Data Dictionary

August 2006

Data Dictionary
Part I

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General Study Information

DIET AND HEALTH STUDY
NATIONAL INSTITUTES OF HEALTH AND AARP

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Baseline Questionnaire **(last updated August 2006 TM)**

The NIH-AARP Diet and Health Study was established in 1995-96 when a questionnaire eliciting information on demographic characteristics, dietary intake, and numerous health-related behaviors was mailed to 3.5 million AARP members, one per household, between 50 and 71 years of age, who resided in six U.S. states (California, Florida, Louisiana, New Jersey, North Carolina, and Pennsylvania) and two metropolitan areas (Atlanta, Georgia, and Detroit, Michigan). Registry areas had a high percentage of case ascertainment, were in areas with a large minority composition and with a large number of AARP members.

Of 617,119 persons who returned the questionnaire, 567,169 were completed satisfactorily (see baseline paper Schatzkin et al, 2001 AJE 154:12). Of these, we additionally excluded an additional withdrawal (n=1), duplicate records (n=179), subjects who moved out of the eight states included in our study before returning the baseline questionnaire (n=321), or were found to have died before study entry (n=261). After these exclusions, the NIH-AARP baseline cohort included 566,407 persons. The current cohort, and the numbers referenced in this report, consists of these 566,407 participants.

Baseline Exclusions: **(last updated August 2006 TM)**

617,119 - returned questionnaires
27, 552 - skipped substantial portions of the questionnaire
13, 442 - indicated they were not the intended respondent and did not complete the rest of the questionnaire
8,127 - had more than 10 recording errors or reported consuming fewer than 10 foods
823 - later requested to be removed from the study
6 - did not provide information on gender (n=6).
----N of the Baseline paper (567,169) ----
1 - additional withdrawal after the baseline paper
179 - duplicates
261 - died before entry
321 - moved before entry
Dataset from IMS: 566407

Risk Factor Questionnaire **(last updated August 2006 TM)**

1996-1997 we mailed 542,095 Risk Factor Questionnaires to those in the baseline cohort. We received 337,076 satisfactorily completed RFQ questionnaires from the baseline cohort.

Risk Factor exclusions

566,407 - Baseline cohort
229,331 - Didn't return RFQ
1619 - Died before RFQ scan
547 - Moved before RFQ scan
334,910- Dataset from IMS

Data Dictionary
Part II

8-14-06
NIH-AARP Diet and Health Study Data Dictionary – Part II

This data dictionary contains all variables used in the NIH-AARP Diet and Health Study as of August 2006 from the Baseline Questionnaire and the Risk Factor Questionnaire. The dataset (*n*= 566,407) was used to calculate ranges for continuous variables and values for categorical variables. The 99th percentile was used to generate continuous graphs and histograms (except for date variables, where the complete dataset was used to create the continuous graph). The complete dataset (n= 566,407) was used to create bar graphs for categorical data. Each variable is described by the following criteria:

Variable Name: name of the variable to use in the analysis file

Type: describes the syntax for each variable.
- C – character
- N – numeric

Basis: explains how the variable was derived or calculated. The options are:
- *Raw* – obtained directly from the data.
- *Derived from QX, QY* – refers to the questions that were used to create the variable
- *DietAARP derived* – calculated through the DietAARP program (see Appendix C)
- *Cancer registry* – information for this variable was obtained through at least one of the eight cancer registries.
- *Cleaned from QZ*– describes the raw question which was used to clean the variable
- *National Death Index (NDI)* – information was obtained from NDI.
- *SSADMF* – Derived from the Social Security Administration Death Master File.
- *Questionnaire mailing logistics* – information concerning the mailing and receiving of questionnaires.
- *AARP frame* – Information obtained from the AARP used to select the initial mailing list.
- *Analysis variables* – variables used for preliminary analysis and exclusions (includes flag variables).
- *Investigator created* – Variables created by investigators.
- *Other databases* – Variable is cleaned or derived from other databases, such as the Census or CHARRED.

Description: gives a definition of the variable.

Levels: defines the levels of the variable (if the variable is categorical), or lists the variable as continuous.
- For categorical variables, the number of people in each level is listed in parentheses.
- For continuous variables, the range of values for the study population is defined in parentheses.
- Levels are not defined for character variables.

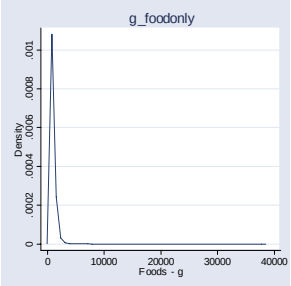
Graph: graphically displays the data by the guidelines listed below.

1. Categorical variables
   - Tabulated the data, and generated a new variable for each level of the original variable. Recorded the number of people per level in the dictionary.
   - Created a bar graph containing the newly created variables and applied the appropriate title and label. Inserted the graph into the data dictionary.

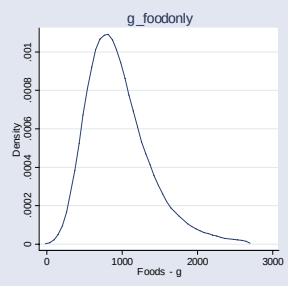
2. Continuous variables
   - Summarized the data, and generated a new variable for each level of the original variable. Record the results of the summary in the dictionary.
   - Create a bar graph containing the newly created variables (for the levels of the original variable) and apply the appropriate titles and labels. Insert the graph into the data dictionary.

- Continuous data was cut at the 99th percentile for clearer representation:

no exclusions



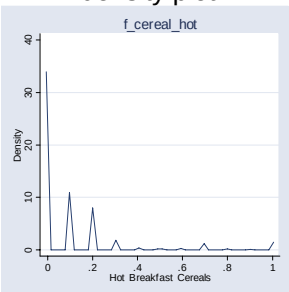
99th percentile



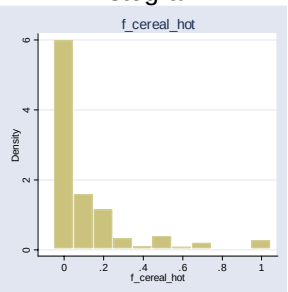
3. Food frequency variables

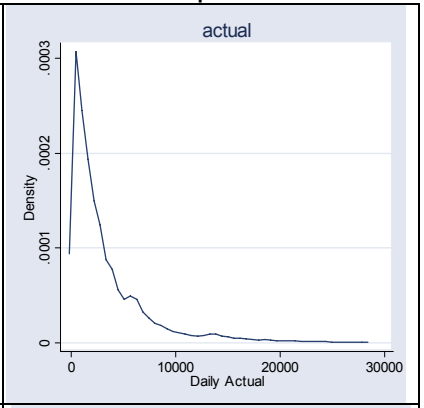
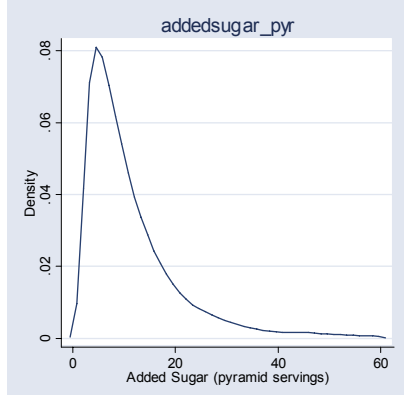
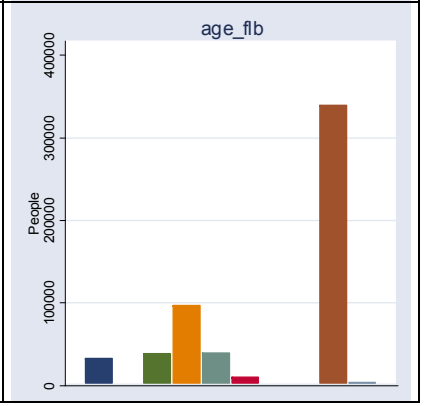
- Same procedures as continuous variables but created a histogram instead of a kdensity plot. Inserted the histogram into the data dictionary.
- Frequency food variables had small range and modal distribution. Relatively uninformative kdensity plots, but histograms more accurately represented the data:

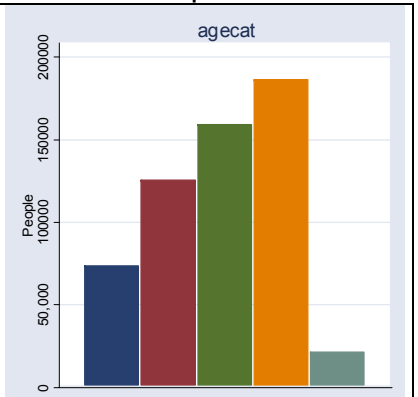
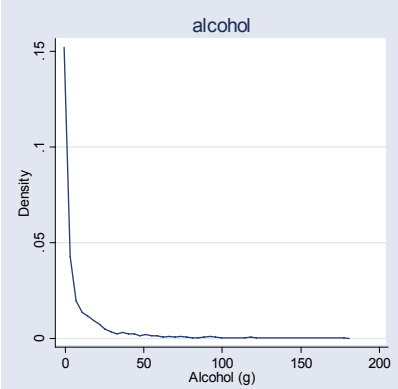
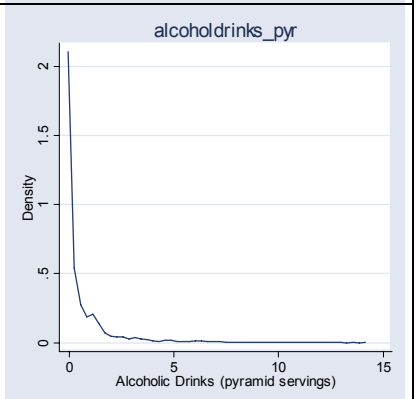
kdensity plot

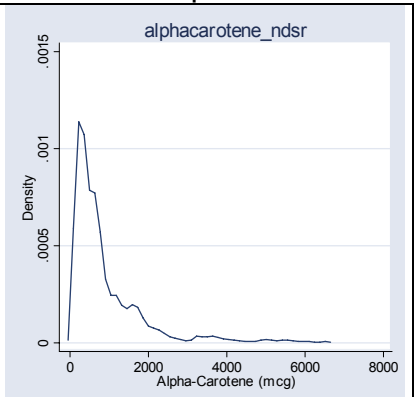
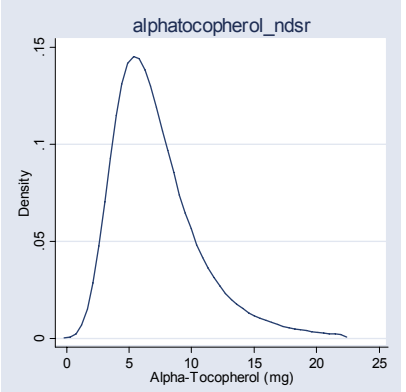


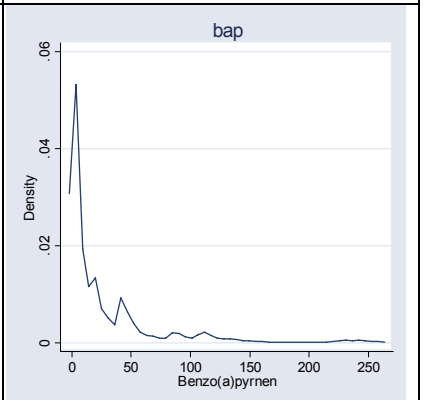
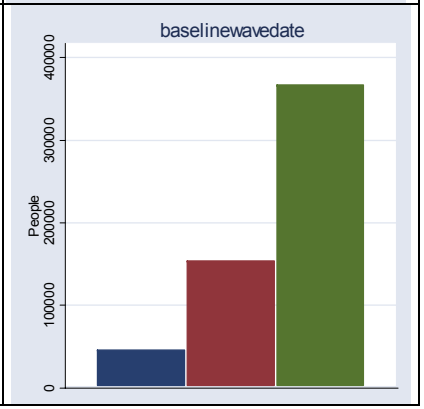
histogram

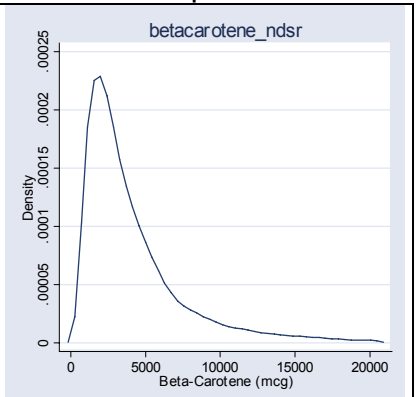
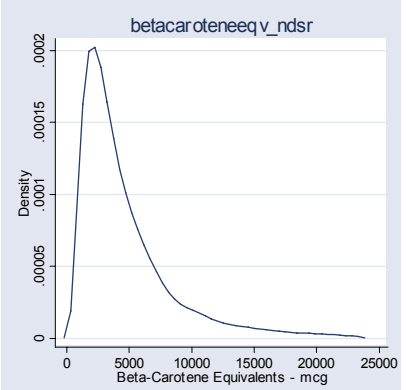
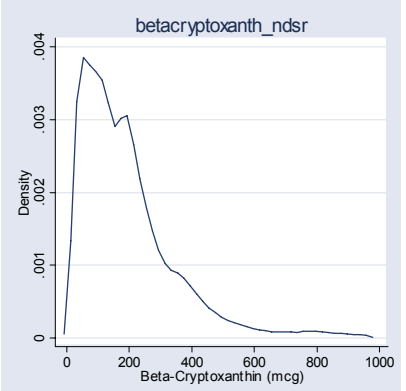


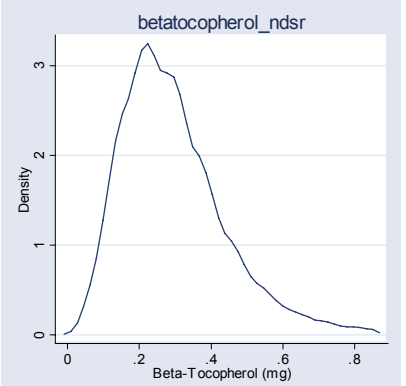
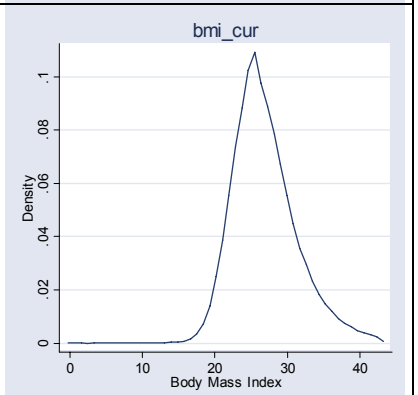
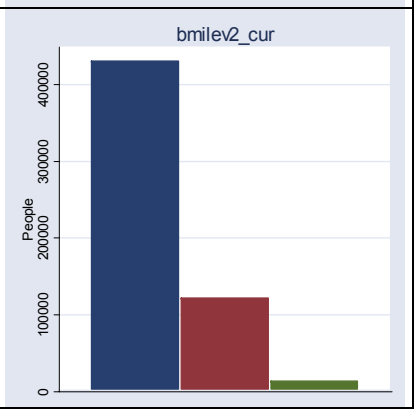
Variable Name	Type	Basis	Description	Levels	Graph
actual	N	Other databases - CHARRED	Daily mutagenic activity from meat per day measured in revertant colonies (RFQ)	Continuous (range = 0 → 1,109,646)	
AddedSugar_Pyr	N	DietAARP derived	Pyramid servings of teaspoons of added sugars	Continuous (range = 0.01 → 373.03)	
AGE_FLB	N	Cleaned from Q49	Age at first live-birth	0 = Never gave birth (*n* = 32,726) 1 = <16 (*n* = 1,376) 2 = 16-19 (*n* = 38,491) 3 = 20-24 (*n* = 97,234) 4 = 25-29 (*n* = 39,904) 5 = 30-34 (*n* = 10,235) 6 = 35-39 (*n* = 2,526) 7 = >=40 (*n* = 455) 8 = Not Applicable - Other Gender (*n* = 339,671) 9 = Unknown (*n* = 3,789)	

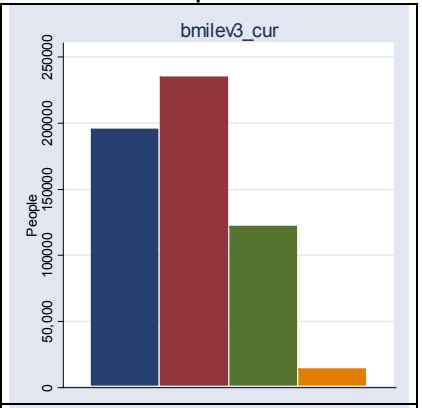
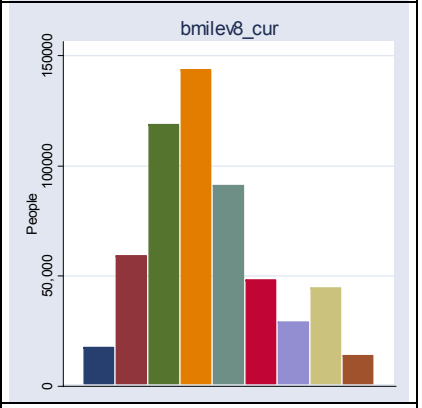
Variable Name	Type	Basis	Description	Levels	Graph
AGECAT	N	AARP	Categorical age group (age when questionnaire was scanned at facility, see scandate_sas)	1 = <55 years (*n* = 73,790) 2 = 55-59 years (*n* = 125,694) 3 = 60-64 years (*n* = 159,071) 4 = 65-69 years (*n* = 186,512) 5 = ≥ 70 years (*n* = 21,340)	
Alcohol	N	DietAARP derived	Alcohol consumed – grams/day	Continuous (range = 0 → 1,272.69)	
AlcoholDrinks_pyr	N	DietAARP derived	Total pyramid servings of alcoholic drinks consumed	Continuous (range = 0 → 92.96)	

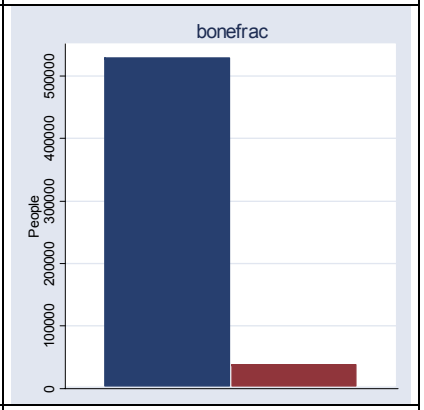
Variable Name	Type	Basis	Description	Levels	Graph
AlphaCarotene_NDSR	N	DietAARP derived	Alpha-carotene (provitamin a carotenoid) (NDS-R) - mcg	Continuous (range = 0.03 → 43,553.04)	
AlphaTocopherol_NDSR	N	DietAARP derived	Vitamin E – total alpha-tocopherol (NDS-R) - mg	Continuous (range = 0.03 → 277.32)	
anus_ajcc_stg	C	cancer registry	see cancer_ajcc_stg	see cancer_ajcc_stg	
anus_ajccseer	C	cancer registry	see cancer_ajccseer	see cancer_ajccseer	
anus_behv	C	cancer registry	see cancer_behv	see cancer_behv	
anus_dxconf	C	cancer registry	see cancer_dxconf	see cancer_dxconf	
anus_dxdt	N	cancer registry	see cancer_dxdt	see cancer_dxdt	
anus_grade	C	cancer registry	see cancer_grade	see cancer_grade	
anus_hist	C	cancer registry	see cancer_hist	see cancer_hist	
anus_histv	C	cancer registry	see cancer_histv	see cancer_histv	
anus_lateral	C	cancer registry	see cancer_lateral	see cancer_lateral	
anus_mort	N	cancer registry	see cancer_mort	see cancer_mort	
anus_pnode	C	cancer registry	see cancer_pnode	see cancer_pnode	
anus_seqno	C	cancer registry	see cancer_seqno	see cancer_seqno	
anus_site	C	cancer registry	see cancer_site	see cancer_site	
anus_siterec3	N	cancer registry	see cancer_siterec3	see cancer_siterec3	

Variable Name	Type	Basis	Description	Levels	Graph
anus_ss_stg	C	cancer registry	see cancer_ss_stg	see cancer_ss_stg	
anus_ss_stg47	C	cancer registry	see cancer_ss_stg47	see cancer_ss_stg47	
anus_ss_stgv	C	cancer registry	see cancer_ss_stgv	see cancer_ss_stgv	
anus_status	C	cancer registry	see cancer_status	see cancer_status	
anus_tnmclinm	C	cancer registry	see cancer_tnmclinm	see cancer_tnmclinm	
anus_tnmclinn	C	cancer registry	see cancer_tnmclinn	see cancer_tnmclinn	
anus_tnmclint	C	cancer registry	see cancer_tnmclint	see cancer_tnmclint	
anus_tnmpathm	C	cancer registry	see cancer_tnmpathm	see cancer_tnmpathm	
anus_tnmpathn	C	cancer registry	see cancer_tnmpathn	see cancer_tnmpathn	
anus_tnmpatht	C	cancer registry	see cancer_tnmpatht	see cancer_tnmpatht	
anus_xnode	C	cancer registry	see cancer_xnode	see cancer_xnode	
anuscan	N	cancer registry	see cancercan	see cancercan	
bap	N	Other databases – CHARRED	Daily benzo(a)pyrnen (ngs) RFQ	Continuous (range = 0 → 3,305.2)	
BASELINEWAVEDATE	N	Questionnaire mailing logistics	Questionnaires were mailed in groups (waves), this variable describes which wave the baseline questionnaire was mailed in.	1 = October 13, 1995 (*n*= 45,766) 2 = February 22, 1996 (*n*= 153,530) 3 = May 6, 1996 (*n*= 367,111)	

Variable Name	Type	Basis	Description	Levels	Graph
BetaCarotene_NDSR	N	DietAARP derived	Beta-Carotene (provitamin a carotenoid) – mcg (NDS-R)	Continuous (range = 4.01 → 197,651.8)	
BetaCaroteneEqv_NDSR	N	DietAARP derived	Beta-Carotene equivalents – mcg (NDS-R)	Continuous (range = 4.31 → 222,691.6)	
BetaCryptoxanth_NDSR	N	DietAARP derived	Beta-Cryptoxanthin (provitamin a carotenoid) – mcg (NDS-R)	Continuous (range = 0 → 6,953.14)	

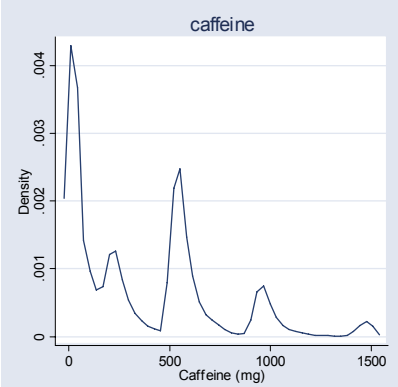
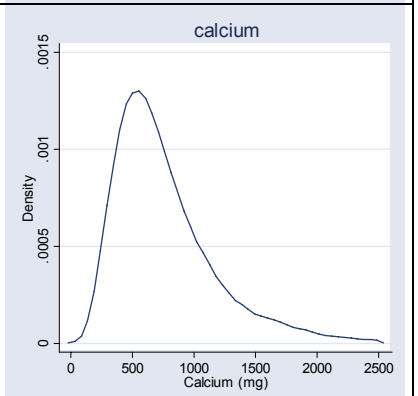
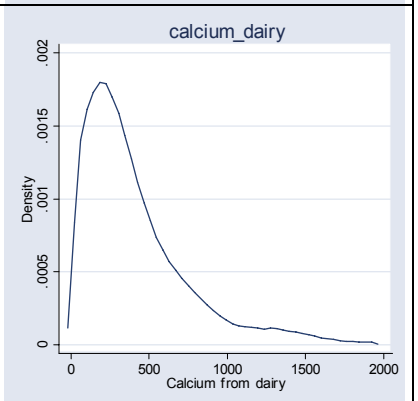
Variable Name	Type	Basis	Description	Levels	Graph
BetaTocopherol_NDSR	N	DietAARP derived	Beta-Tocopherol – mg (NDS-R)	Continuous (range = 0 → 11.13)	
BMI_CUR	N	Derived from Q3, Q4	BMI at current age	Continuous (range = 0 → 201.95)	
BMILEV2_CUR	N	Derived from Q3, Q4	BMI at current age split into two levels.	1 = < 30kg/m^2 (*n* = 430,362) 2 = ≥ 30 kg/m^2 (*n* = 122,117) 9 = missing (*n* = 13,928)	

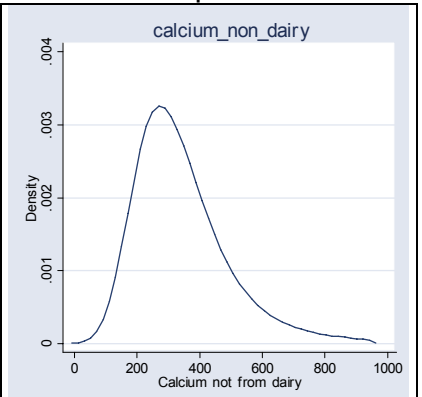
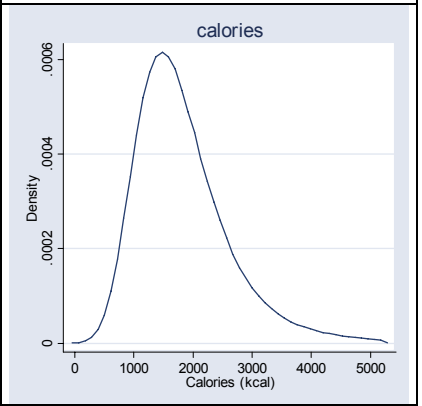
Variable Name	Type	Basis	Description	Levels	Graph
BMILEV3_CUR	N	Derived from Q3, Q4	BMI at current age split into three levels.	1 = <20 kg/m^2 (*n* = 195,593) 2 = 25 - <30 kg/m^2 (*n* = 234,769) 3 = ≥ 30 kg/m^2 (*n* = 122,117) 9 = missing (*n* = 13,928)	
BMILEV8_CUR	N	Derived from Q3, Q4	BMI at current age split into eight levels.	1 = <20 kg/m^2 (*n* = 17,552) 2 = 20.0 – 22.4 kg/m^2 (*n* = 59,194) 3 = 22.5 – 24.9 kg/m^2 (*n* = 118,847) 4 = 25.0 – 27.4 kg/m^2 (*n* = 143,793) 5 = 27.5 – 29.9 kg/m^2 (*n* = 90,976) 6 = 30.0 – 31.9 kg/m^2 (*n* = 48,386) 7 = 32.0 – 33.9 kg/m^2 (*n* = 29,187) 8 =≥ 34 kg/m^2 (*n* = 44,544) 9 = missing (*n* = 13,928)	
BodyWgt	C	Cleaned from Q4A, Q4B, Q4C	A 3 digit character variable that has the actual values from the 3 bubbles or missing/error codes. A missing or error value can exist for one digit in bodywgt. See WEIGHT.	Character variable	Character variable
bone_ajcc_stg	C	cancer registry	see cancer_ajcc_stg	see cancer_ajcc_stg	
bone_ajccseer	C	cancer registry	see cancer_ajccseer	see cancer_ajccseer	
bone_behv	C	cancer registry	see cancer_behv	see cancer_behv	
bone_dxconf	C	cancer registry	see cancer_dxconf	see cancer_dxconf	
bone_dxdt	N	cancer registry	see cancer_dxdt	see cancer_dxdt	
bone_grade	C	cancer registry	see cancer_grade	see cancer_grade	
bone_hist	C	cancer registry	see cancer_hist	see cancer_hist	
bone_histv	C	cancer registry	see cancer_histv	see cancer_histv	
bone_lateral	C	cancer registry	see cancer_lateral	see cancer_lateral	
bone_mort	N	cancer registry	see cancer_mort	see cancer_mort	

Variable Name	Type	Basis	Description	Levels	Graph
bone_pnode	C	cancer registry	see cancer_pnode	see cancer_pnode	
bone_seqno	C	cancer registry	see cancer_seqno	see cancer_seqno	
bone_site	C	cancer registry	see cancer_site	see cancer_site	
bone_siterec3	N	cancer registry	see cancer_siterec3	see cancer_siterec3	
bone_ss_stg	C	cancer registry	see cancer_ss_stg	see cancer_ss_stg	
bone_ss_stg47	C	cancer registry	see cancer_ss_stg47	see cancer_ss_stg47	
bone_ss_stgv	C	cancer registry	see cancer_ss_stgv	see cancer_ss_stgv	
bone_status	C	cancer registry	see cancer_status	see cancer_status	
bone_tnmclinm	C	cancer registry	see cancer_tnmclinm	see cancer_tnmclinm	
bone_tnmclinn	C	cancer registry	see cancer_tnmclinn	see cancer_tnmclinn	
bone_tnmclint	C	cancer registry	see cancer_tnmclint	see cancer_tnmclint	
bone_tnmpathm	C	cancer registry	see cancer_tnmpathm	see cancer_tnmpathm	
bone_tnmpathn	C	cancer registry	see cancer_tnmpathn	see cancer_tnmpathn	
bone_tnmpatht	C	cancer registry	see cancer_tnmpatht	see cancer_tnmpatht	
bone_xnode	C	cancer registry	see cancer_xnode	see cancer_xnode	
bonecan	N	cancer registry	see cancercan	see cancercan	
BONEFRAC	N	Cleaned from Q40F	Self-reported history of bone fractures after age 45	0 = no (*n* = 528,431) 1 = yes (*n* = 37,976)	
brain_ajcc_stg	C	cancer registry	see cancer_ajcc_stg	see cancer_ajcc_stg	
brain_ajccseer	C	cancer registry	see cancer_ajccseer	see cancer_ajccseer	
brain_behv	C	cancer registry	see cancer_behv	see cancer_behv	
brain_dxconf	C	cancer registry	see cancer_dxconf	see cancer_dxconf	
brain_dxdt	N	cancer registry	see cancer_dxdt	see cancer_dxdt	
brain_grade	C	cancer registry	see cancer_grade	see cancer_grade	
brain_hist	C	cancer registry	see cancer_hist	see cancer_hist	
brain_histv	C	cancer registry	see cancer_histv	see cancer_histv	
brain_lateral	C	cancer registry	see cancer_lateral	see cancer_lateral	
brain_mort	N	cancer registry	see cancer_mort	see cancer_mort	
brain_pnode	C	cancer registry	see cancer_pnode	see cancer_pnode	

Variable Name	Type	Basis	Description	Levels	Graph
brain_seqno	C	cancer registry	see cancer_seqno	see cancer_seqno	
brain_site	C	cancer registry	see cancer_site	see cancer_site	
brain_siterec3	N	cancer registry	see cancer_siterec3	see cancer_siterec3	
brain_ss_stg	C	cancer registry	see cancer_ss_stg	see cancer_ss_stg	
brain_ss_stg47	C	cancer registry	see cancer_ss_stg47	see cancer_ss_stg47	
brain_ss_stgv	C	cancer registry	see cancer_ss_stgv	see cancer_ss_stgv	
brain_status	C	cancer registry	see cancer_status	see cancer_status	
brain_tnmclinm	C	cancer registry	see cancer_tnmclinm	see cancer_tnmclinm	
brain_tnmclinn	C	cancer registry	see cancer_tnmclinn	see cancer_tnmclinn	
brain_tnmclint	C	cancer registry	see cancer_tnmclint	see cancer_tnmclint	
brain_tnmpathm	C	cancer registry	see cancer_tnmpathm	see cancer_tnmpathm	
brain_tnmpathn	C	cancer registry	see cancer_tnmpathn	see cancer_tnmpathn	
brain_tnmpatht	C	cancer registry	see cancer_tnmpatht	see cancer_tnmpatht	
brain_xnode	C	cancer registry	see cancer_xnode	see cancer_xnode	
braincan	N	cancer registry	see cancercan	see cancercan	
breast_ajcc_stg	C	cancer registry	see cancer_ajcc_stg	see cancer_ajcc_stg	
breast_ajccseer	C	cancer registry	see cancer_ajccseer	see cancer_ajccseer	
breast_behv	C	cancer registry	see cancer_behv	see cancer_behv	
breast_dxconf	C	cancer registry	see cancer_dxconf	see cancer_dxconf	
breast_dxdt	N	cancer registry	see cancer_dxdt	see cancer_dxdt	
breast_era	N	Cancer registries	SEER site group for cancer specific record axis codes Estrogen Receptor for breast cancer	0 =Test Not Done (includes cases diagnosed at autopsy) 1 = Test Done, Results Positive/Elevated 2 = Test Done, Results Negative/Normal 3 = Test Done, Results Borderline or Undetermined Whether Positive or Negative 4 = Range 1 9 = Not Applicable or for cases diagnosed after January 1, 2004 .m = Registry did not return hormone receptor data	
breast_erbb2	N	Cancer registries	Breast Cancer: California: Her 2/neu	0 = Not done 1 = Positive 2 = Negative 3 = Borderline 8 = Ordered, results not in chart 9 = Unknown	

Variable Name	Type	Basis	Description	Levels	Graph
				.m = Registry did not return hormone receptor data	
breast_grade	C	cancer registry	see cancer_grade	see cancer_grade	
breast_hist	C	cancer registry	see cancer_hist	see cancer_hist	
breast_histv	C	cancer registry	see cancer_histv	see cancer_histv	
breast_lateral	C	cancer registry	see cancer_lateral	see cancer_lateral	
breast_mort	N	cancer registry	see cancer_mort	see cancer_mort	
breast_pnode	C	cancer registry	see cancer_pnode	see cancer_pnode	
breast_pra	N	Cancer registries	Progesterone receptor for breast cancer	0 = Test Not Done (includes cases diagnosed at autopsy) 1 = Test Done, Results Positive/Elevated 2 = Test Done, Results Negative/Normal 3 = Test Done, Results Borderline or Undetermined Whether Positive or Negative 4 = Range 1 < 5,000 mIU/ml 5 = Range 2 5,000 - 50,000 mIU/ml 6 = Range 3 >50,000 mIU/ml 8 = Test Ordered, Results Not in Chart 9 = Unknown If Test Done or Ordered; No Information (includes death certificate-only cases) .m = Registry did not return hormone receptor data	
breast_seqno	C	cancer registry	see cancer_seqno	see cancer_seqno	
breast_site	C	cancer registry	see cancer_site	see cancer_site	
breast_siterec3	N	cancer registry	see cancer_siterec3	see cancer_siterec3	
breast_ss_stg	C	cancer registry	see cancer_ss_stg	see cancer_ss_stg	
breast_ss_stg47	C	cancer registry	see cancer_ss_stg47	see cancer_ss_stg47	
breast_ss_stgv	C	cancer registry	see cancer_ss_stgv	see cancer_ss_stgv	
breast_status	C	cancer registry	see cancer_status	see cancer_status	
breast_tnmclinm	C	cancer registry	see cancer_tnmclinm	see cancer_tnmclinm	
breast_tnmclinn	C	cancer registry	see cancer_tnmclinn	see cancer_tnmclinn	
breast_tnmclint	C	cancer registry	see cancer_tnmclint	see cancer_tnmclint	
breast_tnmpathm	C	cancer registry	see cancer_tnmpathm	see cancer_tnmpathm	
breast_tnmpathn	C	cancer registry	see cancer_tnmpathn	see cancer_tnmpathn	
breast_tnmpatht	C	cancer registry	see cancer_tnmpatht	see cancer_tnmpatht	

Variable Name	Type	Basis	Description	Levels	Graph
breast_xnode	C	cancer registry	see cancer_xnode	see cancer_xnode	
breastcan	N	cancer registry	see cancercan	see cancercan	
Caffeine	N	DietAARP derived	Caffeine - mg	Continuous (range = 0 → 2,783.21)	
Calcium	N	DietAARP derived	Calcium - mg	Continuous (range = 1.30 → 24,674.08)	
calcium_dairy	N	Investigator created – Yikyung Park	Calcium from dairy – mg	Continuous (range = 0 → 15,833.7)	

Variable Name	Type	Basis	Description	Levels	Graph
calcium_non_dairy	N	Investigator created – Yikyung Park	Calcium not from dairy - mg	Continuous (range = 1.3 → 10,363.32)	
CalFlag	C		Calibration of study flag		
Calories	N	DietAARP derived	food energy (kcal/day)	Continuous (range = 8.77 → 65,822.84)	
cancer	N	cancer registry	Cancer status: any cancer (first primary)	0 = no cancer 1 = registry confirmed 2 = death only from National Death Index 3 = registry death only 4 = diagnosis before baseline [missing = 0; non-missing = 566,407]	
cancer_ajcc_stg	C	cancer registry	AJCC stage 3rd edition (1988+)	00 = in situ 10 = I 11 = IA 12 = IB 13 = IC 18 = in situ and I combined for bladder only	

Variable Name	Type	Basis	Description	Levels	Graph
				19 = I, NOS 20 = II 21 = IIA 22 = IIB 23 = IIC 29 – II, NOS 30 = III 31 = IIIA 32 – IIIB 33 = IIIC 39 = III, NOS 40 = IV 41 = IVA 42 = IVB 49 = IV, NOS 88 = recode scheme not yet available 90 = unstaged 98 = not applicable 99 = error condition [missing = 551,162; non-missing = 15,245]	
cancer_ajccseer	C	cancer registry	SEER modified AJCC stage 3rd edition (1988+)	00 = in situ 10 = I 11 = IA 12 = IB 13 = IC 18 = in situ and I combined for bladder only 19 = I, NOS 20 = II 21 = IIA 22 = IIB 23 = IIC 29 – II, NOS 30 = III 31 = IIIA 32 – IIIB 33 = IIIC 39 = III, NOS 40 = IV	

Variable Name	Type	Basis	Description	Levels	Graph
				41 = IVA 42 = IVB 49 = IV, NOS 88 = recode scheme not yet available 90 = unstaged 98 = not applicable 99 = error condition [missing = 551,162; non-missing = 15,245]	
cancer_behv	C	cancer registry	Cancer behavior code: first cancer	0 = benign 1 = uncertain whether benign or malignant 2 = carcinoma in situ 3 = malignant, primary site 6 = metastatic, metastatic site 9 = malignant, uncertain whether primary or metastatic site [missing =517,745; non-missing =48,662]	
cancer_dxconf	C	cancer registry	Code for the best method of diagnostic confirmation of the cancer being reported at any time in the patient's history	1 = positive histology, hematologic confirmation 2 = positive exfoliative cytology, no positive histology 4 = positive microscopic confirmation, method not specified 5 = positive laboratory test/marker study 6 = direct visualization without microscopic confirmation 7 = radiography/other imaging techniques without microscopic confirmation 8 = clinical diagnosis only (other than 5, 6, or 7) 9 = unknown whether or not microscopically confirmed [missing = 517,745; non-missing = 48,662]	
cancer_dxdt	N	cancer registry	Cancer diagnosis date: first cancer	sasdate	
cancer_grade	C	cancer registry	Cancer grade: first cancer	1 = grade I or (well) differentiated	

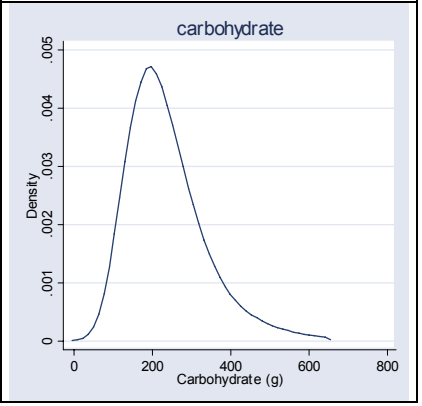
Variable Name	Type	Basis	Description	Levels	Graph
				2 = grade II or moderately (well) differentiated 3 = grade III or poorly differentiated 4 = grade IV or undifferentiated/anaplastic 5 = T-cell 6 = B-cell 7 = null cell 8 = NK (natural killer) cell 9 = grade and differentiation not stated [missing = 518,050; non-missing = 48,357]	
cancer_hist	C	cancer registry	Cancer histology code: first cancer	ICD code	
cancer_histv	C	cancer registry	Cancer histology version: first cancer	0 = ICDO-2 1 = ICDO-3 [missing = 517,745; non-missing =48,662]	
cancer_lateral	C	cancer registry	Cancer laterality: first cancer	0 = not a paired site 1 = right 2 = left 3 = unilateral, NOS 4 = bilateral 9 = paired site, no information [missing =; non-missing =]	
cancer_mort	N	cancer registry	Cancer mortality: any cancer (first primary)	0 = no death 1 = cancer is underlying Cause Of Death on National Death Index 2 = cancer is contributing Cause Of Death on National Death Index 3 = state registry death from COI (no National Death Index, no differentiation of underlying versus contributing) [missing = 517,745; non-missing = 48,662]	
cancer_pnode	C	cancer registry	Number of regional lymph nodes with evidence of involvement	++ = not abstracted 00 = all nodes examined negative 01-96 = number of nodes positive 97 = positive nodes, but number unknown	

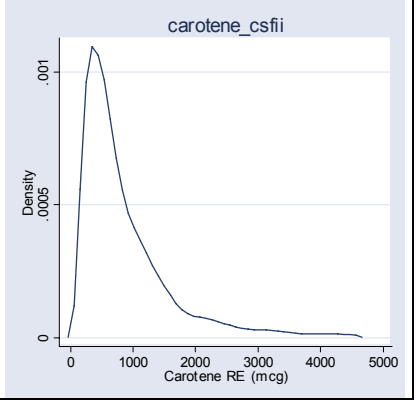
Variable Name	Type	Basis	Description	Levels	Graph
				98 = no nodes examined/none removed 99 = unknown if nodes positive or negative, or if examined 8 = clinical diagnosis only (other than 5, 6, or 7) 9 = unknown whether or not microscopically confirmed [missing = 527,362; non-missing = 39,045]	
cancer_seergroup		cancer registry	SEER mid-level detail cancer site group of first registry reported cancer (First Primary)	01 = Oral cavity and pharynx 02 = Esophagus 03 = Stomach 04 = Small intestine 05 = Colon excluding rectum 06 = Rectum and rectosigmoid junction 07 = Anus, anal canal, and anorectum 08 = Liver and intrahepatic bile duct 09 = Gallbladder 10 = Other biliary 11 = Pancreas 12 = Retroperitoneum 13 = Peritoneum, omentum, and mesentery 14 = Other digestive organs 15 = Respiratory system 16 = Bones and joints 17 = Soft tissue including heart 18 = Skin excluding basal and squamous 19 = Breast 20 = Cervix uteri 21 = Corpus and uterus, NOS 22 = Ovary 23 = Vagina 24 = Vulva 25 = Other female genital organs 26 = Prostate 27 = Testis	

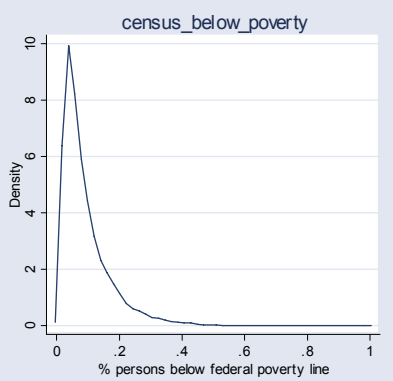
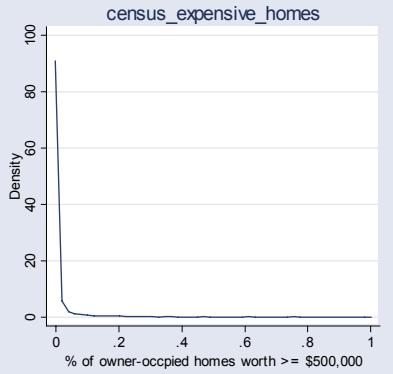
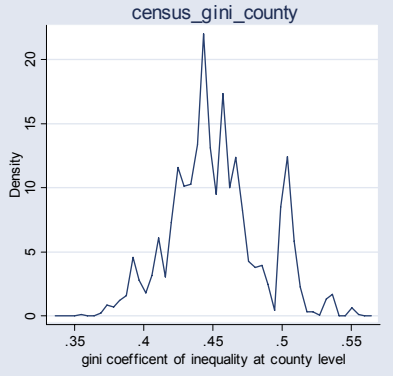
Variable Name	Type	Basis	Description	Levels	Graph
				28 = Penis 29 = Other male genital organs 30 = Urinary system 31 = Eye and orbit 32 = Brain and other nervous system 33 = Endocrine system 34 = Hodgkin lymphoma 35 = Non-Hodgkin lymphoma 36 = Myeloma 37 = Lymphocytic leukemia 38 = Myeloid and monocytic leukemia 39 = Other leukemia 40 = Miscellaneous [missing = 517,745; non-missing = 48,662]	
cancer_seqno	C	cancer registry	Cancer sequence number: first cancer	00-35 In Situ/Malignant as Federally Required Based on Diagnosis Year 00 = one primary only 01-35 = actual number of this primary tumor 60-87 Non-Malignant Tumor as Federally Required Based on Diagnosis Year or State-Province Defined 60 = only one non-malignant tumor or central registry-defined neoplasm 61-87 =actual number of this non-malignant tumor or central registry-defined neoplasm 88 = unspecified number of non-malignant tumor or central registry-defined neoplasms 98 = cervix carcinoma in situ (CIS)/CIN III, diagnosis years 1996-2002 99 = unspecified federally required sequence number or unknown AA-ZZ = benign brain case AA = one benign tumor only; or the first of two or more nonmalignant	

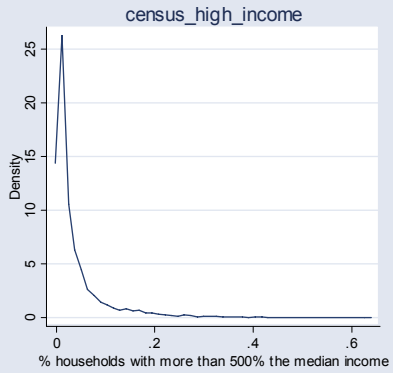
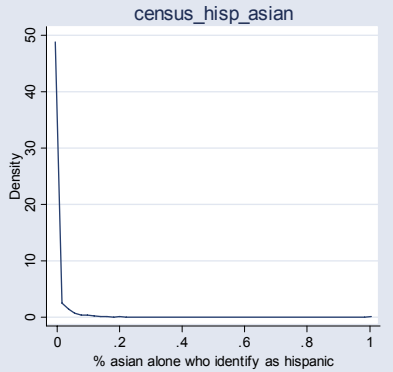
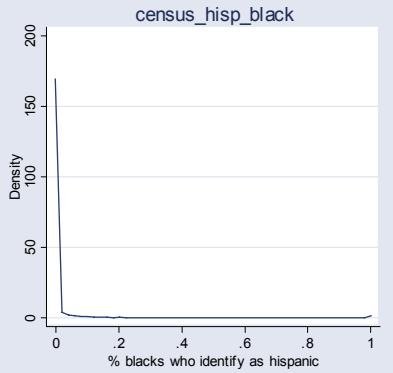
Variable Name	Type	Basis	Description	Levels	Graph
				tumors BB-VV = actual number of this nonmalignant tumor where BB is 2 and VV is 22 XX = unspecified number of nonmalignant tumor [missing = 517,745; non-missing = 48,662]	
cancer_site	C	cancer registry	Cancer site code: first cancer	See ICD-O-2-3 [missing = 517,745; non-missing = 48,662]	
cancer_siterec3	N	cancer registry	SEER cancer site recode ICD-O-3 (5 digit code)	See ICD-O-2-3 [missing = 517,745; non-missing = 48,662]	
cancer_ss_stg	C	cancer registry	Summary stage at the initial diagnosis or treatment of the reportable tumor	0 = in situ 1 = localized 2 = regional by direct extension 3 = regional to lymph nodes 4 = regional (both 2 and 3) 5 = regional, NOS 7 = distant metastases/systemic disease 8 = not abstracted 9 = unstaged, unknown or unspecified [missing = 517,745; non-missing = 48,662]	
cancer_ss_stg47	C	cancer registry	Extent of disease (EOD) converted to SEER summary stage	00 = in situ 10 = localized 11 = in situ & localized (bladder cancer only) 20 = regional 21 = regional by direct extension only 22 = regional by lymph nodes only 23 = regional by direct extension and lymph nodes 40 = remote 90 = unstaged 99 = error [missing = 551,162; non-missing =	

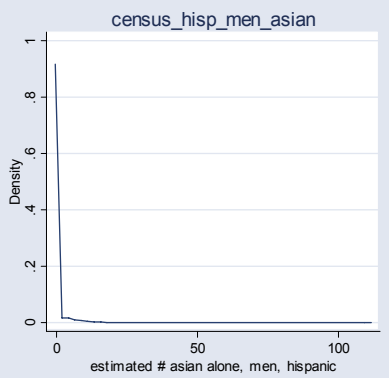
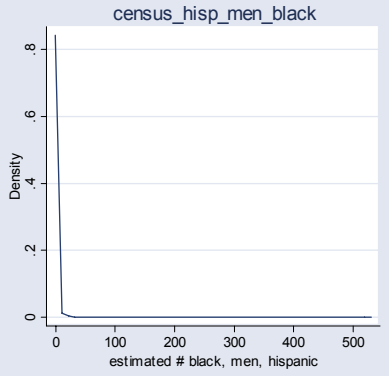
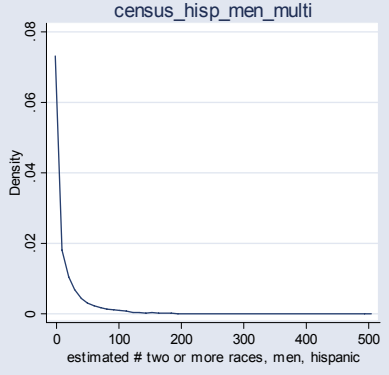
Variable Name	Type	Basis	Description	Levels	Graph
				15,245]	
cancer_ss_stgv	C	cancer registry	SS_STG coding version	0 = SEER summary stage guide 1977 1 = SEER summary staging manual 2000 [missing = 517,745; non-missing = 48,662]	
cancer_status	C	cancer registry	Confidence indicator in potential match following Westat review	I = in question, not enough information available to confirm match M = match, probably match N = no match, probably non-match [missing = 517,745; non-missing = 48,662]	
cancer_tnmclinm	C	cancer registry	Detailed site-specific codes for the clinical metastases (M) as defined by AJCC and recorded by the physician	See cancer registries [missing = 552,486; non-missing =13,921]	
cancer_tnmclinn	C	cancer registry	Detailed site-specific codes for the clinical nodes (N) as defined by AJCC and recorded by the physician	See cancer registries [missing = 552,503; non-missing = 13,904]	
cancer_tnmclint	C	cancer registry	Detailed site-specific codes for the clinical tumor (T) as defined by AJCC and recorded by the physician	See cancer registries [missing = 552,475; non-missing = 13,932]	
cancer_tnmpathm	C	cancer registry	Detailed site-specific codes for the pathologic metastases (M) as defined by AJCC and recorded by the physician	See cancer registries [missing = 552,872; non-missing = 13,535]	
cancer_tnmpathn	C	cancer registry	Detailed site-specific codes for the pathologic nodes (N) as defined by AJCC and recorded by the physician	See cancer registries [missing = 552,876; non-missing = 13,531]	
cancer_tnmpatht	C	cancer registry	Detailed site-specific codes for the pathologic tumor (T) as defined by AJCC and recorded by the physician	See cancer registries [missing = 552,858; non-missing = 13,549]	
cancer_xnode	C	cancer registry	Number of regional lymph nodes examined by pathologist	00 = no regional lymph nodes examined 01-89 = number of lymph nodes examined 90 = ninety or more lymph nodes examined 95 = no lymph node(s) removed but aspiration of lymph node(s)	

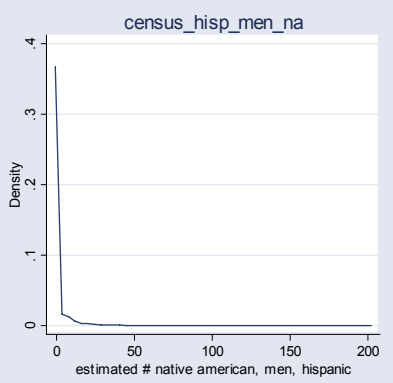
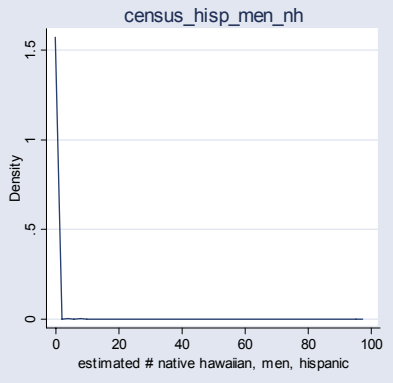
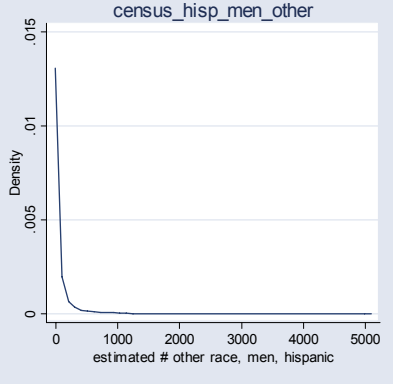
Variable Name	Type	Basis	Description	Levels	Graph
				performed 96 = lymph node removal documented as sampling and number of lymph nodes unknown/not stated 97 = lymph node removal documented as dissection and number of lymph nodes unknown/not stated 98 = lymph nodes surgically removed but number of lymph nodes unknown/ not stated and not documented as sampling or dissection 99 = unknown, not stated, death certificate only [missing = 527,371; non-missing = 39,036]	
Carbohydrate	N	DietAARP derived	Carbohydrate - g	Continuous (range = 0.69 → 6,432.75)	

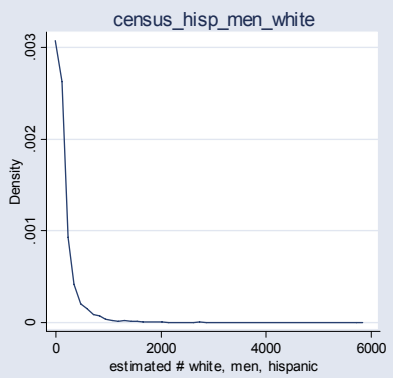
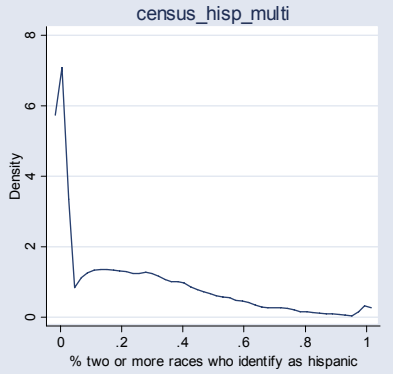
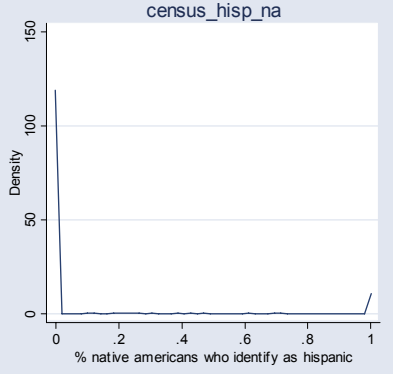
Variable Name	Type	Basis	Description	Levels	Graph
Carotene_CSFII	N	DietAARP derived	Carotene RE (CSFII) - mcg	Continuous (range = 0.37 → 39,467.80)	

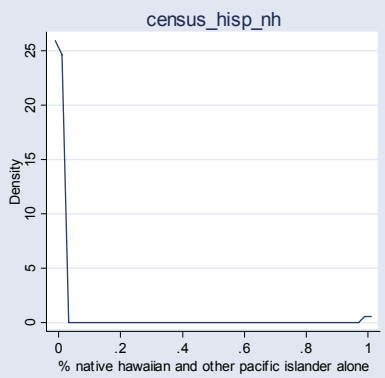
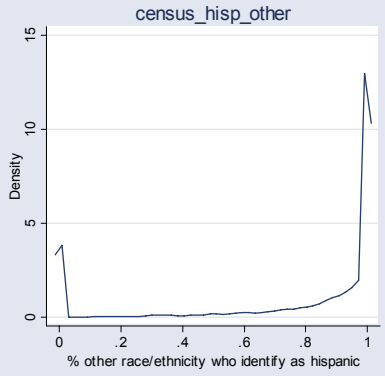
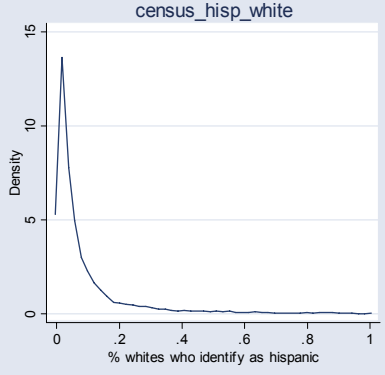
Variable Name	Type	Basis	Description	Levels	Graph
census_below_poverty	N	Other databases: 1990 Census	Percent of persons below federal poverty line	Continuous (range = 0 → 1)	
census_expensive_homes	N	Other databases: 1990 Census	Percent of owner-occupied homes worth ≥ $500,000	Continuous (range = 0 → 1)	
census_gini_county	C	Other databases: 1990 Census	Gini coefficient of inequality at county level	Continuous (range = 0.34 → 0.56)	

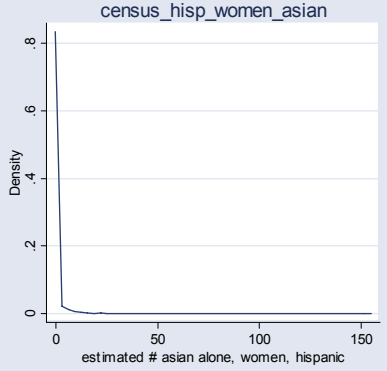
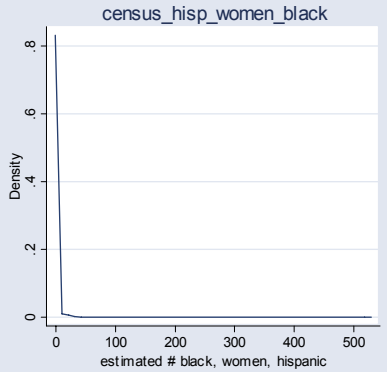
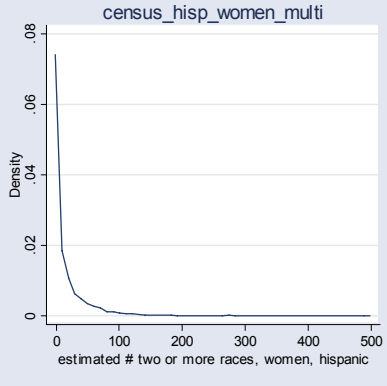
Variable Name	Type	Basis	Description	Levels	Graph
census_high_income	N	Other databases: 1990 Census	Percent of households with more than 500% the median income	Continuous (range = 0 → 0.63768)	
census_hisp_asian	N	Other databases: 1990 Census	Percent of Asians alone who identify as Hispanic	Continuous (range = 0 → 1)	
census_hisp_black	N	Other databases: 1990 Census	Percent of blacks who identify as Hispanic	Continuous (range = 0 → 1)	

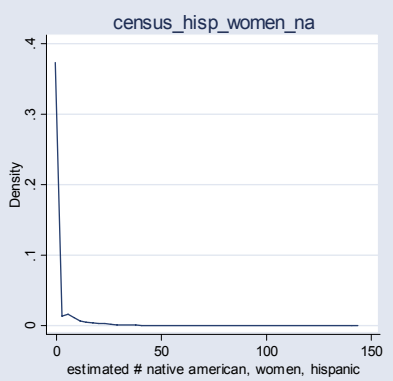
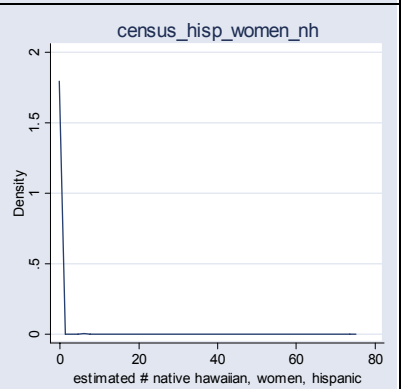
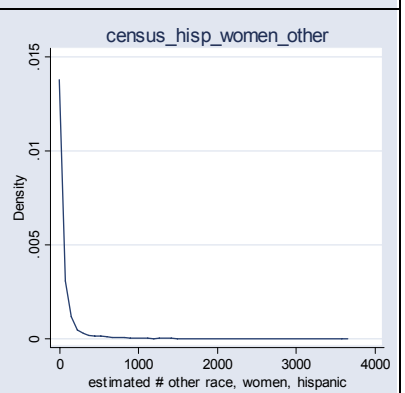
Variable Name	Type	Basis	Description	Levels	Graph
census_hisp_men_asian	N	Other databases: 1990 Census	Estimated number of Hispanic Asian alone men	Continuous (range = 0 →111.3187)	
census_hisp_men_black	N	Other databases: 1990 Census	Estimated number of Hispanic black men	Continuous (range = 0 → 529.8546)	
census_hisp_men_multi	N	Other databases: 1990 Census	Estimated number of Hispanic men of two or more races	Continuous (range = 0 → 503.3204)	

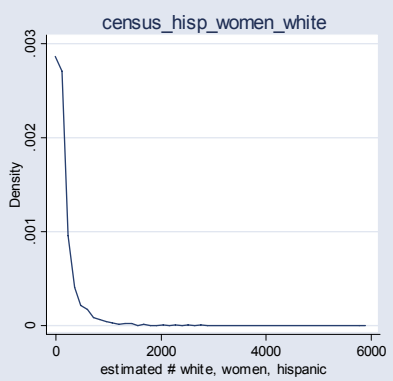
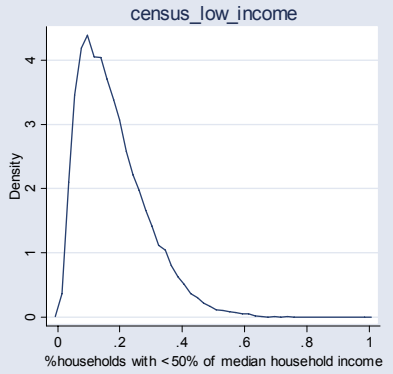
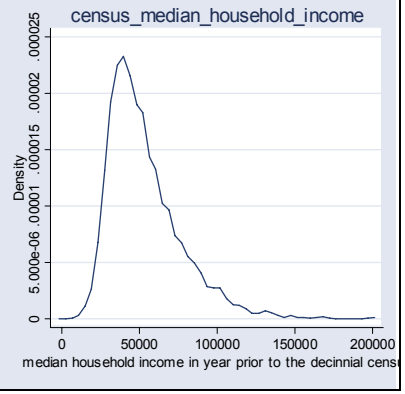
Variable Name	Type	Basis	Description	Levels	Graph
census_hisp_men_na	N	Other databases: 1990 Census	Estimated number of Hispanic Native American men	Continuous (range = 0 → 201.3143)	
census_hisp_men_nh	N	Other databases: 1990 Census	Estimated number of Hispanic native Hawaiian men	Continuous (range = 0 → 97)	
census_hisp_men_other	N	Other databases: 1990 Census	Estimated number of Hispanic men of other races	Continuous (range = 0 → 5,091)	

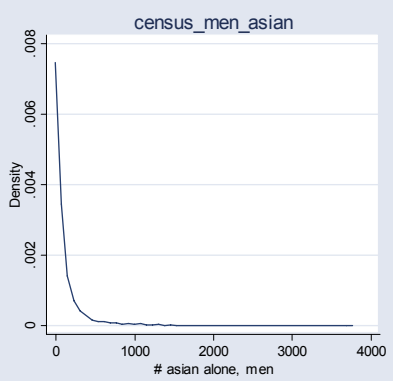
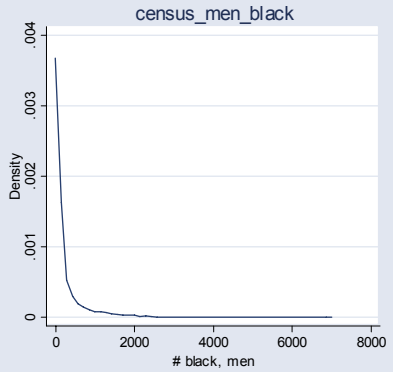
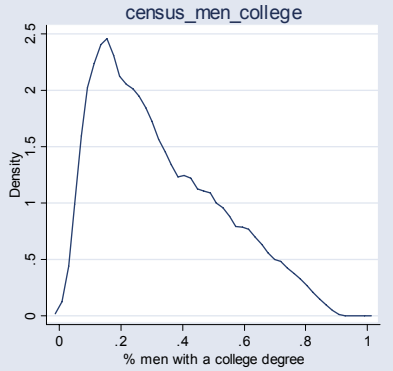
Variable Name	Type	Basis	Description	Levels	Graph
census_hisp_men_white	N	Other databases: 1990 Census	Estimated number of Hispanic white men	Continuous (range = 0 → 5,834.61)	
census_hisp_multi	N	Other databases: 1990 Census	Percent of two or more races who identify as Hispanic	Continuous (range = 0 → 1)	
census_hisp_na	N	Other databases: 1990 Census	Percent of Native Americans who identify as Hispanic	Continuous (range = 0 → 1)	

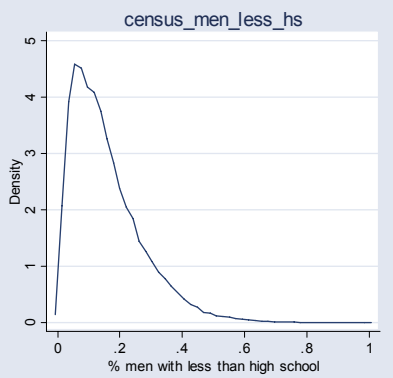
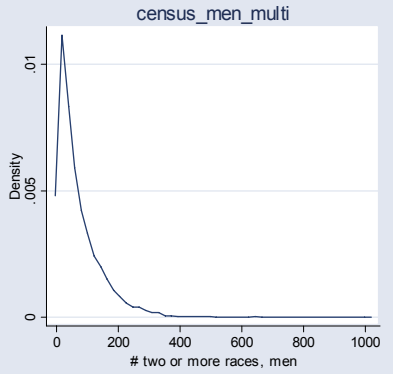
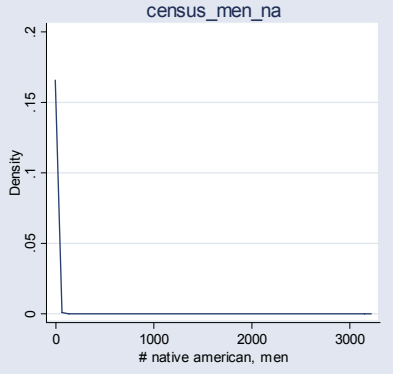
Variable Name	Type	Basis	Description	Levels	Graph
census_hisp_nh	N	Other databases: 1990 Census	Percent of native Hawaiian and other pacific islanders alone who identify as Hispanic	Continuous (range = 0 → 1)	
census_hisp_other	N	Other databases: 1990 Census	Percent of other races / ethnicities who identify as Hispanic	Continuous (range = 0 → 1)	
census_hisp_white	N	Other databases: 1990 Census	Percent of whites who identify as Hispanic	Continuous (range = 0 → 1)	

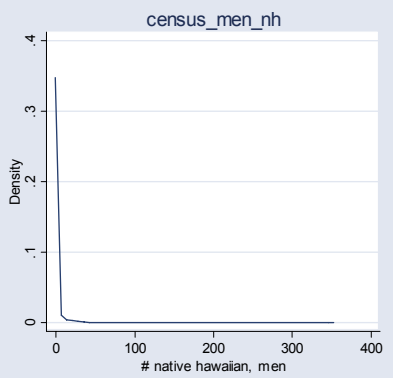
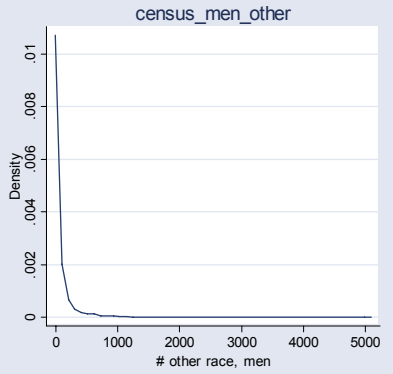
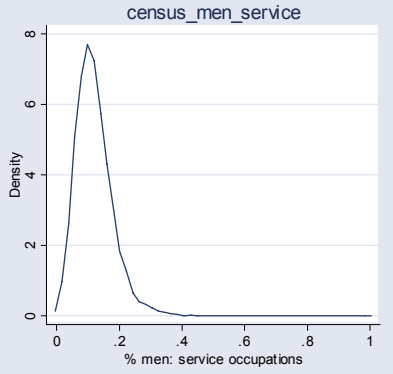
Variable Name	Type	Basis	Description	Levels	Graph
census_hisp_women_asian	N	Other databases: 1990 Census	Estimated number of Hispanic Asian alone women	Continuous (range = 0 → 154.6813)	
census_hisp_women_black	N	Other databases: 1990 Census	Estimated number of Hispanic black women	Continuous (range = 0 → 528.4404)	
census_hisp_women_multi	N	Other databases: 1990 Census	Estimated number of Hispanic women of two or more races	Continuous (range = 0 → 497.0233)	

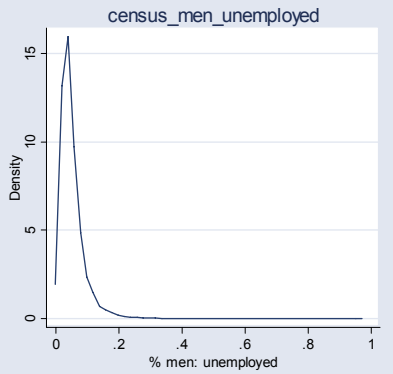
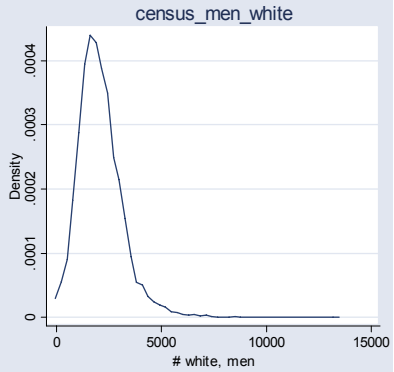
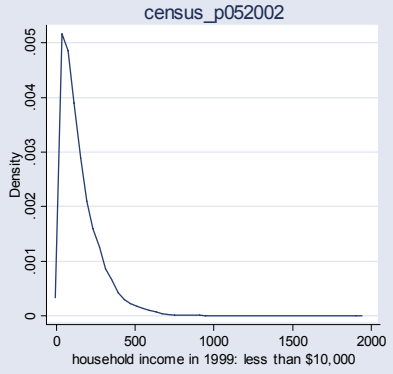
Variable Name	Type	Basis	Description	Levels	Graph
census_hisp_women_na	N	Other databases: 1990 Census	Estimated number of Hispanic Native American women	Continuous (range = 0 → 143)	
census_hisp_women_nh	N	Other databases: 1990 Census	Estimated number of Hispanic native Hawaiian women	Continuous (range = 0 → 75)	
census_hisp_women_other	N	Other databases: 1990 Census	Estimated number of Hispanic women of other races	Continuous (range = 0 → 3,647.51)	

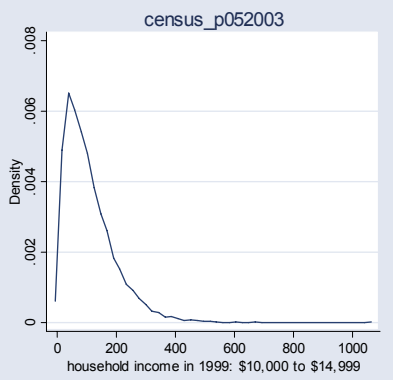
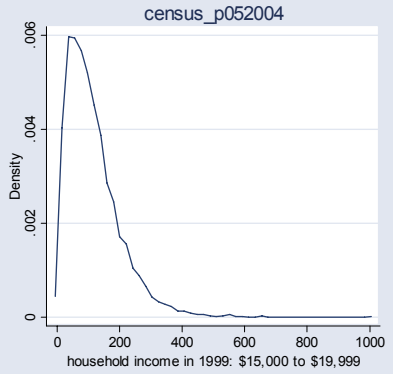
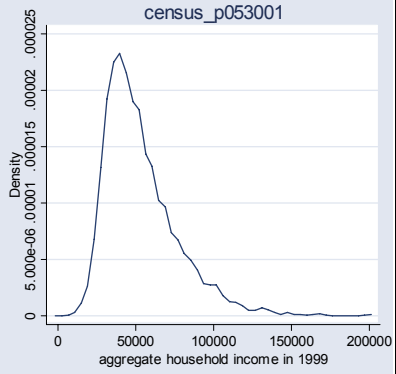
Variable Name	Type	Basis	Description	Levels	Graph
census_hisp_women_white	N	Other databases: 1990 Census	Estimated number of Hispanic white women	Continuous (range = 0 → 5,882.181)	
census_low_income	N	Other databases: 1990 Census	Percent of households with less than 50% of the US median household income	Continuous (range = 0 → 1)	
census_median_household_income	N	Other databases: 1990 Census	Median household income in the year prior to the decennial census	Continuous (range = 0 → 200,001)	

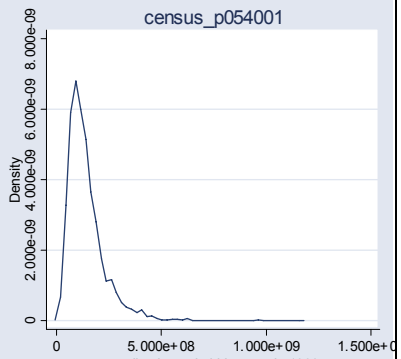
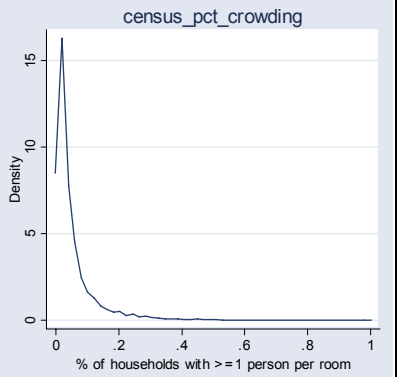
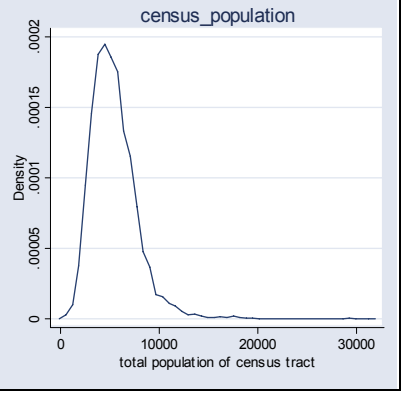
Variable Name	Type	Basis	Description	Levels	Graph
census_men_asian	N	Other databases: 1990 Census	Number of Asian alone men	Continuous (range = 0 → 3,756)	
census_men_black	N	Other databases: 1990 Census	Number of black men	Continuous (range = 0 → 6,989)	
census_men_college	N	Other databases: 1990 Census	Percent of men with a college degree	Continuous (range = 0 → 1)	

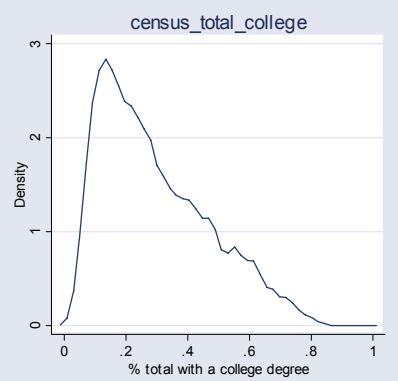
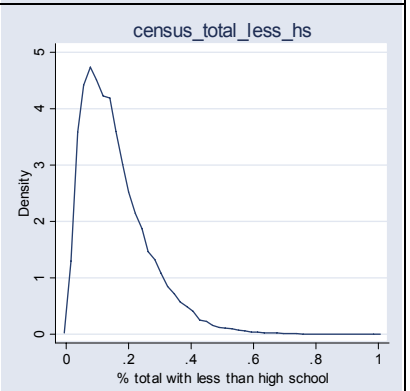
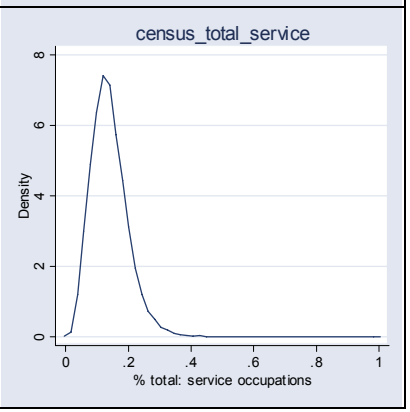
Variable Name	Type	Basis	Description	Levels	Graph
census_men_less_hs	N	Other databases: 1990 Census	Percent of men with less than a high school diploma	Continuous (range = 0 → 1)	
census_men_multi	N	Other databases: 1990 Census	Number of men of two or more races	Continuous (range = 0 → 1,016)	
census_men_na	N	Other databases: 1990 Census	Number of Native American men	Continuous (range = 0 → 3,218)	

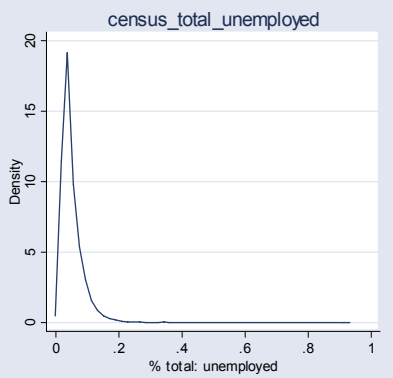
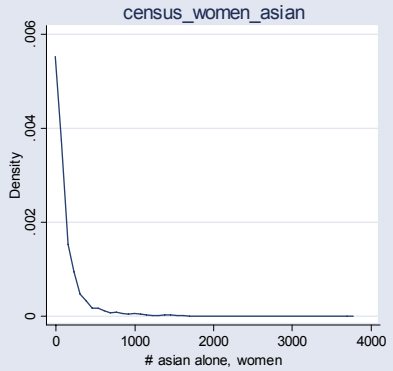
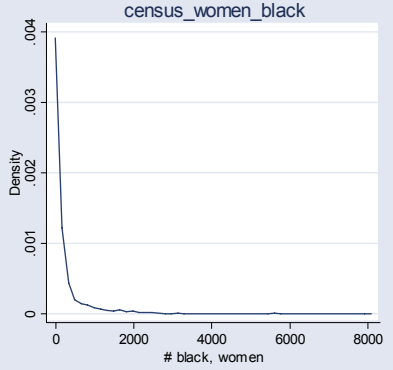
Variable Name	Type	Basis	Description	Levels	Graph
census_men_nh	N	Other databases: 1990 Census	Number of native Hawaiian men	Continuous (range = 0 → 352)	
census_men_other	N	Other databases: 1990 Census	Number of men of other races	Continuous (range = 0 → 5,091)	
census_men_service	N	Other databases: 1990 Census	Percent of men in service occupations	Continuous (range = 0 → 1)	

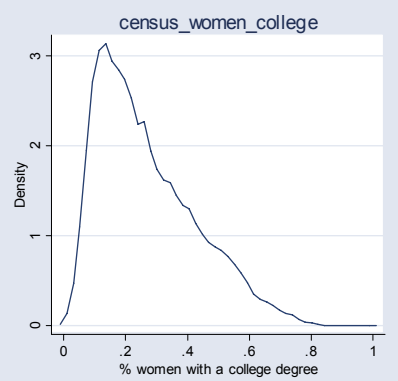
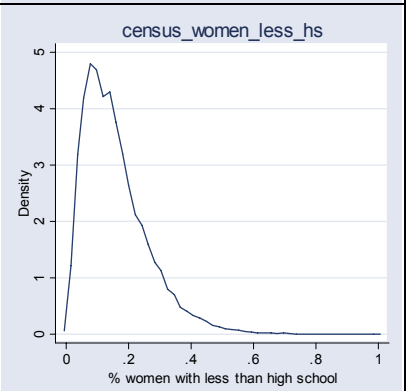
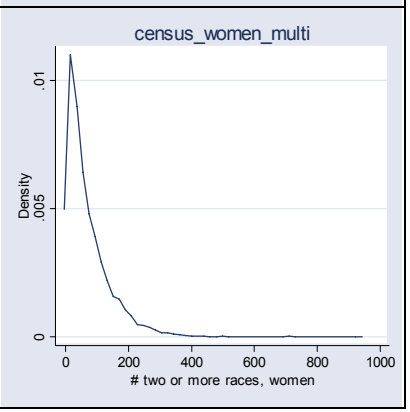
Variable Name	Type	Basis	Description	Levels	Graph
census_men_unemployed	N	Other databases: 1990 Census	Percent of unemployed men	Continuous (range = 0 → 0.96859)	
census_men_white	N	Other databases: 1990 Census	Number of white men	Continuous (range = 0 → 13,414)	
census_p052002	N	Other databases: 1990 Census	Household income in 1999: less than $10,000	Continuous (range = 0 → 1,935)	

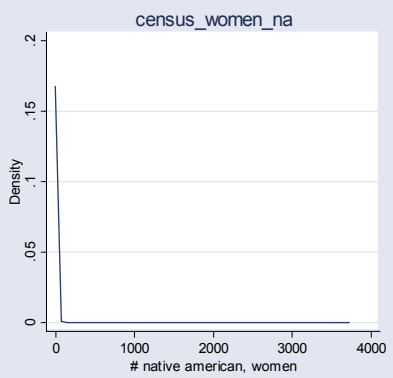
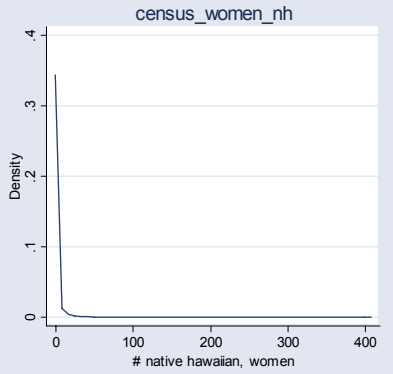
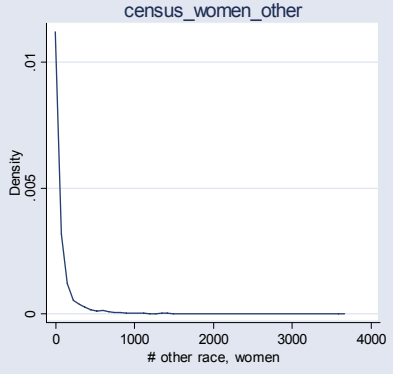
Variable Name	Type	Basis	Description	Levels	Graph
census_p052003	N	Other databases: 1990 Census	Household income in 1999: $10,000 to $14,999	Continuous (range = 0 → 1,058)	
census_p052004	N	Other databases: 1990 Census	Household income in 1999: $15,000 to $19,999	Continuous (range = 0 → 1,000)	
census_p053001	N	Other databases: 1990 Census	Aggregate household income in 1999	Continuous (range = 0 → 200,001)	

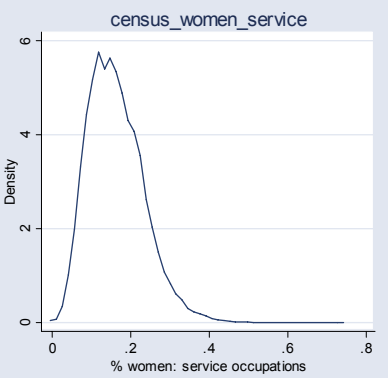
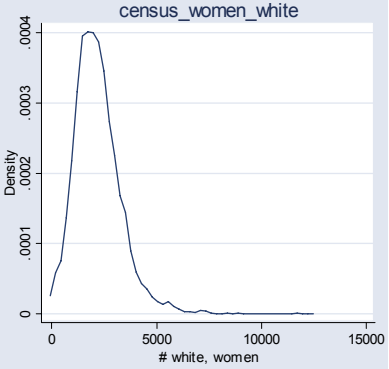
Variable Name	Type	Basis	Description	Levels	Graph
census_p054001	N	Other databases: 1990 Census	Median household income in 1999	Continuous (range = 0 → 1.18e+09)	
census_pct_crowding	N	Other databases: 1990 Census	Percent of households with ≥ 1 person per room	Continuous (range = 0 →1)	
census_population	N	Other databases: 1990 Census	Total population of census tract	Continuous (range = 0 → 31,791)	

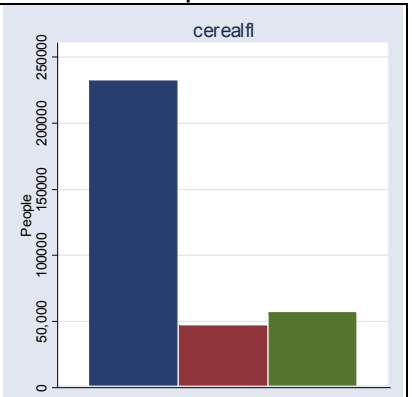
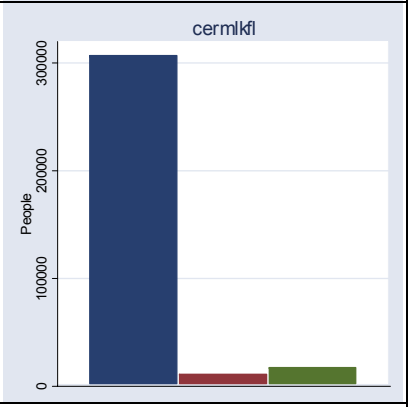
Variable Name	Type	Basis	Description	Levels	Graph
census_total_college	N	Other databases: 1990 Census	Percent total with a college degree	Continuous (range = 0 → 1)	
census_total_less_hs	N	Other databases: 1990 Census	Percent total with less than a high school diploma	Continuous (range = 0 → 1)	
census_total_service	N	Other databases: 1990 Census	Percent total in service occupations	Continuous (range = 0 → 1)	

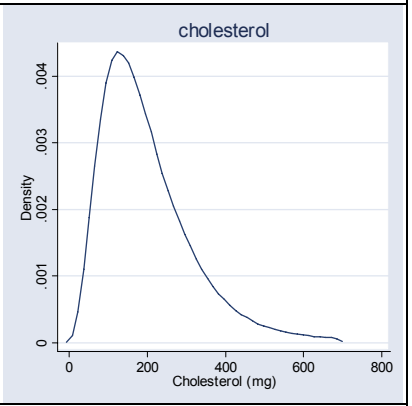
Variable Name	Type	Basis	Description	Levels	Graph
census_total_unemployed	N	Other databases: 1990 Census	Percent total unemployed	Continuous (range = 0 → 0.9306)	
census_women_asian	N	Other databases: 1990 Census	Number of Asian alone women	Continuous (range = 0 → 3,765)	
census_women_black	N	Other databases: 1990 Census	Number of black women	Continuous (range = 0 → 8,077)	

Variable Name	Type	Basis	Description	Levels	Graph
census_women_college	N	Other databases: 1990 Census	Percent of women with a college degree	Continuous (range = 0 → 1)	
census_women_less_hs	N	Other databases: 1990 Census	Percent of women with less than a high school diploma	Continuous (range = 0 → 1)	
census_women_multi	N	Other databases: 1990 Census	Number of women of two or more races	Continuous (range = 0 → 938)	

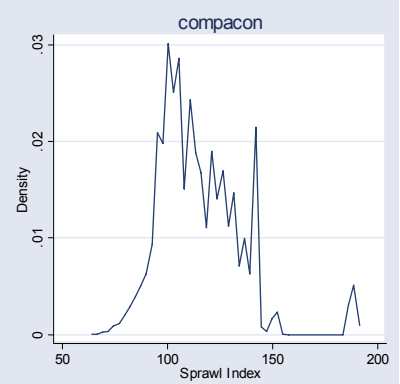
Variable Name	Type	Basis	Description	Levels	Graph
census_women_na	N	Other databases: 1990 Census	Number of Native American women	Continuous (range = 0 → 3,719)	
census_women_nh	N	Other databases: 1990 Census	Number of native Hawaiian women	Continuous (range = 0 → 407)	
census_women_other	N	Other databases: 1990 Census	Number of women of other races	Continuous (range = 0 → 3,656)	

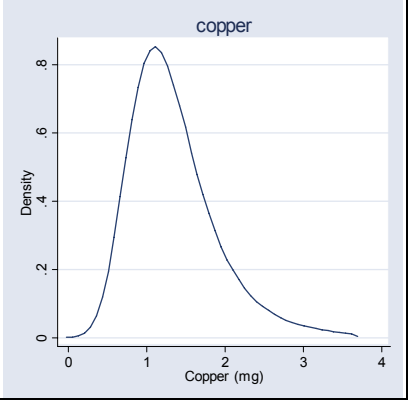
Variable Name	Type	Basis	Description	Levels	Graph
census_women_service	N	Other databases: 1990 Census	Percent of women in service occupations	Continuous (range = 0 → 0.7371795)	
census_women_unemployed	N	Other databases: 1990 Census	Percent of unemployed women	Continuous (range = 0 → 0.9294516)	
census_women_white	N	Other databases: 1990 Census	Number of white women	Continuous (range = 0 → 12,410)	

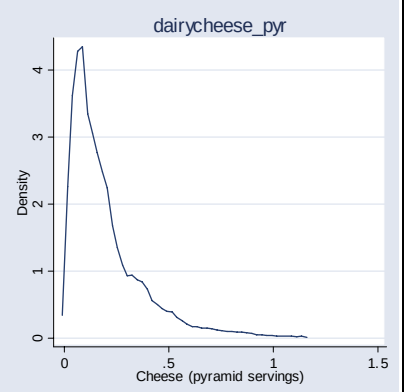
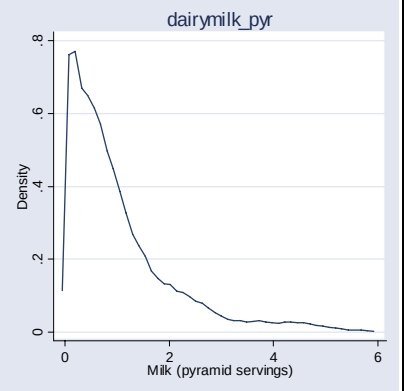
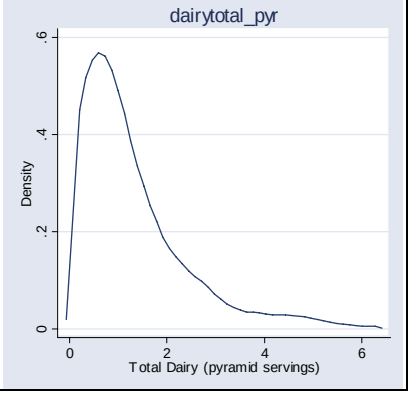
Variable Name	Type	Basis	Description	Levels	Graph
CerealFl	N	DietAARP derived	Cereal ratio adjustment flag	0 = Not adjusted (*n* = 231,966) 1 = Adjusted down (*n* = 46,301) 2 = Adjusted up (*n* = 56,643)	
CerMlkFl	N	DietAARP derived	Cereal milk ratio adjustment flag	0 = Not adjusted (*n* = 306,510) 1 = Adjusted down (*n* = 10,800) 2 = Adjusted up (*n* = 17,520)	
cervix_ajcc_stg	C	cancer registry	see cancer_ajcc_stg	see cancer_ajcc_stg	
cervix_ajccseer	C	cancer registry	see cancer_ajccseer	see cancer_ajccseer	
cervix_behv	C	cancer registry	see cancer_behv	see cancer_behv	
cervix_dxconf	C	cancer registry	see cancer_dxconf	see cancer_dxconf	
cervix_dxdt	N	cancer registry	see cancer_dxdt	see cancer_dxdt	
cervix_grade	C	cancer registry	see cancer_grade	see cancer_grade	
cervix_hist	C	cancer registry	see cancer_hist	see cancer_hist	
cervix_histv	C	cancer registry	see cancer_histv	see cancer_histv	
cervix_lateral	C	cancer registry	see cancer_lateral	see cancer_lateral	
cervix_mort	N	cancer registry	see cancer_mort	see cancer_mort	
cervix_pnode	C	cancer registry	see cancer_pnode	see cancer_pnode	
cervix_seqno	C	cancer registry	see cancer_seqno	see cancer_seqno	
cervix_site	C	cancer registry	see cancer_site	see cancer_site	
cervix_siterec3	N	cancer registry	see cancer_siterec3	see cancer_siterec3	

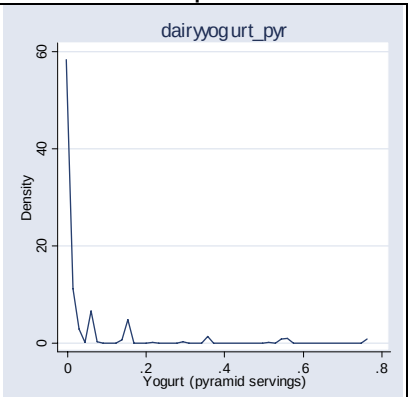
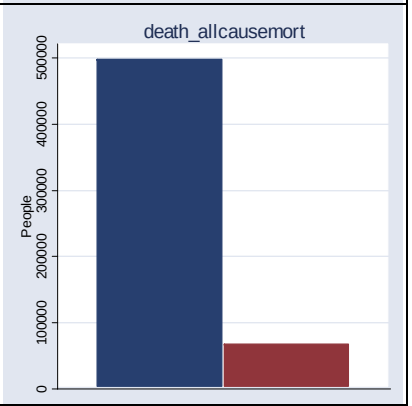
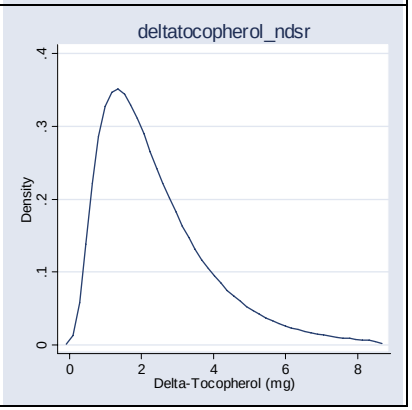
Variable Name	Type	Basis	Description	Levels	Graph
cervix_ss_stg	C	cancer registry	see cancer_ss_stg	see cancer_ss_stg	
cervix_ss_stg47	C	cancer registry	see cancer_ss_stg47	see cancer_ss_stg47	
cervix_ss_stgv	C	cancer registry	see cancer_ss_stgv	see cancer_ss_stgv	
cervix_status	C	cancer registry	see cancer_status	see cancer_status	
cervix_tnmclinm	C	cancer registry	see cancer_tnmclinm	see cancer_tnmclinm	
cervix_tnmclinn	C	cancer registry	see cancer_tnmclinn	see cancer_tnmclinn	
cervix_tnmclint	C	cancer registry	see cancer_tnmclint	see cancer_tnmclint	
cervix_tnmpathm	C	cancer registry	see cancer_tnmpathm	see cancer_tnmpathm	
cervix_tnmpathn	C	cancer registry	see cancer_tnmpathn	see cancer_tnmpathn	
cervix_tnmpatht	C	cancer registry	see cancer_tnmpatht	see cancer_tnmpatht	
cervix_xnode	C	cancer registry	see cancer_xnode	see cancer_xnode	
cervixcan	N	cancer registry	see cancercan	see cancercan	
Cholesterol	N	DietAARP derived	Cholesterol - mg	Continuous (range = 0.17 → 10,642.25)	
colon_ajcc_stg	C	cancer registry	see cancer_ajcc_stg	see cancer_ajcc_stg	
colon_ajccseer	C	cancer registry	see cancer_ajccseer	see cancer_ajccseer	
colon_behv	C	cancer registry	see cancer_behv	see cancer_behv	
colon_dxconf	C	cancer registry	see cancer_dxconf	see cancer_dxconf	
colon_dxdt	N	cancer registry	see cancer_dxdt	see cancer_dxdt	
colon_grade	C	cancer registry	see cancer_grade	see cancer_grade	
colon_hist	C	cancer registry	see cancer_hist	see cancer_hist	
colon_histv	C	cancer registry	see cancer_histv	see cancer_histv	
colon_lateral	C	cancer registry	see cancer_lateral	see cancer_lateral	
colon_mort	N	cancer registry	see cancer_mort	see cancer_mort	
colon_pnode	C	cancer registry	see cancer_pnode	see cancer_pnode	
colon_seqno	C	cancer registry	see cancer_seqno	see cancer_seqno	
colon_site	C	cancer registry	see cancer_site	see cancer_site	
colon_siterec3	N	cancer registry	see cancer_siterec3	see cancer_siterec3	
colon_ss_stg	C	cancer registry	see cancer_ss_stg	see cancer_ss_stg	

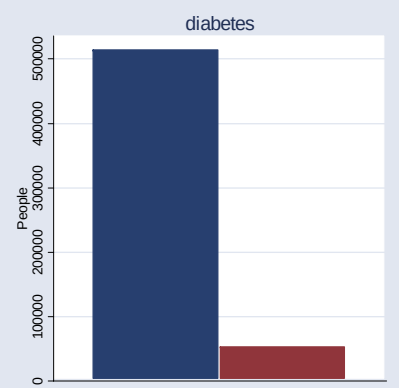
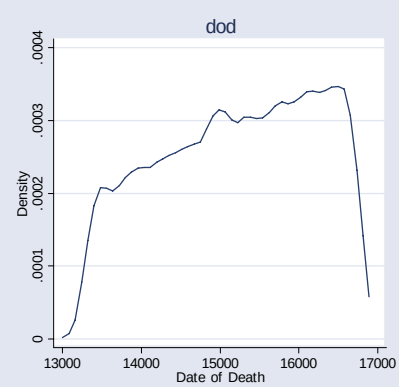
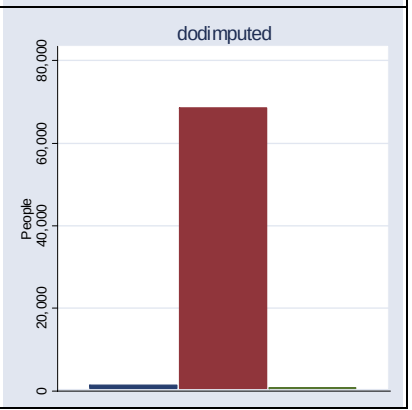
Variable Name	Type	Basis	Description	Levels	Graph
colon_ss_stg47	C	cancer registry	see cancer_ss_stg47	see cancer_ss_stg47	
colon_ss_stgv	C	cancer registry	see cancer_ss_stgv	see cancer_ss_stgv	
colon_status	C	cancer registry	see cancer_status	see cancer_status	
colon_tnmclinm	C	cancer registry	see cancer_tnmclinm	see cancer_tnmclinm	
colon_tnmclinn	C	cancer registry	see cancer_tnmclinn	see cancer_tnmclinn	
colon_tnmclint	C	cancer registry	see cancer_tnmclint	see cancer_tnmclint	
colon_tnmpathm	C	cancer registry	see cancer_tnmpathm	see cancer_tnmpathm	
colon_tnmpathn	C	cancer registry	see cancer_tnmpathn	see cancer_tnmpathn	
colon_tnmpatht	C	cancer registry	see cancer_tnmpatht	see cancer_tnmpatht	
colon_xnode	C	cancer registry	see cancer_xnode	see cancer_xnode	
coloncan	N	cancer registry	see cancercan	see cancercan	
colorectal_ajcc_stg	C	cancer registry	see cancer_ajcc_stg	see cancer_ajcc_stg	
colorectal_ajccseer	C	cancer registry	see cancer_ajccseer	see cancer_ajccseer	
colorectal_behv	C	cancer registry	see cancer_behv	see cancer_behv	
colorectal_dxconf	C	cancer registry	see cancer_dxconf	see cancer_dxconf	
colorectal_dxdt	N	cancer registry	see cancer_dxdt	see cancer_dxdt	
colorectal_grade	C	cancer registry	see cancer_grade	see cancer_grade	
colorectal_hist	C	cancer registry	see cancer_hist	see cancer_hist	
colorectal_histv	C	cancer registry	see cancer_histv	see cancer_histv	
colorectal_lateral	C	cancer registry	see cancer_lateral	see cancer_lateral	
colorectal_mort	N	cancer registry	see cancer_mort	see cancer_mort	
colorectal_pnode	C	cancer registry	see cancer_pnode	see cancer_pnode	
colorectal_seqno	C	cancer registry	see cancer_seqno	see cancer_seqno	
colorectal_site	C	cancer registry	see cancer_site	see cancer_site	
colorectal_siterec3	N	cancer registry	see cancer_siterec3	see cancer_siterec3	
colorectal_ss_stg	C	cancer registry	see cancer_ss_stg	see cancer_ss_stg	
colorectal_ss_stg47	C	cancer registry	see cancer_ss_stg47	see cancer_ss_stg47	
colorectal_ss_stgv	C	cancer registry	see cancer_ss_stgv	see cancer_ss_stgv	
colorectal_status	C	cancer registry	see cancer_status	see cancer_status	
colorectal_tnmclinm	C	cancer registry	see cancer_tnmclinm	see cancer_tnmclinm	
colorectal_tnmclinn	C	cancer registry	see cancer_tnmclinn	see cancer_tnmclinn	
colorectal_tnmclint	C	cancer registry	see cancer_tnmclint	see cancer_tnmclint	
colorectal_tnmpathm	C	cancer registry	see cancer_tnmpathm	see cancer_tnmpathm	
colorectal_tnmpathn	C	cancer registry	see cancer_tnmpathn	see cancer_tnmpathn	
colorectal_tnmpatht	C	cancer registry	see cancer_tnmpatht	see cancer_tnmpatht	
colorectal_xnode	C	cancer registry	see cancer_xnode	see cancer_xnode	
colorectalcan	N	cancer registry	see cancercan	see cancercan	

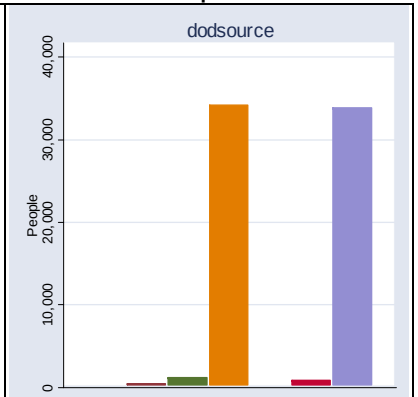
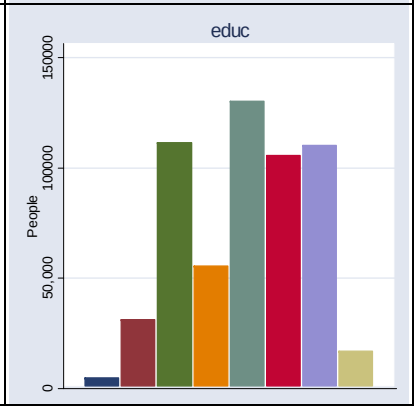
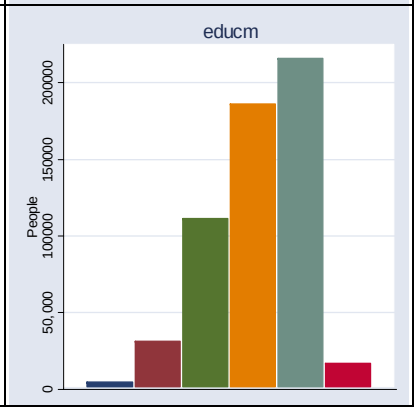
Variable Name	Type	Basis	Description	Levels	Graph
COMPACON	N	Other databases – Sprawl	Urban Sprawl Index developed by Dr. Reid Ewing	Continuous (range = 65.05 → 209.27)	
CONTRIBCOND01	C	NDI	1st contributing cause of death	Character variable	Character variable
CONTRIBCOND02	C	NDI	2nd contributing cause of death	Character variable	Character variable
CONTRIBCOND03	C	NDI	3rd contributing cause of death	Character variable	Character variable
CONTRIBCOND04	C	NDI	4th contributing cause of death	Character variable	Character variable
CONTRIBCOND05	C	NDI	5th contributing cause of death	Character variable	Character variable
CONTRIBCOND06	C	NDI	6th contributing cause of death	Character variable	Character variable
CONTRIBCOND07	C	NDI	7th contributing cause of death	Character variable	Character variable
CONTRIBCOND08	C	NDI	8th contributing cause of death	Character variable	Character variable
CONTRIBCOND09	C	NDI	9th contributing cause of death	Character variable	Character variable
CONTRIBCOND10	C	NDI	10th contributing cause of death	Character variable	Character variable
CONTRIBCOND11	C	NDI	11th contributing cause of death	Character variable	Character variable
CONTRIBCOND12	C	NDI	12th contributing cause of death	Character variable	Character variable
CONTRIBCOND13	C	NDI	13th contributing cause of death	Character variable	Character variable
CONTRIBCOND14	C	NDI	14th contributing cause of death	Character variable	Character variable
CONTRIBCOND15	C	NDI	15th contributing cause of death	Character variable	Character variable

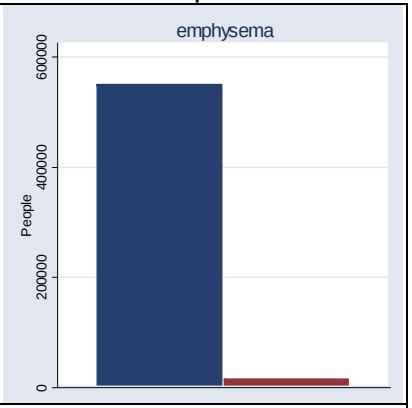
Variable Name	Type	Basis	Description	Levels	Graph
Copper	N	DietAARP derived	Copper - mg	Continuous (range = 0.01→ 56.41)	

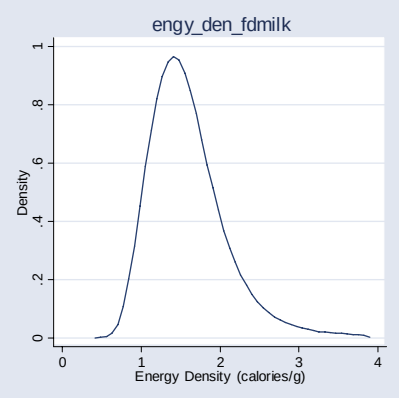
Variable Name	Type	Basis	Description	Levels	Graph
DairyCheese_Pyr	N	DietAARP derived	Number of cheese pyramid servings	Continuous (range = 0 → 12.79)	
DairyMilk_Pyr	N	DietAARP derived	Number of milk pyramid servings	Continuous (range = 0 → 39.82)	
DairyTotal_Pyr	N	DietAARP derived	Total number of dairy pyramid servings	Continuous (range = 0 → 51.46)	

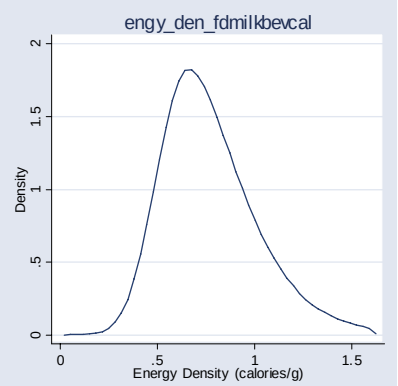
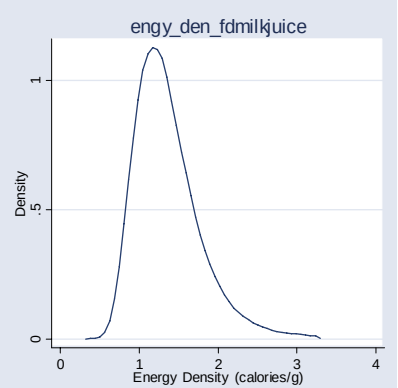
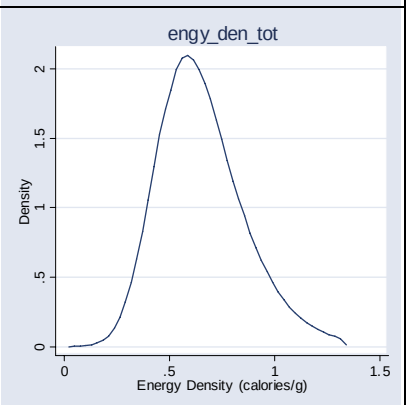
Variable Name	Type	Basis	Description	Levels	Graph
DairyYogurt_Pyr	N	DietAARP derived	Number of yogurt pyramid servings	Continuous (range = 0 → 2.26)	
death_allcausemort	N	cancer registry	Is source of participant death from SSADMF or NDI?	0 = either not dead or death not from SSADMF or NDI (*n* = 498,354) 1 = DOD from SSADMF or NDI (*n* = 68,053)	
DeltaTocopherol_NDSR	N	DietAARP derived	Delta-tocopherol – mg (NDS-R)	Continuous (range = 0.01 → 107.12)	

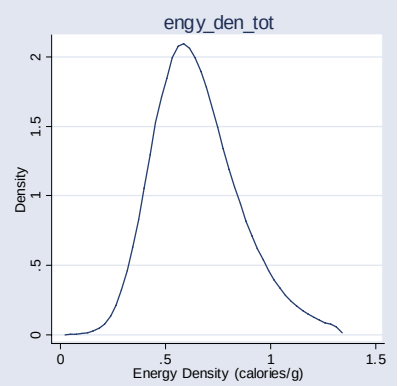
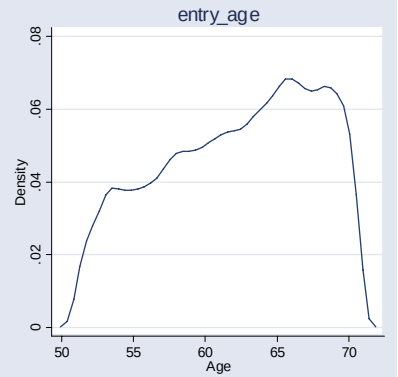
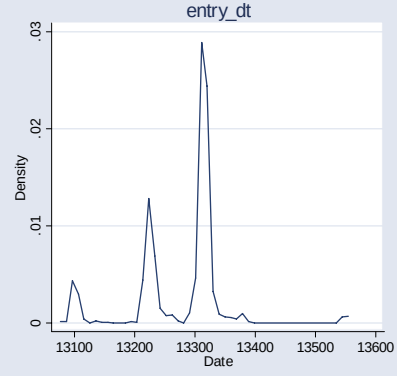
Variable Name	Type	Basis	Description	Levels	Graph
DIABETES	N	Cleaned from Q40B	self-reported history of diabetes	0 = No (*n* = 513,760) 1 = Yes (*n* = 52,647)	
DOD	N	Multiple Sources	Date of death (in SAS format) (See DODSOURCE)	Continuous (range = 13,096 → 16,798)	
DODIMPUTED	C	Multiple Sources	Has a date of death been imputed? (SEE DODSOURCE)	A = all of date of death imputed (*n* = 1,439) N = no (*n* = 68,512) Y = non-year portion of date of death imputed (*n* = 713) Missing (*n* = 495,743)	

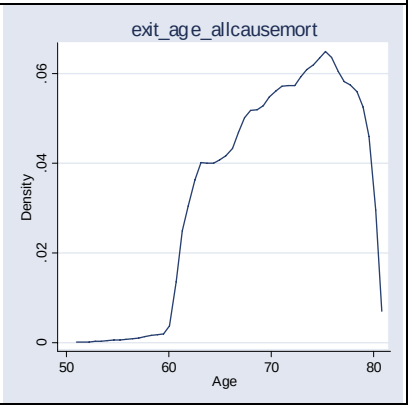
Variable Name	Type	Basis	Description	Levels	Graph
DODSOURCE	C	Multiple Sources	Source for death information	B = Buccal cell study responses (*n* = 70) C = cancer registry returns, version 2 (*n* = 459) F = follow up questionnaire responses (*n* = 1,231) N = National Death Index (*n* = 34,193) P = Pilo study follow up quex, box B (*n* = 6) R = RFQ box A (*n* = 845) S = SSADMF (*n* =33860) Missing (*n* = 495,743)	
EDUC	N	Cleaned from Q37	Education	1 = less than 8 years (*n* = 4,685) 2 = 8-11 years (*n* = 31,378) 3 = 12 years or completed high school (*n* = 111,530) 4 = post-high school training other than college (e.g. vocational or technical training) (*n* = 55,658) 5 = some college (*n* = 130,365) 6 = college graduate (*n* = 105,641) 7 = post graduate (*n* = 110,167) 9 = unknown (*n* = 16,983)	
EDUCM	N	Cleaned from Q37	Education (condensed levels)	1 = less than 8 years (*n* = 4,685) 2 = 8-11 years (*n* = 31,378) 3 = 12 years or completed high school (*n* = 111,530) 4 = post-high school or some college (*n* = 186,023) 5 = college and post graduate (*n* = 215,808) 9 = unknown (16,983)	

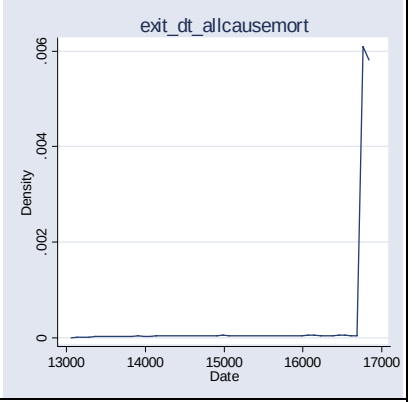
Variable Name	Type	Basis	Description	Levels	Graph
EMPHYSEMA	N	Cleaned from Q40D	Self-reported history of emphysema	0 = No (*n* = 550,356) 1 = Yes (*n* = 16,051)	
endo_ajcc_stg	C	cancer registry	see cancer_ajcc_stg	see cancer_ajcc_stg	
endo_ajccseer	C	cancer registry	see cancer_ajccseer	see cancer_ajccseer	
endo_behv	C	cancer registry	see cancer_behv	see cancer_behv	
endo_dxconf	C	cancer registry	see cancer_dxconf	see cancer_dxconf	
endo_dxdt	N	cancer registry	see cancer_dxdt	see cancer_dxdt	
endo_grade	C	cancer registry	see cancer_grade	see cancer_grade	
endo_hist	C	cancer registry	see cancer_hist	see cancer_hist	
endo_histv	C	cancer registry	see cancer_histv	see cancer_histv	
endo_lateral	C	cancer registry	see cancer_lateral	see cancer_lateral	
endo_mort	N	cancer registry	see cancer_mort	see cancer_mort	
endo_pnode	C	cancer registry	see cancer_pnode	see cancer_pnode	
endo_seqno	C	cancer registry	see cancer_seqno	see cancer_seqno	
endo_site	C	cancer registry	see cancer_site	see cancer_site	
endo_siterec3	N	cancer registry	see cancer_siterec3	see cancer_siterec3	
endo_ss_stg	C	cancer registry	see cancer_ss_stg	see cancer_ss_stg	
endo_ss_stg47	C	cancer registry	see cancer_ss_stg47	see cancer_ss_stg47	
endo_ss_stgv	C	cancer registry	see cancer_ss_stgv	see cancer_ss_stgv	
endo_status	C	cancer registry	see cancer_status	see cancer_status	
endo_tnmclinm	C	cancer registry	see cancer_tnmclinm	see cancer_tnmclinm	
endo_tnmclinn	C	cancer registry	see cancer_tnmclinn	see cancer_tnmclinn	
endo_tnmclint	C	cancer registry	see cancer_tnmclint	see cancer_tnmclint	
endo_tnmpathm	C	cancer registry	see cancer_tnmpathm	see cancer_tnmpathm	
endo_tnmpathn	C	cancer registry	see cancer_tnmpathn	see cancer_tnmpathn	
endo_tnmpatht	C	cancer registry	see cancer_tnmpatht	see cancer_tnmpatht	
endo_xnode	C	cancer registry	see cancer_xnode	see cancer_xnode	
endocan	N	cancer registry	see cancercan	see cancercan	
endocrine_ajcc_stg	C	cancer registry	see cancer_ajcc_stg	see cancer_ajcc_stg	

Variable Name	Type	Basis	Description	Levels	Graph
endocrine_ajccseer	C	cancer registry	see cancer_ajccseer	see cancer_ajccseer	
endocrine_behv	C	cancer registry	see cancer_behv	see cancer_behv	
endocrine_dxconf	C	cancer registry	see cancer_dxconf	see cancer_dxconf	
endocrine_dxdt	N	cancer registry	see cancer_dxdt	see cancer_dxdt	
endocrine_grade	C	cancer registry	see cancer_grade	see cancer_grade	
endocrine_hist	C	cancer registry	see cancer_hist	see cancer_hist	
endocrine_histv	C	cancer registry	see cancer_histv	see cancer_histv	
endocrine_lateral	C	cancer registry	see cancer_lateral	see cancer_lateral	
endocrine_mort	N	cancer registry	see cancer_mort	see cancer_mort	
endocrine_pnode	C	cancer registry	see cancer_pnode	see cancer_pnode	
endocrine_seqno	C	cancer registry	see cancer_seqno	see cancer_seqno	
endocrine_site	C	cancer registry	see cancer_site	see cancer_site	
endocrine_siterec3	N	cancer registry	see cancer_siterec3	see cancer_siterec3	
endocrine_ss_stg	C	cancer registry	see cancer_ss_stg	see cancer_ss_stg	
endocrine_ss_stg47	C	cancer registry	see cancer_ss_stg47	see cancer_ss_stg47	
endocrine_ss_stgv	C	cancer registry	see cancer_ss_stgv	see cancer_ss_stgv	
endocrine_status	C	cancer registry	see cancer_status	see cancer_status	
endocrine_tnmclinm	C	cancer registry	see cancer_tnmclinm	see cancer_tnmclinm	
endocrine_tnmclinn	C	cancer registry	see cancer_tnmclinn	see cancer_tnmclinn	
endocrine_tnmclint	C	cancer registry	see cancer_tnmclint	see cancer_tnmclint	
endocrine_tnmpathm	C	cancer registry	see cancer_tnmpathm	see cancer_tnmpathm	
endocrine_tnmpathn	C	cancer registry	see cancer_tnmpathn	see cancer_tnmpathn	
endocrine_tnmpatht	C	cancer registry	see cancer_tnmpatht	see cancer_tnmpatht	
endocrine_xnode	C	cancer registry	see cancer_xnode	see cancer_xnode	
endocrinecan	N	cancer registry	see cancercan	see cancercan	
engy_den_fdmilk	N	DietAARP derived	Energy density: calories/g_food_milk	Continuous (range 0.44 → 121.49)	

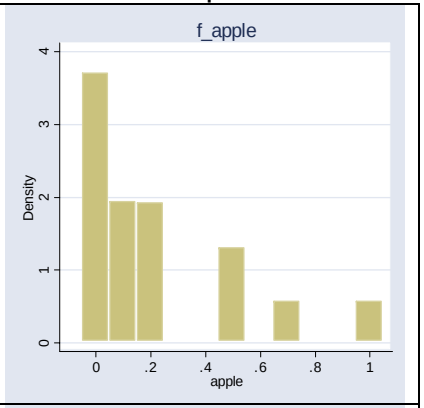
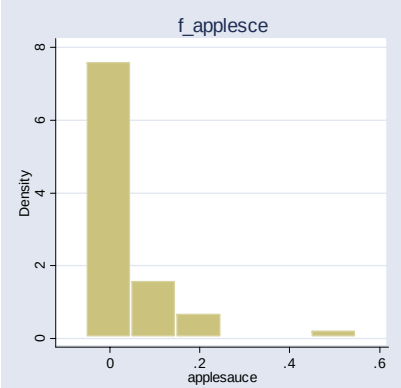
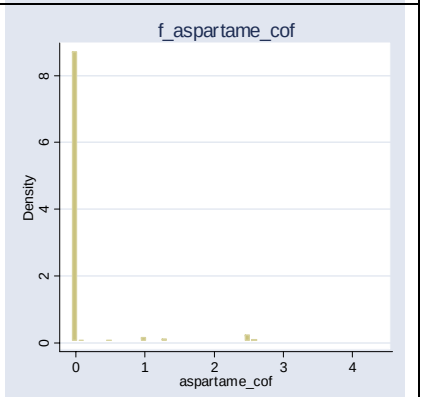
Variable Name	Type	Basis	Description	Levels	Graph
engy_den_fdmilkbevcal	N	DietAARP derived	Energy density: calories/g_food_milk_bevcal	Continuous (range 0.03 → 4.12)	
engy_den_fdmilkjuice	N	DietAARP derived	Energy density: calories/g_food_milk_juice	Continuous (range 0.34 → 121.49)	
engy_den_fdonly	N	DietAARP derived	Energy density: calories/g_foodonly	Continuous (range 0.44 → 136.63)	

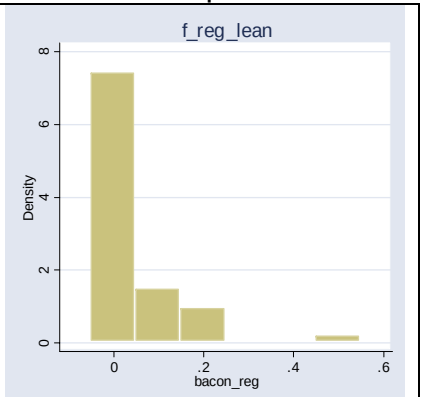
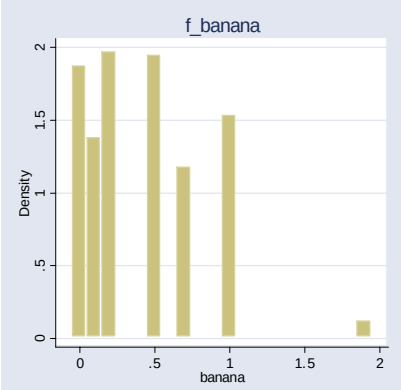
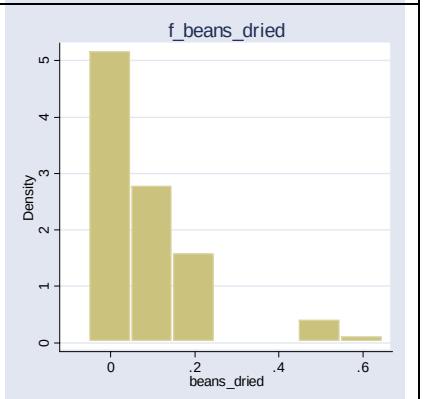
Variable Name	Type	Basis	Description	Levels	Graph
engy_den_tot	N	DietAARP derived	Energy density: calories/g_total	Continuous (range 0.03 → 3.14)	
entry_age	N	Analysis variables	Age at entry (baseline scan date)	Continuous (range = 50.28 → 71.52)	
entry_dt	N	Analysis variables	Baseline scan date	Continuous (range = 13,081 → 13,550)	
esophagus_ajcc_stg	C	cancer registry	see cancer_ajcc_stg	see cancer_ajcc_stg	
esophagus_ajccseer	C	cancer registry	see cancer_ajccseer	see cancer_ajccseer	

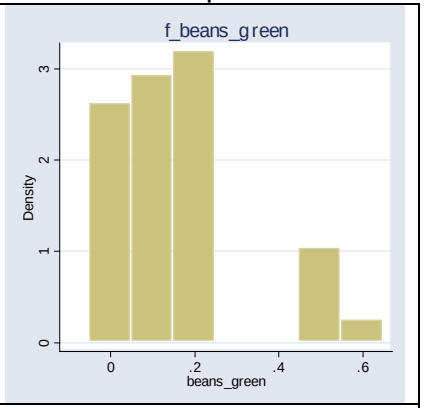
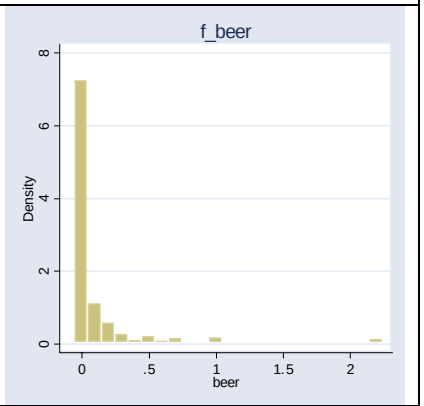
Variable Name	Type	Basis	Description	Levels	Graph
esophagus_behv	C	cancer registry	see cancer_behv	see cancer_behv	
esophagus_dxconf	C	cancer registry	see cancer_dxconf	see cancer_dxconf	
esophagus_dxdt	N	cancer registry	see cancer_dxdt	see cancer_dxdt	
esophagus_grade	C	cancer registry	see cancer_grade	see cancer_grade	
esophagus_hist	C	cancer registry	see cancer_hist	see cancer_hist	
esophagus_histv	C	cancer registry	see cancer_histv	see cancer_histv	
esophagus_lateral	C	cancer registry	see cancer_lateral	see cancer_lateral	
esophagus_mort	N	cancer registry	see cancer_mort	see cancer_mort	
esophagus_pnode	C	cancer registry	see cancer_pnode	see cancer_pnode	
esophagus_seqno	C	cancer registry	see cancer_seqno	see cancer_seqno	
esophagus_site	C	cancer registry	see cancer_site	see cancer_site	
esophagus_siterec3	N	cancer registry	see cancer_siterec3	see cancer_siterec3	
esophagus_ss_stg	C	cancer registry	see cancer_ss_stg	see cancer_ss_stg	
esophagus_ss_stg47	C	cancer registry	see cancer_ss_stg47	see cancer_ss_stg47	
esophagus_ss_stgv	C	cancer registry	see cancer_ss_stgv	see cancer_ss_stgv	
esophagus_status	C	cancer registry	see cancer_status	see cancer_status	
esophagus_tnmclinm	C	cancer registry	see cancer_tnmclinm	see cancer_tnmclinm	
esophagus_tnmclinn	C	cancer registry	see cancer_tnmclinn	see cancer_tnmclinn	
esophagus_tnmclint	C	cancer registry	see cancer_tnmclint	see cancer_tnmclint	
esophagus_tnmpathm	C	cancer registry	see cancer_tnmpathm	see cancer_tnmpathm	
esophagus_tnmpathn	C	cancer registry	see cancer_tnmpathn	see cancer_tnmpathn	
esophagus_tnmpatht	C	cancer registry	see cancer_tnmpatht	see cancer_tnmpatht	
esophagus_xnode	C	cancer registry	see cancer_xnode	see cancer_xnode	
esophaguscan	N	cancer registry	see cancercan	see cancercan	
exit_age_allcausemort	N	Multiple sources	Exit age for All Cause Mortality	Continuous (range = 51.3 → 80.4)	

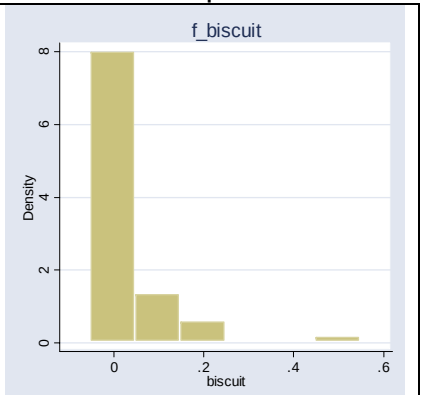
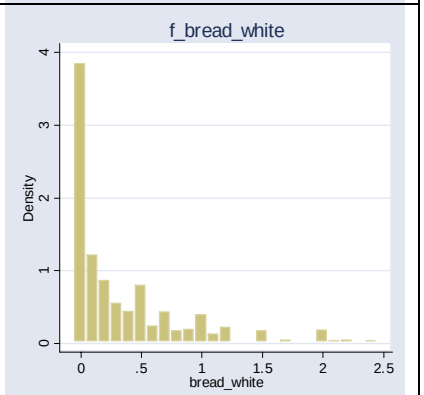
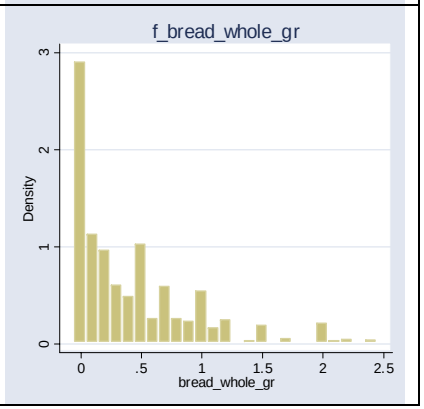
Variable Name	Type	Basis	Description	Levels	Graph
exit_dt_allcausemort	N	Multiple sources	Exit date for All Cause Mortality (DOD or 12/31/2004)	Continuous (range = 13,096 → 16,801) (sasdate)	
eye_ajcc_stg	C	cancer registry	see cancer_ajcc_stg	see cancer_ajcc_stg	
eye_ajccseer	C	cancer registry	see cancer_ajccseer	see cancer_ajccseer	
eye_behv	C	cancer registry	see cancer_behv	see cancer_behv	
eye_dxconf	C	cancer registry	see cancer_dxconf	see cancer_dxconf	
eye_dxdt	N	cancer registry	see cancer_dxdt	see cancer_dxdt	
eye_grade	C	cancer registry	see cancer_grade	see cancer_grade	
eye_hist	C	cancer registry	see cancer_hist	see cancer_hist	
eye_histv	C	cancer registry	see cancer_histv	see cancer_histv	
eye_lateral	C	cancer registry	see cancer_lateral	see cancer_lateral	
eye_mort	N	cancer registry	see cancer_mort	see cancer_mort	
eye_pnode	C	cancer registry	see cancer_pnode	see cancer_pnode	
eye_seqno	C	cancer registry	see cancer_seqno	see cancer_seqno	
eye_site	C	cancer registry	see cancer_site	see cancer_site	
eye_siterec3	N	cancer registry	see cancer_siterec3	see cancer_siterec3	
eye_ss_stg	C	cancer registry	see cancer_ss_stg	see cancer_ss_stg	
eye_ss_stg47	C	cancer registry	see cancer_ss_stg47	see cancer_ss_stg47	
eye_ss_stgv	C	cancer registry	see cancer_ss_stgv	see cancer_ss_stgv	
eye_status	C	cancer registry	see cancer_status	see cancer_status	
eye_tnmclinm	C	cancer registry	see cancer_tnmclinm	see cancer_tnmclinm	
eye_tnmclinn	C	cancer registry	see cancer_tnmclinn	see cancer_tnmclinn	
eye_tnmclint	C	cancer registry	see cancer_tnmclint	see cancer_tnmclint	
eye_tnmpathm	C	cancer registry	see cancer_tnmpathm	see cancer_tnmpathm	
eye_tnmpathn	C	cancer registry	see cancer_tnmpathn	see cancer_tnmpathn	
eye_tnmpatht	C	cancer registry	see cancer_tnmpatht	see cancer_tnmpatht	
eye_xnode	C	cancer registry	see cancer_xnode	see cancer_xnode	
eyecan	N	cancer registry	see cancercan	see cancercan	

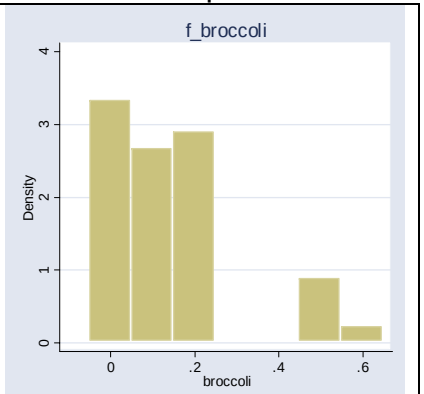
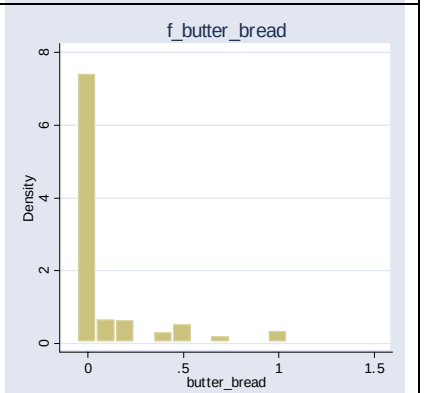
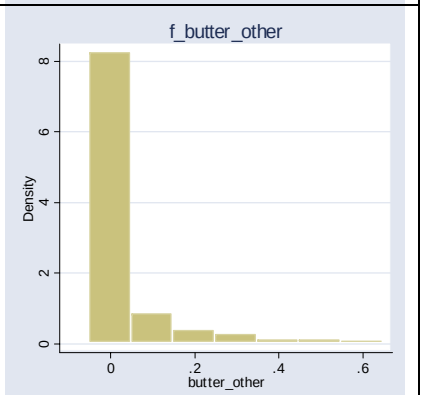
Variable Name	Type	Basis	Description	Levels	Graph

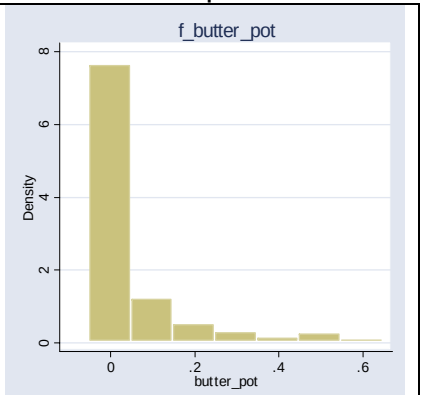
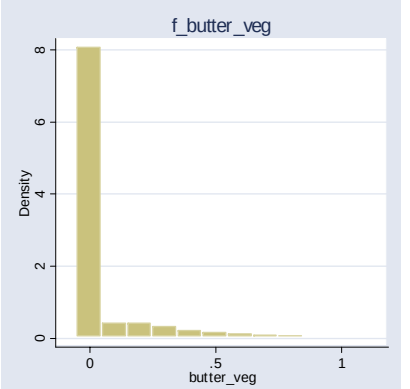
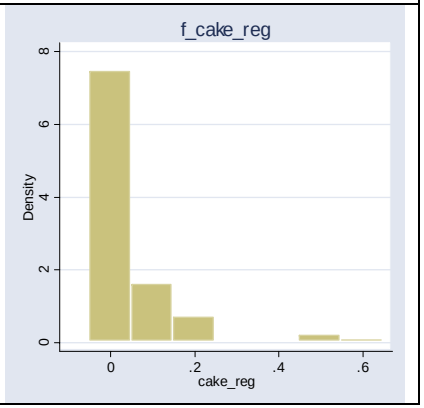
Variable Name	Type	Basis	Description	Levels	Graph
f_apple	N	DietAARP derived	Apples (freq/day)	Continuous (range = 0 → 2)	
f_applesce	N	DietAARP derived	Applesauce/cooked apples (freq/day)	Continuous (range = 0 → 2)	
f_aspartame_cof	N	DietAARP derived	Aspartame in coffee or tea (freq/day)	Continuous (range = 0 → 14)	
f_bacon_lean	N	DietAARP derived	Bacon, lean / Canadian (freq/day)	Continuous (range = 0 → 1.5)	uninformative graph

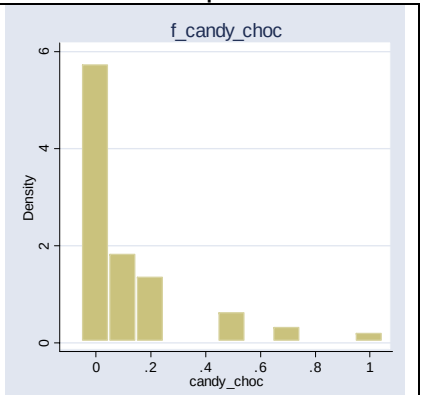
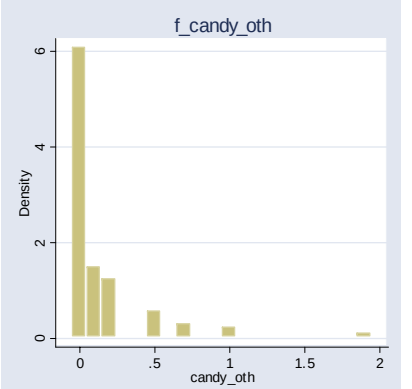
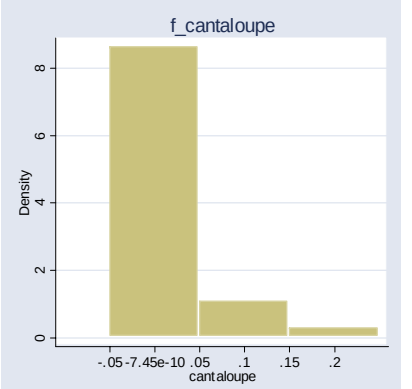
Variable Name	Type	Basis	Description	Levels	Graph
f_bacon_reg	N	DietAARP derived	Bacon, regular (freq/day)	Continuous (range = 0 → 2)	
f_banana	N	DietAARP derived	Bananas (freq/day)	Continuous (range = 0 → 2)	
f_beans_dried	N	DietAARP derived	Bananas (freq/day)	Continuous (range =0 → 2)	

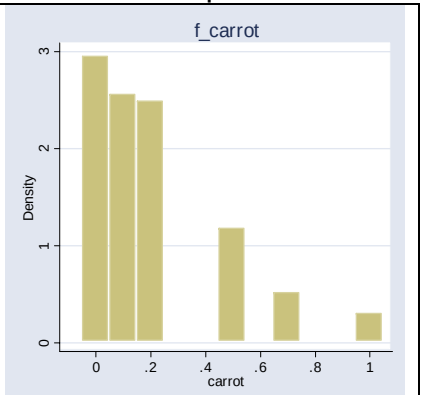
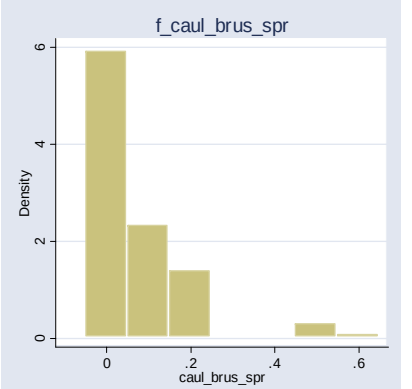
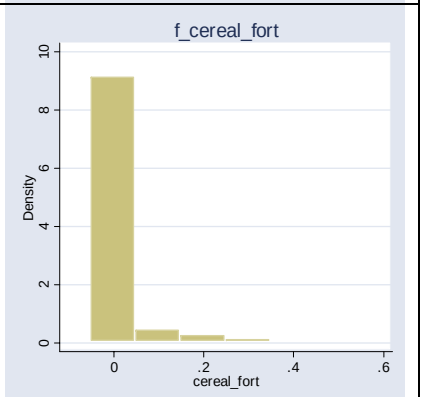
Variable Name	Type	Basis	Description	Levels	Graph
f_beans_green	N	DietAARP derived	String beans, NFA (freq/day)	Continuous (range = 0 → 2)	
f_beef_stew	N	DietAARP derived	Beef stews / pot pies (freq/day)	Continuous (range = 0 → 2)	uninformative graph
f_beefrst_lean	N	DietAARP derived	Beef roasts, lean (freq/day)	Continuous (range = 0 → 1.5)	uninformative graph
f_beefrst_reg	N	DietAARP derived	Beef roasts, regular (freq/day)	Continuous (range = 0 → 2)	uninformative graph
f_beefrst_sand	N	DietAARP derived	Beef, solid or roast in sandwiches (freq/day)	Continuous (range = 0 → 2)	uninformative graph
f_beer	N	DietAARP derived	Beer (freq/day)	Continuous (range = 0 → 7)	

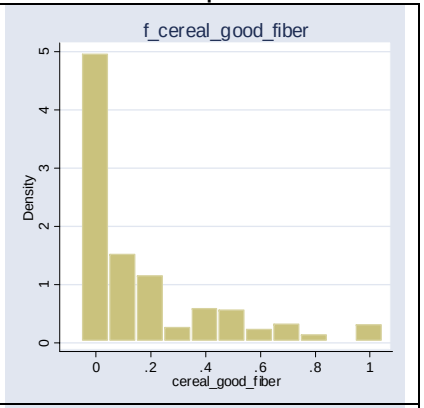
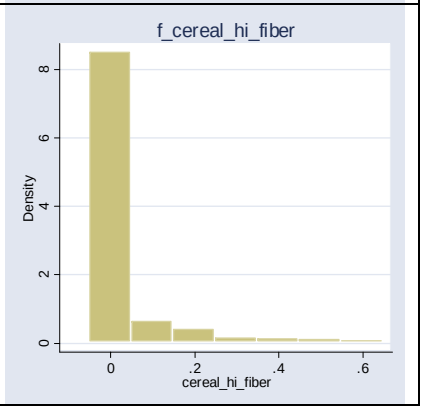
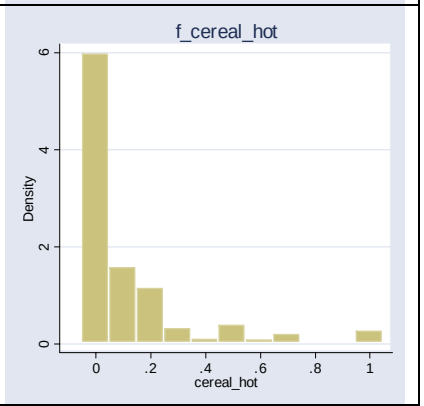
Variable Name	Type	Basis	Description	Levels	Graph
f_biscuit	N	DietAARP derived	Biscuits, all (freq/day)	Continuous (range = 0 → 2)	
f_bread_white	N	DietAARP derived	Breads / rolls, white (freq/day)	Continuous (range = 0 → 4)	
f_bread_whole_gr	N	DietAARP derived	Breads / rolls, whole grain (freq/day)	Continuous (range = 0 → 4)	

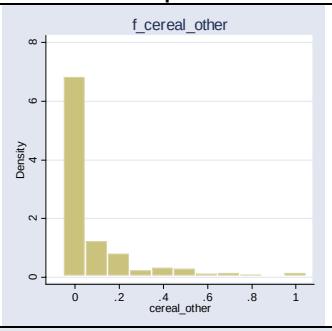
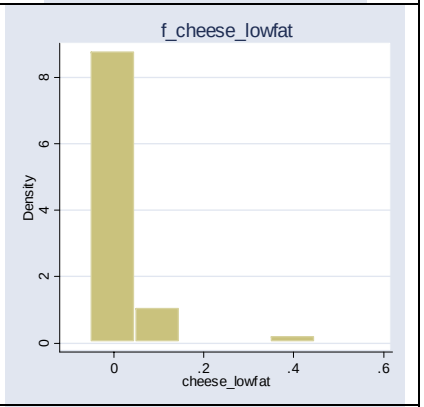
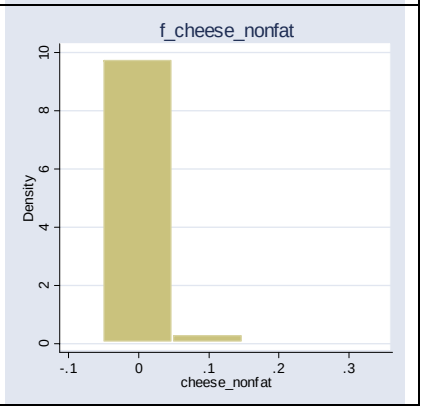
Variable Name	Type	Basis	Description	Levels	Graph
f_broccoli	N	DietAARP derived	Broccoli, NFA (freq/day)	Continuous (range = 0 → 2)	
f_butter_bread	N	DietAARP derived	Butter on bread (freq/day)	Continuous (range = 0 → 2)	
f_butter_other	N	DietAARP derived	Butter, other uses (freq/day)	Continuous (range = 0 → 4.3)	
f_butter_panc	N	DietAARP derived	Butter on pancakes or waffles (freq/day)	Continuous (range = 0 → 2)	uninformative graph

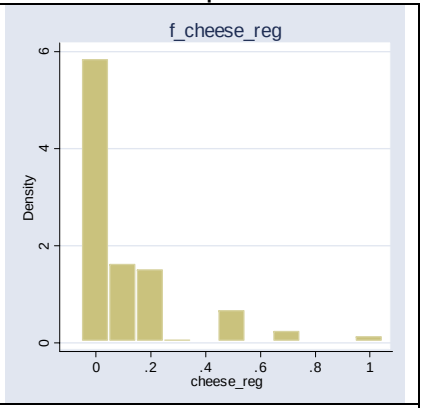
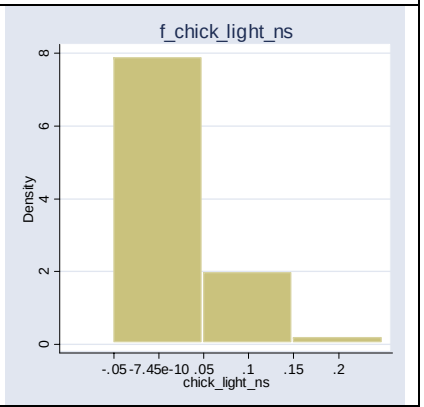
Variable Name	Type	Basis	Description	Levels	Graph
f_butter_pot	N	DietAARP derived	Butter on potatoes (freq/day)	Continuous (range = 0 → 4)	
f_butter_veg	N	DietAARP derived	Butter on vegetables (freq/day)	Continuous (range = 0 → 10)	
f_cake_lowfat	N	DietAARP derived	Cakes, low-fat (freq/day)	Continuous (range = 0 → 1.5)	uninformative graph
f_cake_reg	N	DietAARP derived	Cakes, regular (freq/day)	Continuous (range = 0 → 2)	

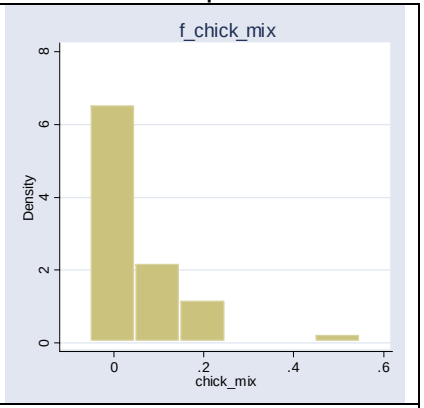
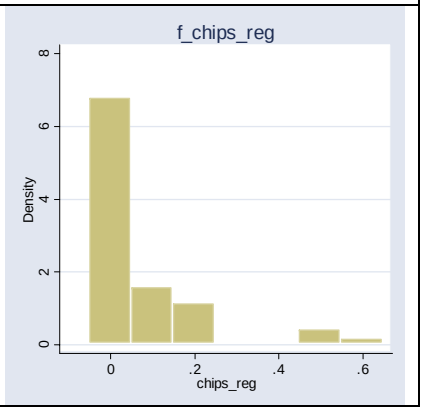
Variable Name	Type	Basis	Description	Levels	Graph
f_candy_choc	N	DietAARP derived	Candy, chocolate (freq/day)	Continuous (range = 0 → 2)	
f_candy_oth	N	DietAARP derived	Candy, not chocolate (freq/day)	Continuous (range = 0 → 2)	
f_cantaloupe	N	DietAARP derived	Cantaloupe (freq/day)	Continuous (range = 0 → 0.5)	

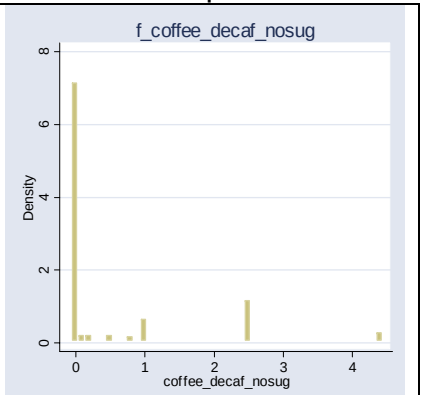
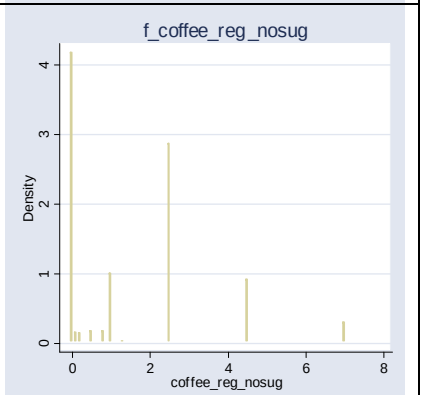
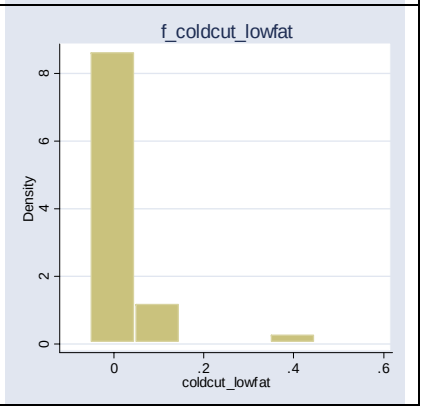
Variable Name	Type	Basis	Description	Levels	Graph
f_carrot	N	DietAARP derived	Carrots, NFA (freq/day)	Continuous (range = 0 → 2)	
f_caul_brus_spr	N	DietAARP derived	Cauliflower / Brussels Sprouts, NFA (freq/day)	Continuous (range = 0 → 2)	
f_cereal_fort	N	DietAARP derived	RTE cereal, highly fort (freq/day)	Continuous (range = 0 → 2)	

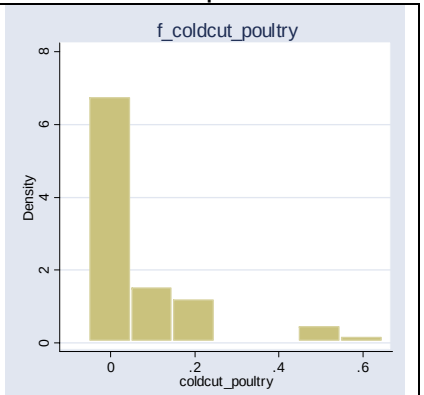
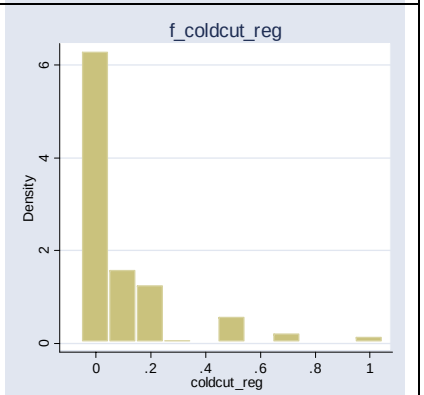
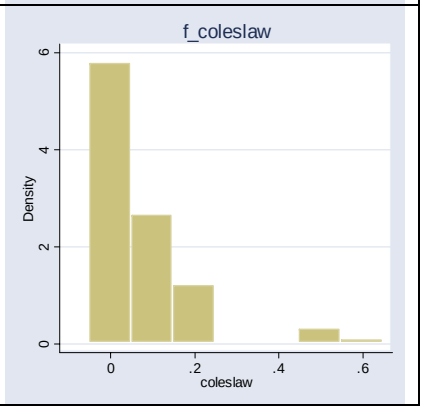
Variable Name	Type	Basis	Description	Levels	Graph
f_cereal_good_fiber	N	DietAARP derived	RTE cereal, good fiber (freq/day)	Continuous (range = 0 → 2)	
f_cereal_hi_fiber	N	DietAARP derived	RTE cereal, hi-fiber (freq/day)	Continuous (range = 0 → 2)	
f_cereal_hot	N	DietAARP derived	Hot breakfast cereals, NFA (freq/day)	Continuous (range = 0 → 2)	

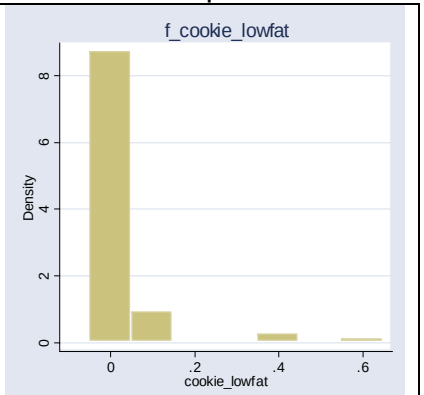
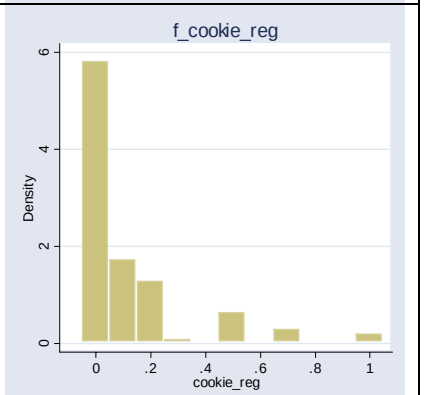
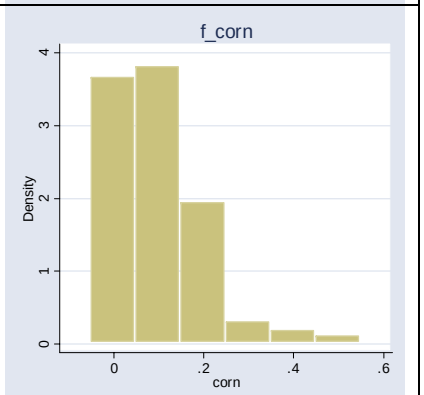
Variable Name	Type	Basis	Description	Levels	Graph
f_cereal_other	N	DietAARP derived	RTE cereal, other (freq/day)	Continuous (range = 0 → 2)	
f_cheese_lowfat	N	DietAARP derived	Cheese, low-fat (freq/day)	Continuous (range = 0 → 1.5)	
f_cheese_nonfat	N	DietAARP derived	Cheese, nonfat (freq/day)	Continuous (range = 0 → 1.5)	

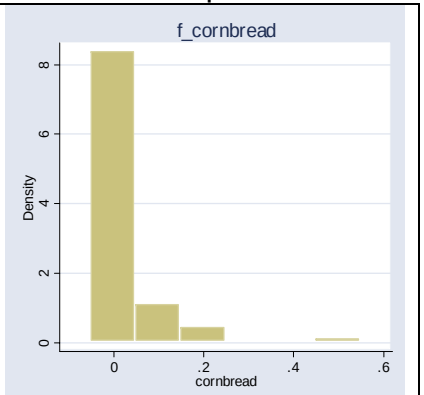
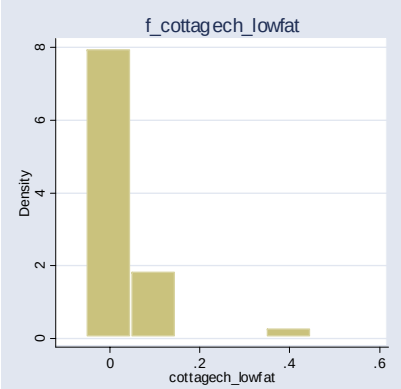
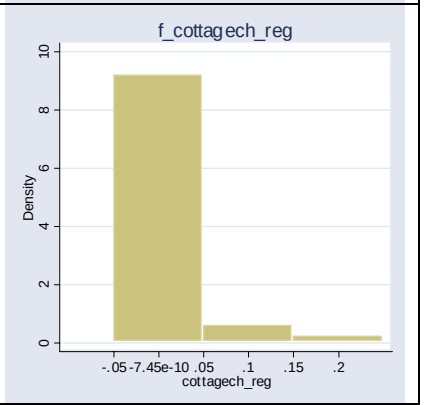
Variable Name	Type	Basis	Description	Levels	Graph
f_cheese_reg	N	DietAARP derived	Cheese, regular (freq/day)	Continuous (range = 0 → 2)	
f_chick_dark_ns	N	DietAARP derived	Chicken, dark, no skin (freq/day)	Continuous (range = 0 → 1.5)	uninformative graph
f_chick_dark_ws	N	DietAARP derived	Chicken, dark, with skin (freq/day)	Continuous (range = 0 → 2)	uninformative graph
f_chick_fr_dark_ns	N	DietAARP derived	Chicken, fried, dark, no skin (freq/day)	Continuous (range = 0 → 1.5)	uninformative graph
f_chick_fr_dark_ws	N	DietAARP derived	Chicken, fried, dark, with skin (freq/day)	Continuous (range = 0 → 2)	uninformative graph
f_chick_fr_light_ns	N	DietAARP derived	Chicken, fried, light, no skin (freq/day)	Continuous (range = 0 → 1.1)	uninformative graph
f_chick_fr_light_ws	N	DietAARP derived	Chicken, fried, light, with skin (freq/day)	Continuous (range = 0 → 1.5)	uninformative graph
f_chick_light_ns	N	DietAARP derived	Chicken, light, no skin (freq/day)	Continuous (range = 0 → 1.1)	
f_chick_light_ws	N	DietAARP derived	Chicken, light, with skin (freq/day)	Continuous (range = 0 → 1.5)	uninformative graph

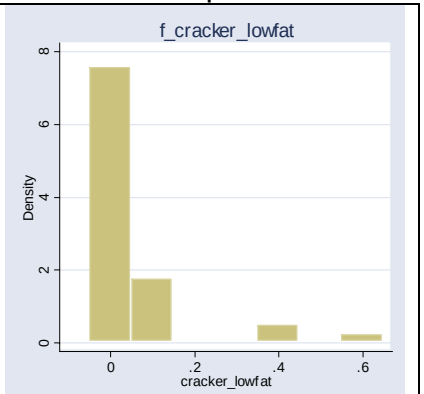
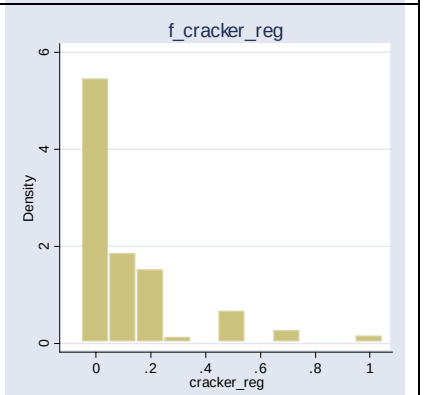
Variable Name	Type	Basis	Description	Levels	Graph
f_chick_mix	N	DietAARP derived	Chicken, mixtures (freq/day)	Continuous (range = 0 → 2)	
f_chili	N	DietAARP derived	Chili (freq/day)	Continuous (range = 0 → 2)	uninformative graph
f_chips_lowfat	N	DietAARP derived	Potato / corn / other chips, low-fat (freq/day)	Continuous (range = 0 → 1.5)	uninformative graph
f_chips_reg	N	DietAARP derived	Potato / corn / other chips, regular (freq/day)	Continuous (range = 0 → 2)	

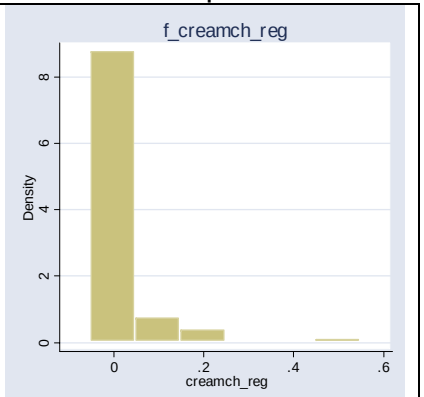
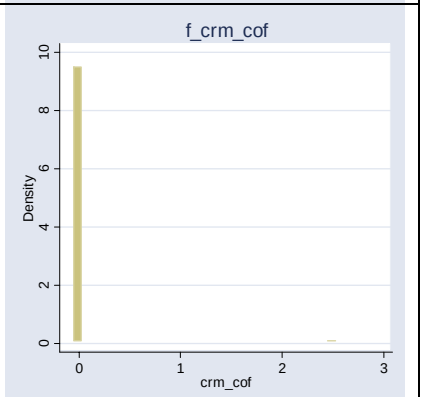
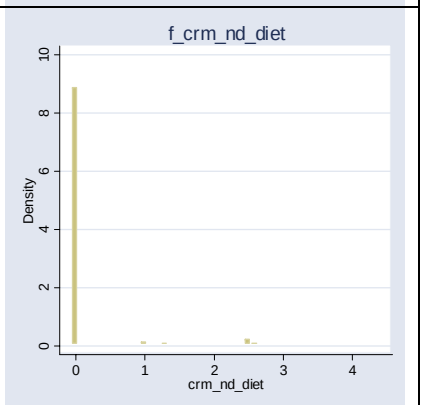
Variable Name	Type	Basis	Description	Levels	Graph
f_coffee_decaf_nosug	N	DietAARP derived	Coffee, decaf, no cream or sugar (freq/day)	Continuous (range = 0 → 7)	
f_coffee_reg_nosug	N	DietAARP derived	Coffee, regular, no cream or sugar (freq/day)	Continuous (range = 0 → 7)	
f_coldcut_lowfat	N	DietAARP derived	Cold cuts, low-fat (freq/day)	Continuous (range = 0 → 1.5)	

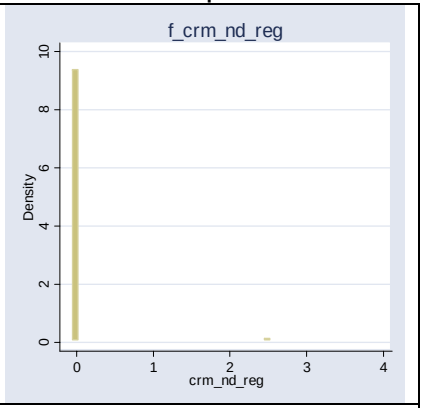
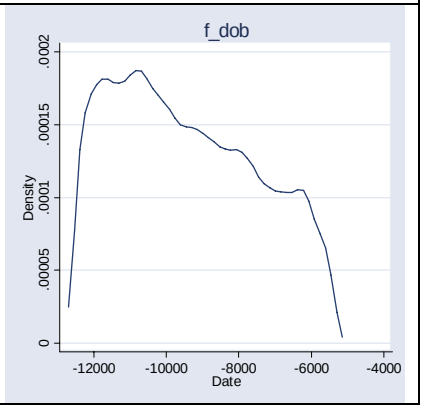
Variable Name	Type	Basis	Description	Levels	Graph
f_coldcut_poultry	N	DietAARP derived	Cold cuts, poultry (freq/day)	Continuous (range = 0 → 2)	
f_coldcut_reg	N	DietAARP derived	Cold cuts, regular (freq/day)	Continuous (range = 0 → 2)	
f_coleslaw	N	DietAARP derived	Coleslaw / cabbage / sauerkraut (freq/day)	Continuous (range = 0 → 2)	

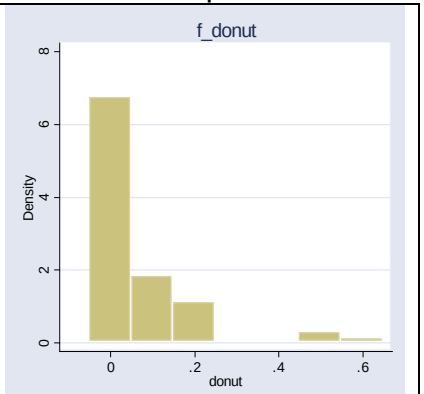
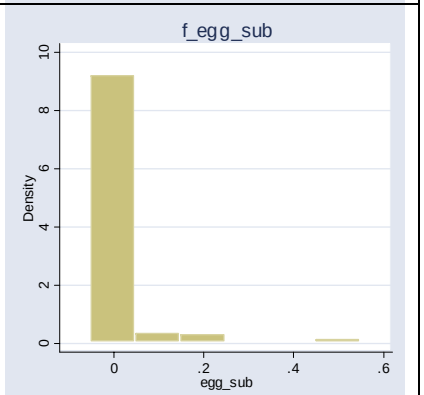
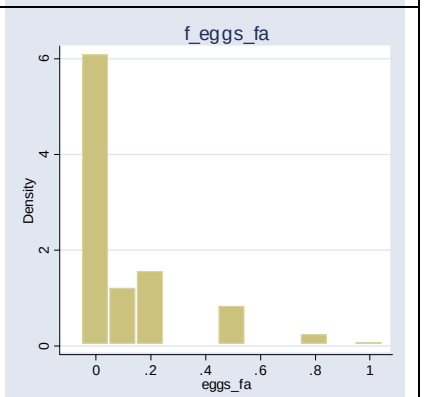
Variable Name	Type	Basis	Description	Levels	Graph
f_cookie_lowfat	N	DietAARP derived	Cookies, brownies, low-fat (freq/day)	Continuous (range = 0 → 2)	
f_cookie_reg	N	DietAARP derived	Cookies, brownies, regular (freq/day)	Continuous (range = 0 → 2)	
f_corn	N	DietAARP derived	Corn, NFA (freq/day)	Continuous (range = 0 → 2)	

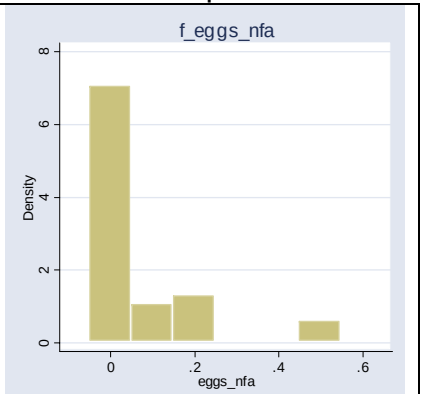
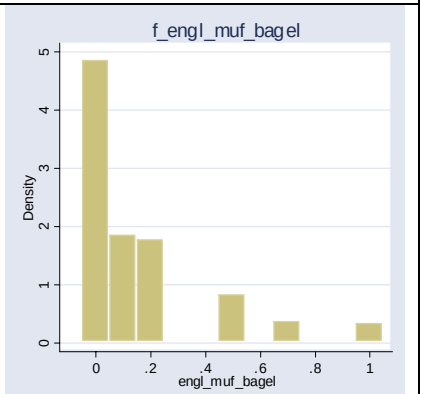
Variable Name	Type	Basis	Description	Levels	Graph
f_cornbread	N	DietAARP derived	Cornbread / muffins (freq/day)	Continuous (range = 0 → 2)	
f_cottagech_lowfat	N	DietAARP derived	Cottage cheese / ricotta cheese, low-fat (freq/day)	Continuous (range = 0 → 2)	
f_cottagech_reg	N	DietAARP derived	Cottage cheese / ricotta cheese, regular (freq/day)	Continuous (range = 0 → 2)	

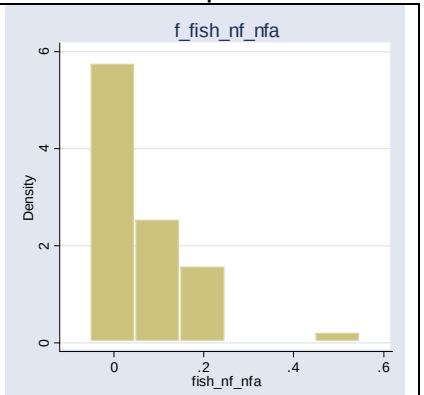
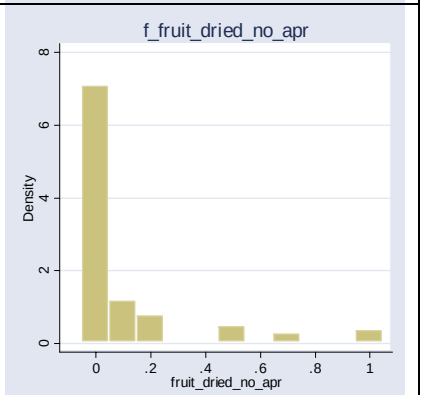
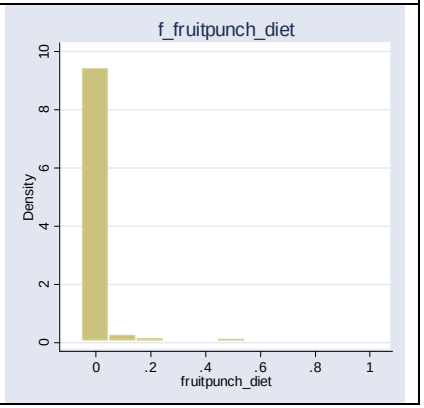
Variable Name	Type	Basis	Description	Levels	Graph
f_cracker_lowfat	N	DietAARP derived	Crackers, low-fat (freq/day)	Continuous (range = 0 → 2)	
f_cracker_reg	N	DietAARP derived	Crackers, regular (freq/day)	Continuous (range = 0 → 2)	
f_creamch_lowfat	N	DietAARP derived	Cream cheese, low-fat (freq/day)	Continuous (range = 0 → 1.5)	uninformative graph
f_creamch_nonfat	N	DietAARP derived	Cream cheese, fat free (freq/day)	Continuous (range = 0 → 1.5)	uninformative graph

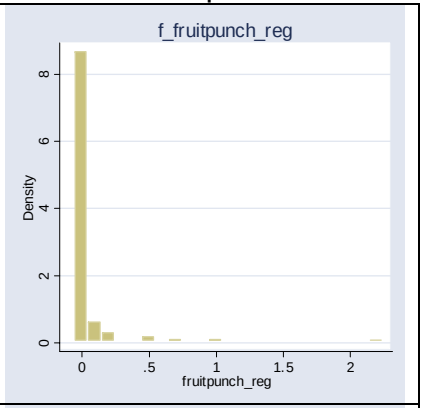
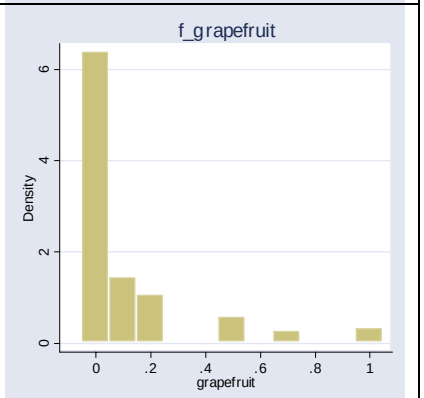
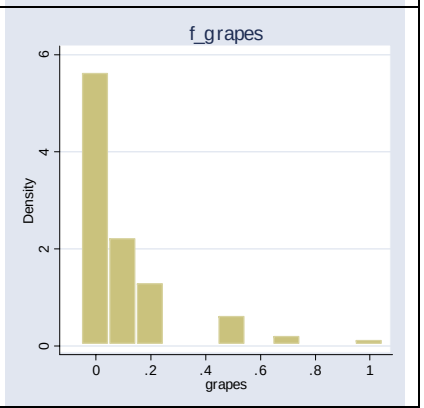
Variable Name	Type	Basis	Description	Levels	Graph
f_creamch_reg	N	DietAARP derived	Cream cheese, regular (freq/day)	Continuous (range = 0 → 2)	
f_crm_cof	N	DietAARP derived	Cream, regular, or ½ & ½, in coffee (freq/day)	Continuous (range = 0 → 14)	
f_crm_nd_diet	N	DietAARP derived	Non-dairy creamer, diet, in coffee (freq/day)	Continuous (range = 0 → 14)	

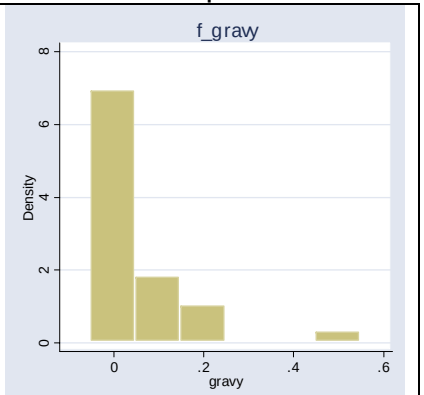
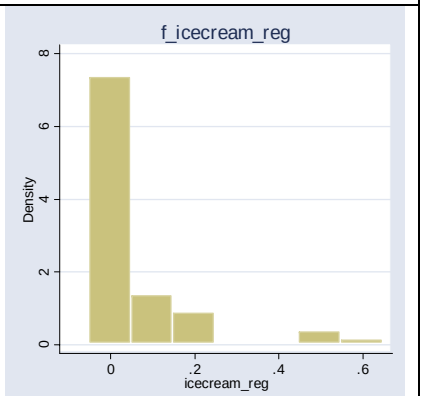
Variable Name	Type	Basis	Description	Levels	Graph
f_crm_nd_reg	N	DietAARP derived	Non-dairy creamer, regular, in coffee (freq/day)	Continuous (range = 0 → 14)	
f_crm_sour_lowfat	N	DietAARP derived	Sour cream, low-fat (freq/day)	Continuous (range = 0 → 1.5)	uninformative graph
f_crm_sour_nonfat	N	DietAARP derived	Sour cream, fat free (freq/day)	Continuous (range = 0 → 1.5)	uninformative graph
f_crm_sour_reg	N	DietAARP derived	Sour cream, regular (freq/day)	Continuous (range = 0 → 2)	uninformative graph
F_DOB	N	AARP frame	Date of birth from AARP sampling frame	Continuous (range = -12,571 → -5,267)	

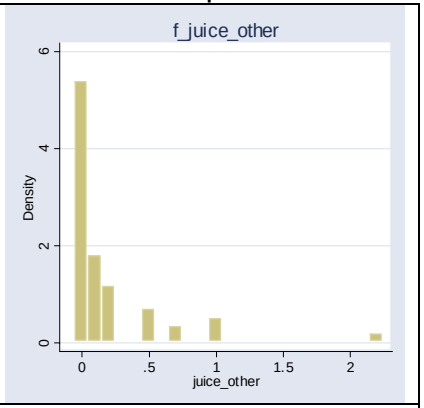
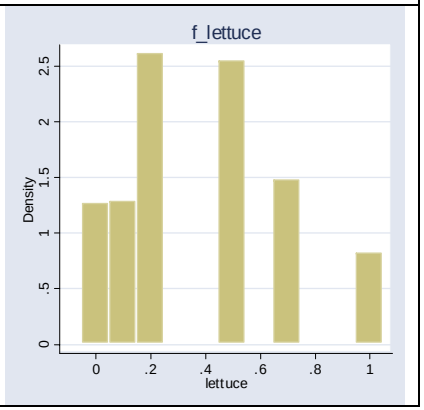
Variable Name	Type	Basis	Description	Levels	Graph
f_donut	N	DietAARP derived	Quick breads, donuts, sweet rolls (freq/day)	Continuous (range = 0 → 2)	
f_egg_sub	N	DietAARP derived	Eggs, substitutes (freq/day)	Continuous (range =0 → 2)	
f_eggs_fa	N	DietAARP derived	Eggs, FA (freq/day)	Continuous (range =0 → 2)	

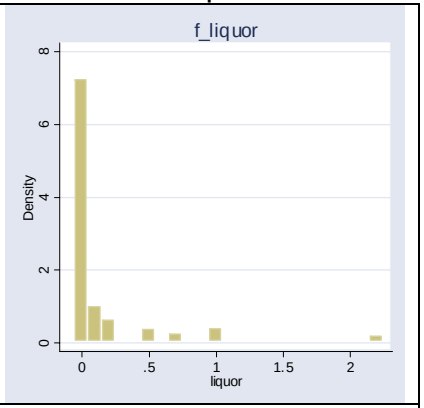
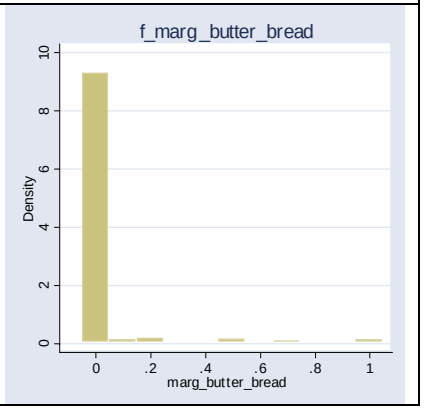
Variable Name	Type	Basis	Description	Levels	Graph
f_eggs_nfa	N	DietAARP derived	Eggs, plain, NFA (freq/day)	Continuous (range = 0 → 2)	
f_eggs_white	N	DietAARP derived	Eggs, whites only (freq/day)	Continuous (range = 0 → 2)	uninformative graph
f_engl_muf_bagel	N	DietAARP derived	English muffin / bagel (freq/day)	Continuous (range = 0 → 2)	
f_fish_fr_fa	N	DietAARP derived	Fish, fried, FA (freq/day)	Continuous (range = 0 → 2)	uninformative graph

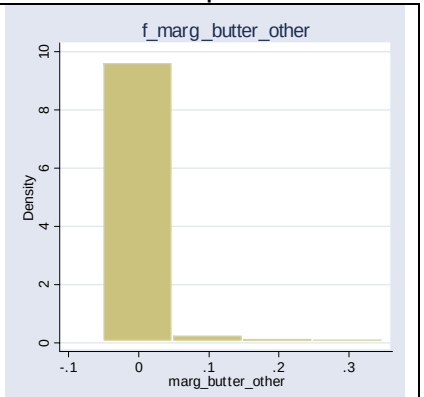
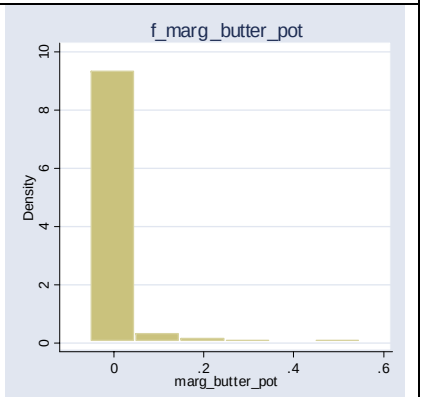
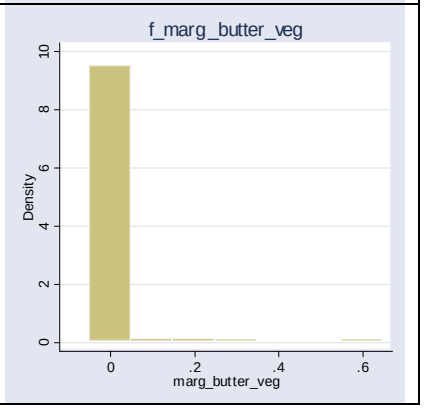
Variable Name	Type	Basis	Description	Levels	Graph
f_fish_nf_nfa	N	DietAARP derived	Fish, not fried, NFA (freq/day)	Continuous (range = 0 → 2)	
f_fruit_dried_no_apr	N	DietAARP derived	Dried fruit, no apricots (freq/day)	Continuous (range = 0 → 2)	
f_fruit_other	N	DietAARP derived	Other fruits (freq/day)	Continuous (range = 0 → 0)	uninformative graph
f_fruitpunch_diet	N	DietAARP derived	Fruit drinks, diet (freq/day)	Continuous (range = 0 → 7)	

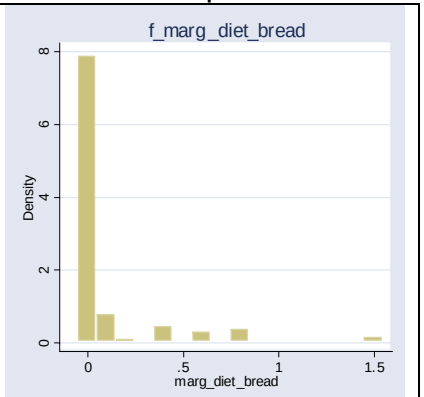
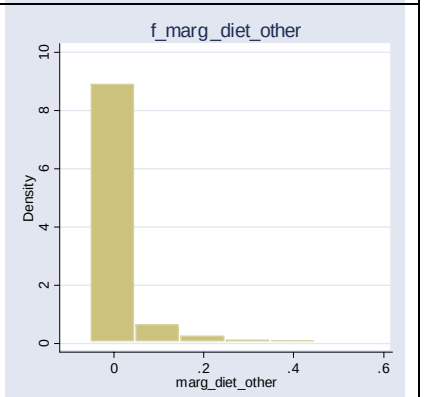
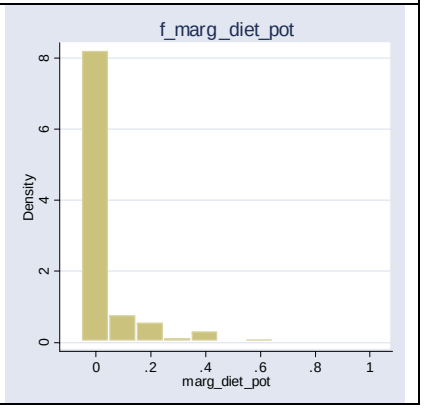
Variable Name	Type	Basis	Description	Levels	Graph
f_fruitpunch_reg	N	DietAARP derived	Fruit drinks, regular (freq/day)	Continuous (range = 0 → 7)	
f_grapefruit	N	DietAARP derived	Grapefruit, all (freq/day)	Continuous (range = 0 → 2)	
f_grapes	N	DietAARP derived	Grapes, all (freq/day)	Continuous (range = 0 → 2)	

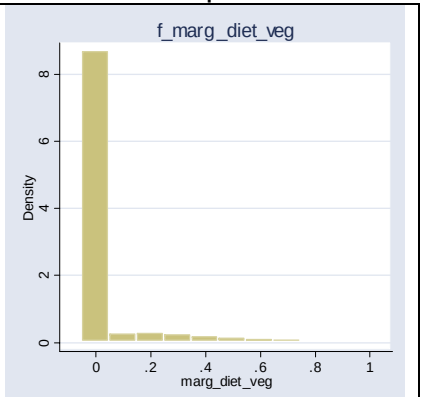
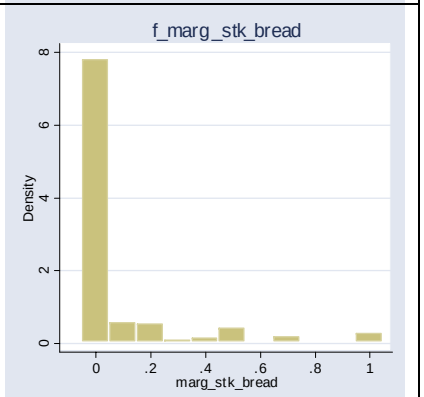
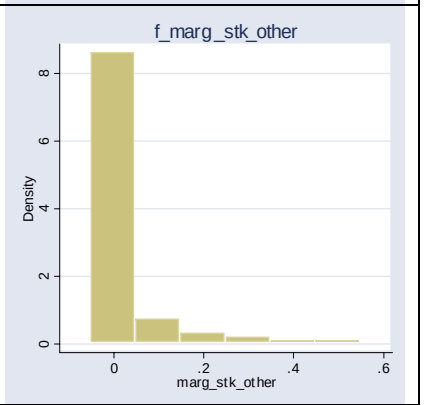
Variable Name	Type	Basis	Description	Levels	Graph
f_gravy	N	DietAARP derived	Gravy (freq/day)	Continuous (range = 0 → 2)	
f_ham_not_lunch	N	DietAARP derived	Ham, not luncheon (freq/day)	Continuous (range = 0 → 2)	uninformative graph
f_hamb_lean	N	DietAARP derived	Beef, burgers, lean (freq/day)	Continuous (range = 0 → 1.5)	uninformative graph
f_hamb_reg	N	DietAARP derived	Beef, burgers, regular (freq/day)	Continuous (range = 0 → 2)	uninformative graph
f_hotdog_lowfat	N	DietAARP derived	Hot dogs, turkey / low-fat (freq/day)	Continuous (range = 0 → 1.5)	uninformative graph
f_hotdog_reg	N	DietAARP derived	Hotdogs, regular (freq/day)	Continuous (range = 0 → 2)	uninformative graph
f_icecream_reg	N	DietAARP derived	Ice cream, regular (freq/day)	Continuous (range = 0 → 2)	

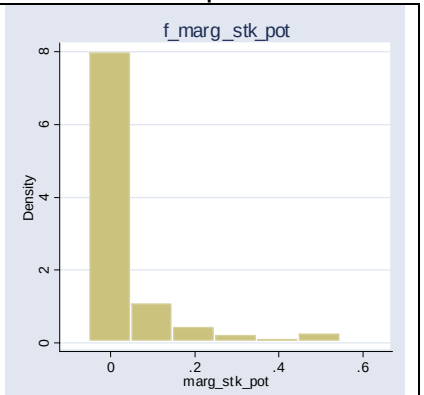
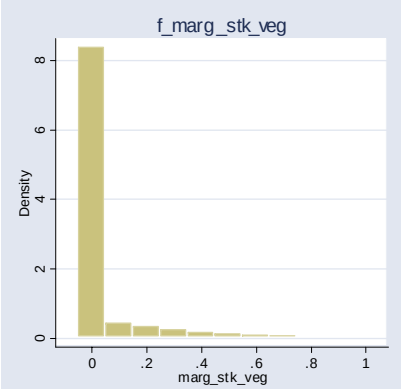
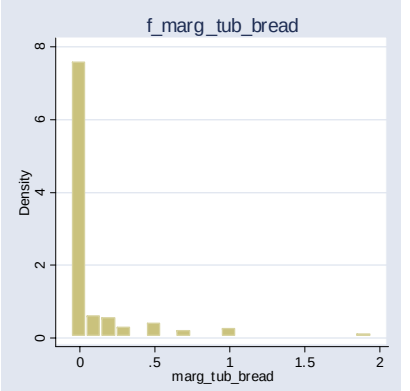
Variable Name	Type	Basis	Description	Levels	Graph
f_juice_other	N	DietAARP derived	Other juice (freq/day)	Continuous (range = 0 → 7)	
f_lard	N	DietAARP derived	Lard, fatback bacon fat (freq/day)	Continuous (range = 0 → 4)	uninformative graph
f_lasagna	N	DietAARP derived	Lasagna, ravioli, shells, etc. (freq/day)	Continuous (range = 0 → 2)	uninformative graph
f_lettuce	N	DietAARP derived	Lettuce, NFA (freq/day)	Continuous (range = 0 → 2)	

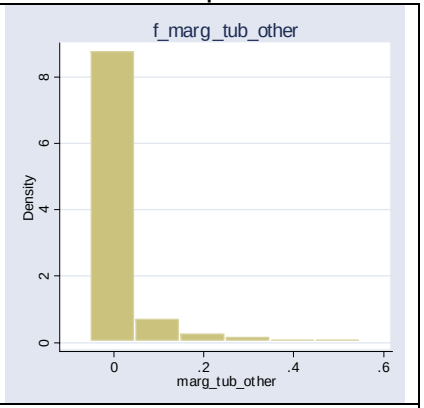
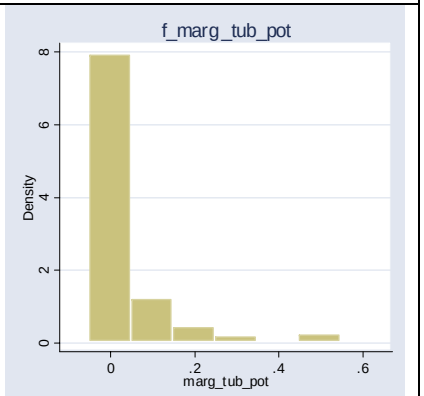
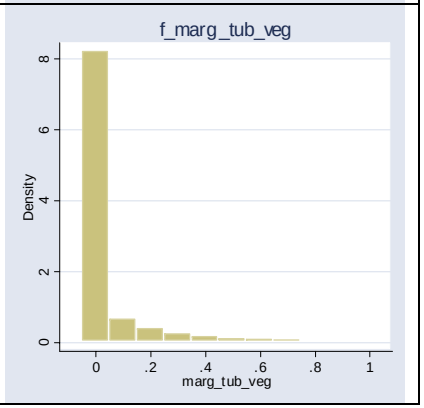
Variable Name	Type	Basis	Description	Levels	Graph
f_liquor	N	DietAARP derived	Alcoholic beverage, liquor (freq/day)	Continuous (range = 0 → 7)	
f_liver	N	DietAARP derived	Liver, liverwurst (freq/day)	Continuous (range = 0 → 2)	uninformative graph
f_macaroni	N	DietAARP derived	Macaroni and cheese	Continuous (range = 0 → 2)	uninformative graph
f_marg_butter_bread	N	DietAARP derived	Butter / margarine blend on bread (freq/day)	Continuous (range = 0 → 2)	

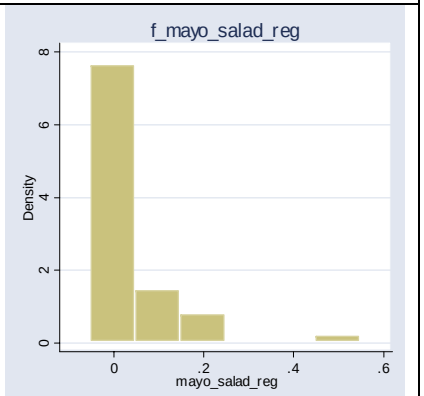
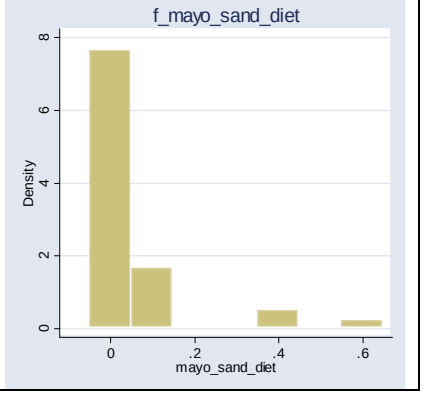
Variable Name	Type	Basis	Description	Levels	Graph
f_marg_butter_other	N	DietAARP derived	Butter / margarine blend, other uses (freq/day)	Continuous (range = 0 → 5.1)	
f_marg_butter_panc	N	DietAARP derived	Butter / margarine blend on pancakes or waffles (freq/day)	Continuous (range = 0 → 2)	uninformative graph
f_marg_butter_pot	N	DietAARP derived	Butter / margarine blend on potatoes (freq/day)	Continuous (range = 0 → 4)	
f_marg_butter_veg	N	DietAARP derived	Butter / margarine blend on vegetables (freq/day)	Continuous (range = 0 → 10.9)	

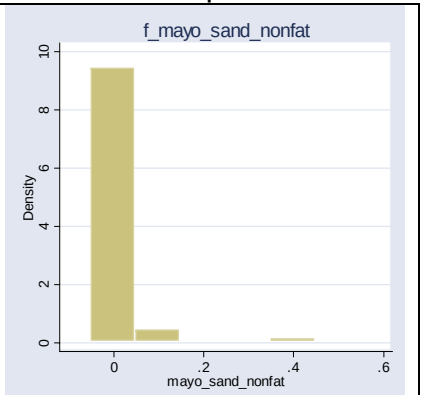
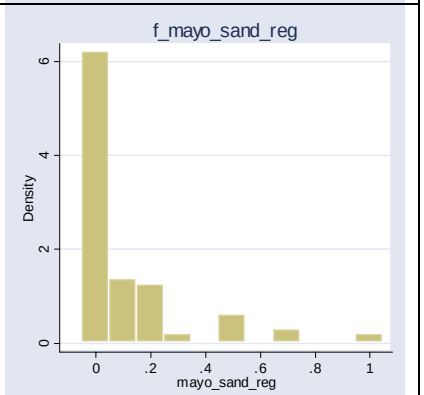
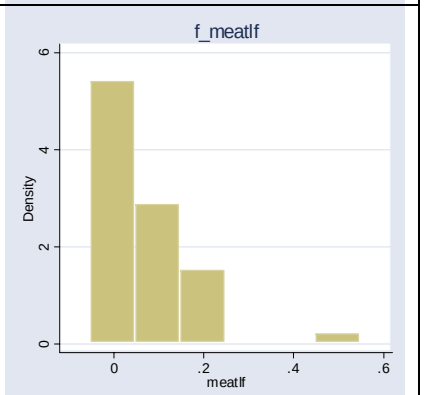
Variable Name	Type	Basis	Description	Levels	Graph
f_marg_diet_bread	N	DietAARP derived	Margarine, diet, on bread (freq/day)	Continuous (range = 0 → 2)	
f_marg_diet_other	N	DietAARP derived	Margarine, diet, other uses (freq/day)	Continuous (range = 0 → 4.2)	
f_marg_diet_panc	N	DietAARP derived	Margarine, diet, on pancakes or waffles (freq/day)	Continuous (range = 0 → 2)	uninformative graph
f_marg_diet_pot	N	DietAARP derived	Margarine, diet, on potatoes (freq/day)	Continuous (range = 0 → 3)	

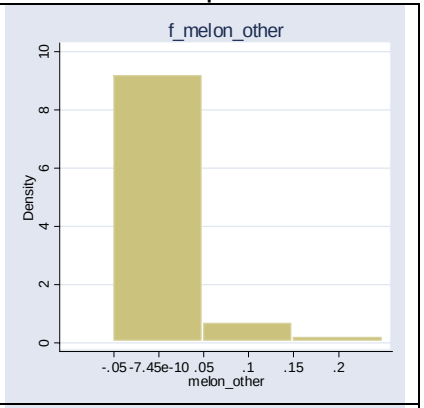
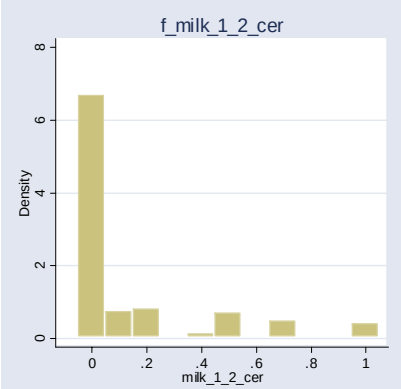
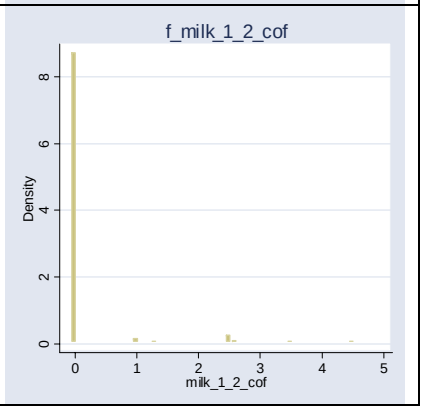
Variable Name	Type	Basis	Description	Levels	Graph
f_marg_diet_veg	N	DietAARP derived	Margarine, diet, on vegetables (freq/day)	Continuous (range = 0 → 10.5)	
f_marg_stk_bread	N	DietAARP derived	Margarine, stick, on bread (freq/day)	Continuous (range = 0 → 2)	
f_marg_stk_other	N	DietAARP derived	Margarine, stick, other uses (freq/day)	Continuous (range = 0 → 5)	
f_marg_stk_panc	N	DietAARP derived	Margarine, stick, on pancakes or waffles (freq/day)	Continuous (range = 0 → 2)	uninformative graph

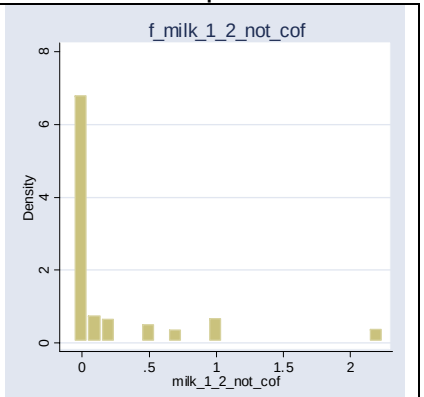
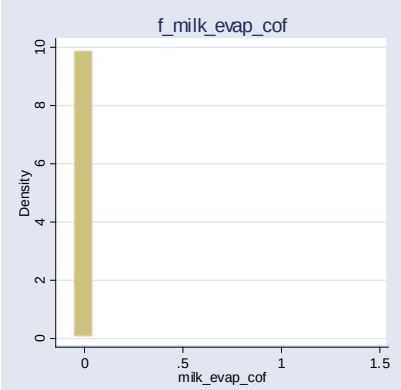
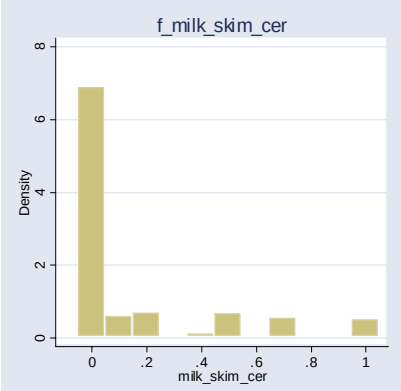
Variable Name	Type	Basis	Description	Levels	Graph
f_marg_stk_pot	N	DietAARP derived	Margarine, stick, on potatoes (freq/day)	Continuous (range = 0 → 4)	
f_marg_stk_veg	N	DietAARP derived	Margarine, stick, on vegetables (freq/day)	Continuous (range = 0 → 14)	
f_marg_tub_bread	N	DietAARP derived	Margarine, tub, on bread (freq/day)	Continuous (range = 0 → 2)	

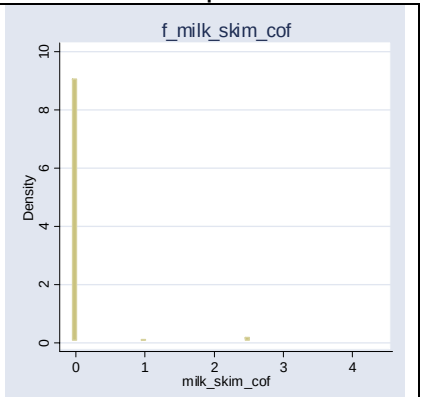
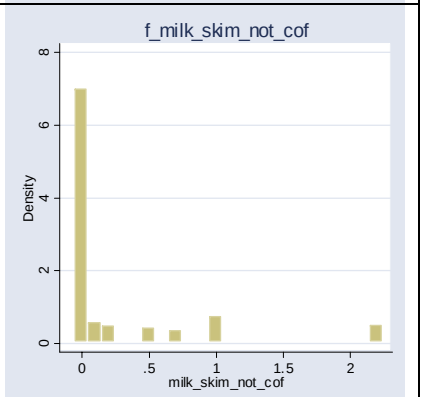
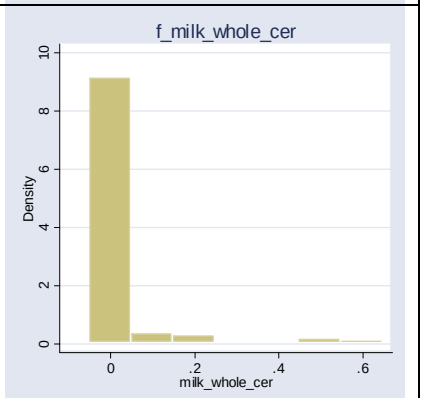
Variable Name	Type	Basis	Description	Levels	Graph
f_marg_tub_other	N	DietAARP derived	Margarine, tub, other uses (freq/day)	Continuous (range = 0 → 4.7)	
f_marg_tub_panc	N	DietAARP derived	Margarine, tub, on pancakes or waffles (freq/day)	Continuous (range = 0 → 2)	uninformative graph
f_marg_tub_pot	N	DietAARP derived	Margarine, tub, on potatoes (freq/day)	Continuous (range = 0 → 4)	
f_marg_tub_veg	N	DietAARP derived	Margarine, tub, on vegetables (freq/day)	Continuous (range = 0 → 14)	

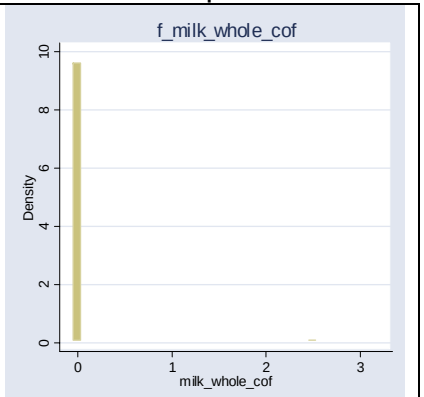
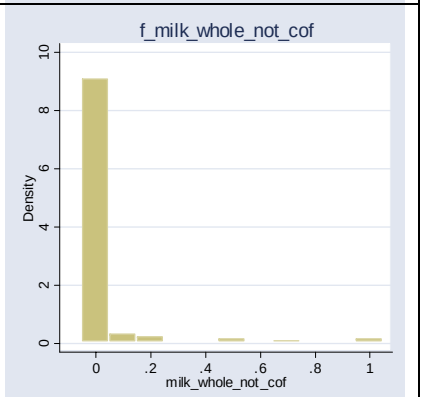
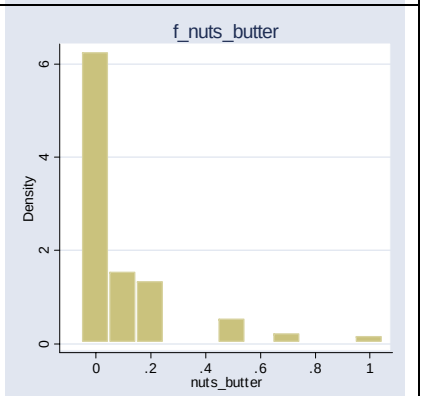
Variable Name	Type	Basis	Description	Levels	Graph
f_mayo_salad_diet	N	DietAARP derived	Mayonnaise, diet, on salad (freq/day)	Continuous (range = 0 → 1.5)	
f_mayo_salad_nofat	N	DietAARP derived	Mayonnaise, fat free, on salad (freq/day)	Continuous (range = 0 → 1.5)	uninformative graph
f_mayo_salad_reg	N	DietAARP derived	Mayonnaise, regular, on salad (freq/day)	Continuous (range = 0 → 2)	
f_mayo_sand_diet	N	DietAARP derived	Mayonnaise, diet, on sandwich (freq/day)	Continuous (range = 0 → 1.5)	

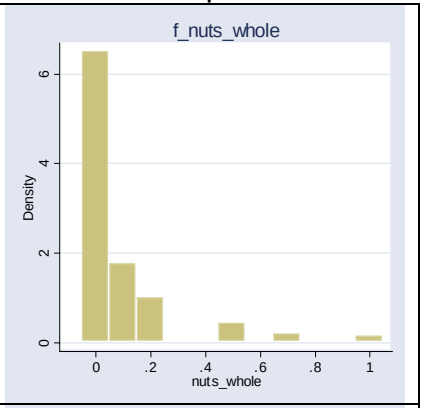
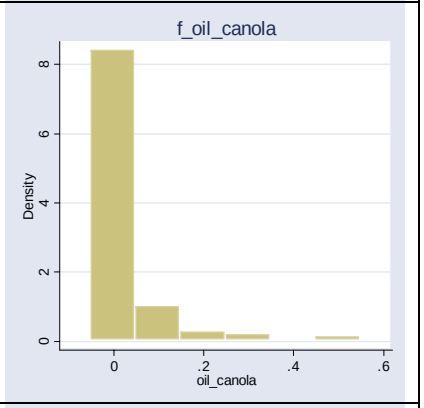
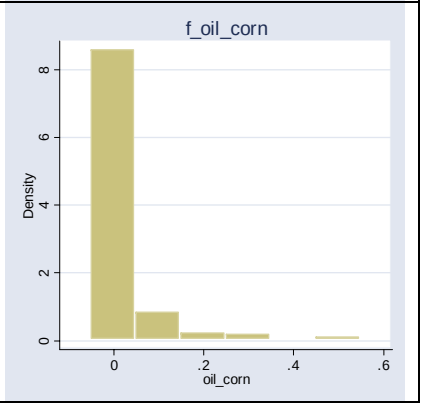
Variable Name	Type	Basis	Description	Levels	Graph
f_mayo_sand_nonfat	N	DietAARP derived	Mayonnaise, fat free, on sandwich (freq/day)	Continuous (range = 0 → 0 → 1.5)	
f_mayo_sand_reg	N	DietAARP derived	Mayonnaise, regular, on sandwich (freq/day)	Continuous (range = 0 → 2)	
f_meatlf	N	DietAARP derived	Beef, ground, meatballs / meatloaf (freq/day)	Continuous (range = 0 → 2)	

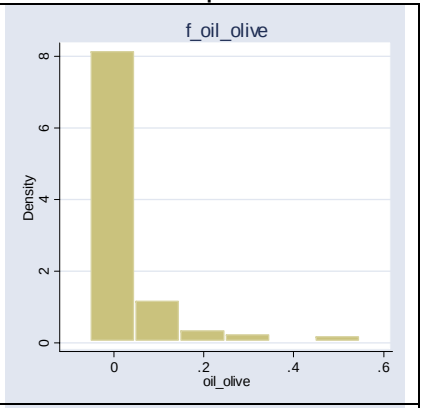
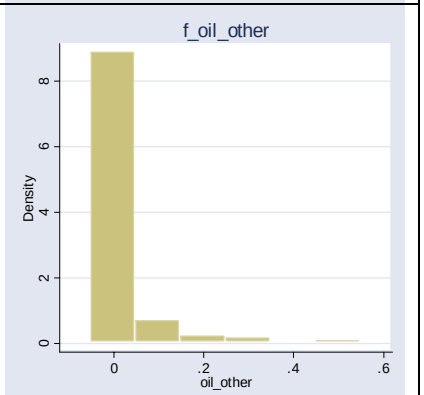
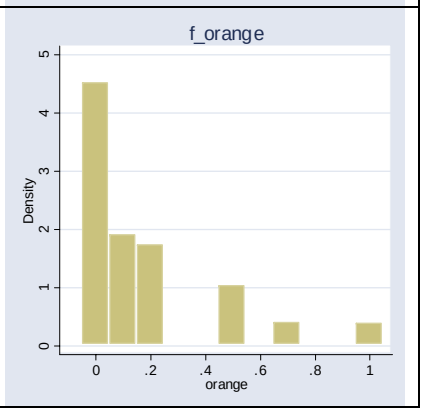
Variable Name	Type	Basis	Description	Levels	Graph
f_melon_other	N	DietAARP derived	Other melon (freq/day)	Continuous (range = 0 → 0.5)	
f_milk_1_2_cer	N	DietAARP derived	Milk, ½%, in cereal (freq/day)	Continuous (range = 0 → 2)	
f_milk_1_2_cof	N	DietAARP derived	Milk, ½%, in coffee or tea (freq/day)	Continuous (range = 0 → 14)	

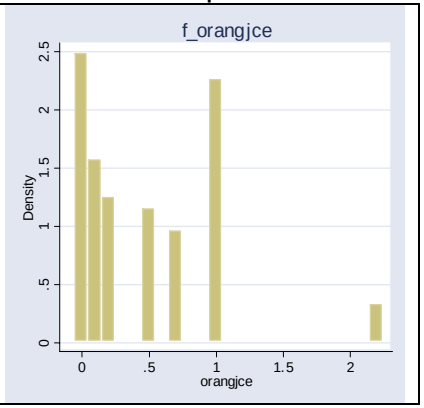
Variable Name	Type	Basis	Description	Levels	Graph
f_milk_1_2_not_cof	N	DietAARP derived	Milk, ½%, not in coffee or tea (freq/day)	Continuous (range = 0 → 7)	
f_milk_evap_cof	N	DietAARP derived	Milk, evaporated / condensed, in coffee or tea (freq/day)	Continuous (range = 0 → 14)	
f_milk_skim_cer	N	DietAARP derived	Milk, nonfat / skim, in cereal (freq/day)	Continuous (range = 0 → 2)	

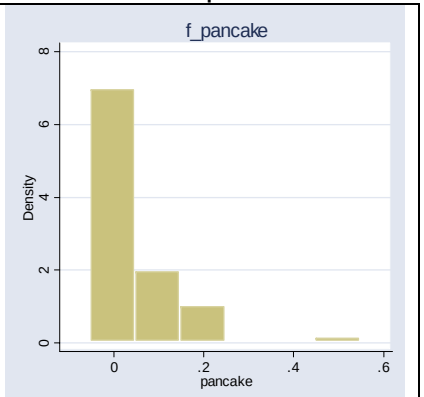
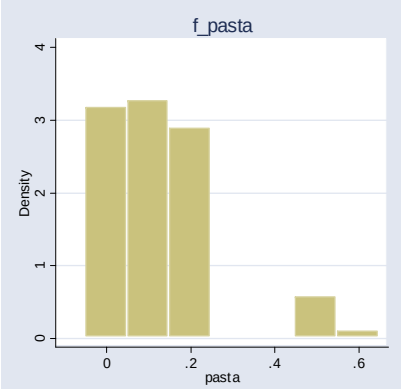
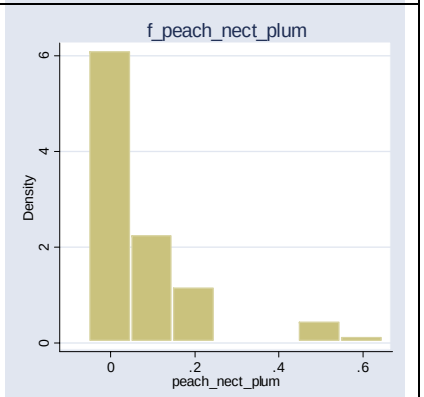
Variable Name	Type	Basis	Description	Levels	Graph
f_milk_skim_cof	N	DietAARP derived	Milk, nonfat / skim, in coffee or tea (freq/day)	Continuous (range = 0 → 14)	
f_milk_skim_not_cof	N	DietAARP derived	Milk, nonfat / skim, not in coffee or tea (freq/day)	Continuous (range = 0 → 7)	
f_milk_whole_cer	N	DietAARP derived	Milk, whole, in cereal (freq/day)	Continuous (range = 0 → 2)	

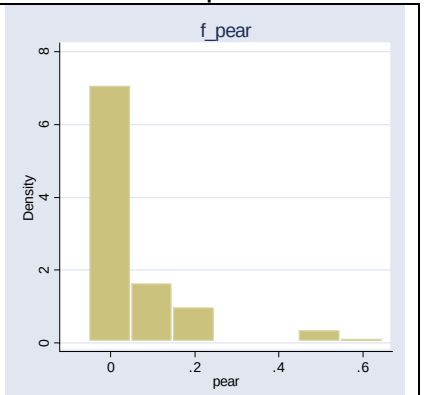
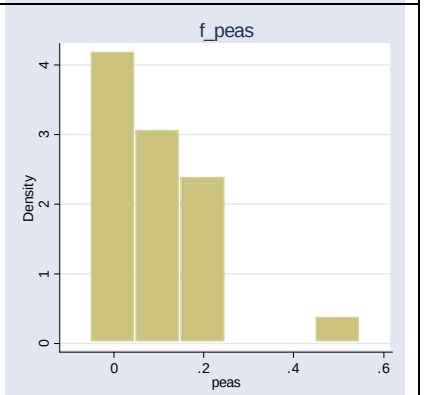
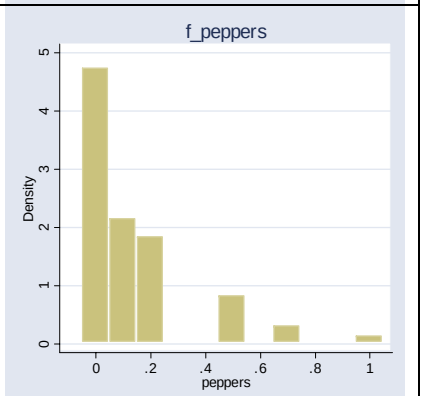
Variable Name	Type	Basis	Description	Levels	Graph
f_milk_whole_cof	N	DietAARP derived	Milk, whole, in coffee or tea (freq/day)	Continuous (range = 0 → 14)	
f_milk_whole_not_cof	N	DietAARP derived	Milk, whole, not in coffee or tea (freq/day)	Continuous (range = 0 → 7)	
f_nuts_butter	N	DietAARP derived	Nuts / seeds, butters (freq/day)	Continuous (range = 0 → 2)	

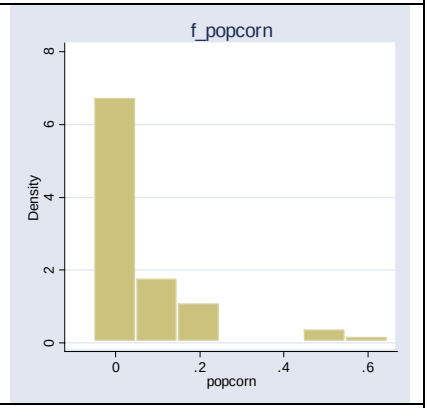
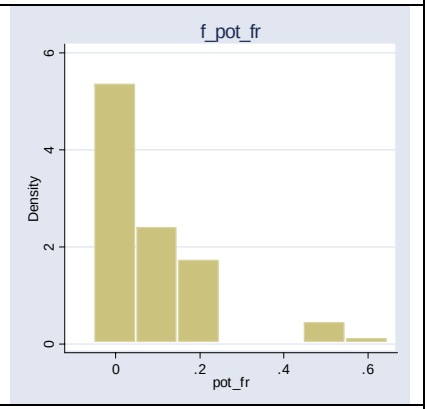
Variable Name	Type	Basis	Description	Levels	Graph
f_nuts_whole	N	DietAARP derived	Nuts / seeds, whole (freq/day)	Continuous (range = 0 → 2)	
f_oil_canola	N	DietAARP derived	Oils, canola / rapeseed (freq/day)	Continuous (range = 0 → 4)	
f_oil_corn	N	DietAARP derived	Oils, corn (freq/day)	Continuous (range = 0 → 4)	

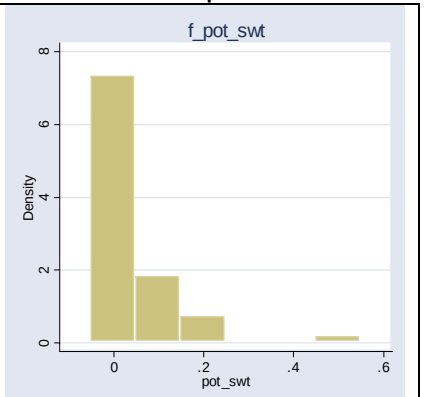
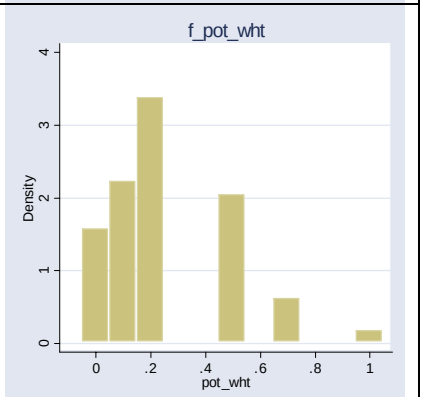
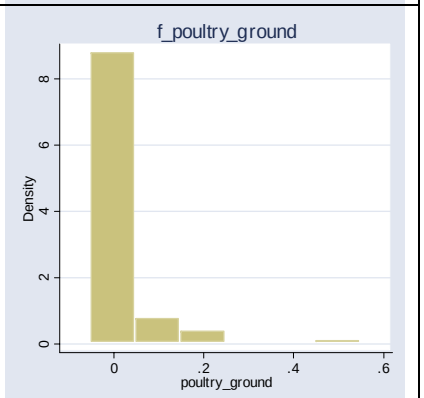
Variable Name	Type	Basis	Description	Levels	Graph
f_oil_olive	N	DietAARP derived	Oils, olive (freq/day)	Continuous (range = 0 → 4)	
f_oil_other	N	DietAARP derived	Oils, other (freq/day)	Continuous (range = 0 → 4)	
f_orange	N	DietAARP derived	Oranges, tangerines, etc. (freq/day)	Continuous (range = 0 → 2)	

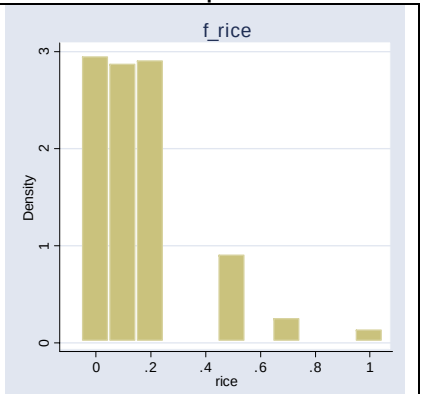
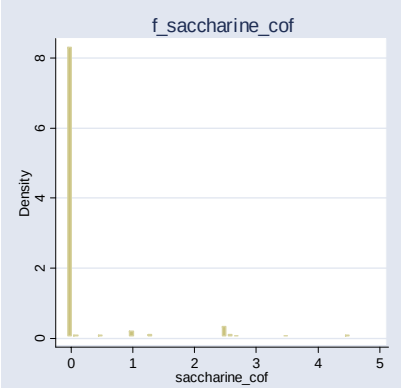
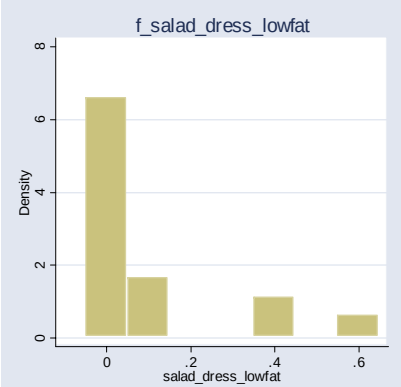
Variable Name	Type	Basis	Description	Levels	Graph
f_orangjce	N	DietAARP derived	Orange / grapefruit juice, all (freq/day)	Continuous (range = 0 → 7)	

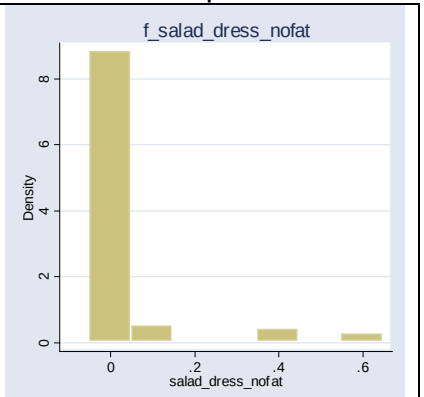
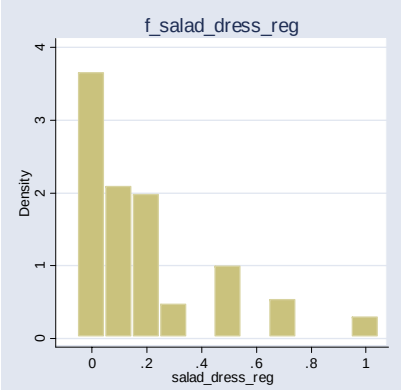
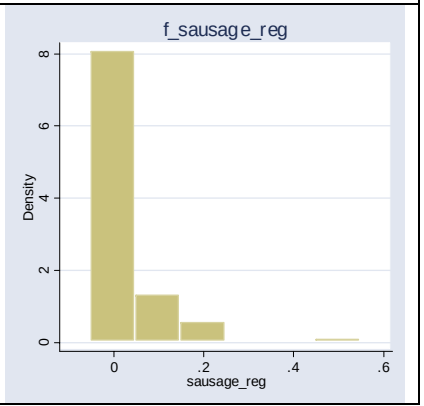
Variable Name	Type	Basis	Description	Levels	Graph
f_pancake	N	DietAARP derived	Pancakes, waffles, French toast (freq/day)	Continuous (range = 0 → 2)	
f_pasta	N	DietAARP derived	Pasta, NFA (freq/day)	Continuous (range = 0 → 2)	
f_peach_nect_plum	N	DietAARP derived	Peaches / nectarines / plums (freq/day)	Continuous (range = 0 → 2)	

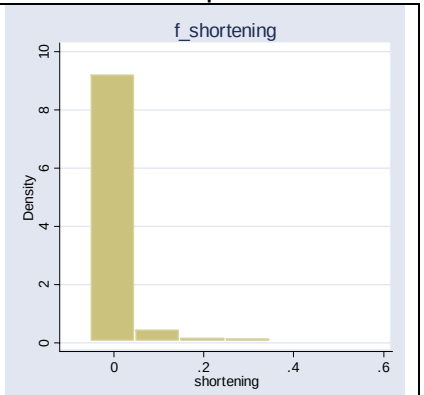
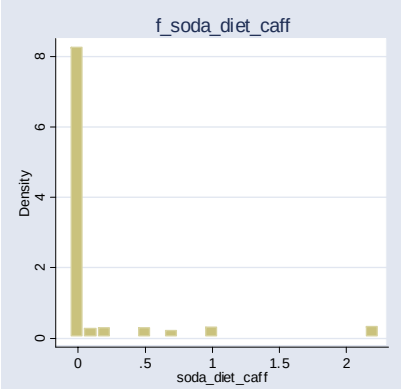
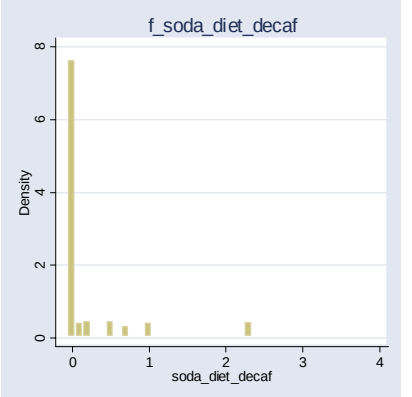
Variable Name	Type	Basis	Description	Levels	Graph
f_pear	N	DietAARP derived	Pears (freq/day)	Continuous (range = 0 → 2)	
f_peas	N	DietAARP derived	Peas, NFA (freq/day)	Continuous (range = 0 → 2)	
f_peppers	N	DietAARP derived	Peppers, NFA (freq/day)	Continuous (range = 0 → 2)	
f_pie_custard	N	DietAARP derived	Pies, cream / custard / other (freq/day)	Continuous (range = 0 → 2)	uninformative graph

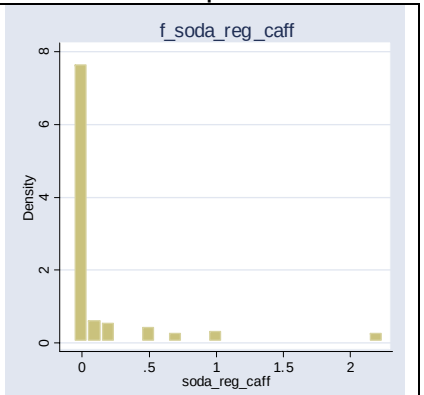
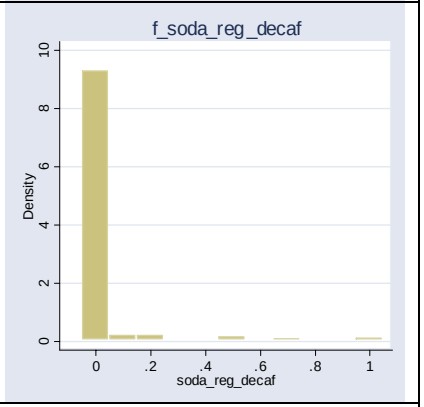
Variable Name	Type	Basis	Description	Levels	Graph
f_pie_fruit	N	DietAARP derived	Pies, fruit (freq/day)	Continuous (range = 0 → 2)	uninformative graph
f_pie_pumpkin	N	DietAARP derived	Pies, pumpkin / sweet potato / etc. (freq/day)	Continuous (range = 0 → 2)	uninformative graph
f_pizza	N	DietAARP derived	Pizza (freq/day)	Continuous (range = 0 → 2)	uninformative graph
f_popcorn	N	DietAARP derived	Popcorn (freq/day)	Continuous (range = 0 → 2)	
f_pork	N	DietAARP derived	Pork (freq/day)	Continuous (range = 0 → 2)	uninformative graph
f_pot_fr	N	DietAARP derived	Potatoes, fried (freq/day)	Continuous (range = 0 → 2)	
f_pot_salad	N	DietAARP derived	Potato salads (freq/day)	Continuous (range = 0 → 2)	uninformative graph

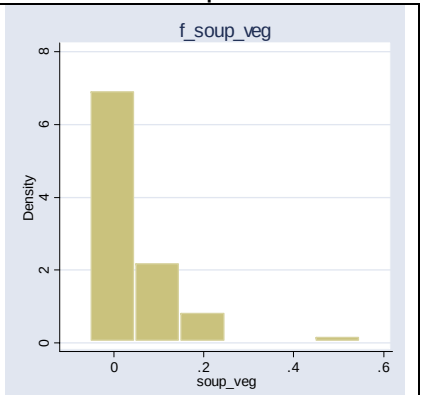
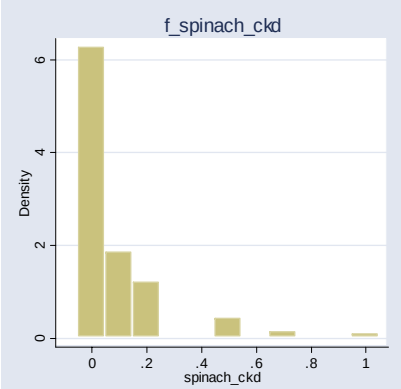
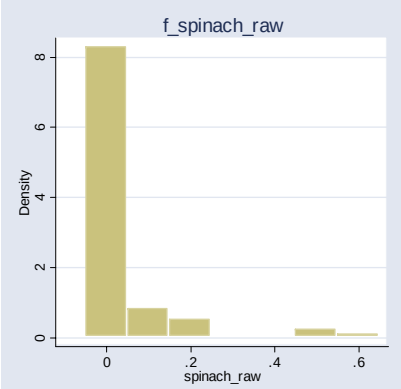
Variable Name	Type	Basis	Description	Levels	Graph
f_pot_swt	N	DietAARP derived	Sweet potatoes, NFA (freq/day)	Continuous (range = 0 → 2)	
f_pot_wht	N	DietAARP derived	Potatoes, white, NFA (freq/day)	Continuous (range = 0 → 2)	
f_poultry_ground	N	DietAARP derived	Chicken / turkey, ground (freq/day)	Continuous (range = 0 → 2)	

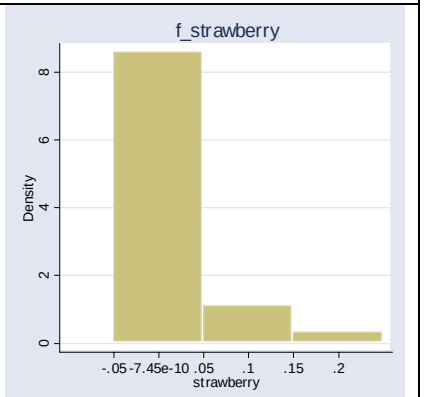
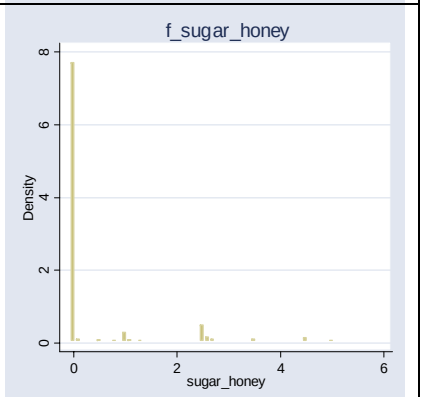
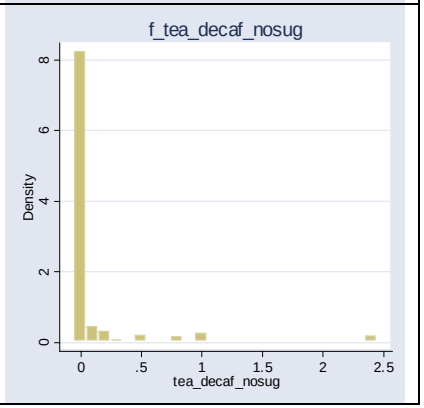
Variable Name	Type	Basis	Description	Levels	Graph
f_rice	N	DietAARP derived	Rice / grains, NFA (freq/day)	Continuous (range = 0 → 2)	
f_saccharine_cof	N	DietAARP derived	Saccharine, in coffee or tea (freq/day)	Continuous (range = 0 → 14)	
f_salad_dress_lowfat	N	DietAARP derived	Salad dressing, low-fat, on salad or vegetables (freq/day)	Continuous (range = 0 → 1.5)	

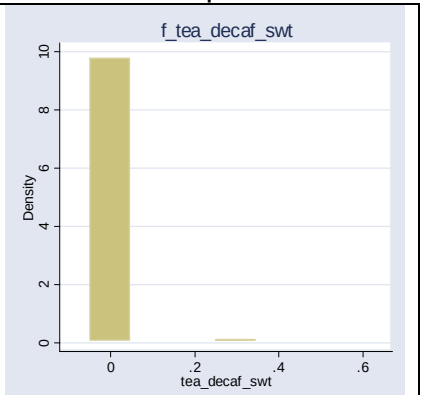
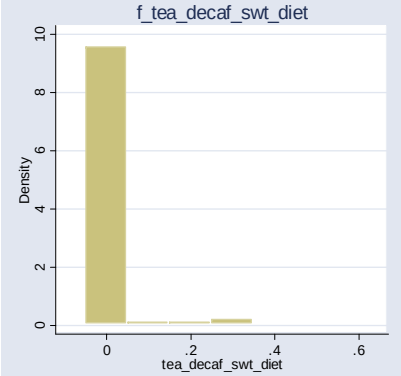
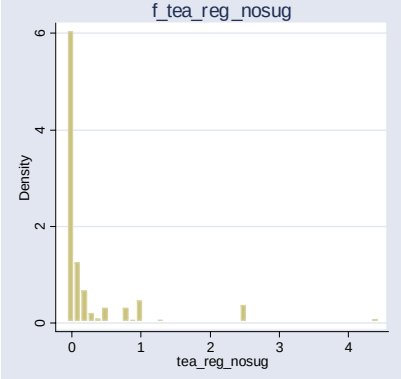
Variable Name	Type	Basis	Description	Levels	Graph
f_salad_dress_nofat	N	DietAARP derived	Salad dressing, nearly nonfat, on salad or vegetables (freq/day)	Continuous (range = 0 → 1.5)	
f_salad_dress_reg	N	DietAARP derived	Salad dressing, regular, on salad or vegetables (freq/day)	Continuous (range = 0 → 2)	
f_sausage_lowfat	N	DietAARP derived	Sausage, turkey / low-fat (freq/day)	Continuous (range = 0 → 1.5)	uninformative graph
f_sausage_reg	N	DietAARP derived	Sausage, regular (freq/day)	Continuous (range = 0 → 2)	

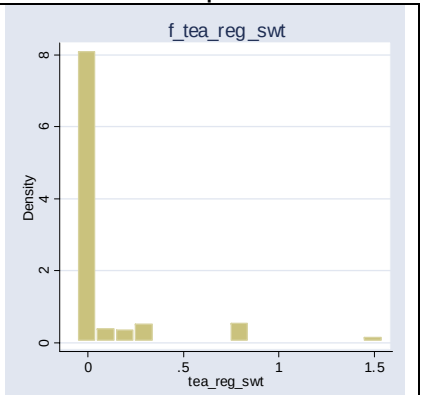
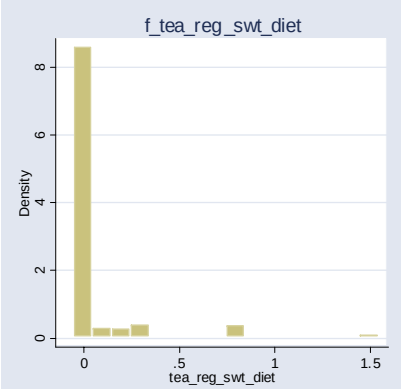
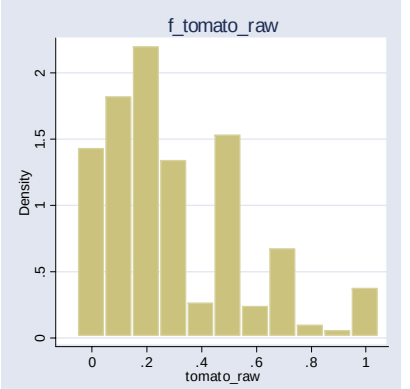
Variable Name	Type	Basis	Description	Levels	Graph
f_shortening	N	DietAARP derived	Vegetable shortening (freq/day)	Continuous (range = 0 → 4)	
f_soda_diet_caff	N	DietAARP derived	Soft drinks, diet, caffeinated (freq/day)	Continuous (range = 0 → 7)	
f_soda_diet_decaf	N	DietAARP derived	Soft drinks, diet, decaffeinated (freq/day)	Continuous (range = 0 → 7)	

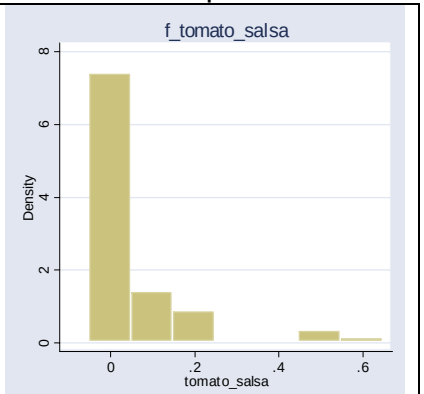
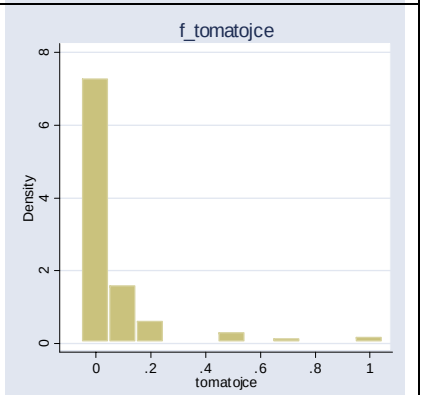
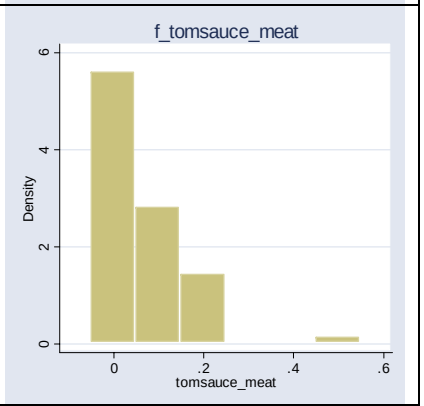
Variable Name	Type	Basis	Description	Levels	Graph
f_soda_reg_caff	N	DietAARP derived	Soft drinks, regular, caffeinated (freq/day)	Continuous (range = 0 → 7)	
f_soda_reg_decaf	N	DietAARP derived	Soft drinks, regular, decaffeinated (freq/day)	Continuous (range = 0 → 7)	
f_soup_bean	N	DietAARP derived	Soups, bean-type (freq/day)	Continuous (range = 0 → 2)	uninformative graph
f_soup_creamed	N	DietAARP derived	Soups, creamed	Continuous (range = 0 → 2)	uninformative graph

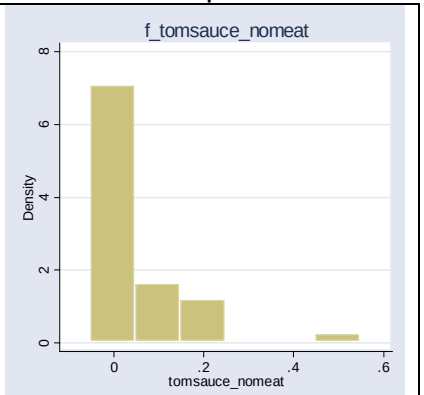
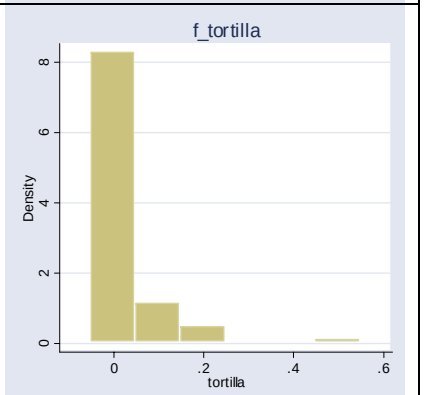
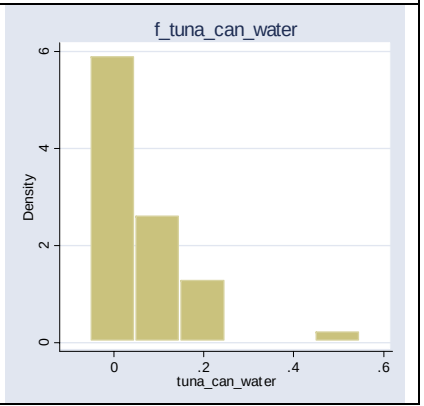
Variable Name	Type	Basis	Description	Levels	Graph
f_soup_veg	N	DietAARP derived	Soups, with vegetables (freq/day)	Continuous (range = 0 → 2)	
f_spinach_ckd	N	DietAARP derived	Spinach / greens, cooked, NFA (freq/day)	Continuous (range = 0 → 2)	
f_spinach_raw	N	DietAARP derived	Spinach / greens, raw (freq/day)	Continuous (range = 0 → 2)	
f_stk_lean	N	DietAARP derived	Beef, steaks, lean (freq/day)	Continuous (range = 0 → 1.5)	uninformative graph

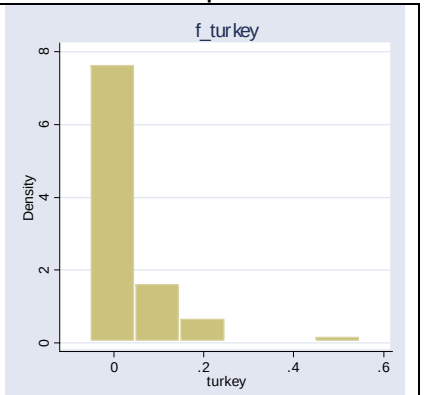
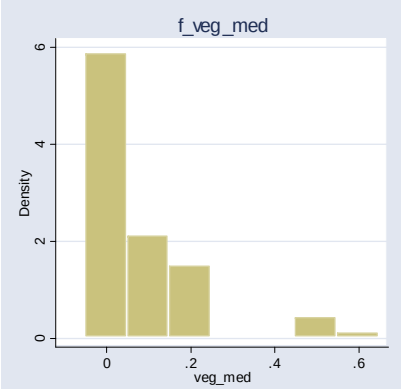
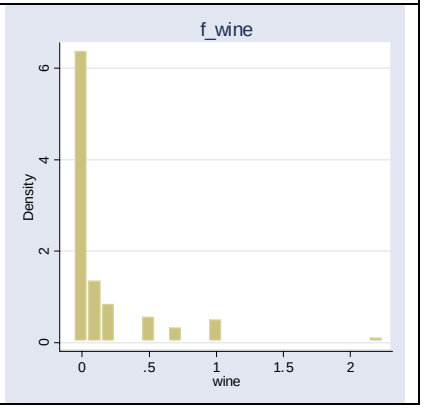
Variable Name	Type	Basis	Description	Levels	Graph
f_stk_reg	N	DietAARP derived	Beef, steaks, regular (freq/day)	Continuous (range = 0 → 2)	uninformative graph
f_strawberry	N	DietAARP derived	Strawberries (freq/day)	Continuous (range = 0 → 0.5)	
f_sugar_honey	N	DietAARP derived	Sugars / honey, all, in coffee or tea (freq/day)	Continuous (range = 0 → 14)	
f_tea_decaf_nosug	N	DietAARP derived	Tea, decaffeinated, no cream or sugar (freq/day)	Continuous (range = 0 → 9.3)	

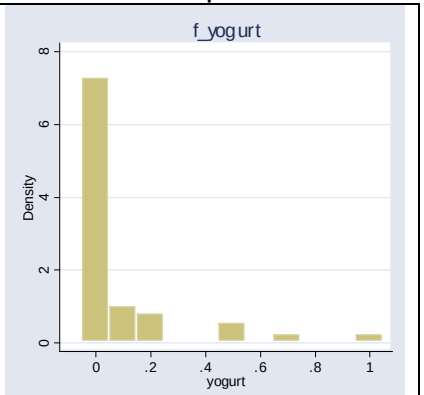
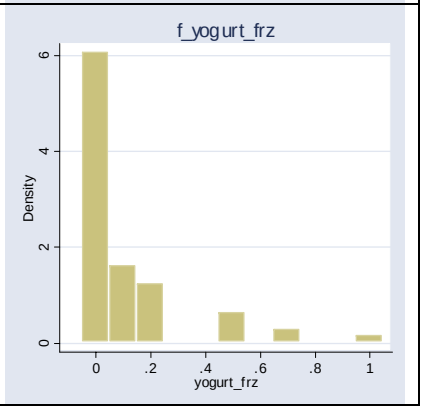
Variable Name	Type	Basis	Description	Levels	Graph
f_tea_decaf_swt	N	DietAARP derived	Tea, decaffeinated, pre-sweetened (freq/day)	Continuous (range = 0 → 2.3)	
f_tea_decaf_swt_diet	N	DietAARP derived	Tea, decaffeinated, pre-sweetened, diet (freq/day)	Continuous (range = 0 → 2.3)	
f_tea_reg_nosug	N	DietAARP derived	Tea, regular, no cream or sugar (freq/day)	Continuous (range = 0 → 9.3)	

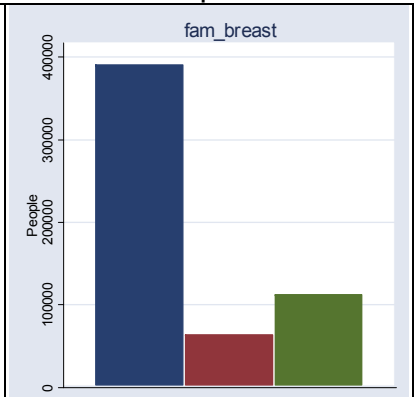
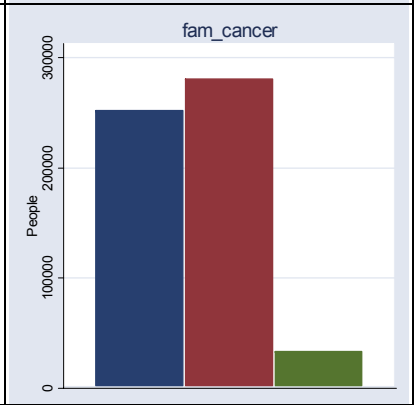
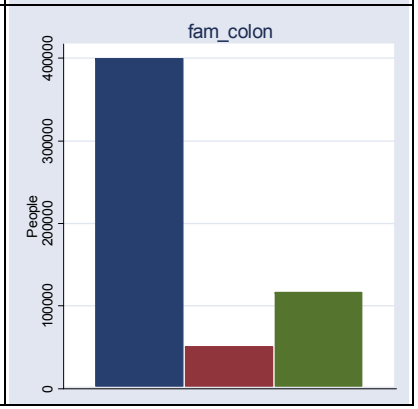
Variable Name	Type	Basis	Description	Levels	Graph
f_tea_reg_swt	N	DietAARP derived	Tea, regular, pre-sweetened (freq/day)	Continuous (range = 0 → 2.3)	
f_tea_reg_swt_diet	N	DietAARP derived	Tea, regular, pre-sweetened, diet (freq/day)	Continuous (range = 0 → 2.3)	
f_tomato_raw	N	DietAARP derived	Tomatoes, raw (freq/day)	Continuous (range = 0 → 2)	

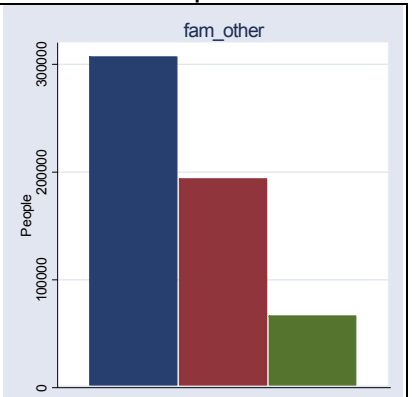
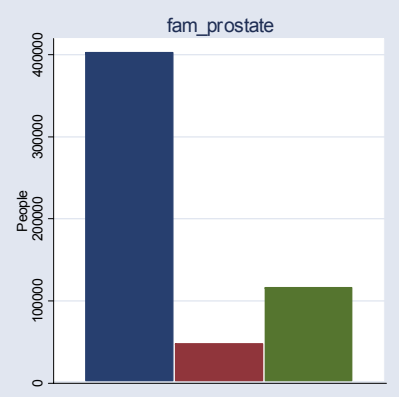
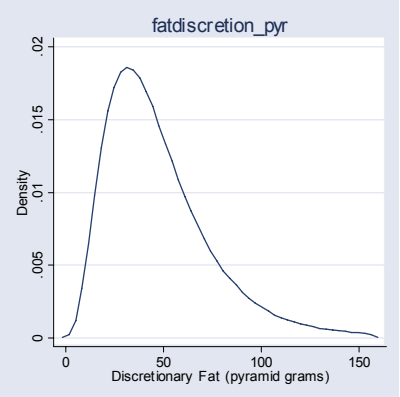
Variable Name	Type	Basis	Description	Levels	Graph
f_tomato_salsa	N	DietAARP derived	Tomato salsa (freq/day)	Continuous (range = 0 → 2)	
f_tomatojce	N	DietAARP derived	Tomato / vegetable juice, all (freq/day)	Continuous (range = 0 → 7)	
f_tomsauce_meat	N	DietAARP derived	Tomato sauces, with meat (freq/day)	Continuous (range = 0 → 2)	

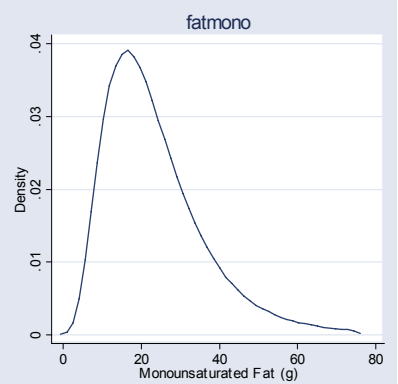
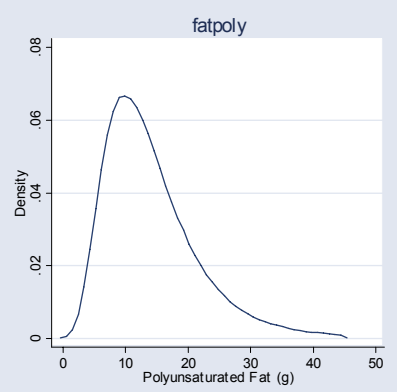
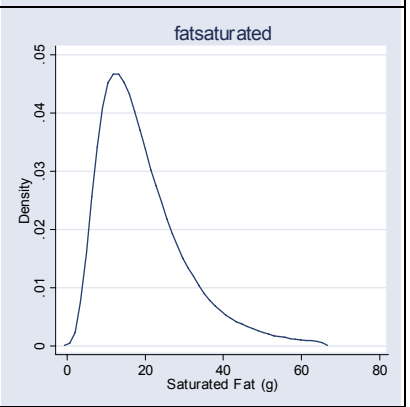
Variable Name	Type	Basis	Description	Levels	Graph
f_tomsauce_nomeat	N	DietAARP derived	Tomato sauces, no meat (freq/day)	Continuous (range = 0 → 2)	
f_tortilla	N	DietAARP derived	Tortillas (freq/day)	Continuous (range = 0 → 2)	
f_tuna_can_oil	N	DietAARP derived	Tuna, packed in oil (freq/day)	Continuous (range = 0 → 2)	uninformative graph
f_tuna_can_water	N	DietAARP derived	Tuna, packed in water (freq/day)	Continuous (range = 0 → 2)	

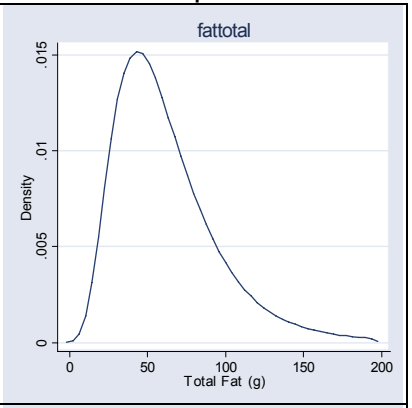
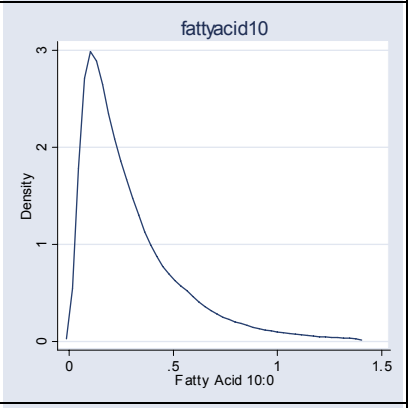
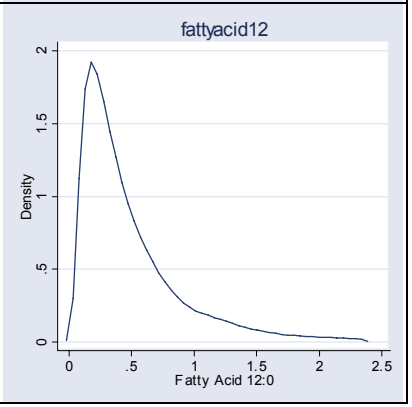
Variable Name	Type	Basis	Description	Levels	Graph
f_turkey	N	DietAARP derived	Turkey (freq/day)	Continuous (range = 0 → 2)	
f_veg_med	N	DietAARP derived	Vegetable medley, NFA (freq/day)	Continuous (range = 0 → 2)	
f_veg_oth	N	DietAARP derived	Other vegetables (freq/day)	Continuous (range = 0 → 0)	uninformative graph
f_wine	N	DietAARP derived	Wine (freq/day)	Continuous (range = 0 → 7)	

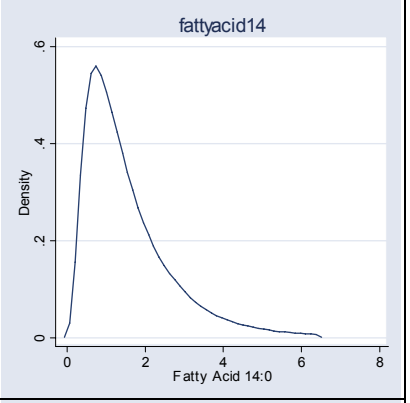
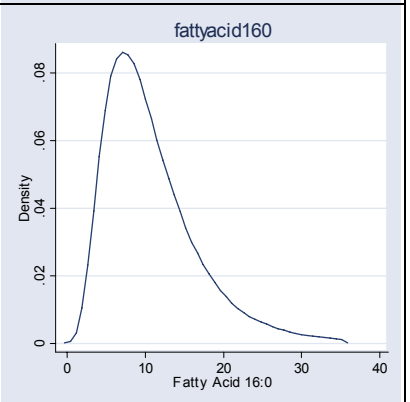
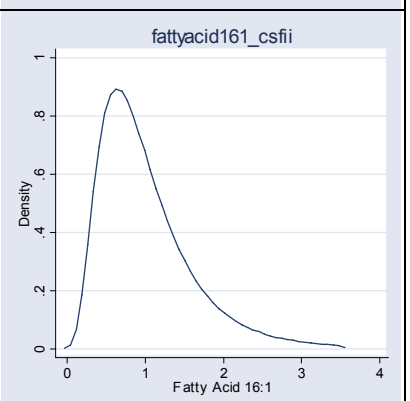
Variable Name	Type	Basis	Description	Levels	Graph
f_yogurt	N	DietAARP derived	Yogurt, all (freq/day)	Continuous (range = 0 → 2)	
f_yogurt_frz	N	DietAARP derived	Frozen yogurt, ice milk (freq/day)	Continuous (range = 0 → 2)	

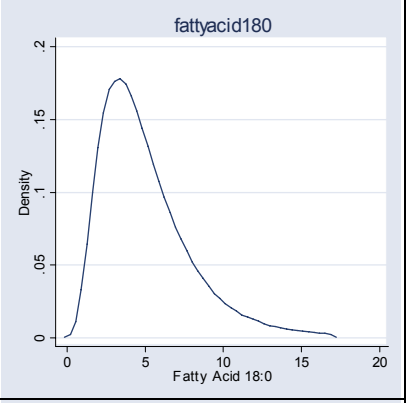
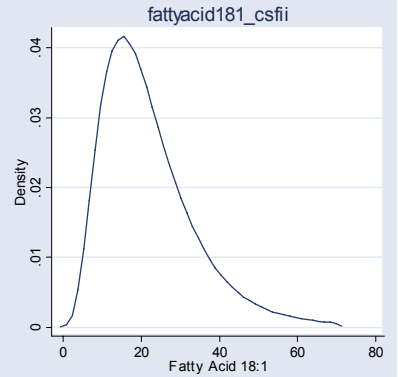
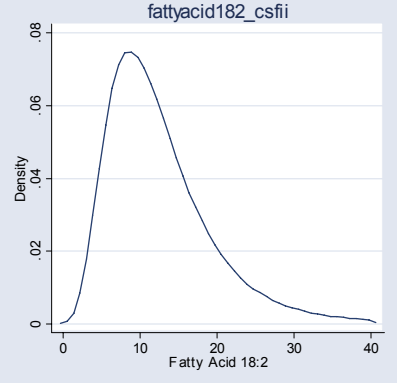
Variable Name	Type	Basis	Description	Levels	Graph
FAM_BREAST	N	Derived from Q41E1, Q41F1, Q41G1	Any blood relatives diagnosed with breast cancer?	0 = No (*n* = 390,814) 1 = Yes (*n* = 63,500) 9 = Unknown (*n* = 112,093)	
FAM_CANCER	N	Derived from Q41B1-Q41G3	Any blood relatives diagnosed with cancer?	0 = No (*n* = 252,021) 1 = Yes (*n* = 280,931) 9 = Unknown (*n* = 33,445)	
FAM_COLON	N	Derived from Q41B2, Q41C2, Q41D2, Q41E2, Q41F2, Q41G2	Any blood relative diagnosed with colon cancer?	0 = No (*n* = 399,455) 1 = Yes (*n* = 50,553) 9 = Unknown (*n* = 116,399)	

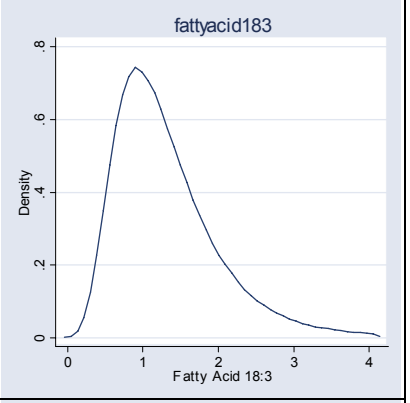
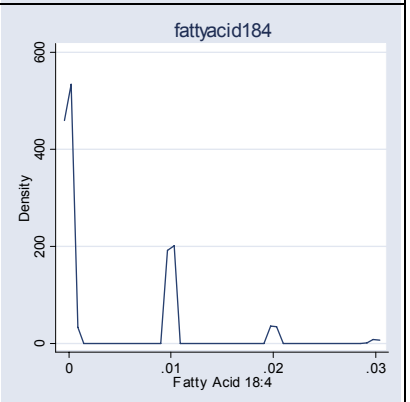
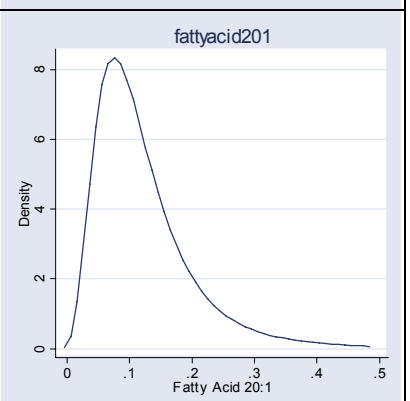
Variable Name	Type	Basis	Description	Levels	Graph
FAM_OTHER	N	Derived from Q41B3, Q41C3, Q41D3, Q41E3, Q41F3, Q41G3	Any blood relative diagnosed with cancer other than breast, colon, or prostate (not basal-cell skin)?	0 = No (*n* = 306,478) 1 = Yes (*n* =193,523) 9 = Unknown (*n* =66,406)	
FAM_PROSTATE	N	Derived from Q41B1, Q41C1, Q41D1	Any blood relative diagnosed with prostate cancer?	0 = No (*n* = 402,051) 1 = Yes (*n* = 48,188) 9 = Unknown (*n* = 116,168)	
FatDiscretion_Pyr	N	DietAARP derived	Pyramid grams of discretionary fat	Continuous (range = 0.05 → 2257.1)	

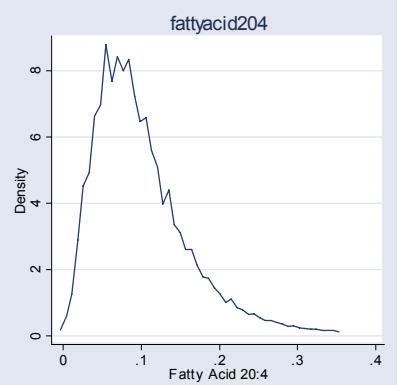
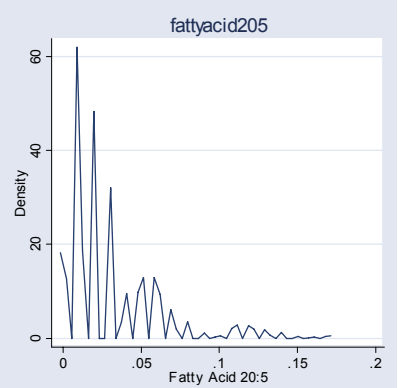
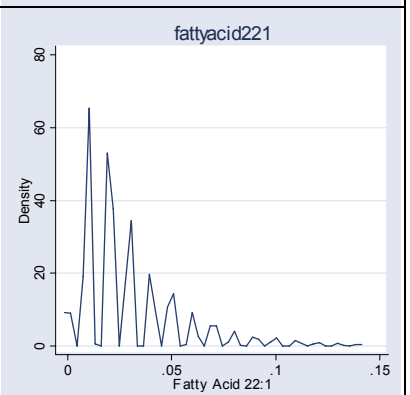
Variable Name	Type	Basis	Description	Levels	Graph
FatMono	N	DietAARP derived	Monounsaturated fat – g	Continuous (range = 0.04 → 1141)	
FatPoly	N	DietAARP derived	Polyunsaturated fat – g	Continuous (range = 0.04 → 572.89)	
FatSaturated	N	DietAARP derived	Saturated fat – g	Continuous (range = 0.03 → 1065.48)	

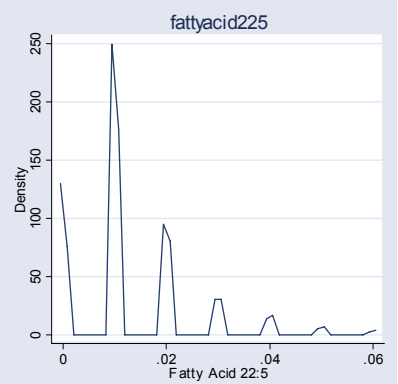
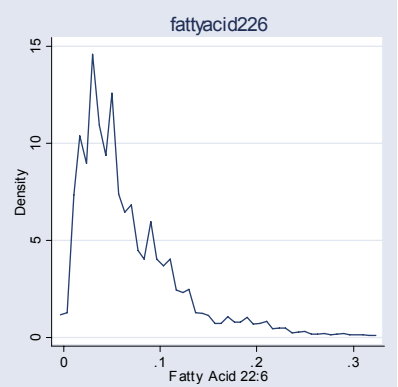
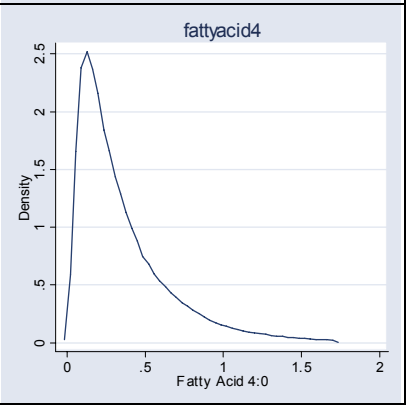
Variable Name	Type	Basis	Description	Levels	Graph
FatTotal	N	DietAARP derived	Total fat – g	Continuous (range = 0.13 → 2932.28)	
FattyAcid10	N	DietAARP derived	Fatty acid 10:0 – g	Continuous (range = 0 → 17.62)	
FattyAcid12	N	DietAARP derived	Fatty acid 12:0 – g	Continuous (range = 0 → 22.09)	

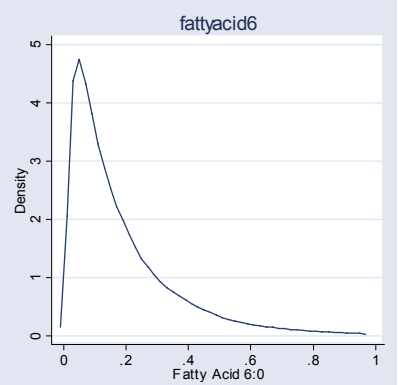
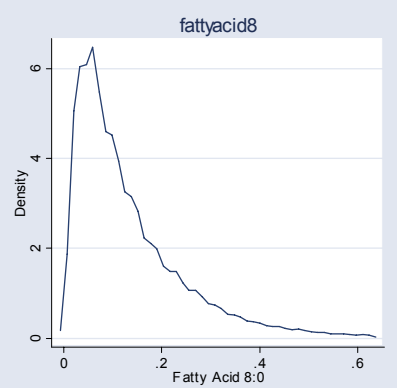
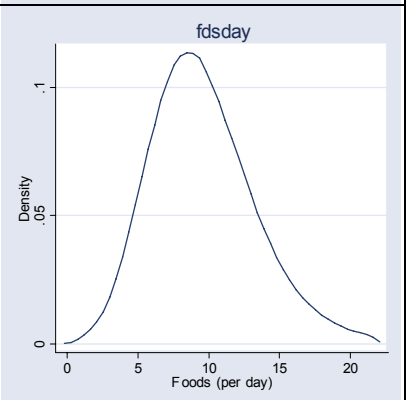
Variable Name	Type	Basis	Description	Levels	Graph
FattyAcid14	N	DietAARP derived	Fatty acid 14:0 – g	Continuous (range = 0 → 95.15)	
FattyAcid160	N	DietAARP derived	Fatty acid 16:0 – g	Continuous (range = 0.02 → 578.93)	
FattyAcid161_CSFII	N	DietAARP derived	Fatty acid 16:1 – g (CSFII)	Continuous (range = 0 → 64.32)	

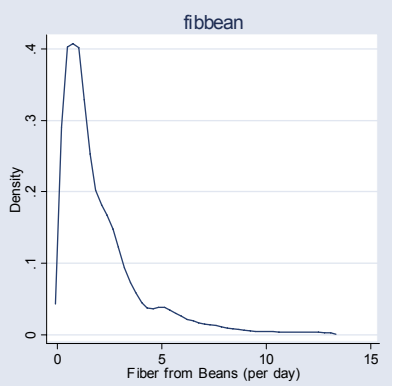
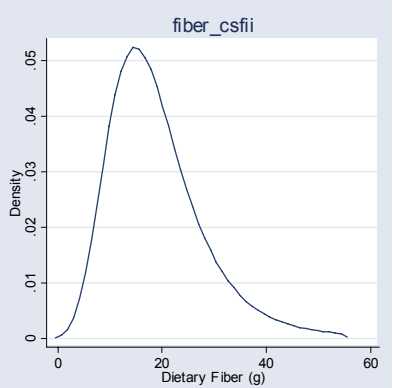
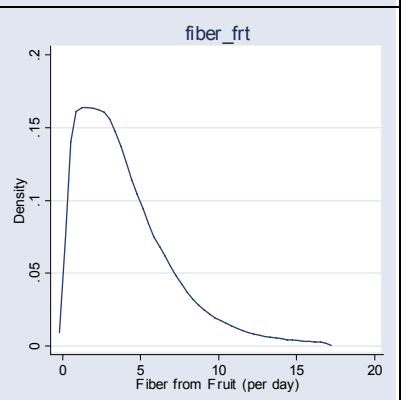
Variable Name	Type	Basis	Description	Levels	Graph
FattyAcid180	N	DietAARP derived	Fatty acid 18:0 – g	Continuous (range = 0.01 → 281.77)	
FattyAcid181_CSFII	N	DietAARP derived	Fatty acid 18:1 – g (CSFII)	Continuous (range = 0.04 → 1,053.95)	
FattyAcid182_CSFII	N	DietAARP derived	Fatty acid 18:3 – g (CSFII)	Continuous (range = 0.03 → 503.15)	

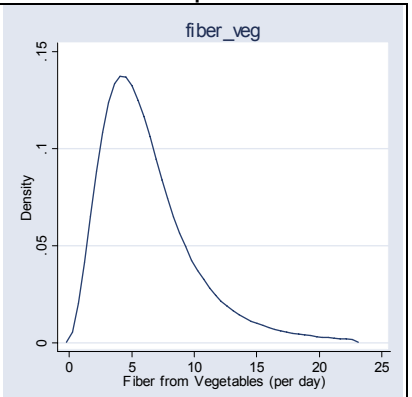
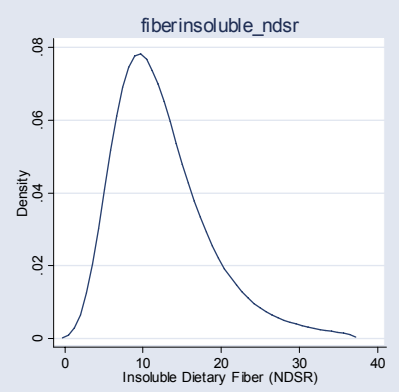
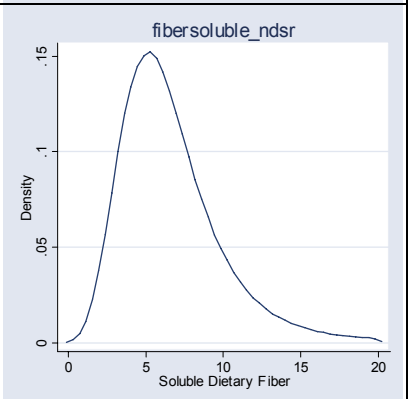
Variable Name	Type	Basis	Description	Levels	Graph
FattyAcid183	N	DietAARP derived	Fatty acid 18:3 – g	Continuous (range = 0 → 48.37)	
FattyAcid184	N	DietAARP derived	Fatty acid 18:4 – g	Continuous (range = 0 → 0.4)	
FattyAcid201	N	DietAARP derived	Fatty acid 20:1 – g	Continuous (range = 0 → 6.05)	

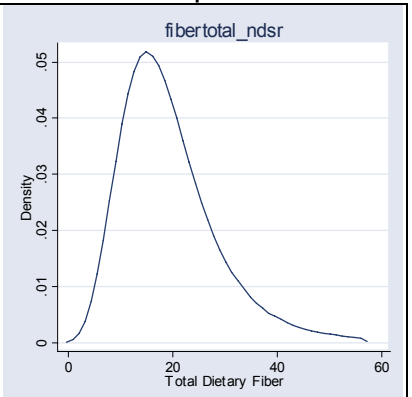
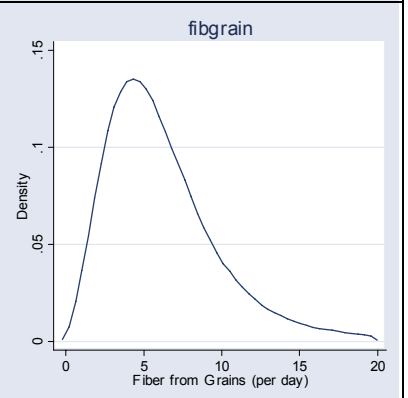
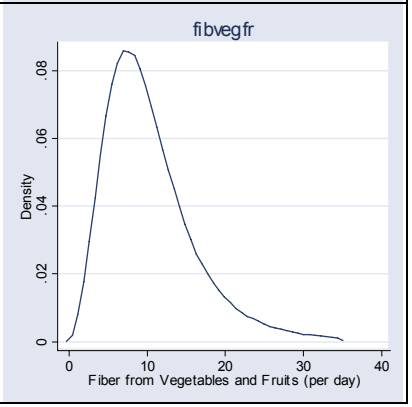
Variable Name	Type	Basis	Description	Levels	Graph
FattyAcid204	N	DietAARP derived	Fatty acid 20:4 – g	Continuous (range = 0 → 7.26)	
FattyAcid205	N	DietAARP derived	Fatty acid 20:5 – g	Continuous (range = 0 → 2.13)	
FattyAcid221	N	DietAARP derived	Fatty acid 22:1 – g	Continuous (range = 0 → 2.22)	

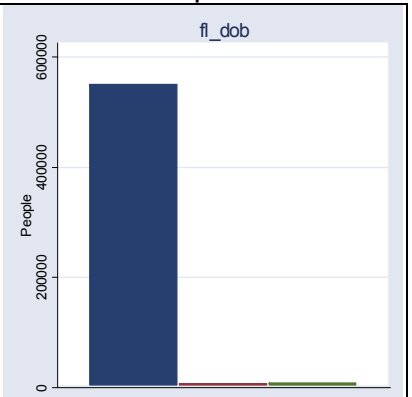
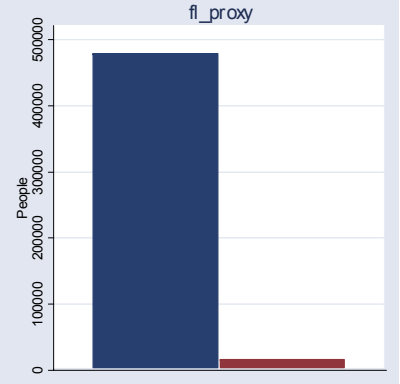
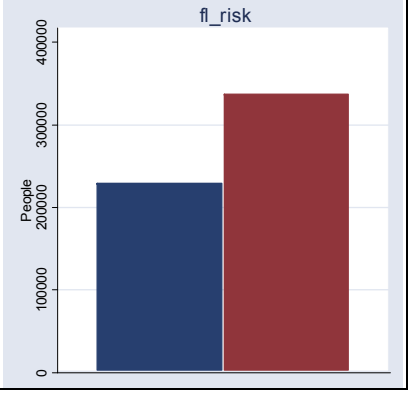
Variable Name	Type	Basis	Description	Levels	Graph
FattyAcid225	N	DietAARP derived	Fatty acid 22:5 – g	Continuous (range = 0 → 0.98)	
FattyAcid226	N	DietAARP derived	Fatty acid 22:6 – g	Continuous (range = 0 → 5.24)	
FattyAcid4	N	DietAARP derived	Fatty acid 4:0 – g	Continuous (range = 0 → 21.78)	

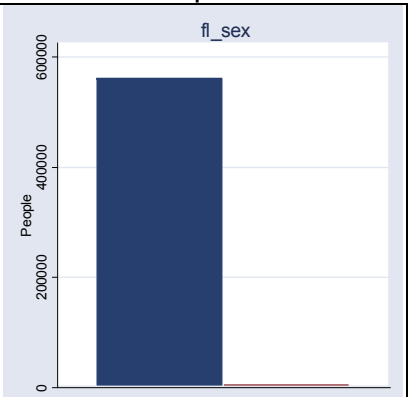
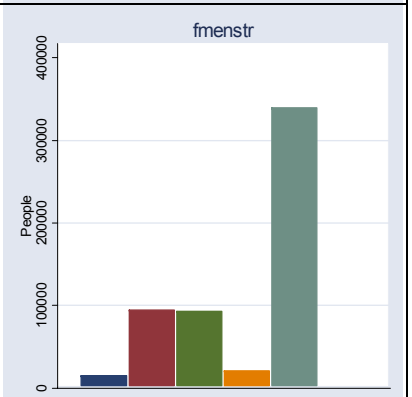
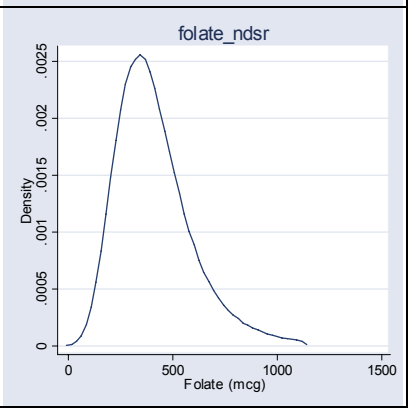
Variable Name	Type	Basis	Description	Levels	Graph
FattyAcid6	N	DietAARP derived	Fatty acid 6:0 – g	Continuous (range = 0 → 10.97)	
FattyAcid8	N	DietAARP derived	Fatty acid 8:0 – g	Continuous (range = 0 → 7.25)	
FdsDay	N	DietAARP derived	Foods per day	Continuous (range = 0.07 → 160.51)	

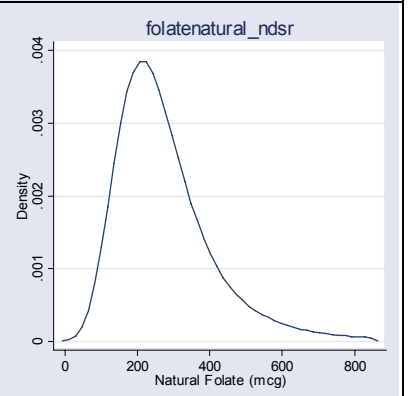
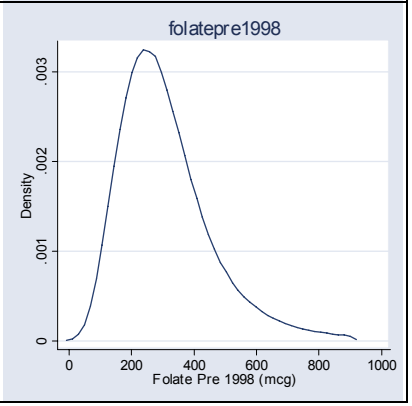
Variable Name	Type	Basis	Description	Levels	Graph
FibBean	N	DietAARP derived	Daily fiber from beans	Continuous (range = 0 → 156.58)	
Fiber_CSFII	N	DietAARP derived	Dietary fiber – g (CSFII)	Continuous (range = 0.13 → 592.84)	
fiber_frt	N	DietAARP derived	Daily fiber from fruit	Continuous (range = 0 → 97.67)	

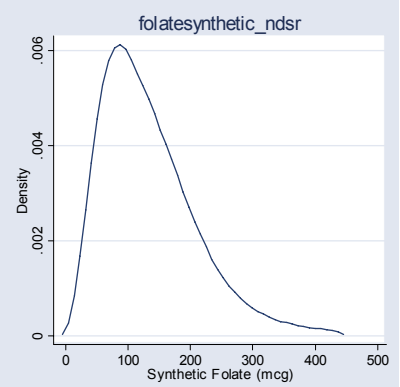
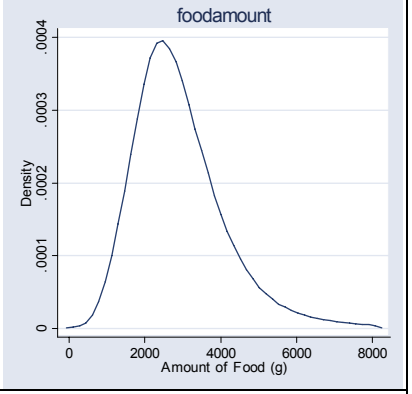
Variable Name	Type	Basis	Description	Levels	Graph
fiber_veg	N	DietAARP derived	Daily fiber from vegetables	Continuous (range = 0 → 260.75)	
FiberInsoluble_NDSR	N	DietAARP derived	Insoluble dietary fiber – g (NDS-R)	Continuous (range = 0.09 → 362.08)	
FiberSoluble_NDSR	N	DietAARP derived	Soluble dietary fiber – g (NDS-R)	Continuous (range = 0.05 → 213.88)	

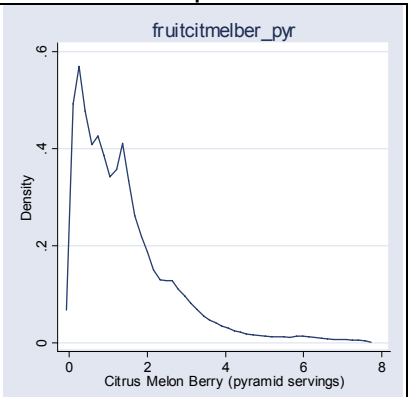
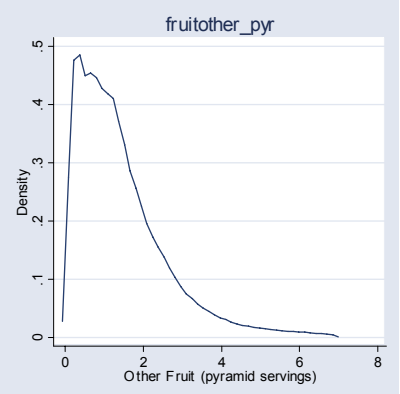
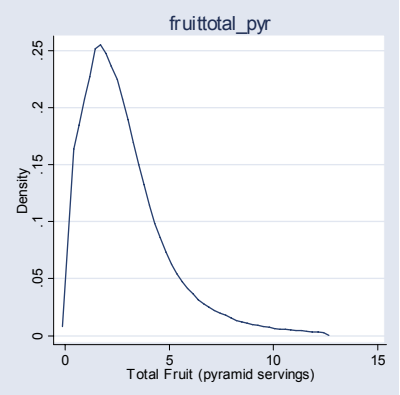
Variable Name	Type	Basis	Description	Levels	Graph
FiberTotal_NDSR	N	DietAARP derived	Total dietary fiber – g (NDS-R)	Continuous (range = 0.14 → 584.62)	
FibGrain	N	DietAARP derived	Daily fiber from grains	Continuous (range = 0 → 124.63)	
FibVegFr	N	DietAARP derived	Daily fiber from vegetables/fruits	Continuous (range = 0.03 → 332.29)	

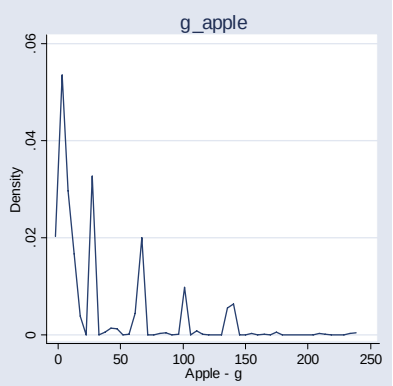
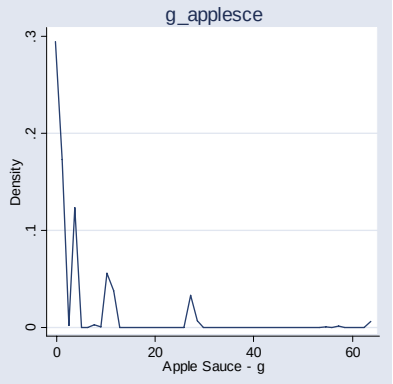
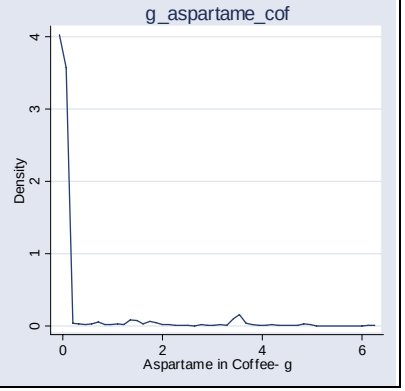
Variable Name	Type	Basis	Description	Levels	Graph
fl_DOB	N	Analysis variables	Date of birth differs between baseline questionnaire and frame by more than 1 year	0 (*n* = 550,761) 1 (*n* = 7,323) 2 (*n* = 8,323)	
fl_proxy	N	Analysis variables	Flag: baseline proxy	0 = (*n* = 478,751) 1 = (*n* = 15,760)	
fl_risk	N	Analysis variables	Flag: Subject in RFQ dataset	0 (*n* = 229,331) 1 (*n* = 337,076)	

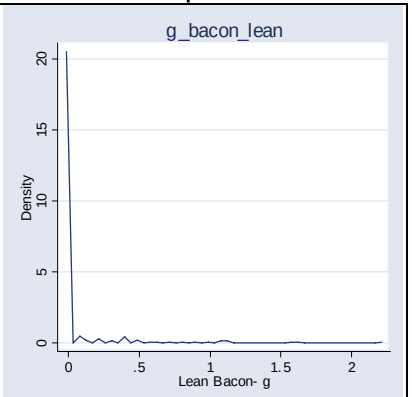
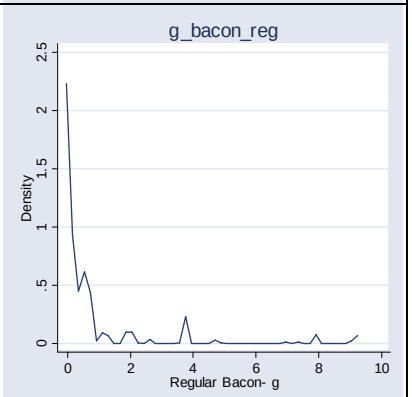
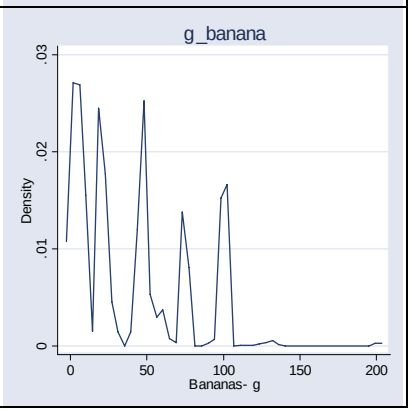
Variable Name	Type	Basis	Description	Levels	Graph
fl_sex	N	Analysis variables	Sex differs between sources	0 (*n* = 561,244) 1 (*n* = 5,163)	
FMENSTR	N	Cleaned from Q46	Age at menarche	1 = ≤ 10 years old (*n* = 15,589) 2 = 11-12 years old (*n* = 94,456) 3 = 13-14 years old (*n* = 93,138) 4 = ≥ 15 years old (*n* = 21,109) 8 = not applicable – other gender (*n* = 339,671) 9 = unknown (*n* = 2,444)	
Folate_NDSR	N	DietAARP derived	Folate – mcg (NDS-R)	Continuous (range = 1.47 → 12,413.86)	

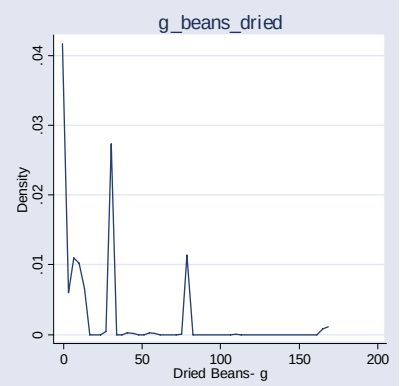
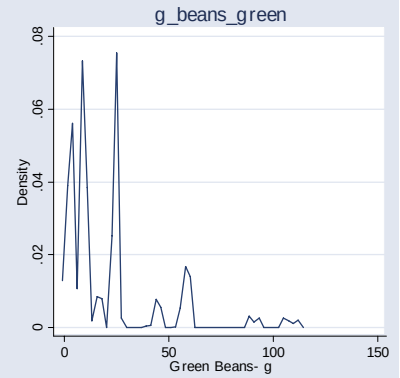
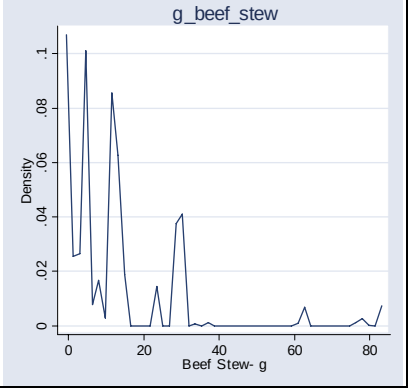
Variable Name	Type	Basis	Description	Levels	Graph
FolateEquiv_NDSR	N	DietAARP derived	Dietary folate equivalents – mcg (NDS-R)	Continuous (range = 1.55 → 15,001.88)	
FolateNatural_NDSR	N	DietAARP derived	Natural folate (food folate) – mcg (NDS-R)	Continuous (range = 1.35 → 8,722.6)	
FolatePre1998	N	DietAARP derived	Folate (pre 1998) – mcg	Continuous (range = 1.3 → 7995.82)	

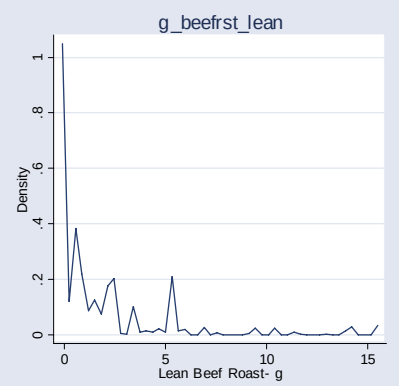
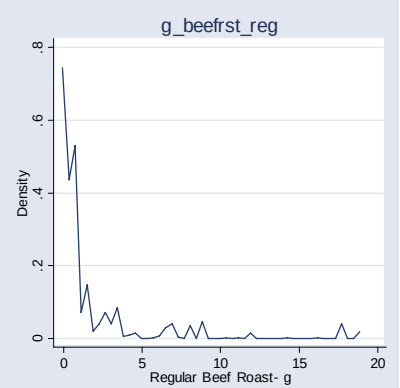
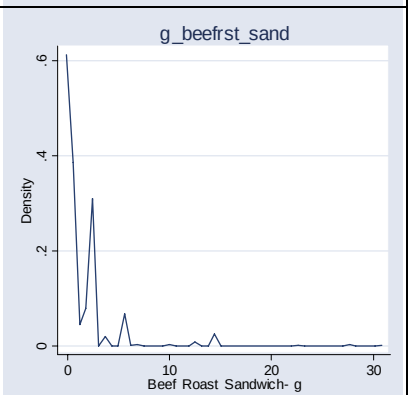
Variable Name	Type	Basis	Description	Levels	Graph
FolateSynthetic_NDSR	N	DietAARP derived	Synthetic folate (folic acid) – mcg (NDS-R)	Continuous (range = 0 → 3,704.03)	
FoodAmount	N	DietAARP derived	Amount of food in grams	Continuous (range = 9.68 → 61,887.75)	
FrtAdjFl	N	DietAARP derived	Adjust option flag – fruits	0 = Not adjusted (*n* = 566,407) 1 = Adjusted down (*n* = 0) 2 = Adjusted up (*n* = 0)	uninformative graph

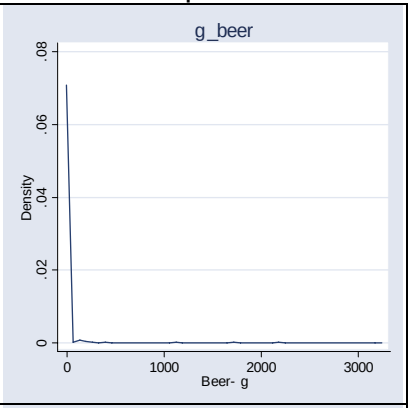
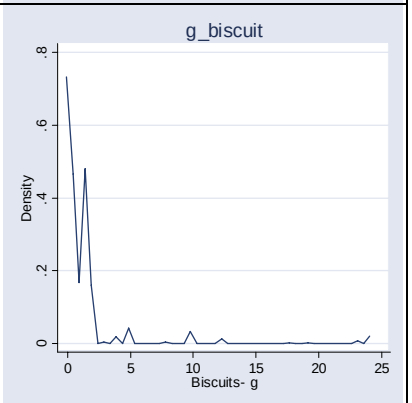
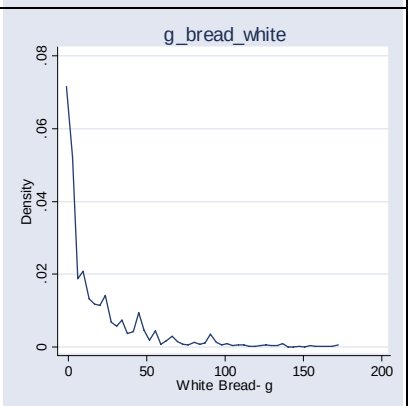
Variable Name	Type	Basis	Description	Levels	Graph
FruitCitMelBer_Pyr	N	DietAARP derived	Number of citrus/melon/berry pyramid servings	Continuous (range = 0 → 37.9)	
FruitOther_Pyr	N	DietAARP derived	Number of other fruit pyramid servings	Continuous (range = 0 → 45.77)	
FruitTotal_Pyr	N	DietAARP derived	Total number of fruit pyramid servings	Continuous (range = 0 → 82.22)	

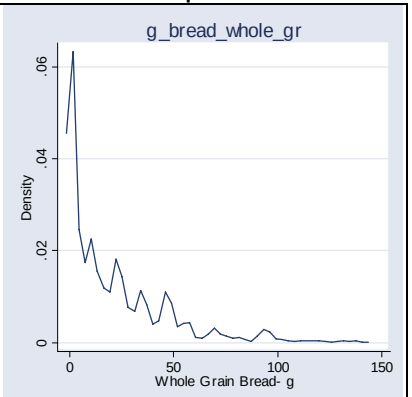
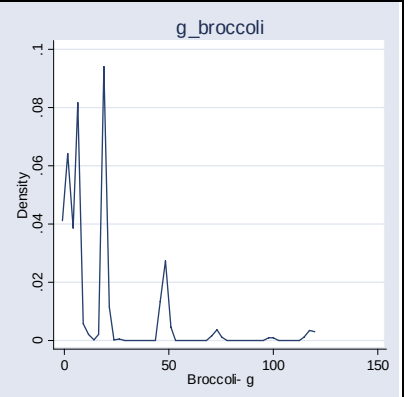
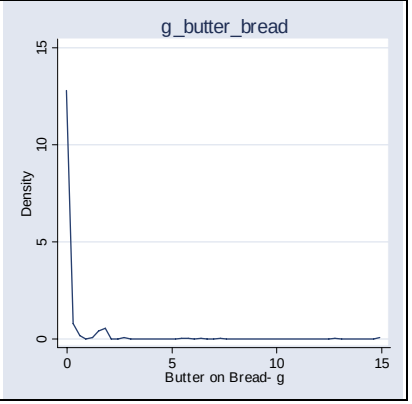
Variable Name	Type	Basis	Description	Levels	Graph
g_apple	N	DietAARP derived	Apples (grams/day)	Continuous (range = 0 → 472.90)	
g_applesce	N	DietAARP derived	Applesauce / cooked apples (grams/day)	Continuous (range = 0 → 581.80)	
g_aspartame_cof	N	DietAARP derived	Aspartame in coffee or tea (grams/day)	Continuous (range = 0 → 19.60)	

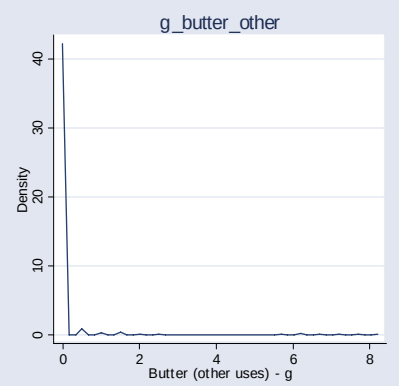
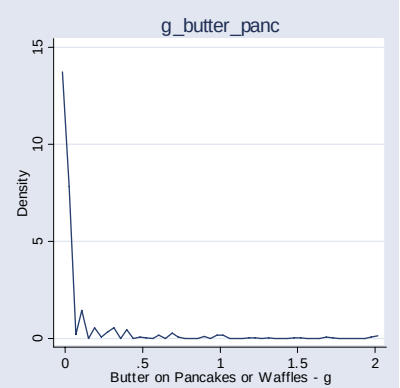
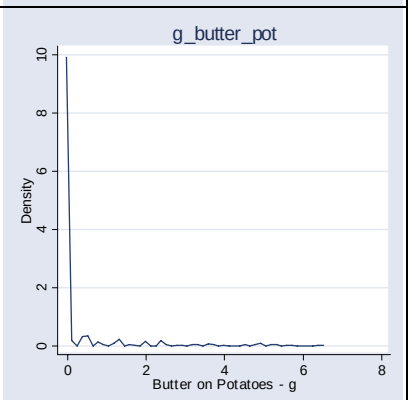
Variable Name	Type	Basis	Description	Levels	Graph
g_bacon_lean	N	DietAARP derived	Bacon, lean / Canadian (grams/day)	Continuous (range = 0 → 64.90)	
g_bacon_reg	N	DietAARP derived	Bacon, regular (grams/day)	Continuous (range = 0 → 80.60)	
g_banana	N	DietAARP derived	Bananas (grams/day)	Continuous (range = 0 → 263.60)	

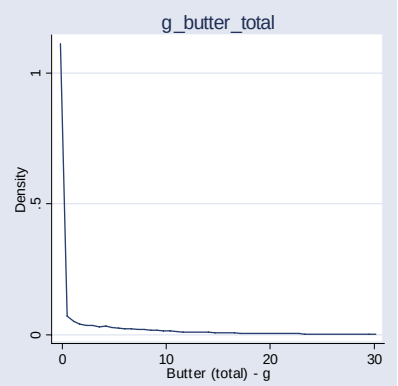
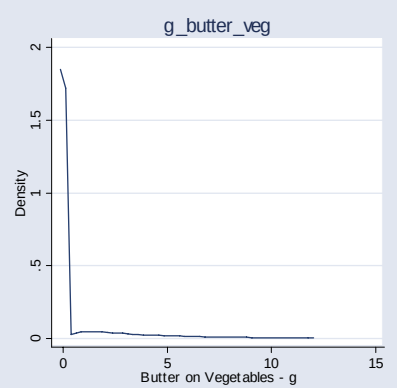
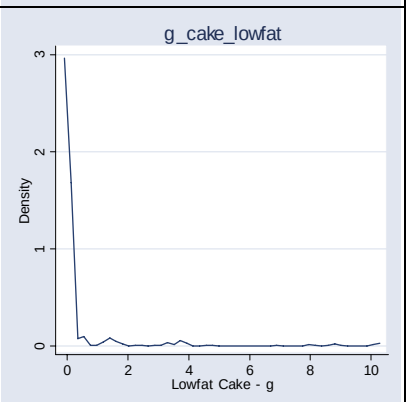
Variable Name	Type	Basis	Description	Levels	Graph
g_beans_dried	N	DietAARP derived	Bananas (grams/day)	Continuous (range = 0 → 774.70)	
g_beans_green	N	DietAARP derived	String beans, NFA (grams/day)	Continuous (range = 0 → 468.90)	
g_beef_stew	N	DietAARP derived	Beef stews / pot pies (grams/day)	Continuous (range = 0 → 1,722.80)	

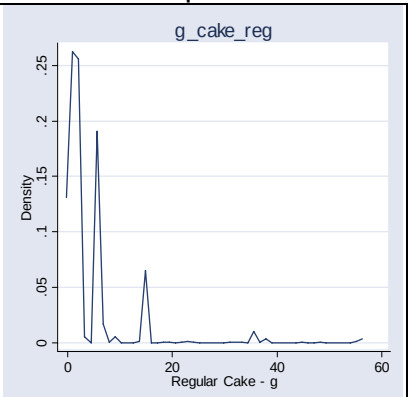
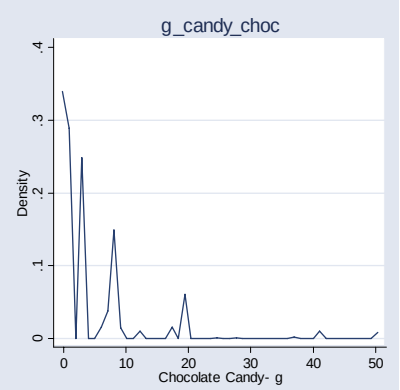
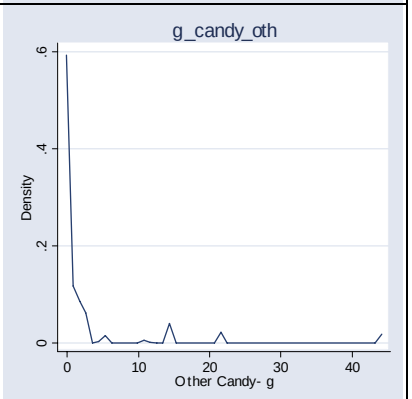
Variable Name	Type	Basis	Description	Levels	Graph
g_beefrst_lean	N	DietAARP derived	Beef roasts, lean (grams/day)	Continuous (range = 0 → 422.90)	
g_beefrst_reg	N	DietAARP derived	Beef roasts, regular (grams/day)	Continuous (range = 0 → 484.4)	
g_beefrst_sand	N	DietAARP derived	Beef, solid or roast in sandwiches (grams/day)	Continuous (range = 0 → 336.60)	

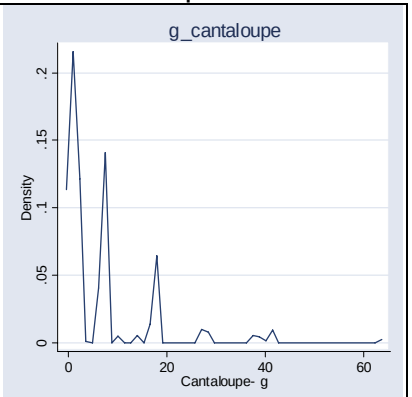
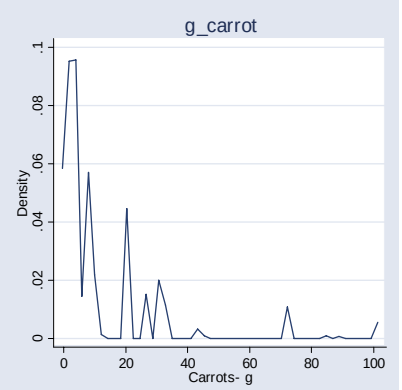
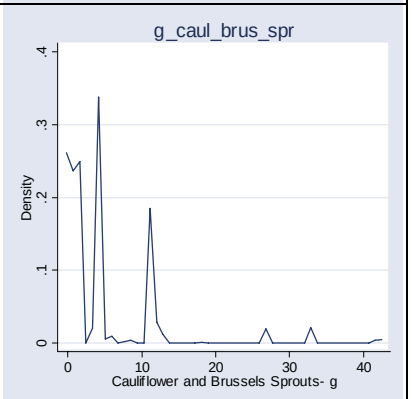
Variable Name	Type	Basis	Description	Levels	Graph
g_beer	N	DietAARP derived	Beer (grams/day)	Continuous (range = 0 → 12,043.90)	
g_biscuit	N	DietAARP derived	Biscuits, all (grams/day)	Continuous (range = 0 → 235.10)	
g_bread_white	N	DietAARP derived	Breads / rolls, white (grams/day)	Continuous (range = 0 → 341.70)	

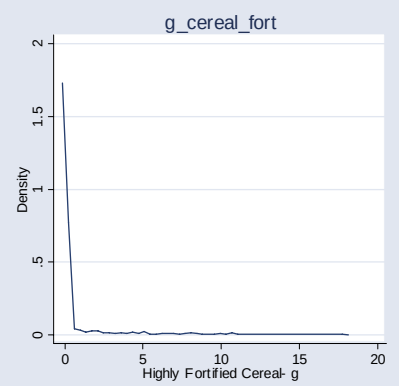
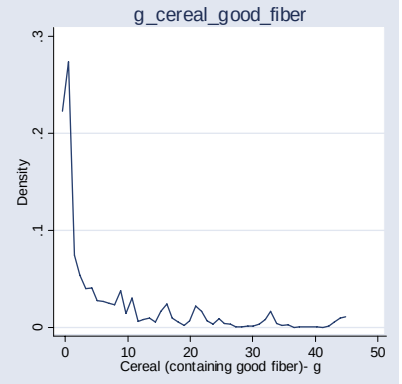
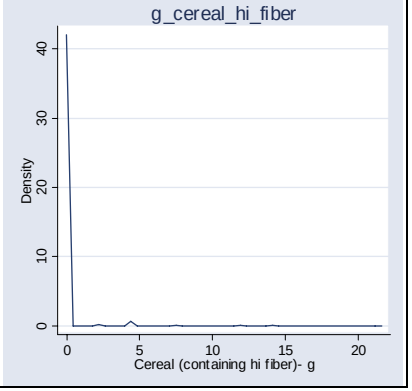
Variable Name	Type	Basis	Description	Levels	Graph
g_bread_whole_gr	N	DietAARP derived	Breads / rolls, whole grain (grams/day)	Continuous (range = 0 → 299.00)	
g_broccoli	N	DietAARP derived	Broccoli, NFA (grams/day)	Continuous (range = 0 → 501.90)	
g_butter_bread	N	DietAARP derived	Butter on bread (grams/day)	Continuous (range = 0 → 41.00)	

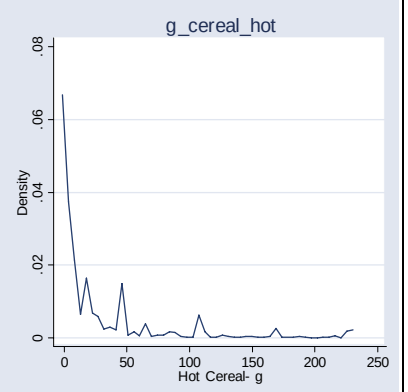
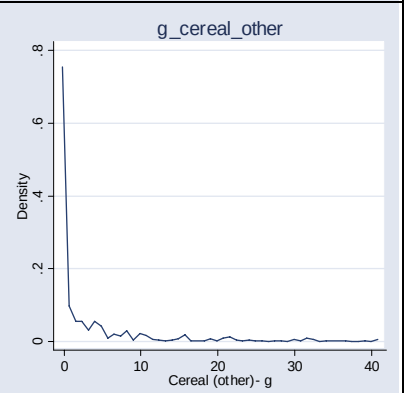
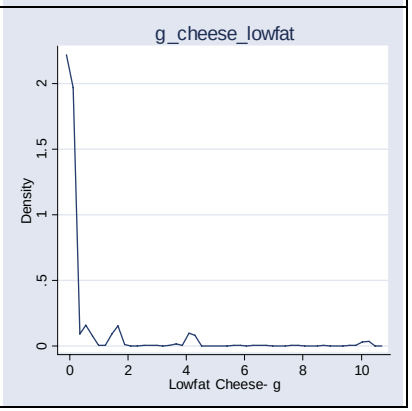
Variable Name	Type	Basis	Description	Levels	Graph
g_butter_other	N	DietAARP derived	Butter, other uses (grams/day)	Continuous (range = 0 → 53.50)	
g_butter_panc	N	DietAARP derived	Butter on pancakes or waffles (grams/day)	Continuous (range = 0 → 20.30)	
g_butter_pot	N	DietAARP derived	Butter on potatoes (grams/day)	Continuous (range = 0 → 38.30)	

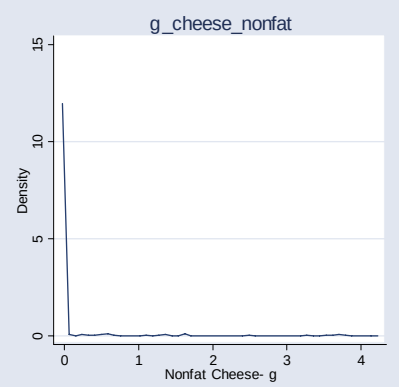
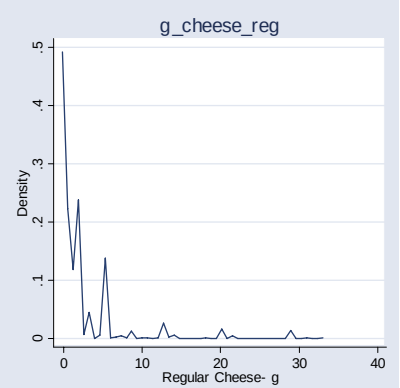
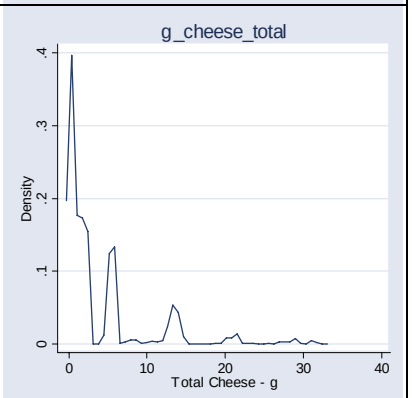
Variable Name	Type	Basis	Description	Levels	Graph
g_butter_total	N	DietAARP derived	Total butter (grams/day)	Continuous (range = 0 → 223.70)	
g_butter_veg	N	DietAARP derived	Butter on vegetables (grams/day)	Continuous (range = 0 → 103.80)	
g_cake_lowfat	N	DietAARP derived	Cakes, lowfat (grams/day)	Continuous (range = 0 → 282.40)	

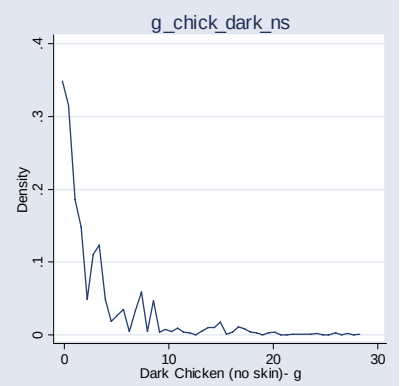
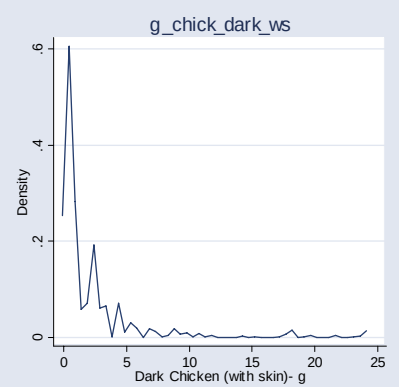
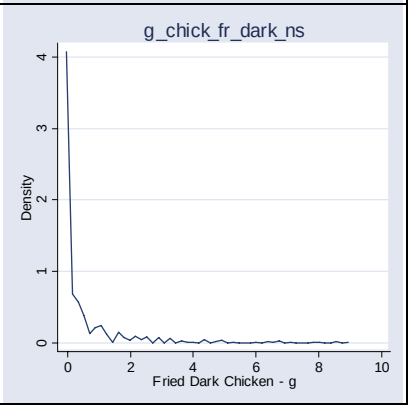
Variable Name	Type	Basis	Description	Levels	Graph
g_cake_reg	N	DietAARP derived	Cakes, regular (grams/day)	Continuous (range = 0 → 388.50)	
g_candy_choc	N	DietAARP derived	Candy, chocolate (grams/day)	Continuous (range = 0 → 212.60)	
g_candy_oth	N	DietAARP derived	Candy, not chocolate (grams/day)	Continuous (range = 0 → 186.00)	

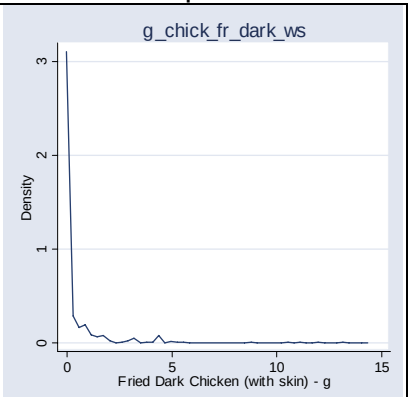
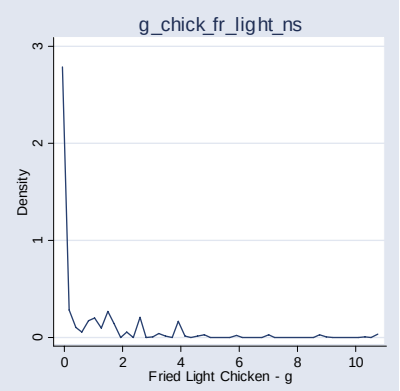
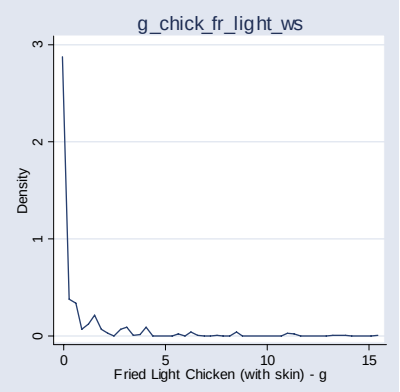
Variable Name	Type	Basis	Description	Levels	Graph
g_cantaloupe	N	DietAARP derived	Cantaloupe (grams/day)	Continuous (range = 0 → 176.00)	
g_carrot	N	DietAARP derived	Carrots, NFA (grams/day)	Continuous (range =0 → 305.30)	
g_caul_brus_spr	N	DietAARP derived	Cauliflower / Brussels Sprouts, NFA (grams/day)	Continuous (range = 0 → 346.50)	

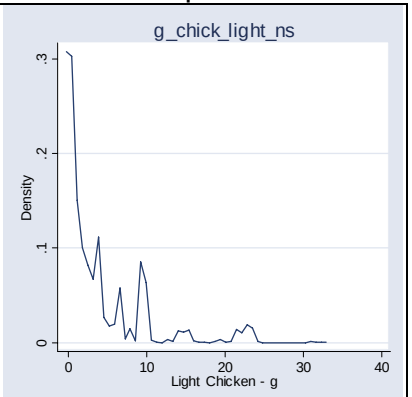
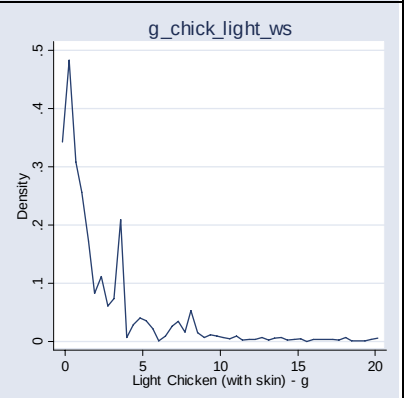
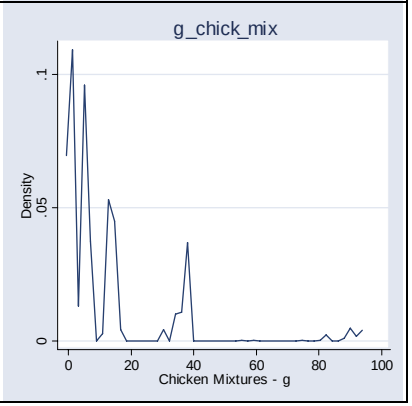
Variable Name	Type	Basis	Description	Levels	Graph
g_cereal_fort	N	DietAARP derived	RTE cereal, highly fortified (grams/day)	Continuous (range = 0 → 168.40)	
g_cereal_good_fiber	N	DietAARP derived	RTE cereal, good fiber (grams/day)	Continuous (range = 0 → 212.60)	
g_cereal_hi_fiber	N	DietAARP derived	RTE cereal, hi-fiber (grams/day)	Continuous (range 0 → =178.20)	

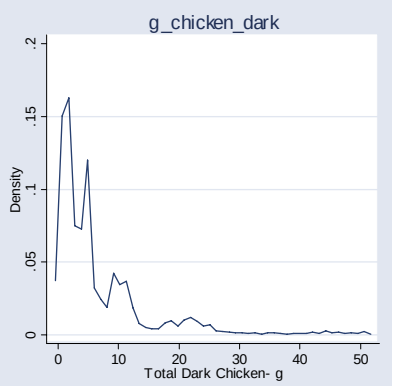
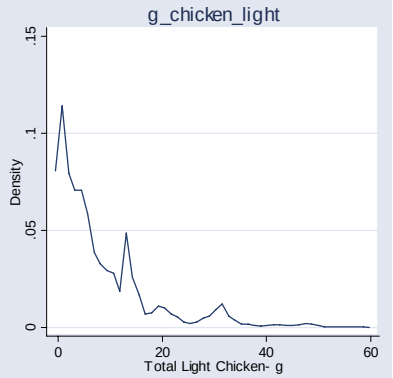
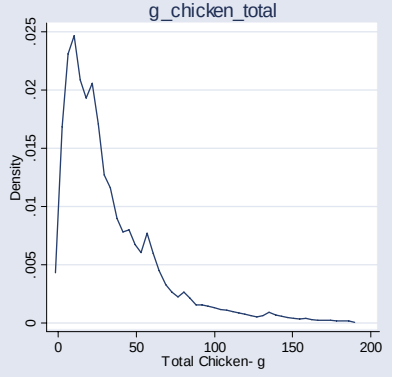
Variable Name	Type	Basis	Description	Levels	Graph
g_cereal_hot	N	DietAARP derived	Hot breakfast cereals, NFA (grams/day)	Continuous (range = 0 → 911.50)	
g_cereal_other	N	DietAARP derived	RTE cereal, other (grams/day)	Continuous (range = 0 → 194.40)	
g_cheese_lowfat	N	DietAARP derived	Cheese, lowfat (grams/day)	Continuous (range = 0 → 112.80)	

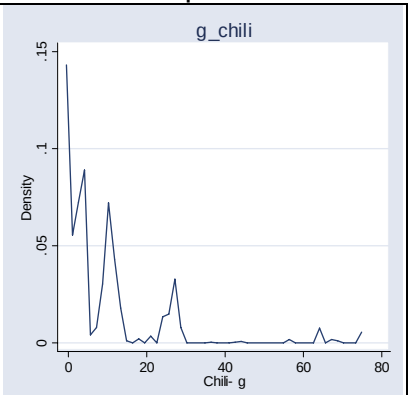
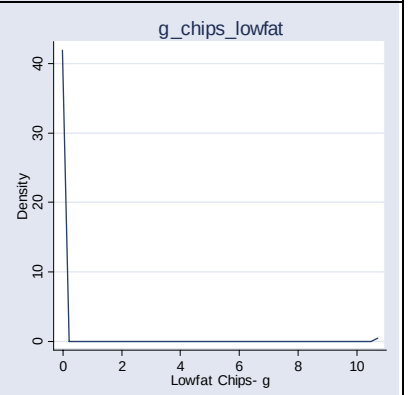
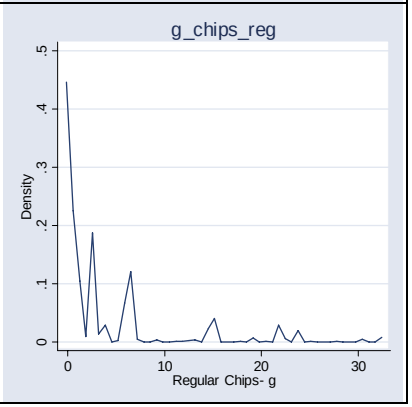
Variable Name	Type	Basis	Description	Levels	Graph
g_cheese_nonfat	N	DietAARP derived	Cheese, nonfat (grams/day)	Continuous (range = 0 → 99.10)	
g_cheese_reg	N	DietAARP derived	Cheese, regular (grams/day)	Continuous (range = 0 → 145.20)	
g_cheese_total	N	DietAARP derived	Cheese, total (grams/day)	Continuous (range = 0 → 34.4)	

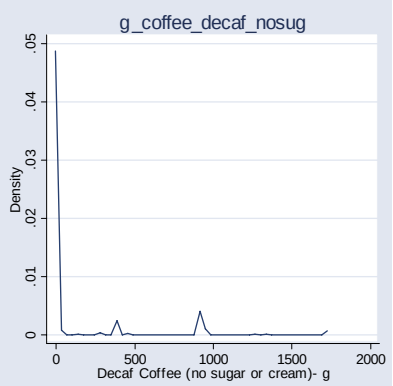
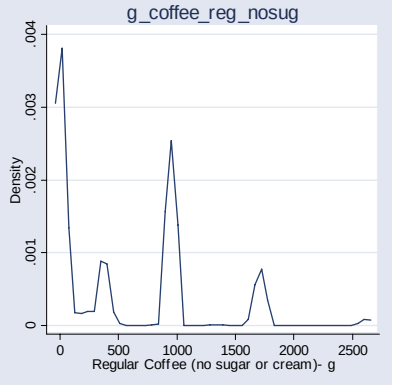
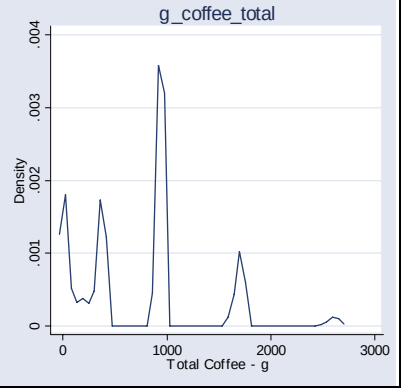
Variable Name	Type	Basis	Description	Levels	Graph
g_chick_dark_ns	N	DietAARP derived	Chicken, dark, no skin (grams/day)	Continuous (range = 0 → 330.70)	
g_chick_dark_ws	N	DietAARP derived	Chicken, dark, with skin (grams/day)	Continuous (range = 0 → 487.20)	
g_chick_fr_dark_ns	N	DietAARP derived	Chicken, fried, dark, no skin (grams/day)	Continuous (range = 0 → 262.40)	

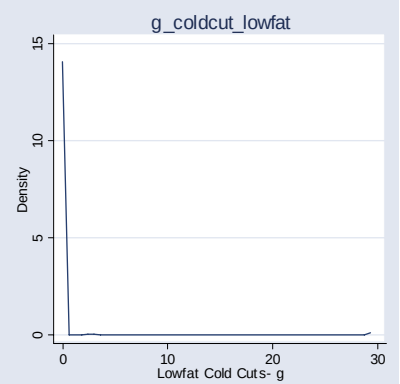
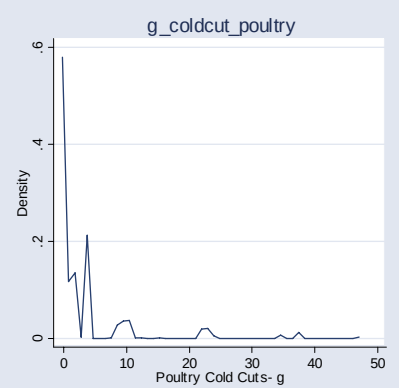
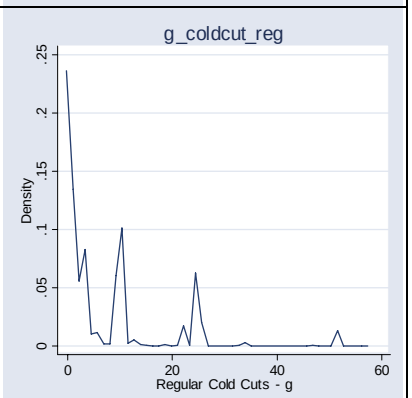
Variable Name	Type	Basis	Description	Levels	Graph
g_chick_fr_dark_ws	N	DietAARP derived	Chicken, fried, dark, with skin (grams/day)	Continuous (range = 0 → 405.90)	
g_chick_fr_light_ns	N	DietAARP derived	Chicken, fried, light, no skin (grams/day)	Continuous (range = 0 → 243.90)	
g_chick_fr_light_ws	N	DietAARP derived	Chicken, fried, light, with skin (grams/day)	Continuous (range = 0 → 347.90)	

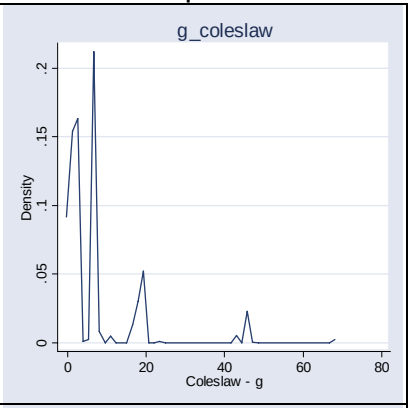
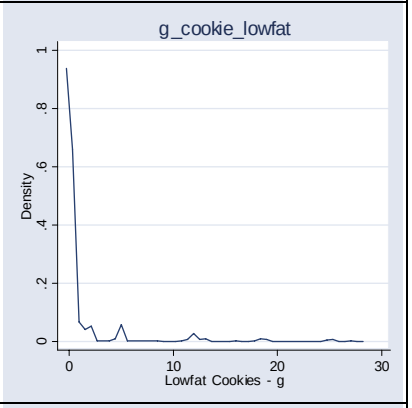
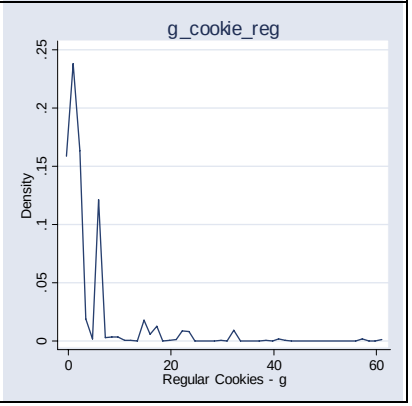
Variable Name	Type	Basis	Description	Levels	Graph
g_chick_light_ns	N	DietAARP derived	Chicken, light, no skin (grams/day)	Continuous (range = 0 → 216.00)	
g_chick_light_ws	N	DietAARP derived	Chicken, light, with skin (grams/day)	Continuous (range = 0 → 292.70)	
g_chick_mix	N	DietAARP derived	Chicken, mixtures (grams/day)	Continuous (range = 0 → 946.00)	

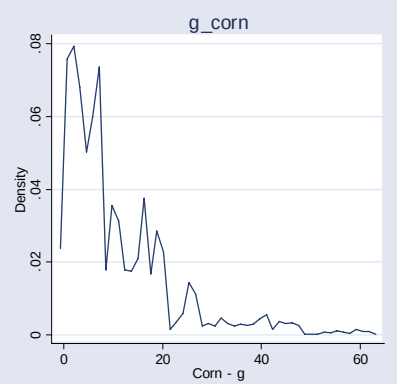
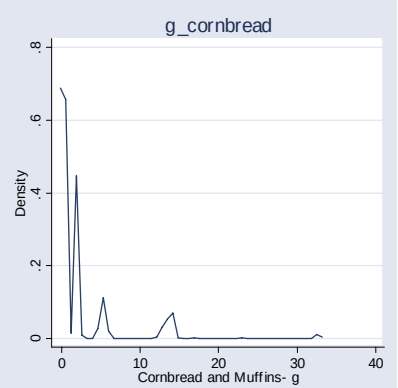
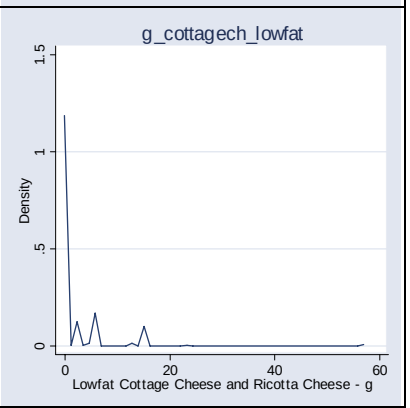
Variable Name	Type	Basis	Description	Levels	Graph
g_chicken_dark	N	DietAARP derived	Chicken, dark meat (grams/day)	Continuous (range = 0 → 893.10)	
g_chicken_light	N	DietAARP derived	Chicken, light meat (grams/day)	Continuous (range = 0 → 617.60)	
g_chicken_total	N	DietAARP derived	Chicken, total (grams/day)	Continuous (range = 0 → 2,386.70)	

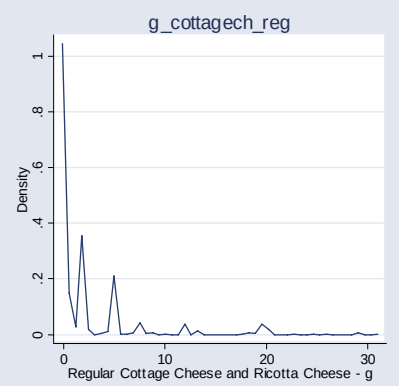
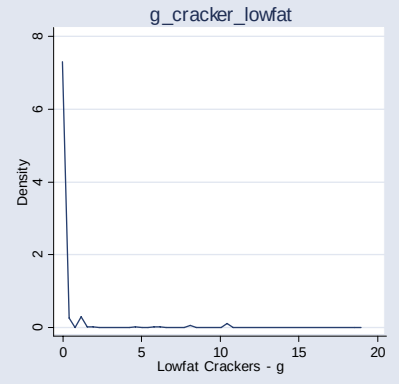
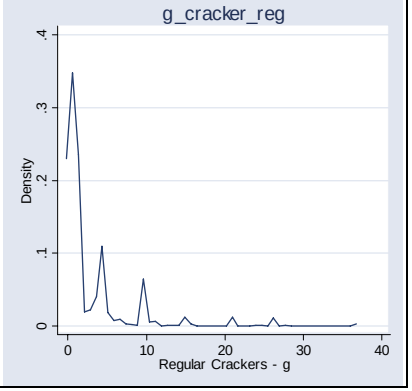
Variable Name	Type	Basis	Description	Levels	Graph
g_chili	N	DietAARP derived	Chili (grams/day)	Continuous (range = 0 → 1,753.20)	
g_chips_lowfat	N	DietAARP derived	Potato / corn / other chips, lowfat (grams/day)	Continuous (range = 0 → 147.30)	
g_chips_reg	N	DietAARP derived	Potato / corn / other chips, regular (grams/day)	Continuous (range = 0 → 220.90)	

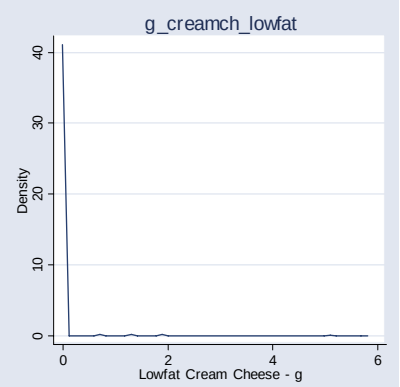
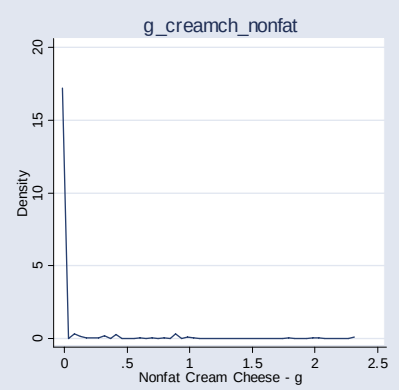
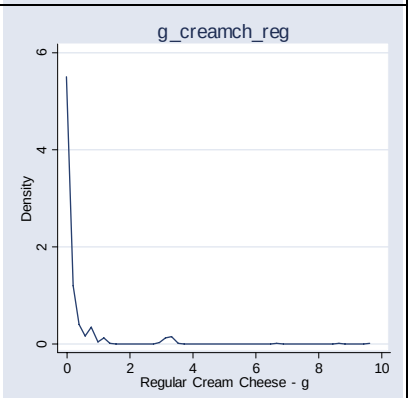
Variable Name	Type	Basis	Description	Levels	Graph
g_coffee_decaf_nosug	N	DietAARP derived	Coffee, decaf, no cream or sugar (grams/day)	Continuous (range = 0 → 2,675.50)	
g_coffee_reg_nosug	N	DietAARP derived	Coffee, regular, no cream or sugar (grams/day)	Continuous (range = 0 → 2,681.10)	
g_coffee_total	N	DietAARP derived	Coffee, total (grams/day)	Continuous (range = 0 → 2,681.10)	

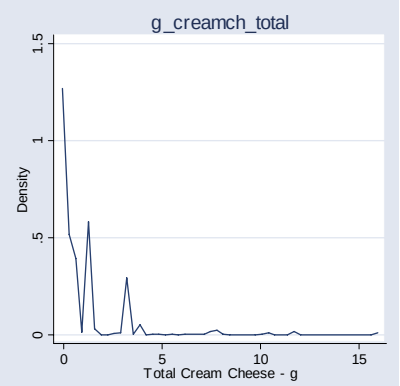
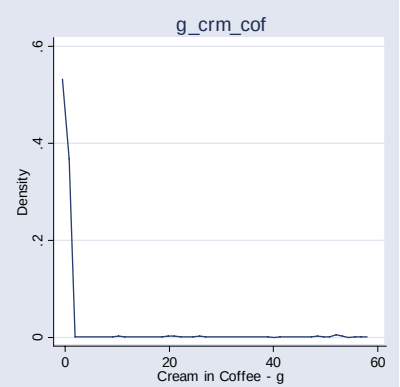
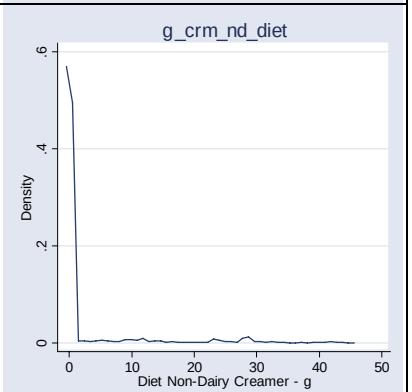
Variable Name	Type	Basis	Description	Levels	Graph
g_coldcut_lowfat	N	DietAARP derived	Cold cuts, lowfat (grams/day)	Continuous (range = 0 → 221.00)	
g_coldcut_poultry	N	DietAARP derived	Cold cuts, poultry (grams/day)	Continuous (range = 0 → 233.60)	
g_coldcut_reg	N	DietAARP derived	Cold cuts, regular (grams/day)	Continuous (range = 0 → 262.20)	

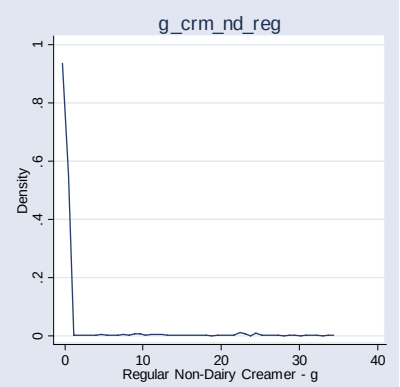
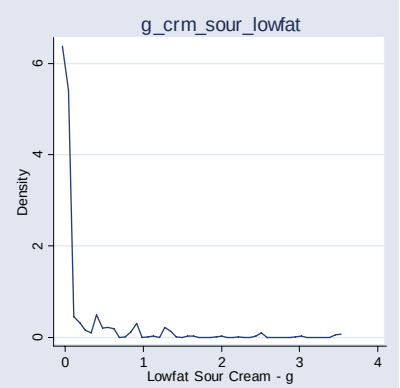
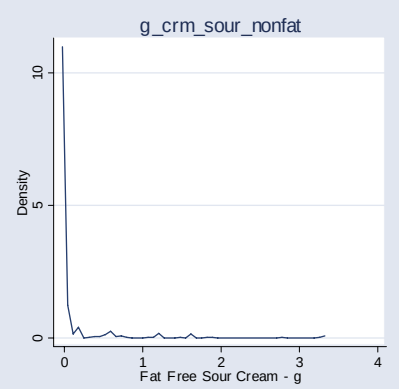
Variable Name	Type	Basis	Description	Levels	Graph
g_coleslaw	N	DietAARP derived	Coleslaw / cabbage / sauerkraut (grams/day)	Continuous (range = 0 → 463.70)	
g_cookie_lowfat	N	DietAARP derived	Cookies, brownies, lowfat (grams/day)	Continuous (range = 0 → 175.70)	
g_cookie_reg	N	DietAARP derived	Cookies, brownies, regular (grams/day)	Continuous (range = 0 → 170.60)	

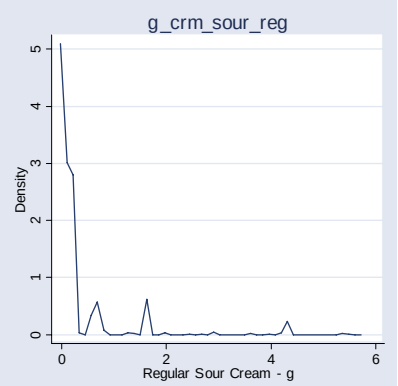
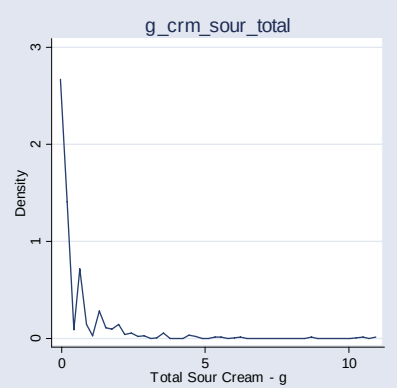
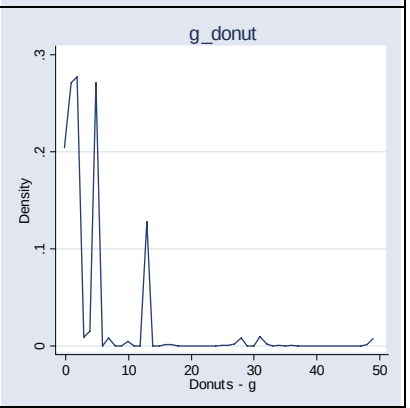
Variable Name	Type	Basis	Description	Levels	Graph
g_corn	N	DietAARP derived	Corn, NFA (grams/day)	Continuous (range = 0 → 448.20)	
g_cornbread	N	DietAARP derived	Cornbread / muffins (grams/day)	Continuous (range = 0 → 351.90)	
g_cottagech_lowfat	N	DietAARP derived	Cottage cheese / ricotta cheese, lowfat (grams/day)	Continuous (range = 0 → 393.60)	

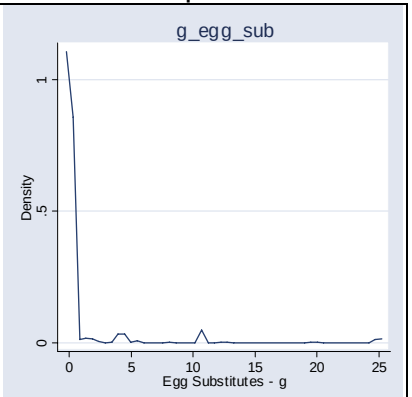
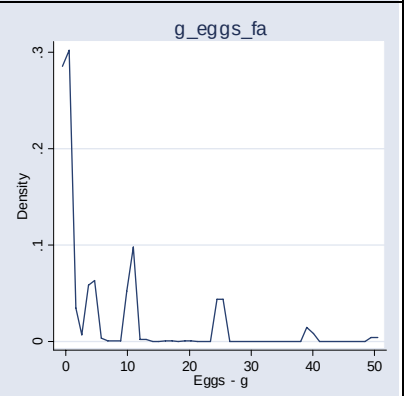
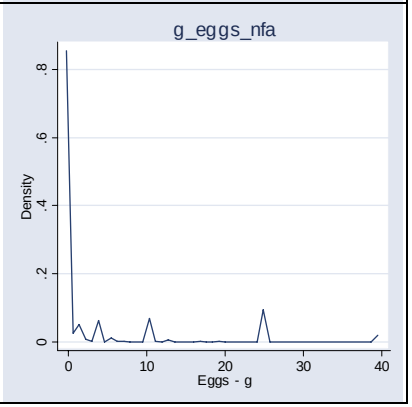
Variable Name	Type	Basis	Description	Levels	Graph
g_cottagech_reg	N	DietAARP derived	Cottage cheese / ricotta cheese, regular (grams/day)	Continuous (range = 0 → 535.30)	
g_cracker_lowfat	N	DietAARP derived	Crackers, lowfat (grams/day)	Continuous (range = 0 → 110.30)	
g_cracker_reg	N	DietAARP derived	Crackers, regular (grams/day)	Continuous (range = 0 → 109.50)	

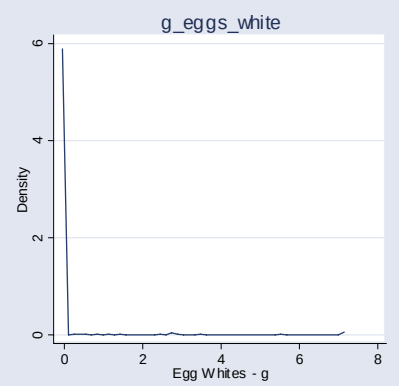
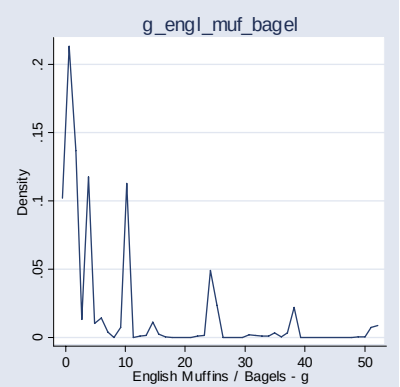
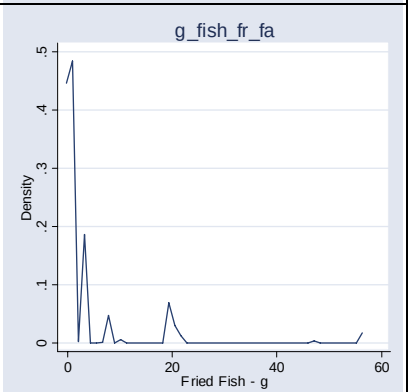
Variable Name	Type	Basis	Description	Levels	Graph
g_creamch_lowfat	N	DietAARP derived	Cream cheese, lowfat (grams/day)	Continuous (range = 0 → 77.00)	
g_creamch_nonfat	N	DietAARP derived	Cream cheese, fat free (grams/day)	Continuous (range = 0 → 54.90)	
g_creamch_reg	N	DietAARP derived	Cream cheese, regular (grams/day)	Continuous (range = 0 → 104.40)	

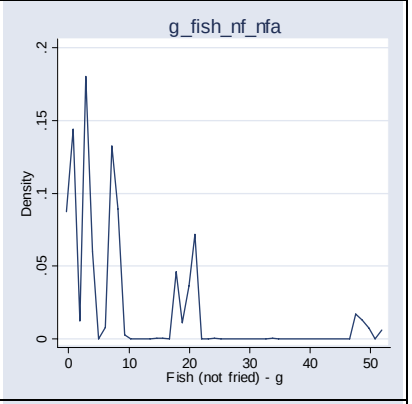
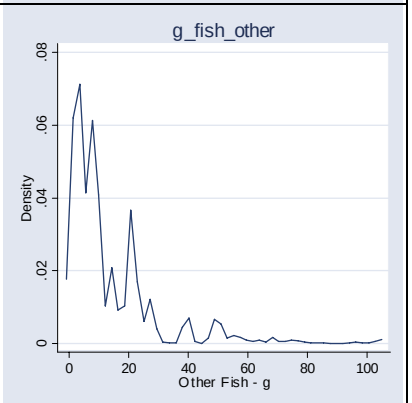
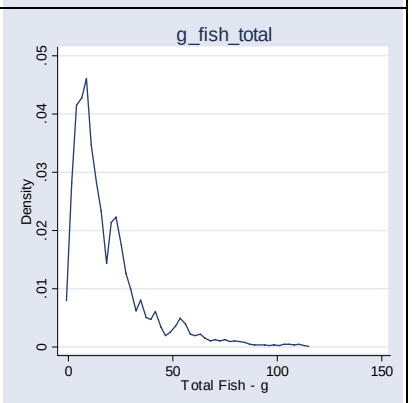
Variable Name	Type	Basis	Description	Levels	Graph
g_creamch_total	N	DietAARP derived	Cream cheese, total (grams/day)	Continuous (range = 0 → 15.9)	
g_crm_cof	N	DietAARP derived	Cream, regular, or ½ & ½, in coffee (grams/day)	Continuous (range = 0 → 288.80)	
g_crm_nd_diet	N	DietAARP derived	Non-dairy creamer, diet, in coffee (grams/day)	Continuous (range = 0 → 158.10)	

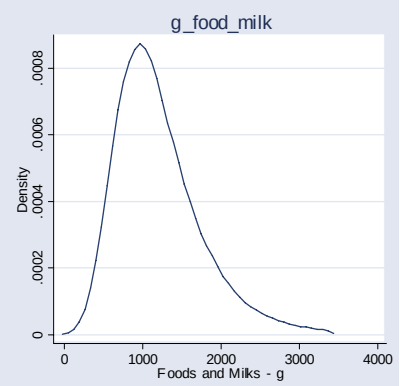
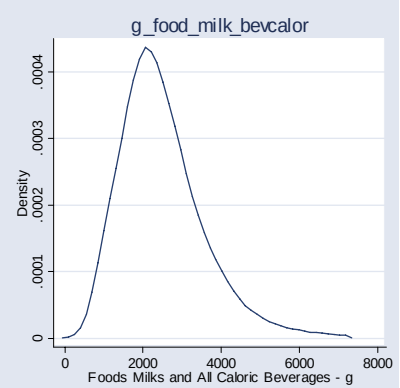
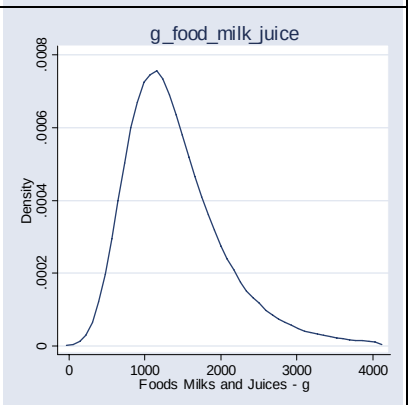
Variable Name	Type	Basis	Description	Levels	Graph
g_crm_nd_reg	N	DietAARP derived	Non-dairy creamer, regular, in coffee (grams/day)	Continuous (range = 0 → 136.40)	
g_crm_sour_lowfat	N	DietAARP derived	Sour cream, lowfat (grams/day)	Continuous (range = 0 → 119.00)	
g_crm_sour_nonfat	N	DietAARP derived	Sour cream, fat free (grams/day)	Continuous (range = 0 → 116.6)	

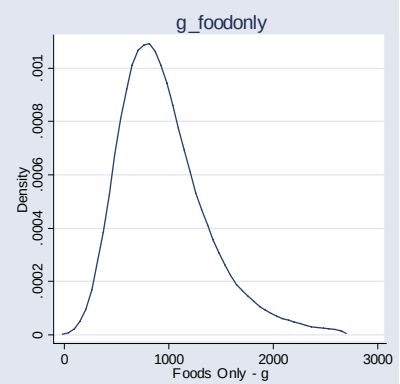
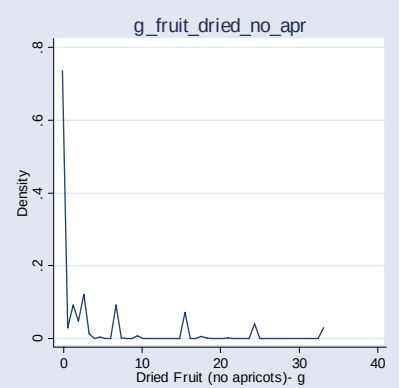
Variable Name	Type	Basis	Description	Levels	Graph
g_crm_sour_reg	N	DietAARP derived	Sour cream, regular (grams/day)	Continuous (range = 0 → 172.10)	
g_crm_sour_total	N	DietAARP derived	Sour cream, total (grams/day)	Continuous (range = 0 → 172.10)	
g_donut	N	DietAARP derived	Quick breads, donuts, sweet rolls (grams/day)	Continuous (range = 0 → 285.50)	

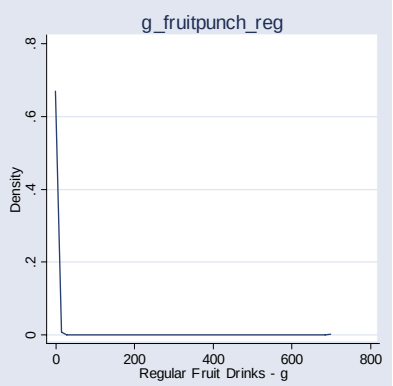
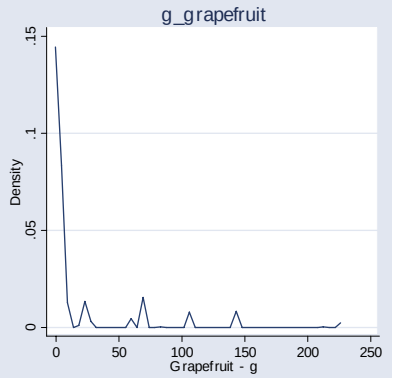
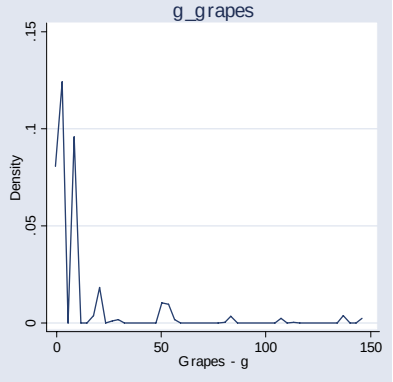
Variable Name	Type	Basis	Description	Levels	Graph
g_egg_sub	N	DietAARP derived	Eggs, substitutes (grams/day)	Continuous (range = 0 → 100.00)	
g_eggs_fa	N	DietAARP derived	Eggs, FA (grams/day)	Continuous (range = 0 → 100.00)	
g_eggs_nfa	N	DietAARP derived	Eggs, plain, NFA (grams/day)	Continuous (range = 0 → 100.00)	

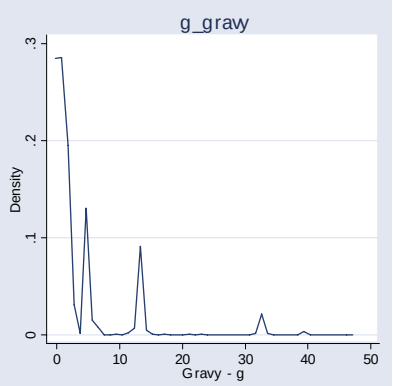
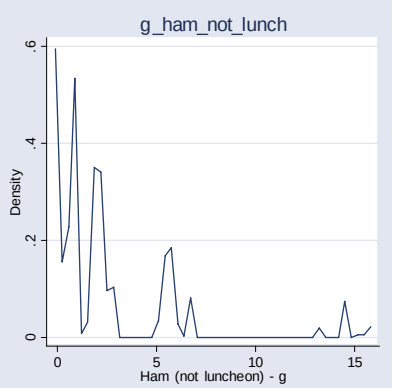
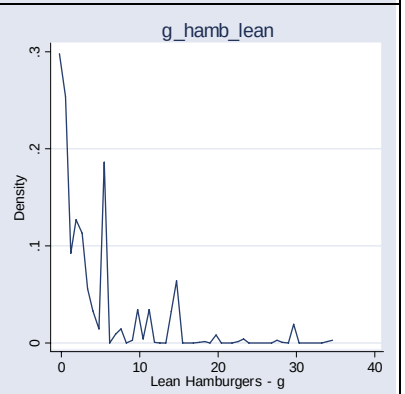
Variable Name	Type	Basis	Description	Levels	Graph
g_eggs_white	N	DietAARP derived	Eggs, whites only (grams/day)	Continuous (range = 0 → 66.00)	
g_engl_muf_bagel	N	DietAARP derived	English muffin / bagel (grams/day)	Continuous (range = 0 → 148.00)	
g_fish_fr_fa	N	DietAARP derived	Fish, fried, FA (grams/day)	Continuous (range = 0 → 598.30)	

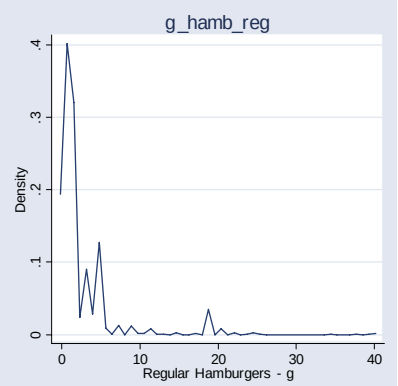
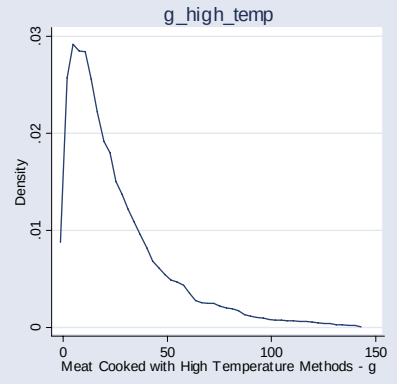
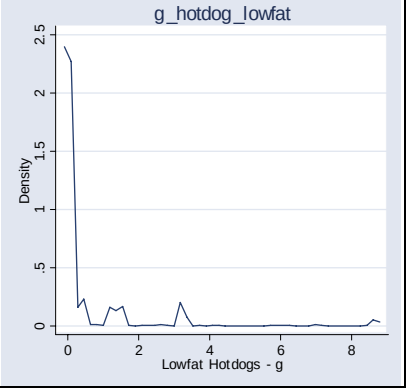
Variable Name	Type	Basis	Description	Levels	Graph
g_fish_nf_nfa	N	DietAARP derived	Fish, not fried, NFA (grams/day)	Continuous (range = 0 → 522.30)	
g_fish_other	N	DietAARP derived	Fish, other (not tuna) (grams/day)	Continuous (range = 0 → 1,120.60)	
g_fish_total	N	DietAARP derived	Fish, total (grams/day)	Continuous (range = 0 → 1,451.80)	

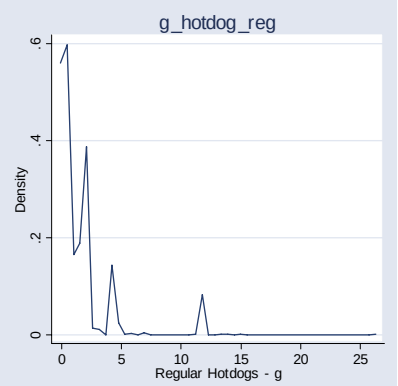
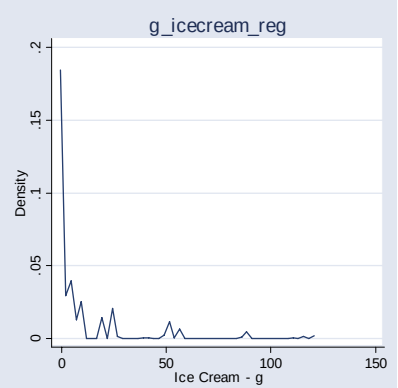
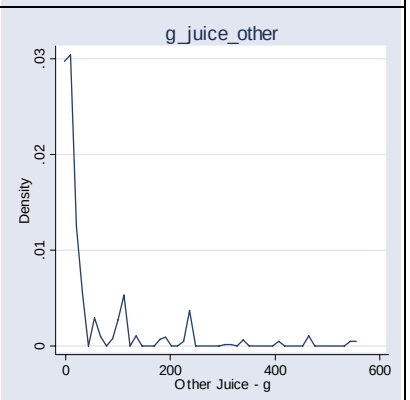
Variable Name	Type	Basis	Description	Levels	Graph
g_food_milk	N	DietAARP derived	Foods and milks (grams/day)	Continuous (range = 9.60 → 41,317.50)	
g_food_milk_bevcalor	N	DietAARP derived	Foods, milks, and all caloric beverages (grams/day)	Continuous (range = 9.60 → 61,878.40)	
g_food_milk_juice	N	DietAARP derived	Foods, milks, and juices (grams/day)	Continuous (range = 9.60 → 46,537.80)	

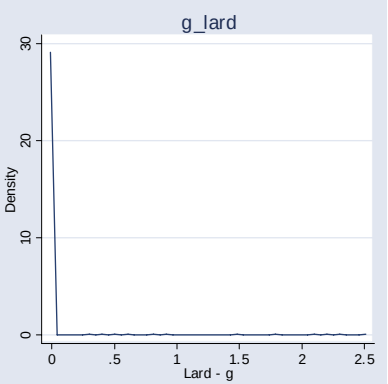
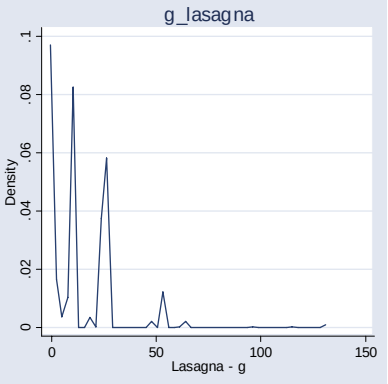
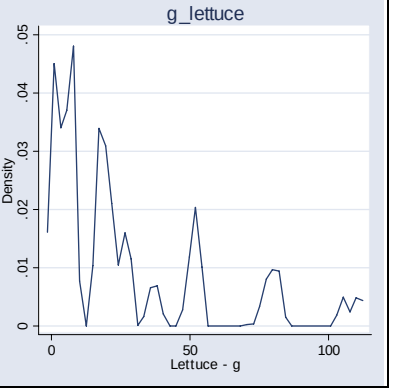
Variable Name	Type	Basis	Description	Levels	Graph
g_foodonly	N	DietAARP derived	Foods only (no beverages) (grams/day)	Continuous (range = 9.60 → 38,490.10)	
g_fruit_dried_no_apr	N	DietAARP derived	Dried fruit, no apricots (grams/day)	Continuous (range = 0 → 195.00)	
g_fruitpunch_diet	N	DietAARP derived	Fruit drinks, diet (grams/day)	Continuous (range = 0 → 4,792.20)	

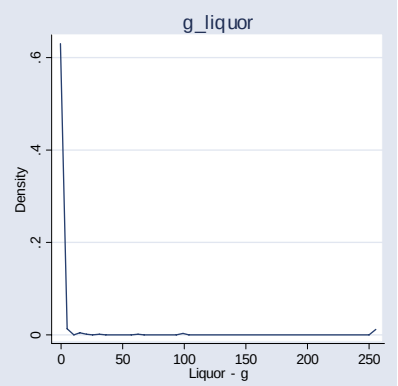
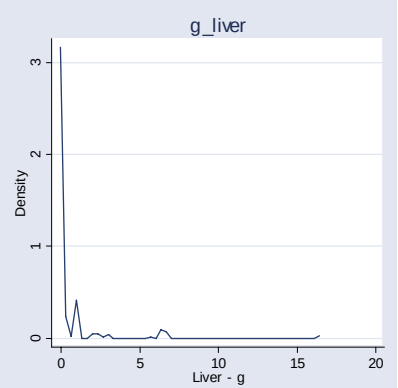
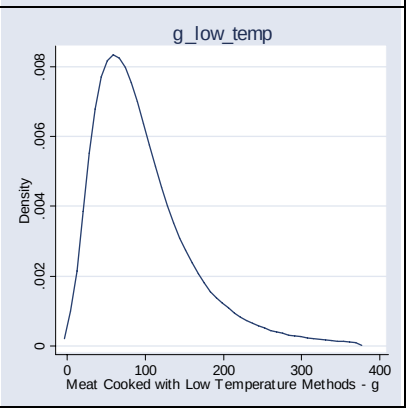
Variable Name	Type	Basis	Description	Levels	Graph
g_fruitpunch_reg	N	DietAARP derived	Fruit drinks, regular (grams/day)	Continuous (range = 0 → 4,974.60)	
g_grapefruit	N	DietAARP derived	Grapefruit, all (grams/day)	Continuous (range = 0 → 614.20)	
g_grapes	N	DietAARP derived	Grapes, all (grams/day)	Continuous (range = 0 → 614.50)	

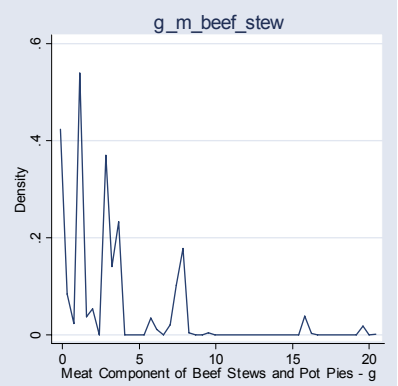
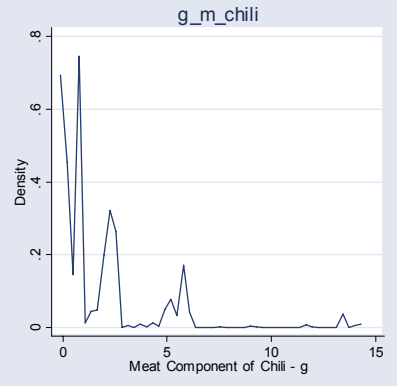
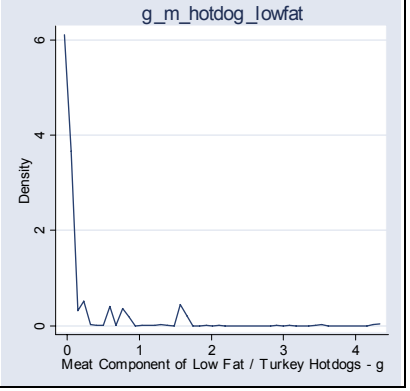
Variable Name	Type	Basis	Description	Levels	Graph
g_gravy	N	DietAARP derived	Gravy (grams/day)	Continuous (range = 0 → 403.80)	
g_ham_not_lunch	N	DietAARP derived	Ham, not luncheon (grams/day)	Continuous (range = 0 → 393.90)	
g_hamb_lean	N	DietAARP derived	Beef, burgers, lean (grams/day)	Continuous (range = 0 → 300.50)	

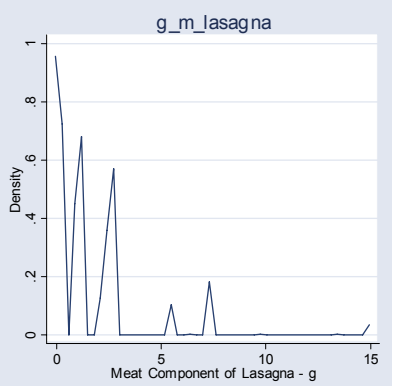
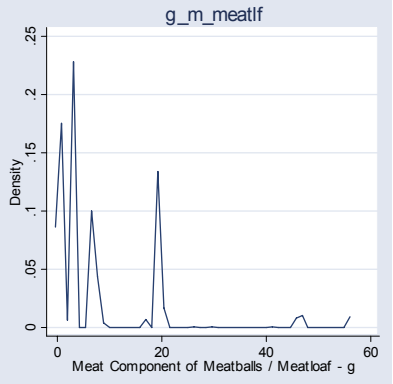
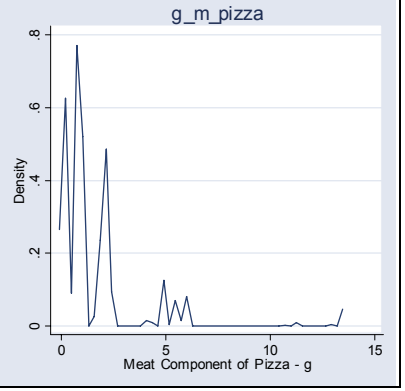
Variable Name	Type	Basis	Description	Levels	Graph
g_hamb_reg	N	DietAARP derived	Beef, burgers, regular (grams/day)	Continuous (range = 0 → 410.30)	
g_high_temp	N	DietAARP derived	Meat prepared using high temperature cooking methods (grams/day)	Continuous (range = 0 → 1,853.30)	
g_hotdog_lowfat	N	DietAARP derived	Hot dogs, turkey / lowfat (grams/day)	Continuous (range = 0 → 192.00)	

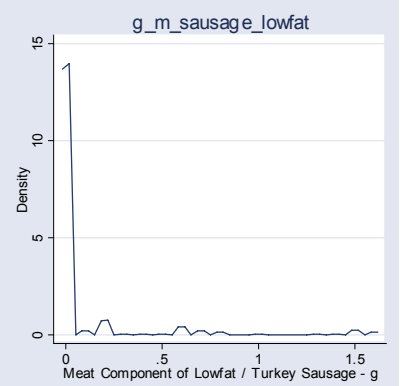
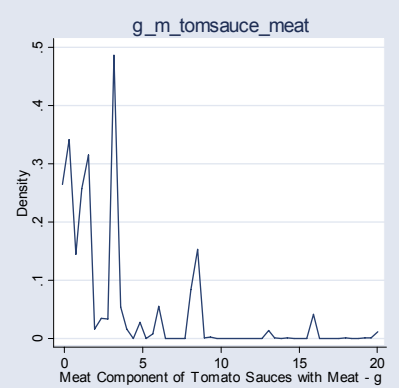
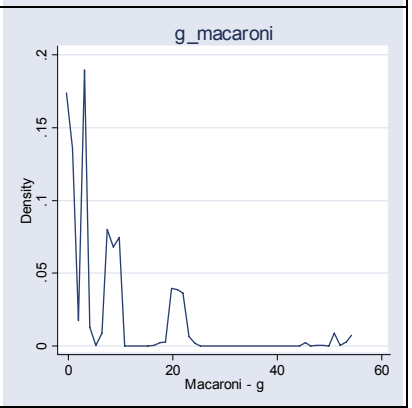
Variable Name	Type	Basis	Description	Levels	Graph
g_hotdog_reg	N	DietAARP derived	Hotdogs, regular (grams/day)	Continuous (range = 0 → 285.40)	
g_icecream_reg	N	DietAARP derived	Ice cream, regular (grams/day)	Continuous (range = 0 → 522.30)	
g_juice_other	N	DietAARP derived	Other juice (grams/day)	Continuous (range = 0 → 3,236.80)	

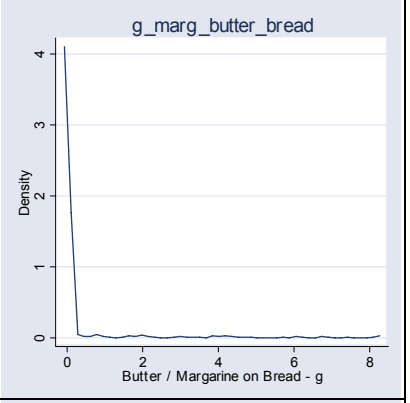
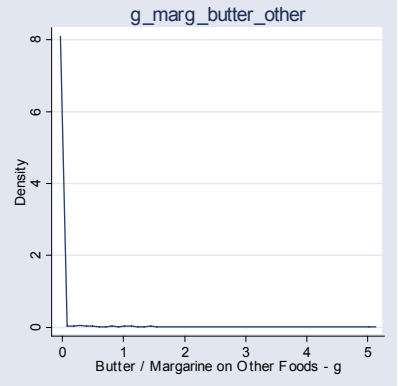
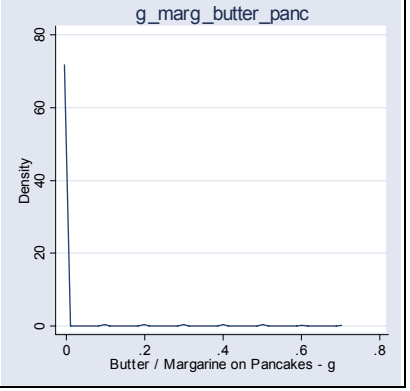
Variable Name	Type	Basis	Description	Levels	Graph
g_lard	N	DietAARP derived	Lard, fatback bacon fat (grams/day)	Continuous (range = 0 → 98.90)	
g_lasagna	N	DietAARP derived	Lasagna, ravioli, shells, etc. (grams/day)	Continuous (range = 0 → 1,464.10)	
g_lettuce	N	DietAARP derived	Lettuce, NFA (grams/day)	Continuous (range = 0 → 222.00)	

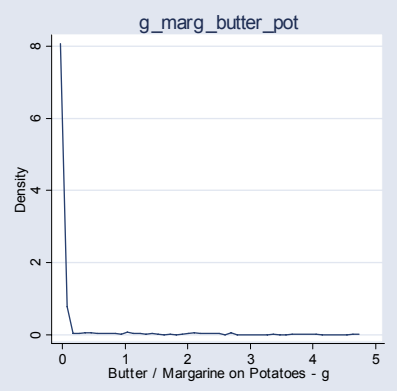
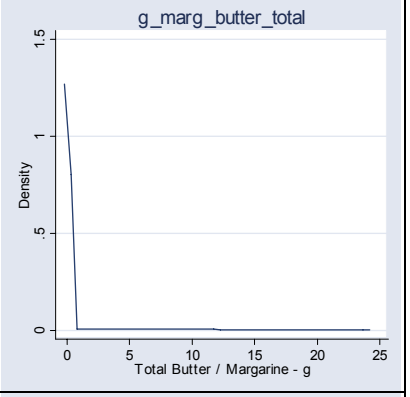
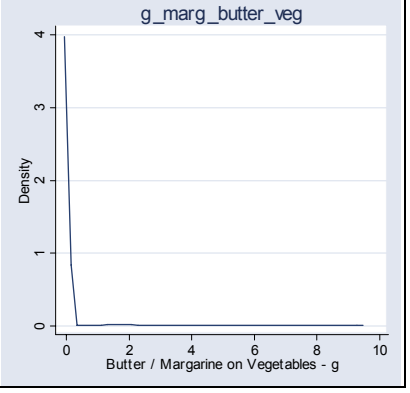
Variable Name	Type	Basis	Description	Levels	Graph
g_liquor	N	DietAARP derived	Alcoholic beverage, liquor (grams/day)	Continuous (range = 0 → 1,787.50)	
g_liver	N	DietAARP derived	Liver, liverwurst (grams/day)	Continuous (range = 0 → 449.40)	
g_low_temp	N	DietAARP derived	Meat prepared using low temperature cooking methods (grams/day)	Continuous (range = 0 → 7,792.50)	

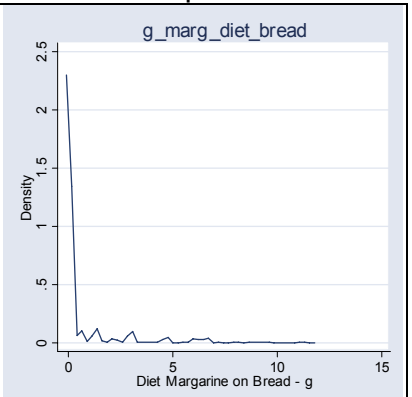
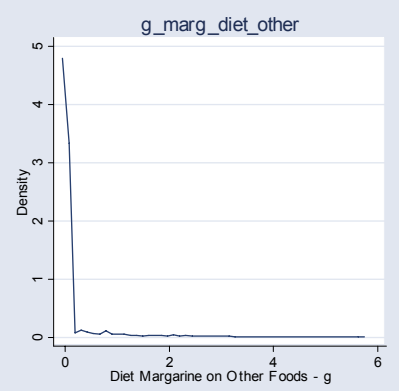
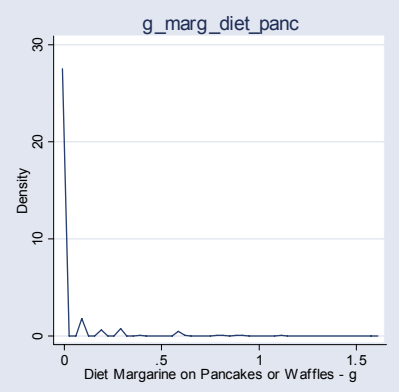
Variable Name	Type	Basis	Description	Levels	Graph
g_m_beef_stew	N	DietAARP derived	Meat component of beef stews and pot pies (grams/day)	Continuous (range = 0 → 439.30)	
g_m_chili	N	DietAARP derived	Meat component of chili (grams/day)	Continuous (range = 0 → 366.40)	
g_m_hotdog_lowfat	N	DietAARP derived	Meat component of turkey or other lowfat hot dogs (grams/day)	Continuous (range = 0 → 96.00)	

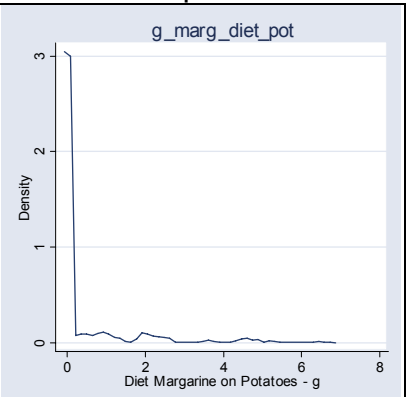
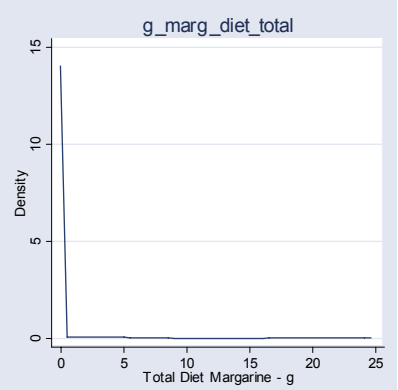
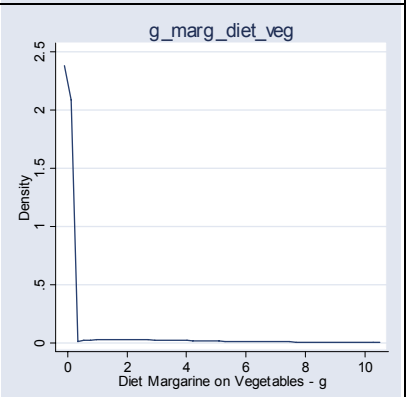
Variable Name	Type	Basis	Description	Levels	Graph
g_m_lasagna	N	DietAARP derived	Meat component of lasagna, ravioli, shells, etc. (grams/day)	Continuous (range = 0 → 150.80)	
g_m_meatlf	N	DietAARP derived	Meat component of ground beef, meatballs / meat loaf (grams/day)	Continuous (range = 0 → 566.80)	
g_m_pizza	N	DietAARP derived	Meat component of pizza (grams/day)	Continuous (range = 0 → 136.50)	

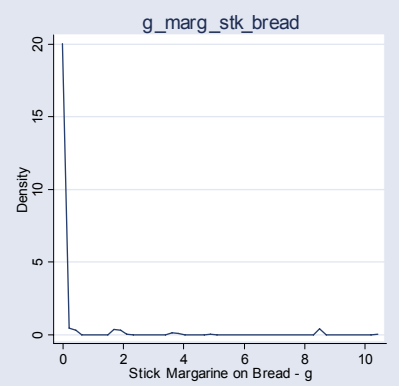
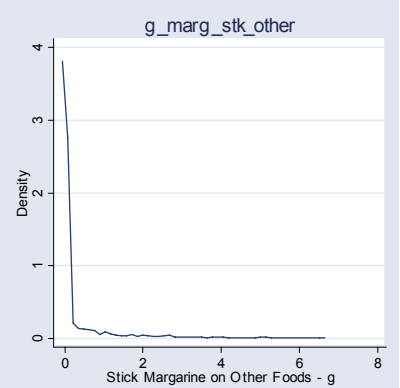
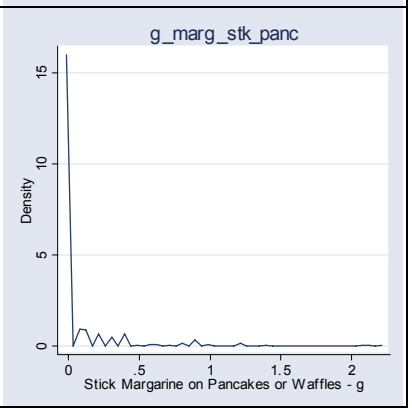
Variable Name	Type	Basis	Description	Levels	Graph
g_m_sausage_lowfat	N	DietAARP derived	Meat component of turkey or other lowfat sausage (grams/day)	Continuous (range = 0 → 101.70)	
g_m_tomsauce_meat	N	DietAARP derived	Meat component of meat tomato sauces (grams/day)	Continuous (range = 0 → 161.8)	
g_macaroni	N	DietAARP derived	Macaroni and cheese	Continuous (range = 0 → 1403.5)	

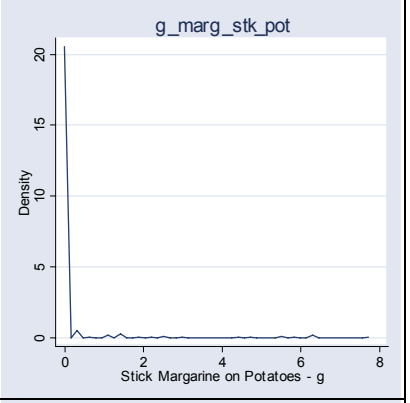
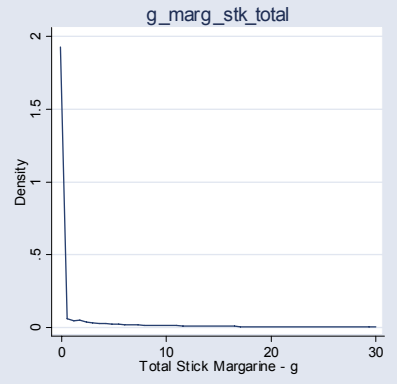
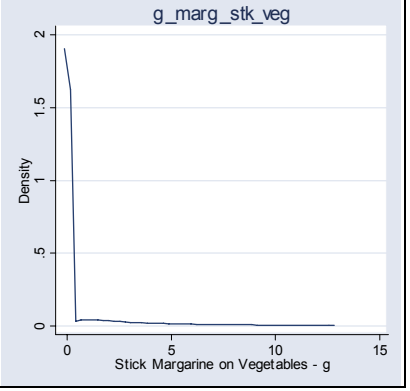
Variable Name	Type	Basis	Description	Levels	Graph
g_marg_butter_bread	N	DietAARP derived	Butter / margarine blend on bread (grams/day)	Continuous (range = 0 → 58.3)	
g_marg_butter_other	N	DietAARP derived	Butter / margarine blend, other uses (grams/day)	Continuous (range = 0 → 72)	
g_marg_butter_panc	N	DietAARP derived	Butter / margarine blend on pancakes or waffles (grams/day)	Continuous (range = 0 → 18.3)	

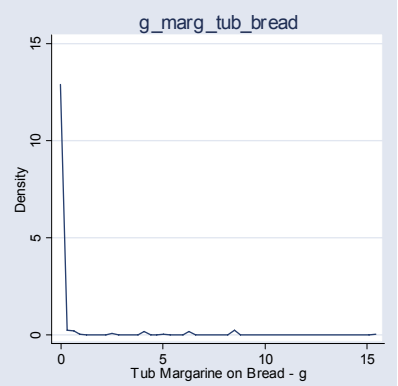
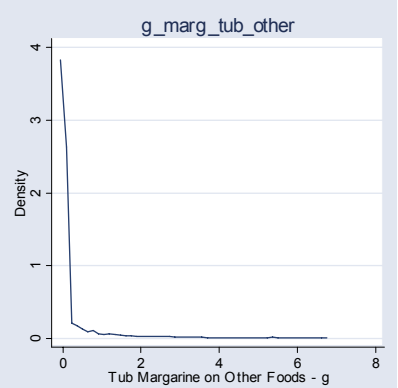
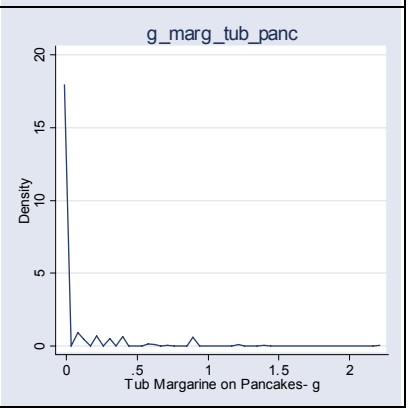
Variable Name	Type	Basis	Description	Levels	Graph
g_marg_butter_pot	N	DietAARP derived	Butter / margarine blend on potatoes (grams/day)	Continuous (range = 0 → 40)	
g_marg_butter_total	N	DietAARP derived	Butter / margarine blend, total (grams/day)	Continuous (range = 0 → 209.1)	
g_marg_butter_veg	N	DietAARP derived	Butter / margarine blend on vegetables (grams/day)	Continuous (range = 0 → 137.7)	

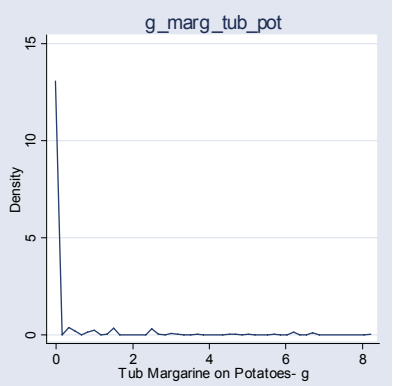
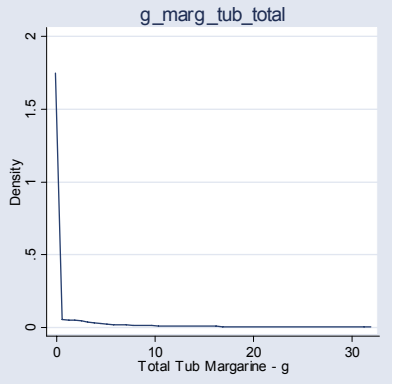
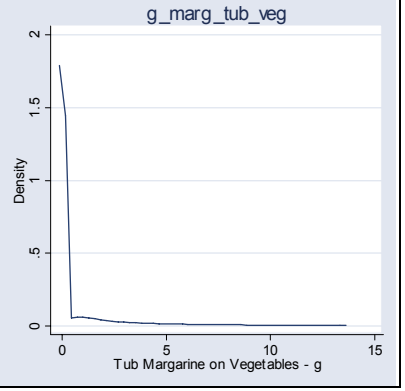
Variable Name	Type	Basis	Description	Levels	Graph
g_marg_diet_bread	N	DietAARP derived	Margarine, diet, on bread (grams/day)	Continuous (range = 0 → 51.6)	
g_marg_diet_other	N	DietAARP derived	Margarine, diet, other uses (grams/day)	Continuous (range = 0 → 53.2)	
g_marg_diet_panc	N	DietAARP derived	Margarine, diet, on pancakes or waffles (grams/day)	Continuous (range = 0 → 23.1)	

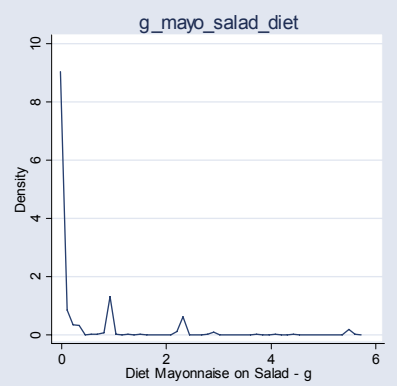
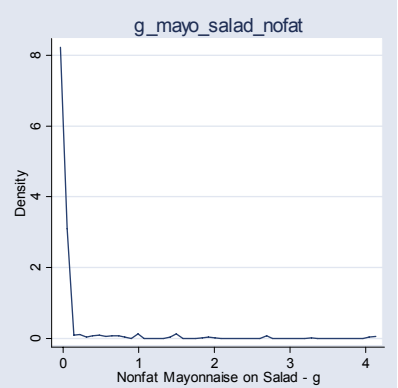
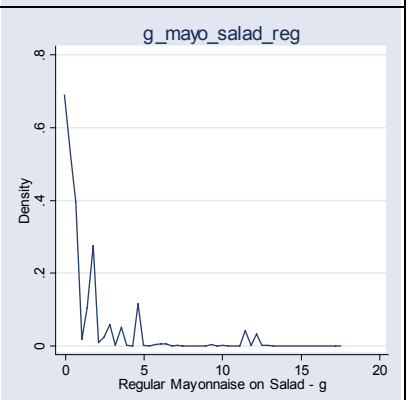
Variable Name	Type	Basis	Description	Levels	Graph
g_marg_diet_pot	N	DietAARP derived	Margarine, diet, on potatoes (grams/day)	Continuous (range = 0 → 36.1)	
g_marg_diet_total	N	DietAARP derived	Margarine, diet, total (grams/day)	Continuous (range = 0 → 164.9)	
g_marg_diet_veg	N	DietAARP derived	Margarine, diet, on vegetables (grams/day)	Continuous (range = 0 → 109.5)	

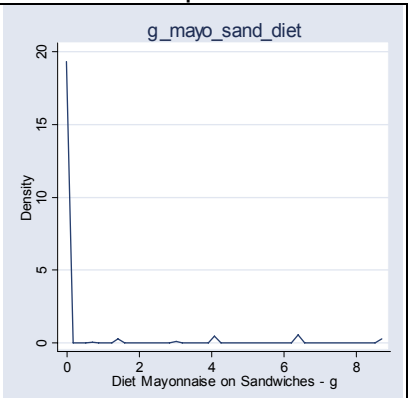
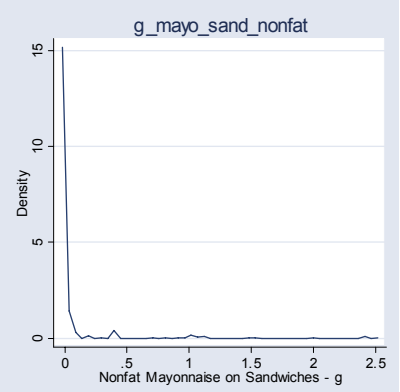
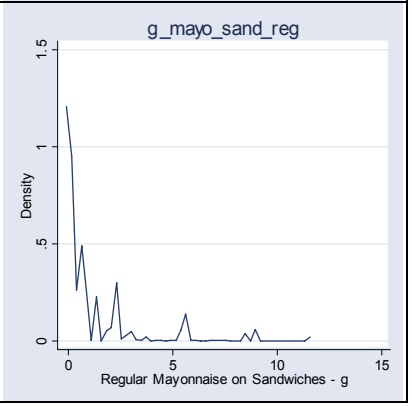
Variable Name	Type	Basis	Description	Levels	Graph
g_marg_stk_bread	N	DietAARP derived	Margarine, stick, on bread (grams/day)	Continuous (range = 0 → 41.4)	
g_marg_stk_other	N	DietAARP derived	Margarine, stick, other uses (grams/day)	Continuous (range = 0 → 51.3)	
g_marg_stk_panc	N	DietAARP derived	Margarine, stick, on pancakes or waffles (grams/day)	Continuous (range = 0 → 24.3)	

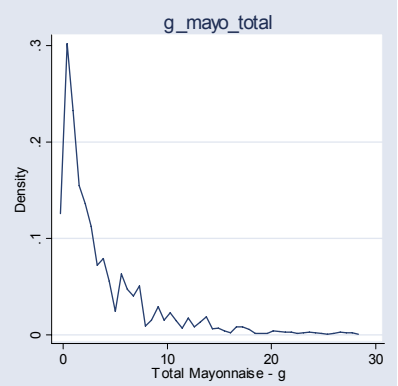
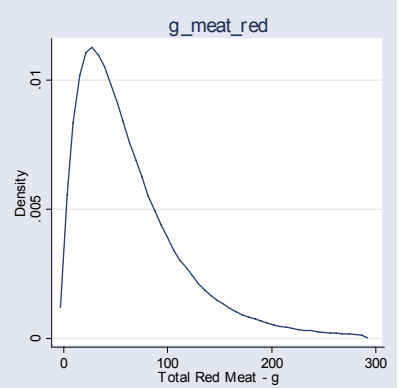
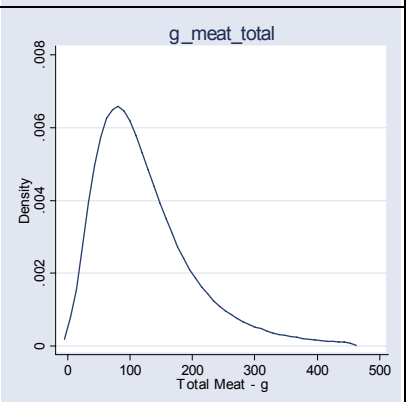
Variable Name	Type	Basis	Description	Levels	Graph
g_marg_stk_pot	N	DietAARP derived	Margarine, stick, on potatoes (grams/day)	Continuous (range = 0 → 50)	
g_marg_stk_total	N	DietAARP derived	Margarine, stick, total (grams/day)	Continuous (range = 0 → 281)	
g_marg_stk_veg	N	DietAARP derived	Margarine, stick, on vegetables (grams/day)	Continuous (range = 0 → 159)	

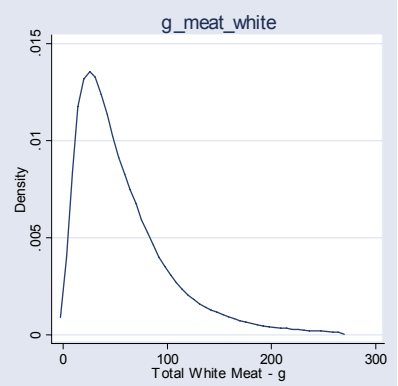
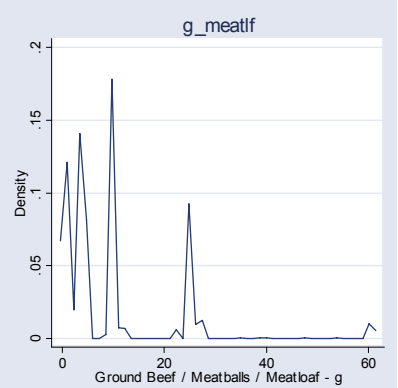
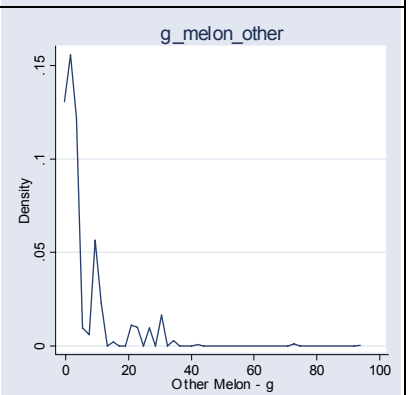
Variable Name	Type	Basis	Description	Levels	Graph
g_marg_tub_bread	N	DietAARP derived	Margarine, tub, on bread (grams/day)	Continuous (range = 0 → 42)	
g_marg_tub_other	N	DietAARP derived	Margarine, tub, other uses (grams/day)	Continuous (range = 0 → 59.9)	
g_marg_tub_panc	N	DietAARP derived	Margarine, tub, on pancakes or waffles (grams/day)	Continuous (range = 0 → 24.4)	

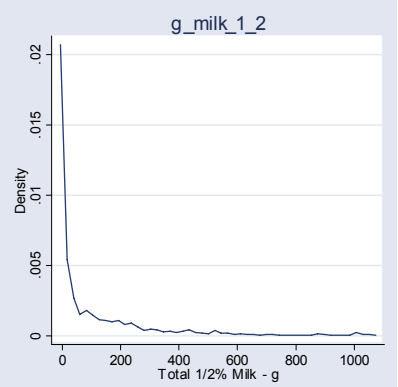
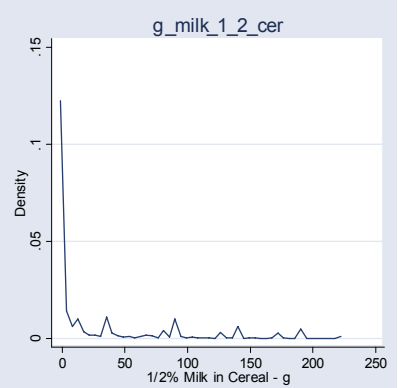
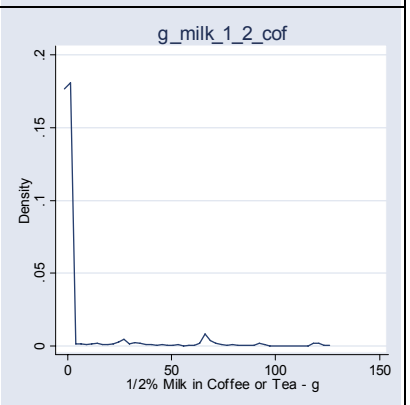
Variable Name	Type	Basis	Description	Levels	Graph
g_marg_tub_pot	N	DietAARP derived	Margarine, tub, on potatoes (grams/day)	Continuous (range = 0 → 49)	
g_marg_tub_total	N	DietAARP derived	Margarine, tub, total (grams/day)	Continuous (range = 0 → 242.8)	
g_marg_tub_veg	N	DietAARP derived	Margarine, tub, on vegetables (grams/day)	Continuous (range = 0 → 173)	

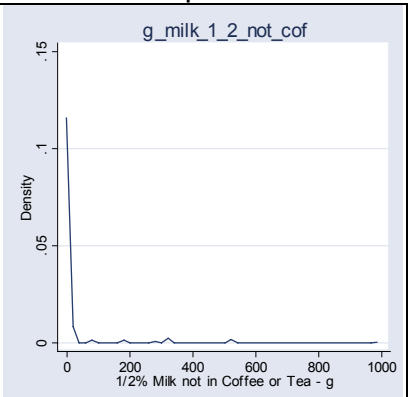
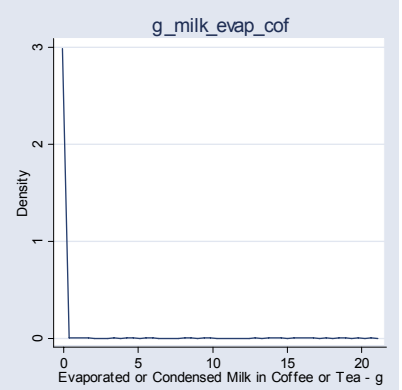
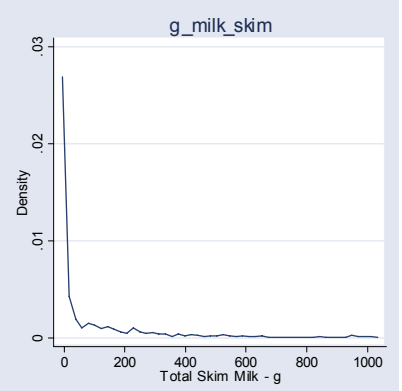
Variable Name	Type	Basis	Description	Levels	Graph
g_mayo_salad_diet	N	DietAARP derived	Mayonnaise, diet, on salad (grams/day)	Continuous (range = 0 → 79.9)	
g_mayo_salad_nofat	N	DietAARP derived	Mayonnaise, fat free, on salad (grams/day)	Continuous (range = 0 → 50.9)	
g_mayo_salad_reg	N	DietAARP derived	Mayonnaise, regular, on salad (grams/day)	Continuous (range = 0 → 95.2)	

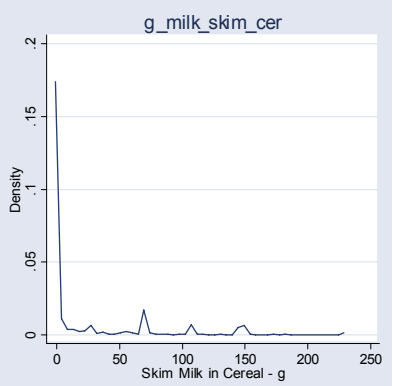
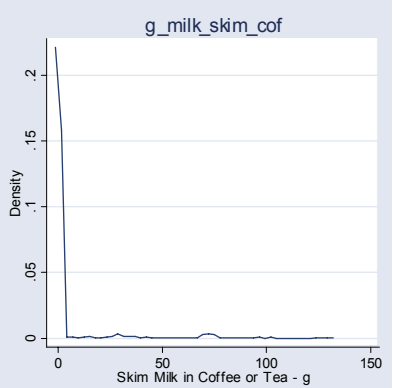
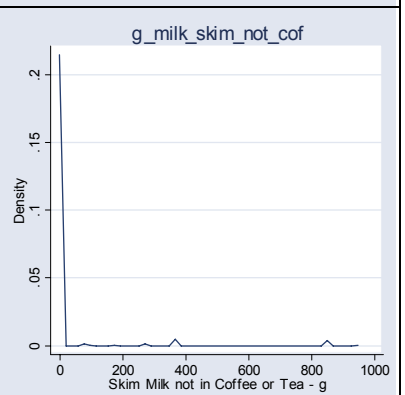
Variable Name	Type	Basis	Description	Levels	Graph
g_mayo_sand_diet	N	DietAARP derived	Mayonnaise, diet, on sandwich (grams/day)	Continuous (range = 0 → 40.6)	
g_mayo_sand_nonfat	N	DietAARP derived	Mayonnaise, fat free, on sandwich (grams/day)	Continuous (range = 0 → 28.3)	
g_mayo_sand_reg	N	DietAARP derived	Mayonnaise, regular, on sandwich (grams/day)	Continuous (range = 0 → 56.6)	

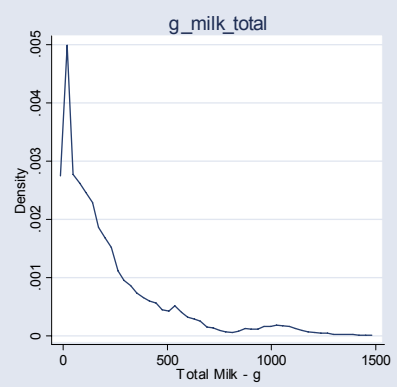
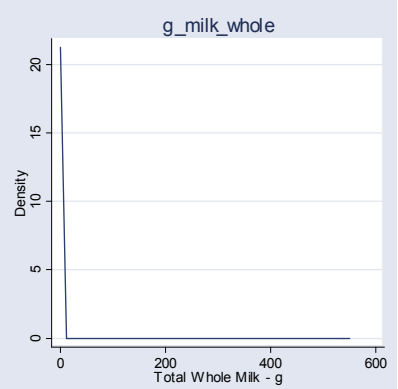
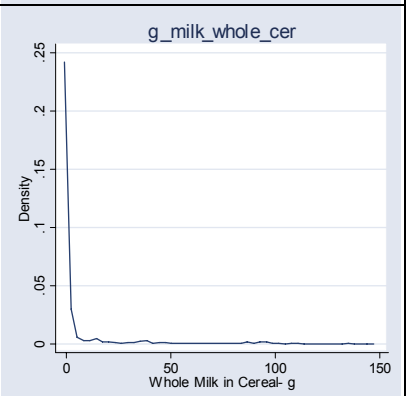
Variable Name	Type	Basis	Description	Levels	Graph
g_mayo_total	N	DietAARP derived	Mayonnaise, total (grams/day)	Continuous (range = 0 → 153.7)	
g_meat_red	N	DietAARP derived	Red meat, total (grams/day)	Continuous (range = 0 → 5,514.4)	
g_meat_total	N	DietAARP derived	Meat, total (grams/day)	Continuous (range = 0 → 9,268.7)	

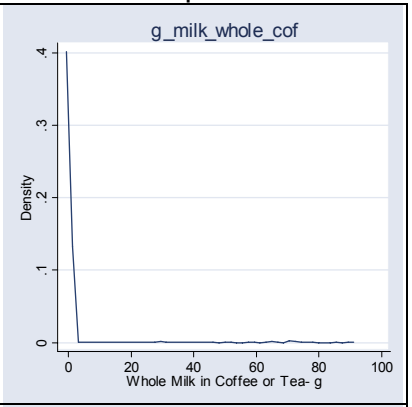
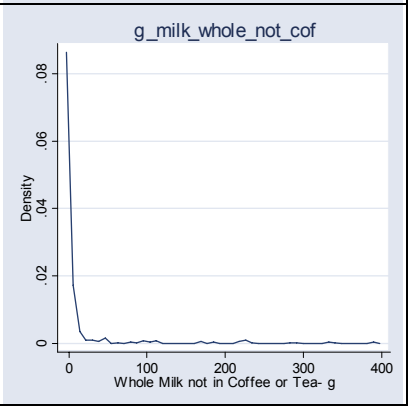
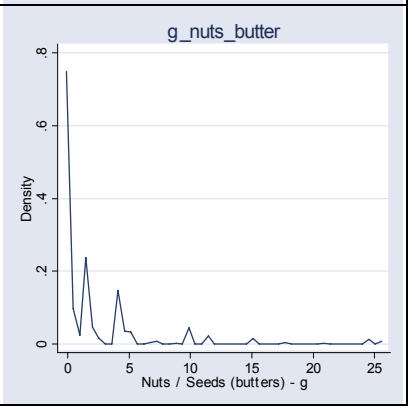
Variable Name	Type	Basis	Description	Levels	Graph
g_meat_white	N	DietAARP derived	White meat, total (grams/day)	Continuous (range = 0 → 4,260.9)	
g_meatlf	N	DietAARP derived	Beef, ground, meatballs / meatloaf (grams/day)	Continuous (range = 0 → 739.9)	
g_melon_other	N	DietAARP derived	Other melon (grams/day)	Continuous (range = 0 → 310.1)	

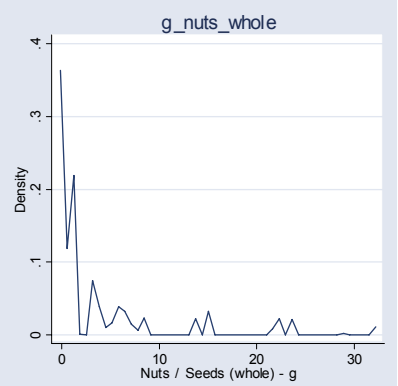
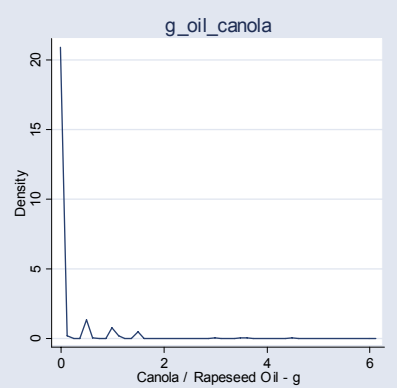
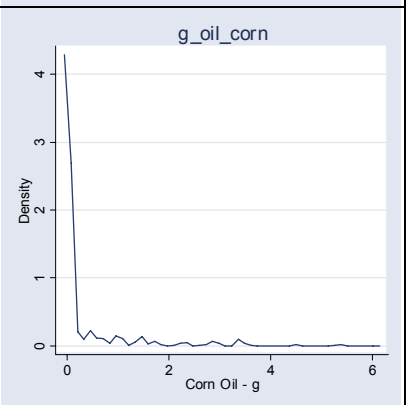
Variable Name	Type	Basis	Description	Levels	Graph
g_milk_1_2	N	DietAARP derived	Milk, ½%, total (grams/day)	Continuous (range = 0 → 3,560.6)	
g_milk_1_2_cer	N	DietAARP derived	Milk, ½%, in cereal (grams/day)	Continuous (range = 0 → 931.6)	
g_milk_1_2_cof	N	DietAARP derived	Milk, ½%, in coffee or tea (grams/day)	Continuous (range = 0 → 369.9)	

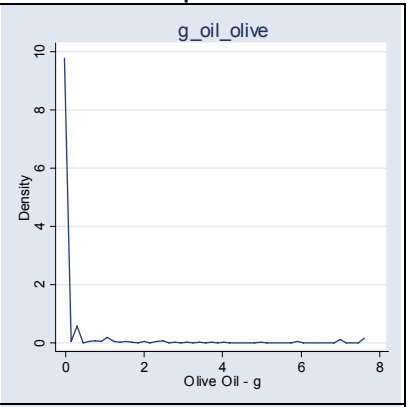
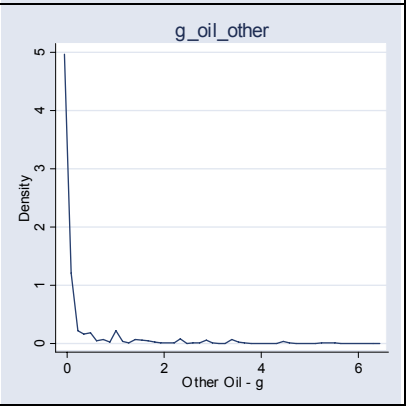
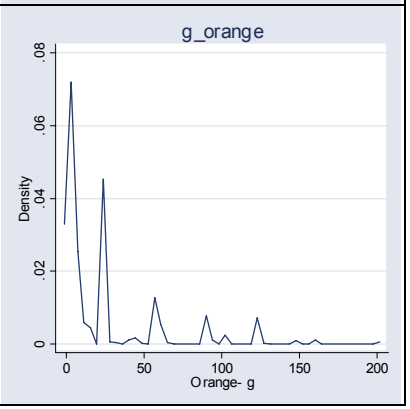
Variable Name	Type	Basis	Description	Levels	Graph
g_milk_1_2_not_cof	N	DietAARP derived	Milk, ½%, not in coffee or tea (grams/day)	Continuous (range = 0 → 3,028.3)	
g_milk_evap_cof	N	DietAARP derived	Milk, evaporated / condensed, in coffee or tea (grams/day)	Continuous (range = 0 → 261)	
g_milk_skim	N	DietAARP derived	Milk, nonfat / skim, total (grams/day)	Continuous (range = 0 → 3,492)	

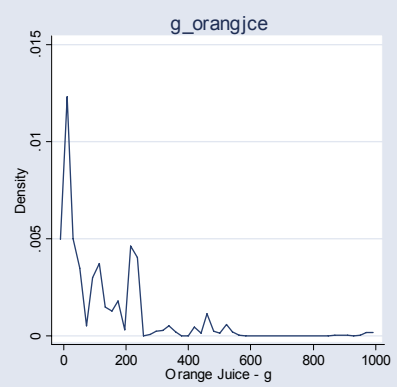
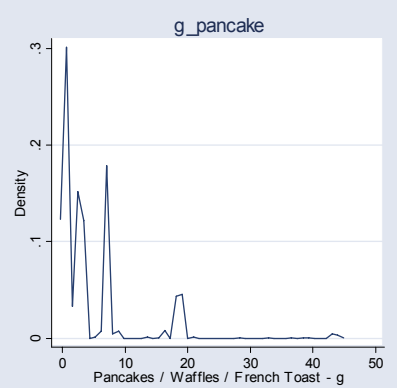
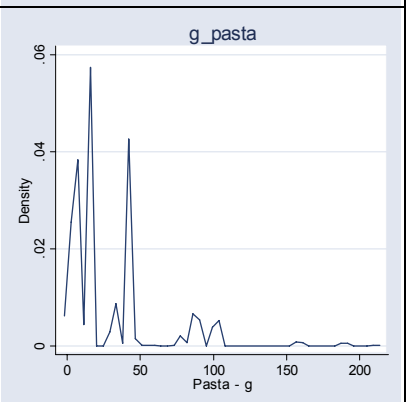
Variable Name	Type	Basis	Description	Levels	Graph
g_milk_skim_cer	N	DietAARP derived	Milk, nonfat / skim, in cereal (grams/day)	Continuous (range = 0 → 619.8)	
g_milk_skim_cof	N	DietAARP derived	Milk, nonfat / skim, in coffee or tea (grams/day)	Continuous (range = 0 → 408)	
g_milk_skim_not_cof	N	DietAARP derived	Milk, nonfat / skim, not in coffee or tea (grams/day)	Continuous (range = 0 → 2,872.2)	

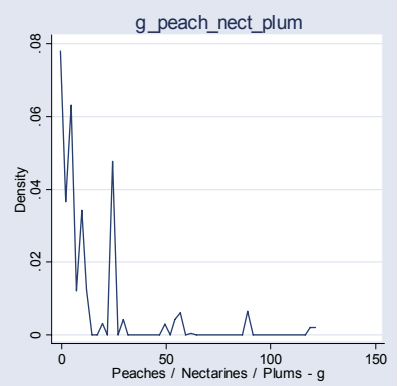
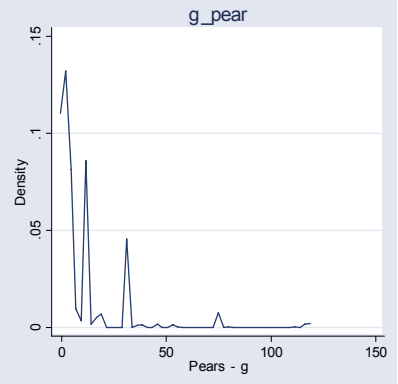
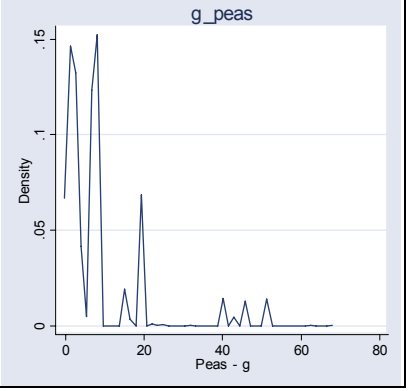
Variable Name	Type	Basis	Description	Levels	Graph
g_milk_total	N	DietAARP derived	Milk, total (grams/day)	Continuous (range = 0 → 9,503.2)	
g_milk_whole	N	DietAARP derived	Milk, whole, total (grams/day)	Continuous (range = 0 → 4,037.2)	
g_milk_whole_cer	N	DietAARP derived	Milk, whole, in cereal (grams/day)	Continuous (range = 0 → 869.1)	

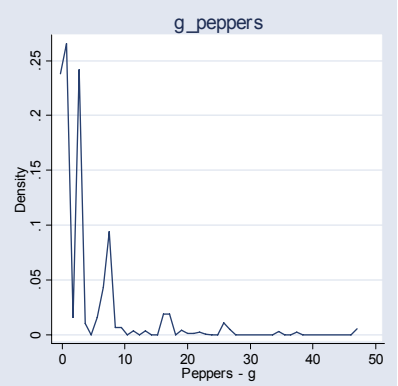
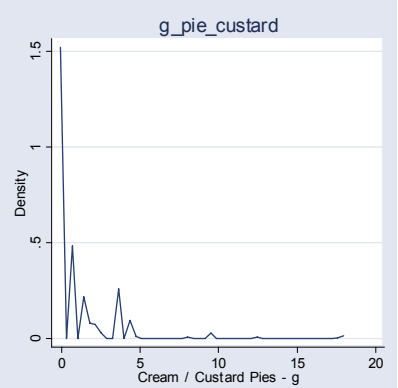
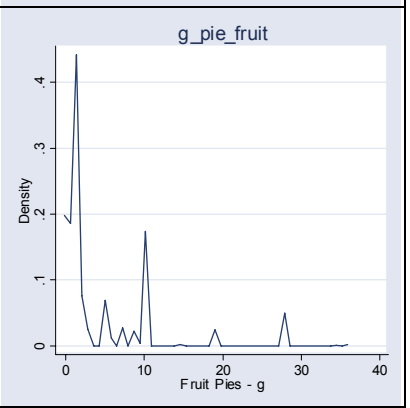
Variable Name	Type	Basis	Description	Levels	Graph
g_milk_whole_cof	N	DietAARP derived	Milk, whole, in coffee or tea (grams/day)	Continuous (range = 0 → 398.3)	
g_milk_whole_not_cof	N	DietAARP derived	Milk, whole, not in coffee or tea (grams/day)	Continuous (range = 0 → 3,168.1)	
g_nuts_butter	N	DietAARP derived	Nuts / seeds, butters (grams/day)	Continuous (range = 0 → 146.2)	

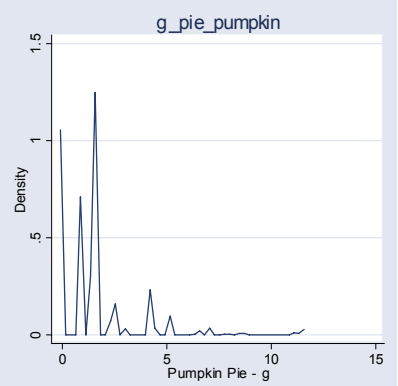
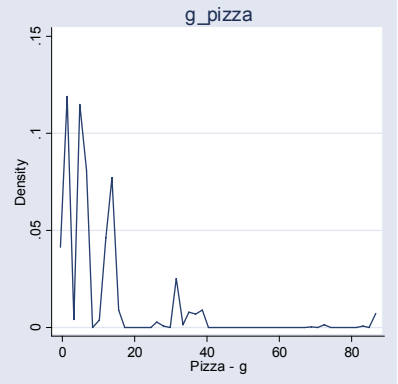
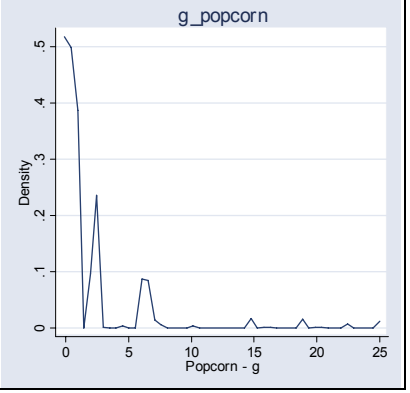
Variable Name	Type	Basis	Description	Levels	Graph
g_nuts_whole	N	DietAARP derived	Nuts / seeds, whole (grams/day)	Continuous (range = 0 → 227.7)	
g_oil_canola	N	DietAARP derived	Oils, canola / rapeseed (grams/day)	Continuous (range = 0 → 54.5)	
g_oil_corn	N	DietAARP derived	Oils, corn (grams/day)	Continuous (range = 0 → 54.5)	

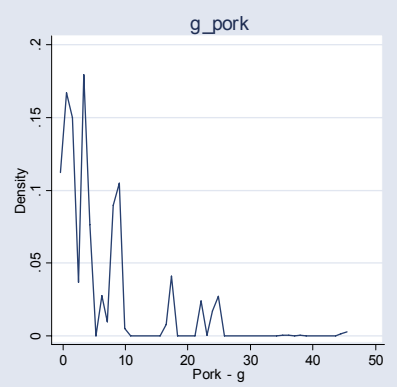
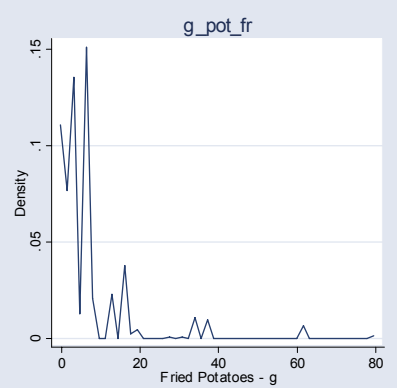
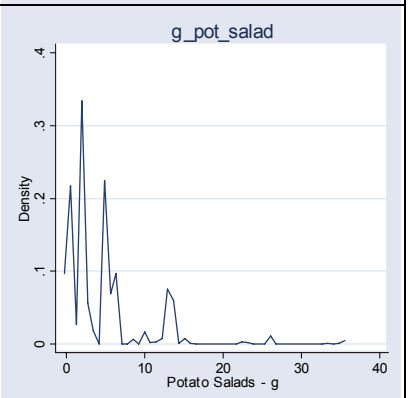
Variable Name	Type	Basis	Description	Levels	Graph
g_oil_olive	N	DietAARP derived	Oils, olive (grams/day)	Continuous (range = 0 → 60.5)	
g_oil_other	N	DietAARP derived	Oils, other (grams/day)	Continuous (range = 0 → 54.5)	
g_orange	N	DietAARP derived	Oranges, tangerines, etc. (grams/day)	Continuous (range = 432.7)	

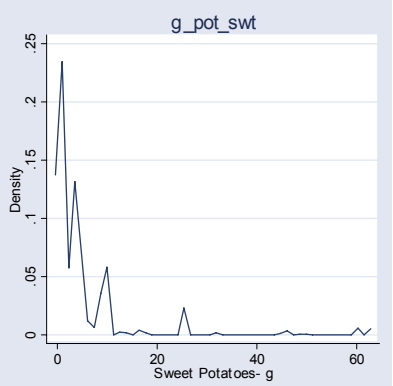
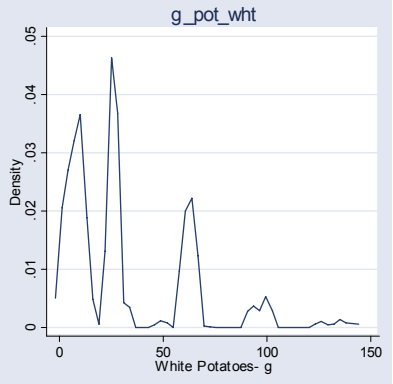
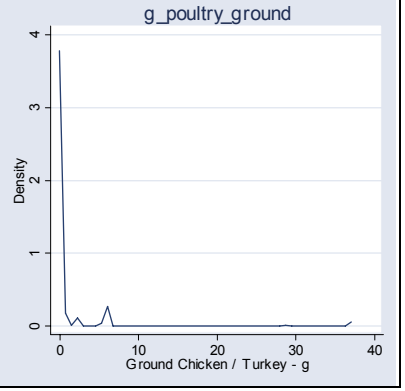
Variable Name	Type	Basis	Description	Levels	Graph
g_orangjce	N	DietAARP derived	Orange / grapefruit juice, all (grams/day)	Continuous (range = 0 → 3,238.6)	
g_pancake	N	DietAARP derived	Pancakes, waffles, French toast (grams/day)	Continuous (range = 0 → 437.6)	
g_pasta	N	DietAARP derived	Pasta, NFA (grams/day)	Continuous (range = 0 → 894.4)	

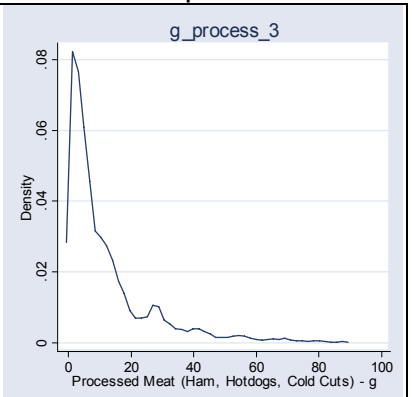
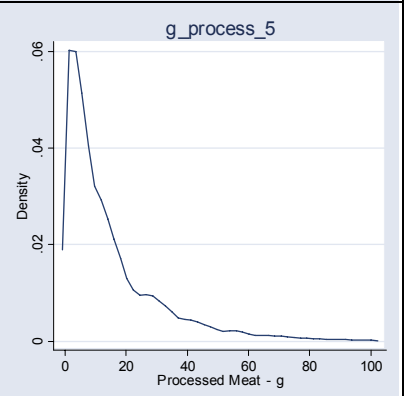
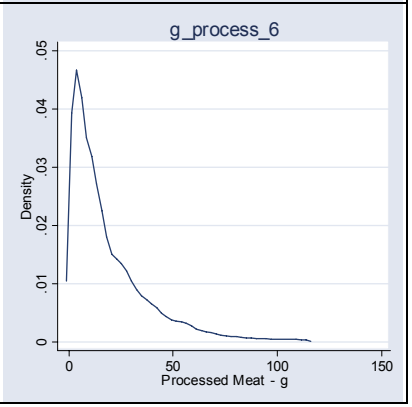
Variable Name	Type	Basis	Description	Levels	Graph
g_peach_nect_plum	N	DietAARP derived	Peaches / nectarines / plums (grams/day)	Continuous (range = 0 → 554.4)	
g_pear	N	DietAARP derived	Pears (grams/day)	Continuous (range = 0 → 528.3)	
g_peas	N	DietAARP derived	Peas, NFA (grams/day)	Continuous (range = 0 → 432.4)	

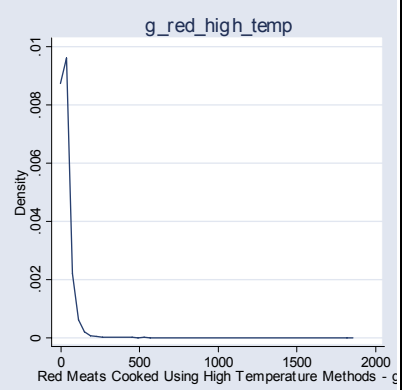
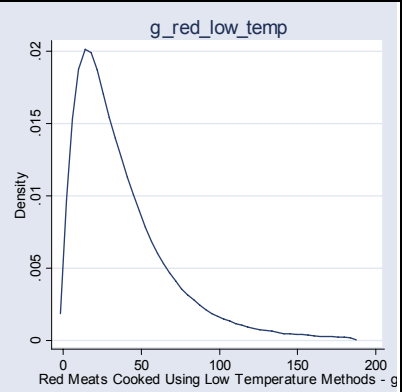
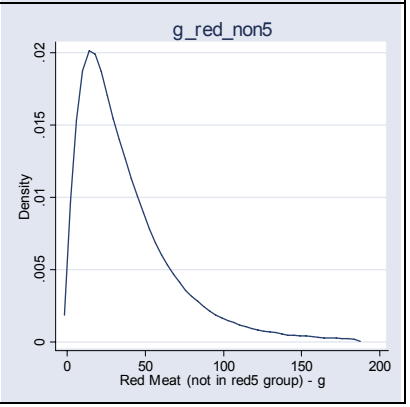
Variable Name	Type	Basis	Description	Levels	Graph
g_peppers	N	DietAARP derived	Peppers, NFA (grams/day)	Continuous (range = 0 → 217.6)	
g_pie_custard	N	DietAARP derived	Pies, cream / custard / other (grams/day)	Continuous (range = 0 → 490.6)	
g_pie_fruit	N	DietAARP derived	Pies, fruit (grams/day)	Continuous (range = 0 → 551.5)	

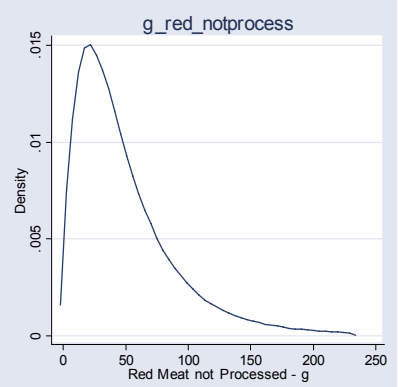
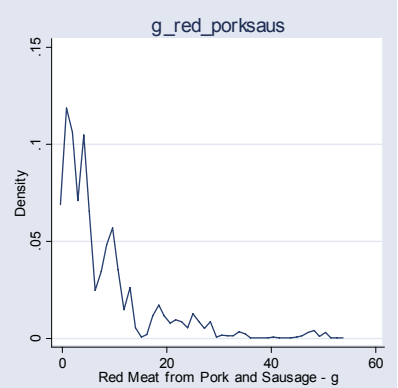
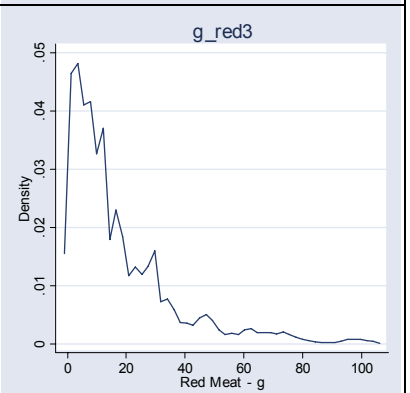
Variable Name	Type	Basis	Description	Levels	Graph
g_pie_pumpkin	N	DietAARP derived	Pies, pumpkin / sweet potato / etc. (grams/day)	Continuous (range = 0 → 513.7)	
g_pizza	N	DietAARP derived	Pizza (grams/day)	Continuous (range = 0 → 874.7)	
g_popcorn	N	DietAARP derived	Popcorn (grams/day)	Continuous (range = 0 → 189.3)	

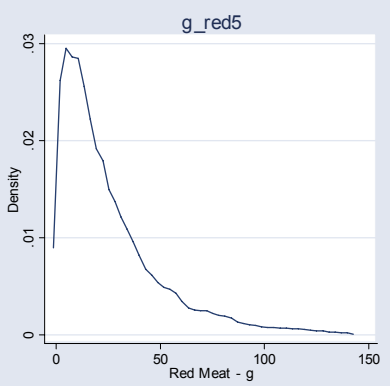
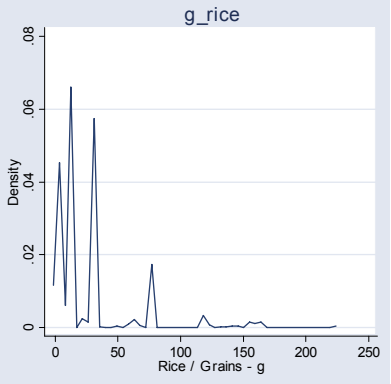
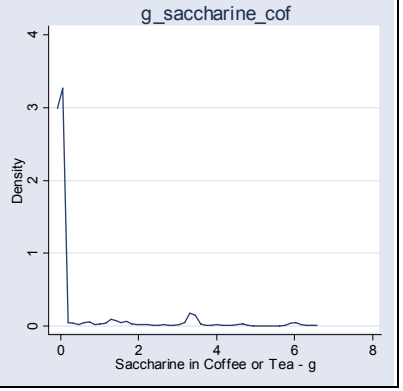
Variable Name	Type	Basis	Description	Levels	Graph
g_pork	N	DietAARP derived	Pork (grams/day)	Continuous (range = 0 → 476)	
g_pot_fr	N	DietAARP derived	Potatoes, fried (grams/day)	Continuous (range = 0 → 347.8)	
g_pot_salad	N	DietAARP derived	Potato salads (grams/day)	Continuous (range = 0 → 714.8)	

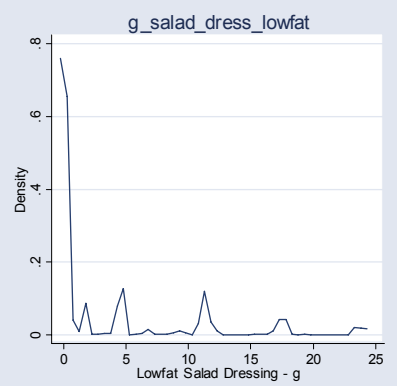
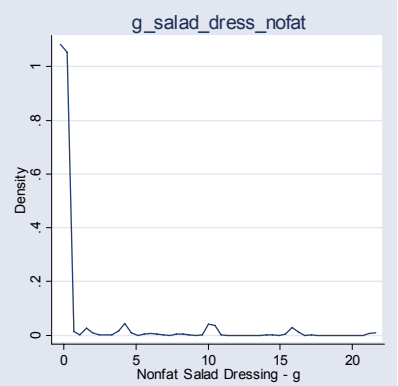
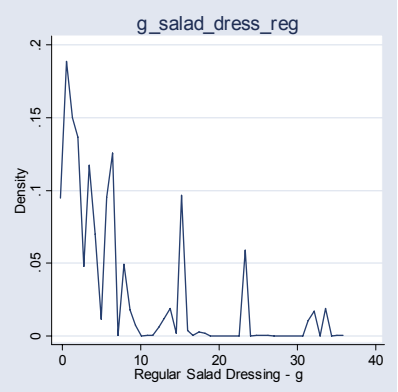
Variable Name	Type	Basis	Description	Levels	Graph
g_pot_swt	N	DietAARP derived	Sweet potatoes, NFA (grams/day)	Continuous (range = 0 → 469)	
g_pot_wht	N	DietAARP derived	Potatoes, white, NFA (grams/day)	Continuous (range = 0 → 629.5)	
g_poultry_ground	N	DietAARP derived	Chicken / turkey, ground (grams/day)	Continuous (range = 0 → 375)	

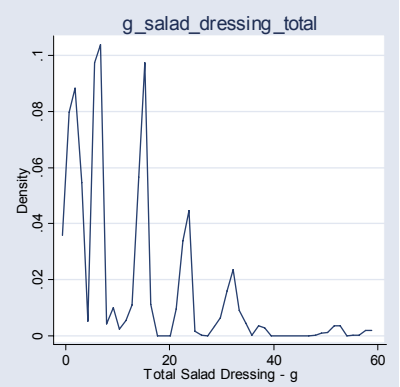
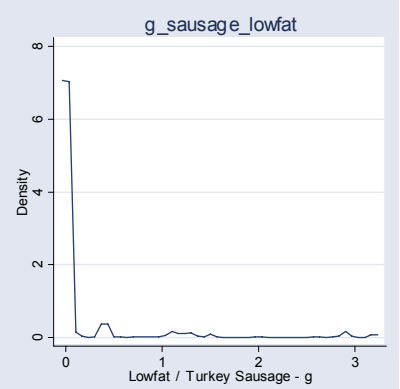
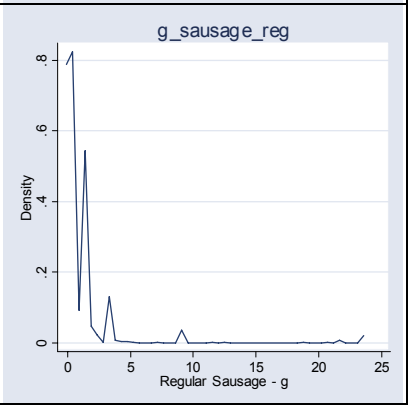
Variable Name	Type	Basis	Description	Levels	Graph
g_process_3	N	DietAARP derived	Meat, processed, ham, hot dog, cold cuts (grams/day)	Continuous (range = 0 → 941.5)	
g_process_5	N	DietAARP derived	Meat, processed, ham, bacon, sausage, hot dog, coldcuts (grams/day)	Continuous (range = 0 → 1,318.9)	
g_process_6	N	DietAARP derived	Meat, processed, ham, bacon, sausage, hot dog, coldcuts, low fat sausage (grams/day)	Continuous (range = 0 → 1,552.5)	

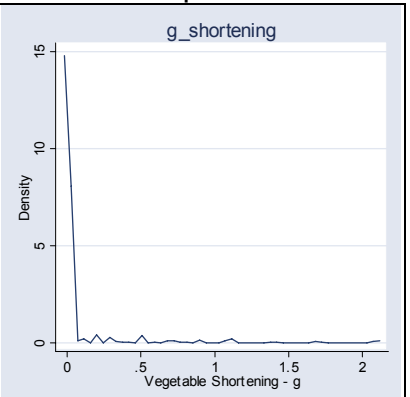
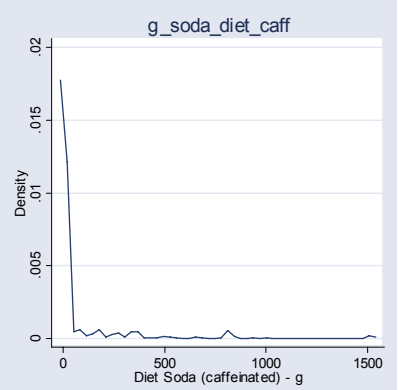
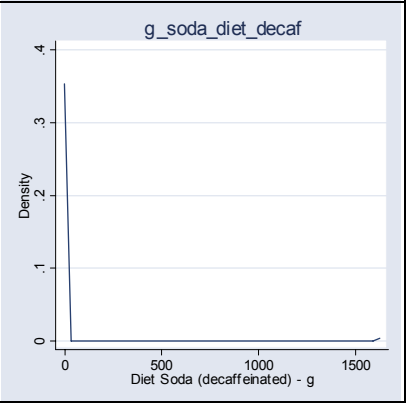
Variable Name	Type	Basis	Description	Levels	Graph
g_red_high_temp	N	DietAARP derived	Red meat prepared with high temperature cooking methods (grams/day)	Continuous (range = 0 → 1,853.3)	
g_red_low_temp	N	DietAARP derived	Red meat prepared with low temperature cooking methods (grams/day)	Continuous (range = 0 → 3,661.1)	
g_red_non5	N	DietAARP derived	Red meat, not included in red5 group (g_red5) (grams/day)	Continuous (range = 0 → 3,661.1)	

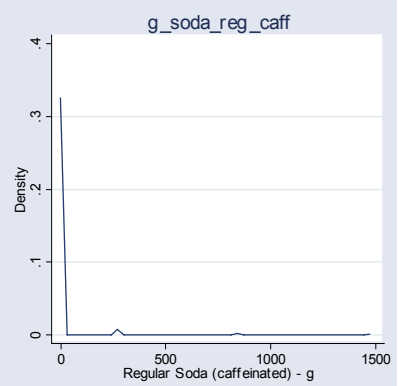
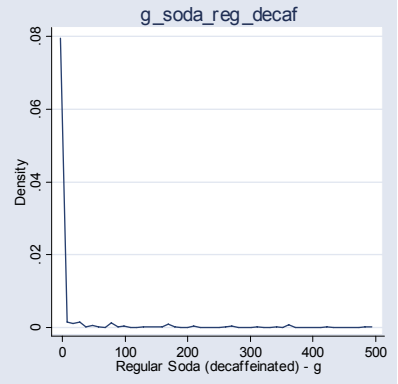
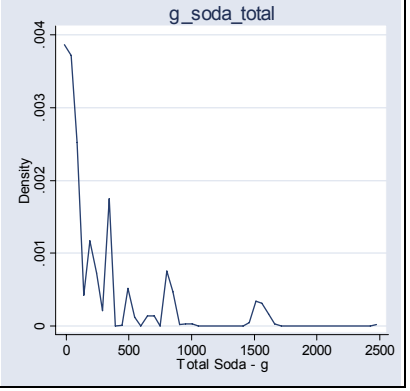
Variable Name	Type	Basis	Description	Levels	Graph
g_red_notprocess	N	DietAARP derived	Red meat, not processed (grams/day)	Continuous (range = 0 → 4,195.5)	
g_red_porksaus	N	DietAARP derived	Red meat from pork and sausage (grams/day)	Continuous (range = 0 → 772.8)	
g_red3	N	DietAARP derived	Red meat from hamburger, steak, and bacon (grams/day)	Continuous (range = 0 → 1,080.5)	

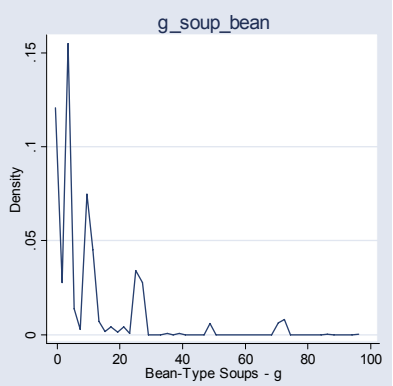
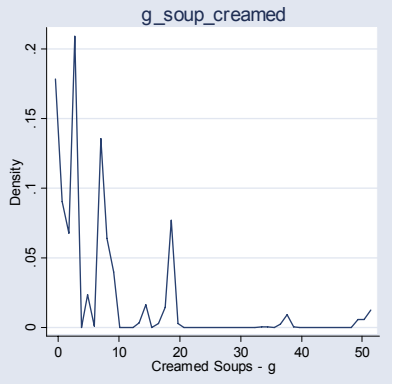
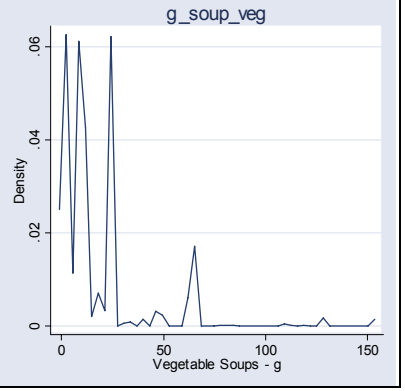
Variable Name	Type	Basis	Description	Levels	Graph
g_red5	N	DietAARP derived	Red5 meat from hamburger, steak, bacon, pork, and sausage (grams/day)	Continuous (range = 0 → 1,853.3)	
g_rice	N	DietAARP derived	Rice / grains, NFA (grams/day)	Continuous (range = 0 → 658.2)	
g_saccharine_cof	N	DietAARP derived	Saccharine, in coffee or tea (grams/day)	Continuous (range = 0 → 18.8)	

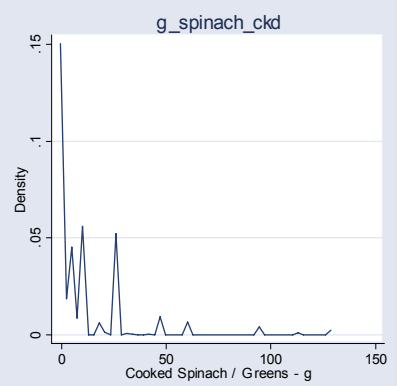
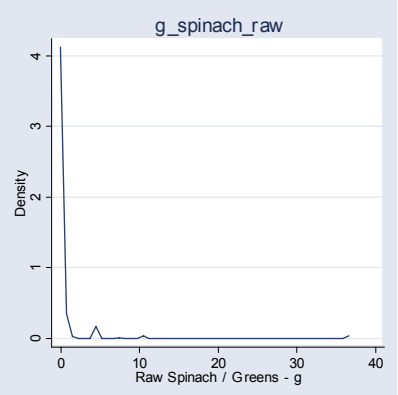
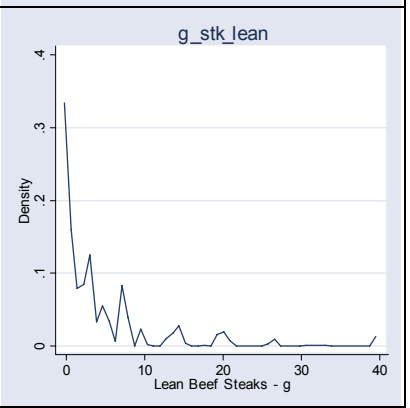
Variable Name	Type	Basis	Description	Levels	Graph
g_salad_dress_lowfat	N	DietAARP derived	Salad dressing, lowfat, on salad or vegetables (grams/day)	Continuous (range = 0 → 122.9)	
g_salad_dress_nofat	N	DietAARP derived	Salad dressing, nearly nonfat, on salad or vegetables (grams/day)	Continuous (range = 0 → 102.7)	
g_salad_dress_reg	N	DietAARP derived	Salad dressing, regular, on salad or vegetables (grams/day)	Continuous (range = 0 → 142.4)	

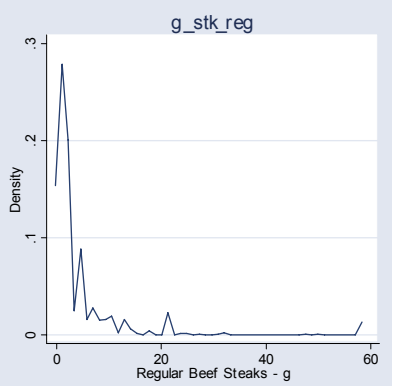
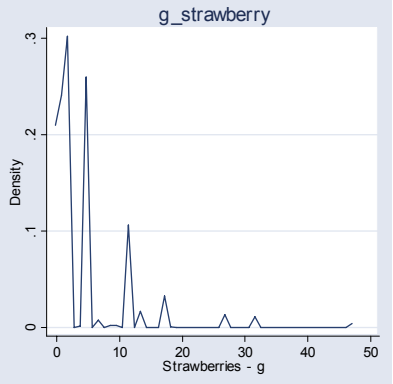
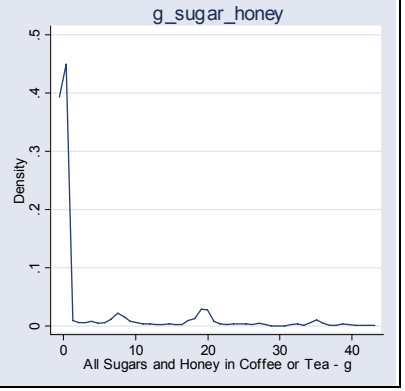
Variable Name	Type	Basis	Description	Levels	Graph
g_salad_dressing_total	N	DietAARP derived	Salad dressing, total (grams/day)	Continuous (range = 0 → 158.5)	
g_sausage_lowfat	N	DietAARP derived	Sausage, turkey / lowfat (grams/day)	Continuous (range = 0 → 203.4)	
g_sausage_reg	N	DietAARP derived	Sausage, regular (grams/day)	Continuous (range = 0 → 310.3)	

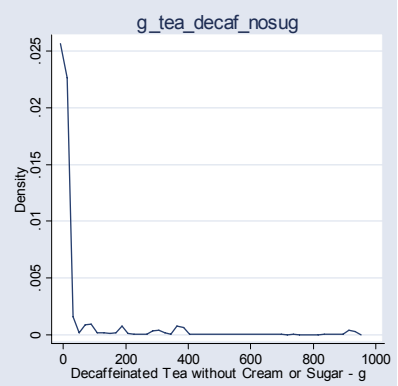
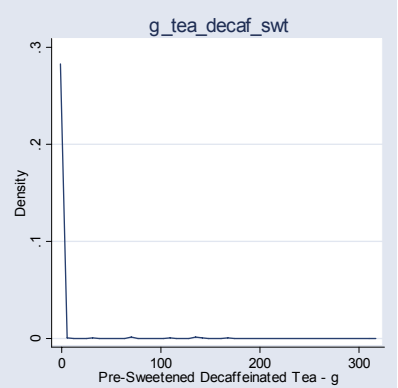
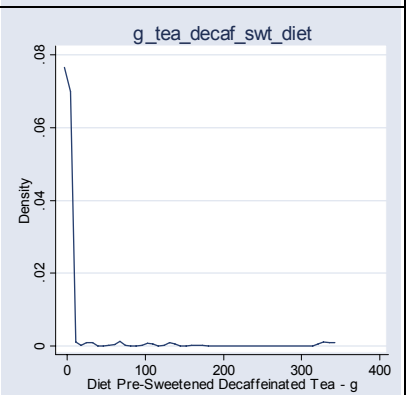
Variable Name	Type	Basis	Description	Levels	Graph
g_shortening	N	DietAARP derived	Vegetable shortening (grams/day)	Continuous (range = 0 → 17.1)	
g_soda_diet_caff	N	DietAARP derived	Soft drinks, diet, caffeinated (grams/day)	Continuous (range = 0 → 4,684.3)	
g_soda_diet_decaf	N	DietAARP derived	Soft drinks, diet, decaffeinated (grams/day)	Continuous (range = 0 → 4,897.6)	

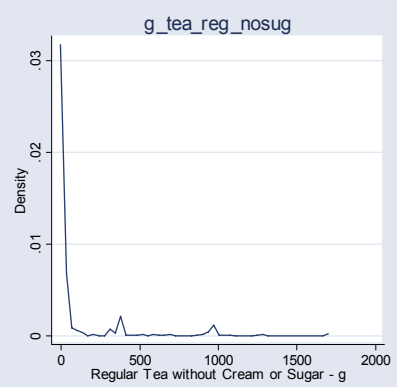
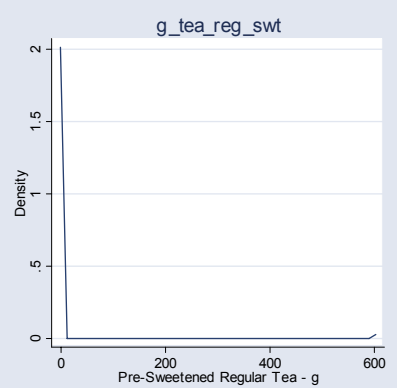
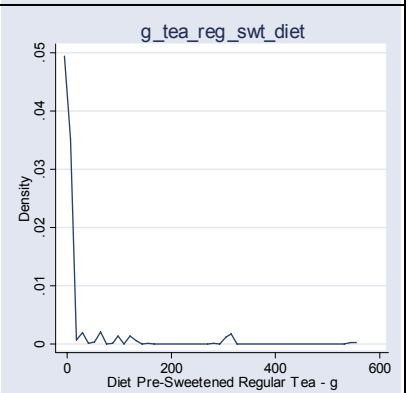
Variable Name	Type	Basis	Description	Levels	Graph
g_soda_reg_caff	N	DietAARP derived	Soft drinks, regular, caffeinated (grams/day)	Continuous (range = 0 → 4,741.7)	
g_soda_reg_decaf	N	DietAARP derived	Soft drinks, regular, decaffeinated (grams/day)	Continuous (range = 0 → 4,974.1)	
g_soda_total	N	DietAARP derived	Soft drinks, total (grams/day)	Continuous (range = 0 → 4,974.1)	

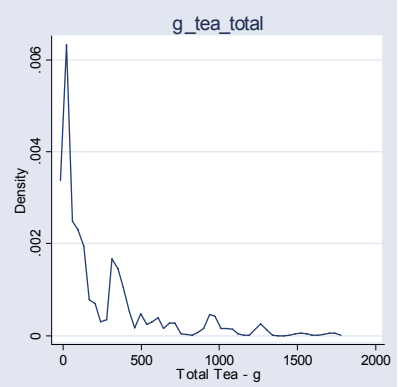
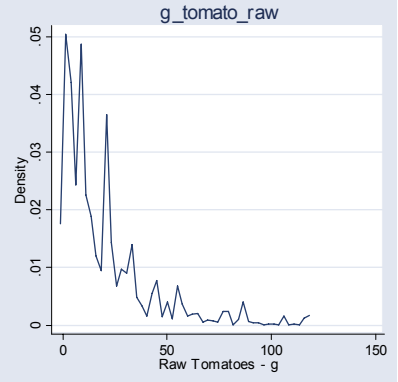
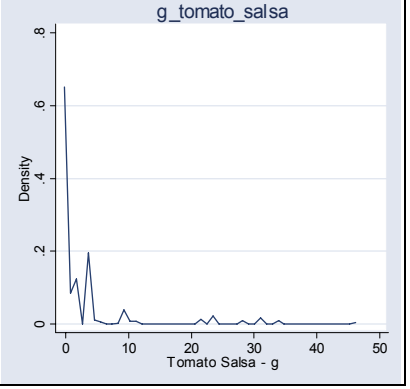
Variable Name	Type	Basis	Description	Levels	Graph
g_soup_bean	N	DietAARP derived	Soups, bean-type (grams/day)	Continuous (range = 0 → 1,337.9)	
g_soup_creamed	N	DietAARP derived	Soups, creamed (grams/day)	Continuous (range = 0 → 1,039.3)	
g_soup_veg	N	DietAARP derived	Soups, with vegetables (grams/day)	Continuous (range = 0 → 1,309.3)	

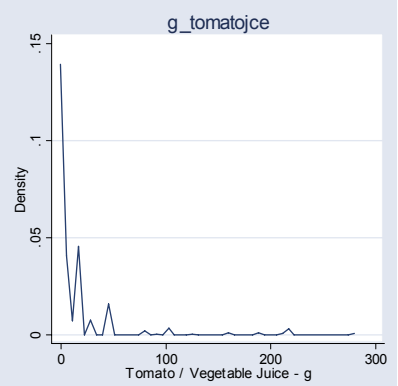
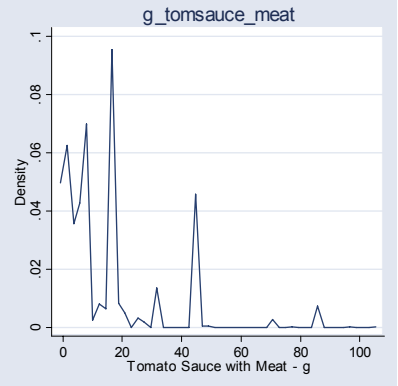
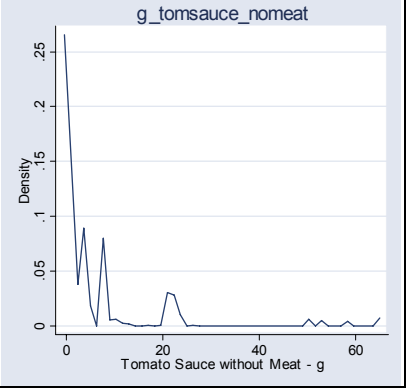
Variable Name	Type	Basis	Description	Levels	Graph
g_spinach_ckd	N	DietAARP derived	Spinach / greens, cooked, NFA (grams/day)	Continuous (range = 0 → 472.7)	
g_spinach_raw	N	DietAARP derived	Spinach / greens, raw (grams/day)	Continuous (range = 0 → 154.3)	
g_stk_lean	N	DietAARP derived	Beef, steaks, lean (grams/day)	Continuous (range = 0 → 408.1)	

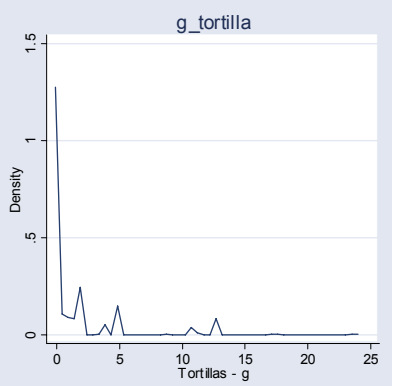
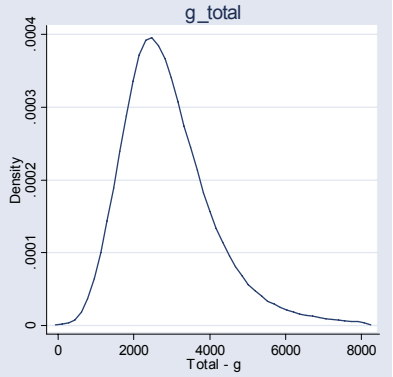
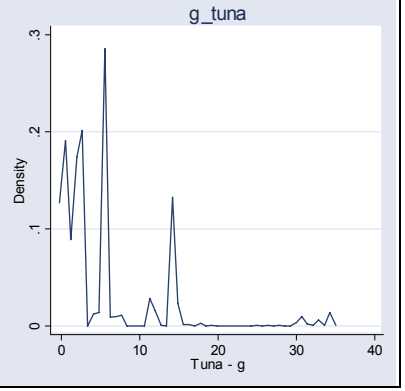
Variable Name	Type	Basis	Description	Levels	Graph
g_stk_reg	N	DietAARP derived	Beef, steaks, regular (grams/day)	Continuous (range = 0 → 589.6)	
g_strawberry	N	DietAARP derived	Strawberries (grams/day)	Continuous (range = 0 → 134.2)	
g_sugar_honey	N	DietAARP derived	Sugars / honey, all, in coffee or tea (grams/day)	Continuous (range = 0 → 108.4)	

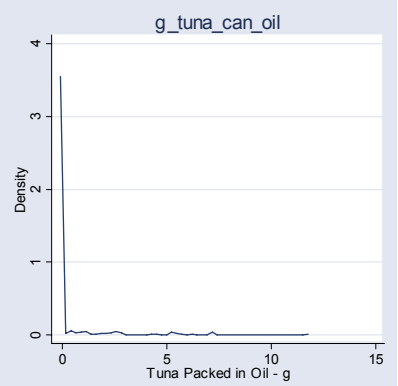
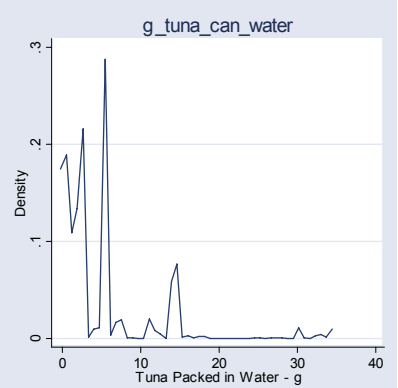
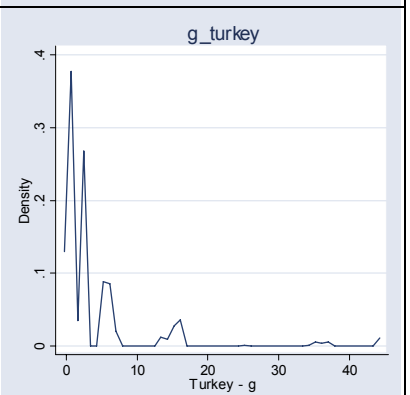
Variable Name	Type	Basis	Description	Levels	Graph
g_tea_decaf_nosug	N	DietAARP derived	Tea, decaffeinated, no cream or sugar (grams/day)	Continuous (range = 0 → 3,528)	
g_tea_decaf_swt	N	DietAARP derived	Tea, decaffeinated, pre-sweetened (grams/day)	Continuous (range = 0 → 982.1)	
g_tea_decaf_swt_diet	N	DietAARP derived	Tea, decaffeinated, pre-sweetened, diet (grams/day)	Continuous (range = 0 → 950.3)	

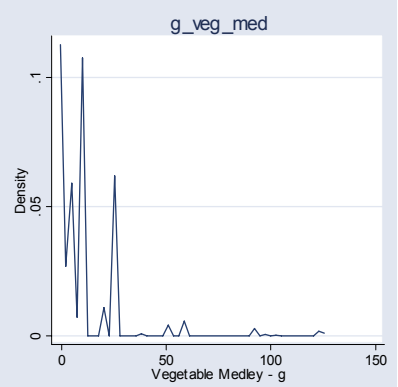
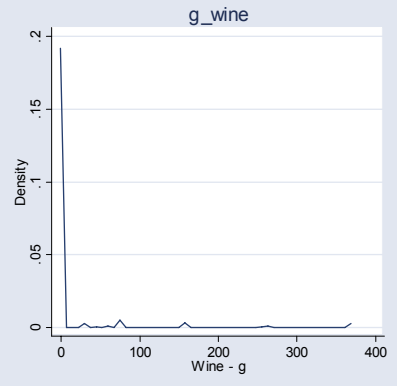
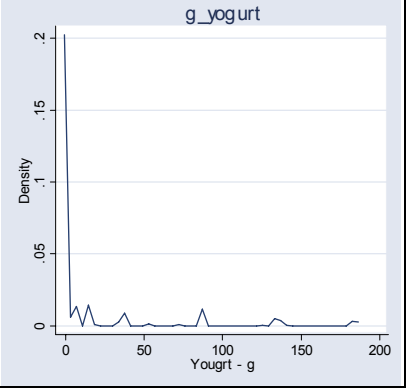
Variable Name	Type	Basis	Description	Levels	Graph
g_tea_reg_nosug	N	DietAARP derived	Tea, regular, no cream or sugar (grams/day)	Continuous (range = 0 → 3,599.2)	
g_tea_reg_swt	N	DietAARP derived	Tea, regular, pre-sweetened (grams/day)	Continuous (range = 0 → 936.9)	
g_tea_reg_swt_diet	N	DietAARP derived	Tea, regular, pre-sweetened, diet (grams/day)	Continuous (range = 0 → 883.7)	

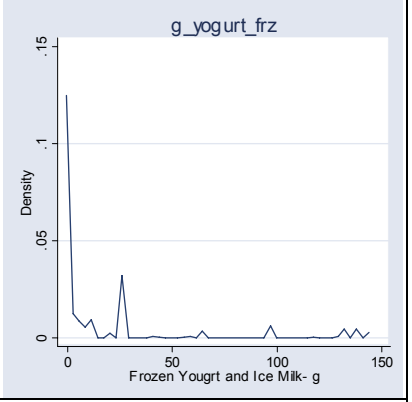
Variable Name	Type	Basis	Description	Levels	Graph
g_tea_total	N	DietAARP derived	Tea, total (grams/day)	Continuous (range = 0 → 3,650.3)	
g_tomato_raw	N	DietAARP derived	Tomatoes, raw (grams/day)	Continuous (range = 0 → 234.4)	
g_tomato_salsa	N	DietAARP derived	Tomato salsa (grams/day)	Continuous (range = 0 → 313.8)	

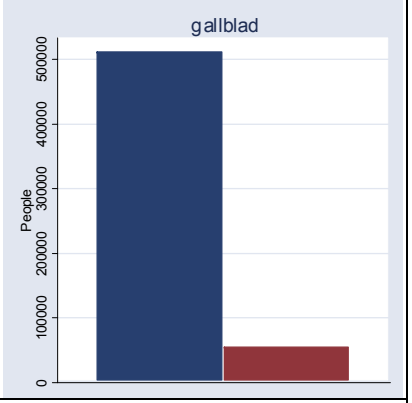
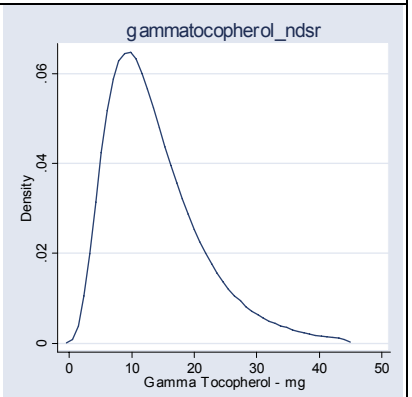
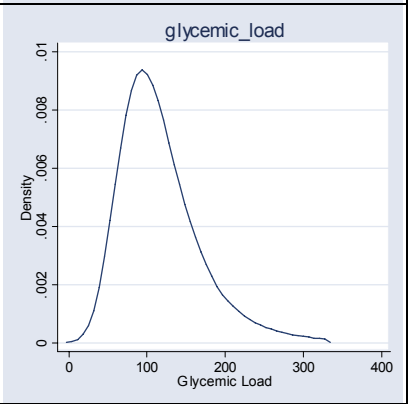
Variable Name	Type	Basis	Description	Levels	Graph
g_tomatojce	N	DietAARP derived	Tomato / vegetable juice, all (grams/day)	Continuous (range = 0 → 2,744.1)	
g_tomsauce_meat	N	DietAARP derived	Tomato sauces, with meat (grams/day)	Continuous (range = 0 → 874.5)	
g_tomsauce_nomeat	N	DietAARP derived	Tomato sauces, no meat (grams/day)	Continuous (range = 0 → 655.2)	

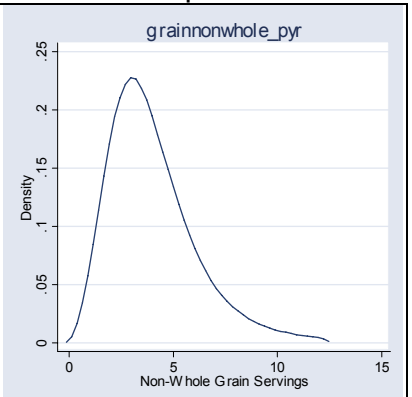
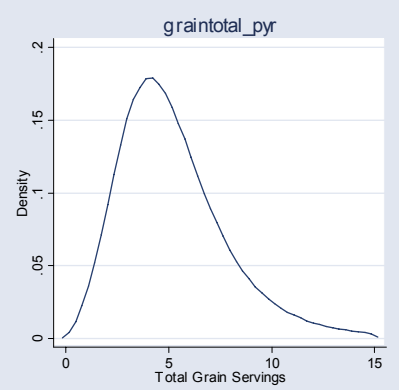
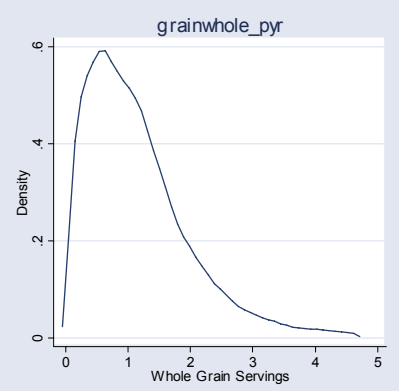
Variable Name	Type	Basis	Description	Levels	Graph
g_tortilla	N	DietAARP derived	Tortillas (grams/day)	Continuous (range = 0 → 287.1)	
g_total	N	DietAARP derived	All foods and beverages (grams/day)	Continuous (range = 0 →61,887.8)	
g_tuna	N	DietAARP derived	Tuna (grams/day)	Continuous (range = 0 → 331.2)	

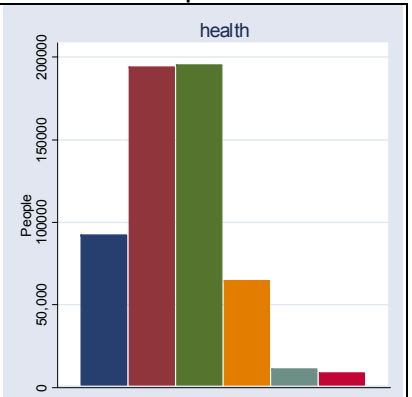
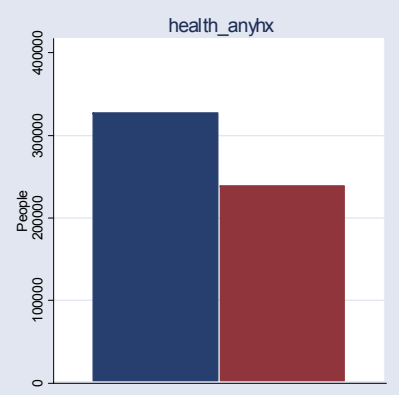
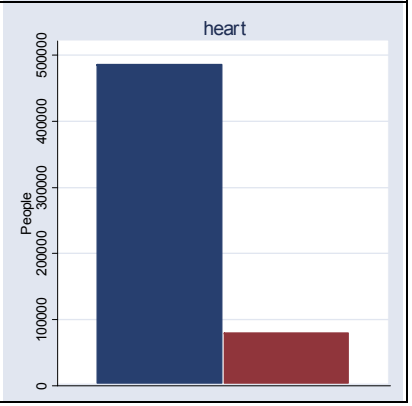
Variable Name	Type	Basis	Description	Levels	Graph
g_tuna_can_oil	N	DietAARP derived	Tuna, packed in oil (grams/day)	Continuous (range = 0 → 320)	
g_tuna_can_water	N	DietAARP derived	Tuna, packed in water (grams/day)	Continuous (range = 0 → 331.2)	
g_turkey	N	DietAARP derived	Turkey (grams/day)	Continuous (range = 0 → 446)	

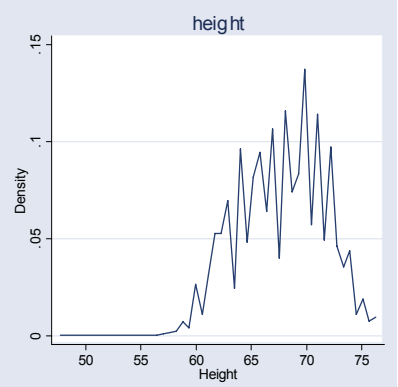
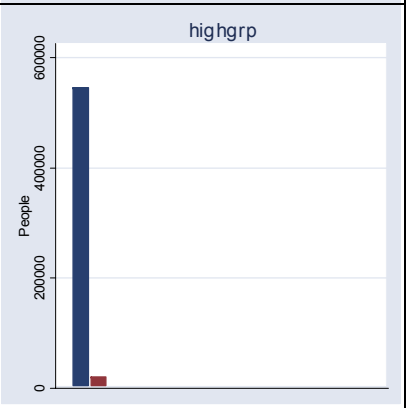
Variable Name	Type	Basis	Description	Levels	Graph
g_veg_med	N	DietAARP derived	Vegetable medley, NFA (grams/day)	Continuous (range = 0 → 554.1)	
g_wine	N	DietAARP derived	Wine (grams/day)	Continuous (range = 0 → 2,572.6)	
g_yogurt	N	DietAARP derived	Yogurt, all (grams/day)	Continuous (range = 0 → 553.9)	

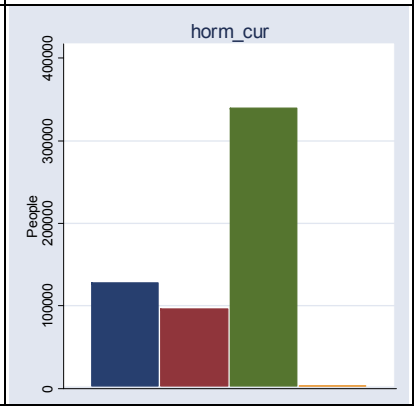
Variable Name	Type	Basis	Description	Levels	Graph
g_yogurt_frz	N	DietAARP derived	Frozen yogurt, ice milk (grams/day)	Continuous (range = 0 → 605.1)	
gall_ajcc_stg	C	cancer registry	see cancer_ajcc_stg	see cancer_ajcc_stg	
gall_ajccseer	C	cancer registry	see cancer_ajccseer	see cancer_ajccseer	
gall_behv	C	cancer registry	see cancer_behv	see cancer_behv	
gall_dxconf	C	cancer registry	see cancer_dxconf	see cancer_dxconf	
gall_dxdt	N	cancer registry	see cancer_dxdt	see cancer_dxdt	
gall_grade	C	cancer registry	see cancer_grade	see cancer_grade	
gall_hist	C	cancer registry	see cancer_hist	see cancer_hist	
gall_histv	C	cancer registry	see cancer_histv	see cancer_histv	
gall_lateral	C	cancer registry	see cancer_lateral	see cancer_lateral	
gall_mort	N	cancer registry	see cancer_mort	see cancer_mort	
gall_pnode	C	cancer registry	see cancer_pnode	see cancer_pnode	
gall_seqno	C	cancer registry	see cancer_seqno	see cancer_seqno	
gall_site	C	cancer registry	see cancer_site	see cancer_site	
gall_siterec3	N	cancer registry	see cancer_siterec3	see cancer_siterec3	
gall_ss_stg	C	cancer registry	see cancer_ss_stg	see cancer_ss_stg	
gall_ss_stg47	C	cancer registry	see cancer_ss_stg47	see cancer_ss_stg47	
gall_ss_stgv	C	cancer registry	see cancer_ss_stgv	see cancer_ss_stgv	
gall_status	C	cancer registry	see cancer_status	see cancer_status	
gall_tnmclinm	C	cancer registry	see cancer_tnmclinm	see cancer_tnmclinm	
gall_tnmclinn	C	cancer registry	see cancer_tnmclinn	see cancer_tnmclinn	
gall_tnmclint	C	cancer registry	see cancer_tnmclint	see cancer_tnmclint	
gall_tnmpathm	C	cancer registry	see cancer_tnmpathm	see cancer_tnmpathm	
gall_tnmpathn	C	cancer registry	see cancer_tnmpathn	see cancer_tnmpathn	
gall_tnmpatht	C	cancer registry	see cancer_tnmpatht	see cancer_tnmpatht	
gall_xnode	C	cancer registry	see cancer_xnode	see cancer_xnode	

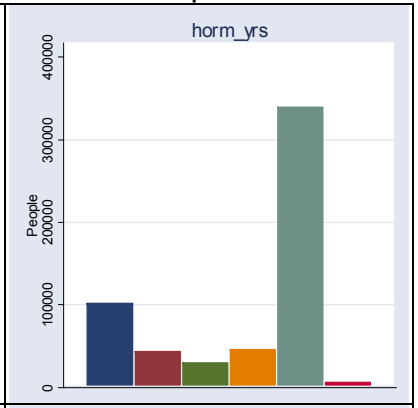
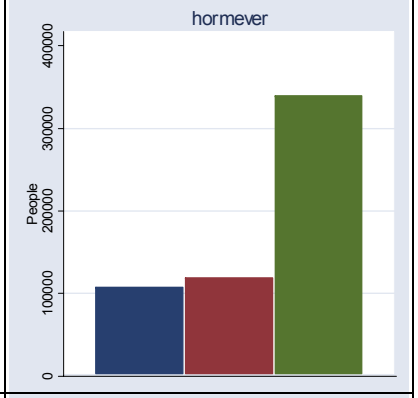
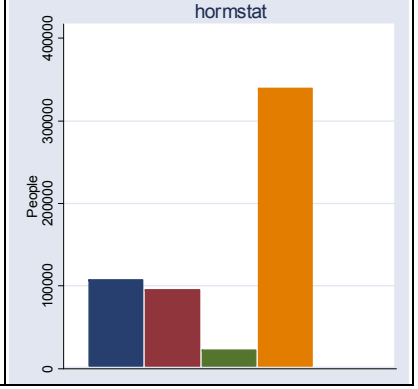
Variable Name	Type	Basis	Description	Levels	Graph
GALLBLAD	N	Cleaned from Q40A	Self-reported history of gallbladder stone or disease	0 = No (*n* = 511,647) 1 = Yes (*n* = 54,760)	
gallcan	N	cancer registry	see cancercan	see cancercan	
GammaTocopherol_NDSR	N	DietAARP derived	Gamma-Tocopherol – mg (NDS-R)	Continuous (range = 0.03 → 665.57)	
GlycemicLoad	N		Glycemic Load	Continuous (range = 0.19 → 3,259.73)	

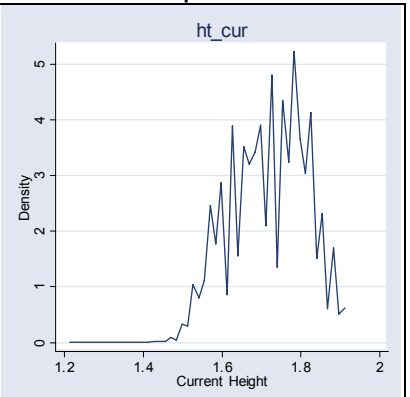
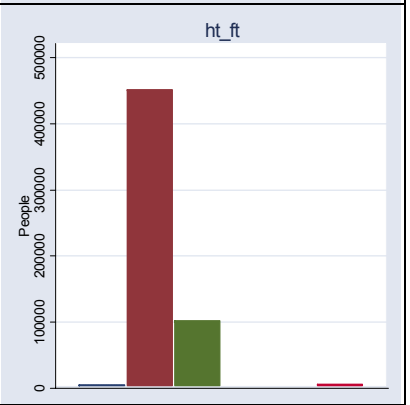
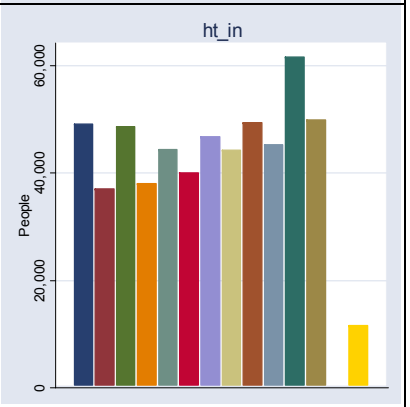
Variable Name	Type	Basis	Description	Levels	Graph
GrainNonWhole_Pyr	N	DietAARP derived	Number of non-whole grain pyramid servings	Continuous (range = 0 → 153.3)	
GrainTotal_Pyr	N	DietAARP derived	Total number of grain pyramid servings	Continuous (range = 0 → 167.16)	
GrainWhole_Pyr	N	DietAARP derived	Number of whole grain pyramid servings	Continuous (range = 0 → 16.7)	

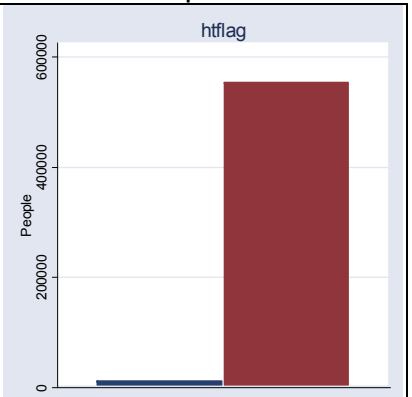
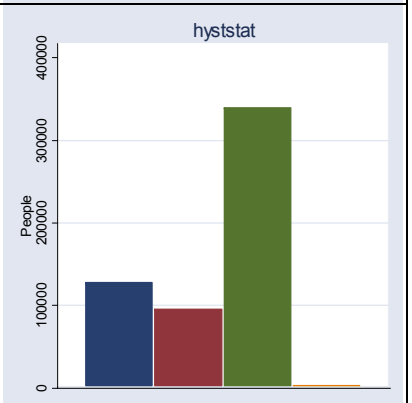
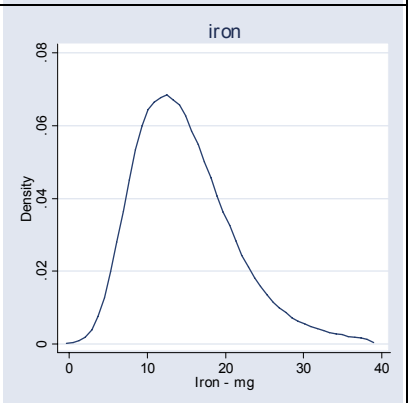
Variable Name	Type	Basis	Description	Levels	Graph
HEALTH	N	Cleaned from Q39	Self-reported heath condition, general	1 = Excellent (*n* = 92,365) 2 = Very good (*n* = 193,837) 3 = Good (*n* = 195,425) 4 = Fair (*n* = 64,592) 5 = Poor (*n* = 11,315) 9 = Unknown (*n* = 8,873)	
HEALTH_ANYHX	N	Derived from Q40A, Q40B, Q40C, Q40D, Q40E, Q40F, Q40G, Q40H, Q40I, Q40J	Any self-reported health problem	0 = No history of health problems (*n* = 327,610) 1 = History of health problems (*n* = 238,797)	
HEART	N	Cleaned from Q40C	Self-reported history of heart disease	0 = No (*n* = 486,152) 1 = Yes (*n* =80,255)	

Variable Name	Type	Basis	Description	Levels	Graph
Height	N	Cleaned from Q3	Height in inches	(*n* = 48.00 → 95.00)	
HighGrp	N	DietAARP derived	Number of food groups with high frequencies	0 = 545,206 1 = 20,154 2 = 769 3 = 119 4 = 58 5 = 27 6 = 16 7 = 14 8 = 12 9 = 7 10 = 9 11 = 5 12 = 6 13 = 2 14 = 1 15 = 1 16 = 1	
hodgkins	N	cancer registry	see cancercan	see cancercan	
hodgkins_ajcc_stg	C	cancer registry	see cancer_ajcc_stg	see cancer_ajcc_stg	
hodgkins_ajccseer	C	cancer registry	see cancer_ajccseer	see cancer_ajccseer	
hodgkins_behv	C	cancer registry	see cancer_behv	see cancer_behv	
hodgkins_dxconf	C	cancer registry	see cancer_dxconf	see cancer_dxconf	
hodgkins_dxdt	N	cancer registry	see cancer_dxdt	see cancer_dxdt	
hodgkins_grade	C	cancer registry	see cancer_grade	see cancer_grade	
hodgkins_hist	C	cancer registry	see cancer_hist	see cancer_hist	
hodgkins_histv	C	cancer registry	see cancer_histv	see cancer_histv	
hodgkins_lateral	C	cancer registry	see cancer_lateral	see cancer_lateral	

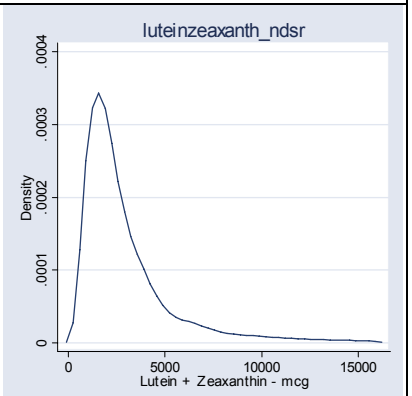
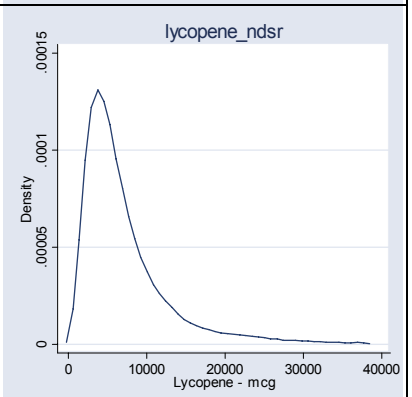
Variable Name	Type	Basis	Description	Levels	Graph
hodgkins_mort	N	cancer registry	see cancer_mort	see cancer_mort	
hodgkins_pnode	C	cancer registry	see cancer_pnode	see cancer_pnode	
hodgkins_seqno	C	cancer registry	see cancer_seqno	see cancer_seqno	
hodgkins_site	C	cancer registry	see cancer_site	see cancer_site	
hodgkins_siterec3	N	cancer registry	see cancer_siterec3	see cancer_siterec3	
hodgkins_ss_stg	C	cancer registry	see cancer_ss_stg	see cancer_ss_stg	
hodgkins_ss_stg47	C	cancer registry	see cancer_ss_stg47	see cancer_ss_stg47	
hodgkins_ss_stgv	C	cancer registry	see cancer_ss_stgv	see cancer_ss_stgv	
hodgkins_status	C	cancer registry	see cancer_status	see cancer_status	
hodgkins_tnmclinm	C	cancer registry	see cancer_tnmclinm	see cancer_tnmclinm	
hodgkins_tnmclinn	C	cancer registry	see cancer_tnmclinn	see cancer_tnmclinn	
hodgkins_tnmclint	C	cancer registry	see cancer_tnmclint	see cancer_tnmclint	
hodgkins_tnmpathm	C	cancer registry	see cancer_tnmpathm	see cancer_tnmpathm	
hodgkins_tnmpathn	C	cancer registry	see cancer_tnmpathn	see cancer_tnmpathn	
hodgkins_tnmpatht	C	cancer registry	see cancer_tnmpatht	see cancer_tnmpatht	
hodgkins_xnode	C	cancer registry	see cancer_xnode	see cancer_xnode	
HORM_CUR	N	Cleaned from Q55	Currently taking replacement hormones	0 = No (*n* = 128,104) 1 = Yes (*n* = 95,885) 8 = Not applicable – other gender (*n* = 339,671) 9 = Unknown (*n* = 2,747)	

Variable Name	Type	Basis	Description	Levels	Graph
HORM_YRS	N	Cleaned from Q56	Total years used replacement hormones	0 = Never used hormones (*n* = 101,912) 1 = <5 years (*n* = 43,261) 2 = 5-9 years (*n* = 29,509) 3 = ≥10 years (*n* = 45,668) 8 = Not applicable – other gender (*n* = 339,671) 9 = Unknown (*n* =6,386)	
HORMEVER	N	Derived from Q55, Q56	Ever taken replacement hormones	0 = No (*n* = 107,929) 1 = Yes (*n* = 118,807) 8 = Not applicable – other gender (*n* = 339,671) 9 = Unknown	
HORMSTAT	N	Derived from Q55, Q56	Hormone status	0 = Never used hormones (*n* = 107,929) 1 = Currently using hormones (*n* = 95,646) 2 = Formerly used hormones (*n* = 22,541) 8 = Not applicable – other gender (*n* = 339,671) 9 = Unknown (*n* = 620)	

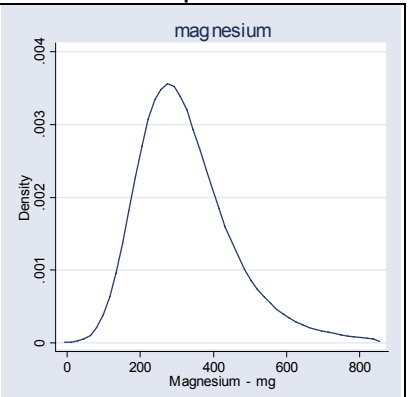
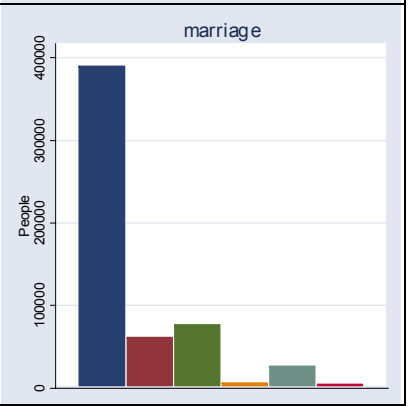
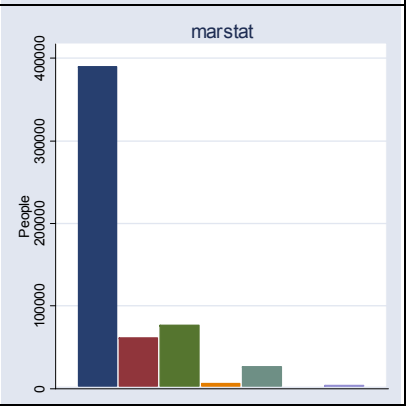
Variable Name	Type	Basis	Description	Levels	Graph
HT_CUR	N	Cleaned from Q3	Converted height at current age in meters	Continuous (range = 1.22 → 2.41) (Missing =.)	
HT_FT	C	Cleaned from Q3	Current height (feet portion)	4 = 4 feet (n = 5,254) 5 = 5 feet (n = 451,694) 6 = 6 feet (n = 101,774) 7 = 7 feet (n = 1,707) E = Error (n = 46) M = Missing (n = 5,932)	
HT_IN	C	Cleaned from Q3	Current height (inches portion)	00 = 0 inches (n = 49,165) 01 = 1 inch (n = 37,085) 02 = 2 inches (n = 48,607) 03 = 3 inches (n = 38,069) 04 = 4 inches (n = 44,359) 05 = 5 inches (n = 40,001) 06 = 6 inches (n = 46,763) 07 = 7 inches (n = 44,303) 08 = 8 inches (n = 49,410) 09 = 9 inches (n = 45,267) 10 = 10 inches (n = 61,603) 11 = 11 inches (n = 49,889) EE = Error (n = 338) MM = Missing (n = 11,548)	

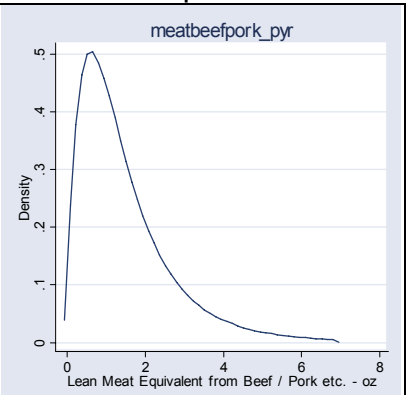
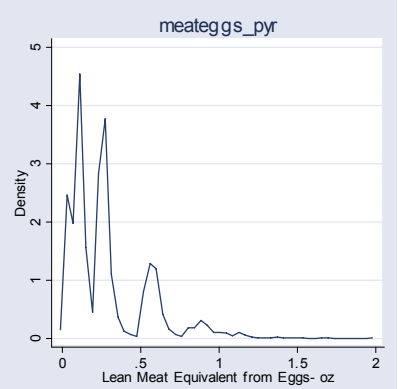
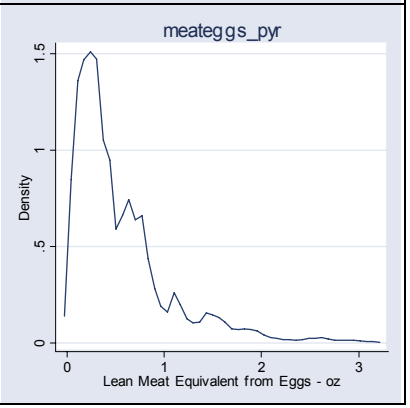
Variable Name	Type	Basis	Description	Levels	Graph
HtFlag	N	Cleaned from Q3	Height flag	0 = Flag (*n* = 12,180) 1 = No flag (*n* = 554,227)	
HYSTSTAT	N	Cleaned from Q52	Did participant have a hysterectomy?	0 = Did not have a hysterectomy (*n* = 127,710) 1 = Had a hysterectomy (*n* = 95,860) 8 = Not applicable – other gender (*n* = 339,671) 9 = Unknown (3,166)	
Iron	N	DietAARP derived	Iron - mg	Continuous (range = 0.06 → 465.92)	
liver_ajcc_stg	C	cancer registry	see cancer_ajcc_stg	see cancer_ajcc_stg	
liver_ajccseer	C	cancer registry	see cancer_ajccseer	see cancer_ajccseer	

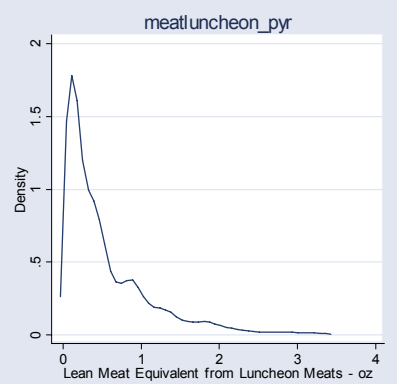
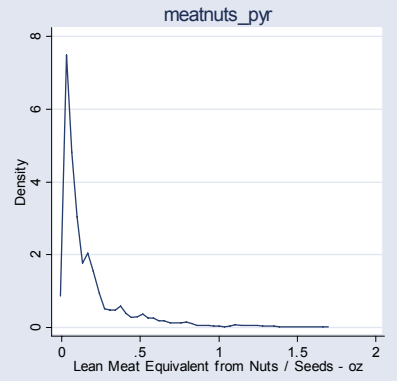
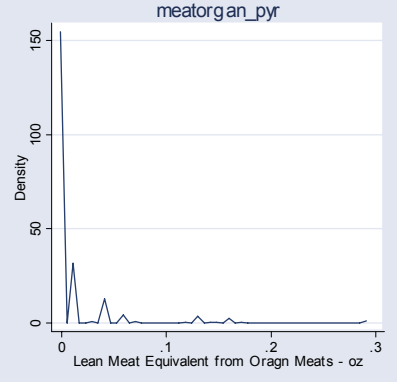
Variable Name	Type	Basis	Description	Levels	Graph
liver_behv	C	cancer registry	see cancer_behv	see cancer_behv	
liver_dxconf	C	cancer registry	see cancer_dxconf	see cancer_dxconf	
liver_dxdt	N	cancer registry	see cancer_dxdt	see cancer_dxdt	
liver_grade	C	cancer registry	see cancer_grade	see cancer_grade	
liver_hist	C	cancer registry	see cancer_hist	see cancer_hist	
liver_histv	C	cancer registry	see cancer_histv	see cancer_histv	
liver_lateral	C	cancer registry	see cancer_lateral	see cancer_lateral	
liver_mort	N	cancer registry	see cancer_mort	see cancer_mort	
liver_pnode	C	cancer registry	see cancer_pnode	see cancer_pnode	
liver_seqno	C	cancer registry	see cancer_seqno	see cancer_seqno	
liver_site	C	cancer registry	see cancer_site	see cancer_site	
liver_siterec3	N	cancer registry	see cancer_siterec3	see cancer_siterec3	
liver_ss_stg	C	cancer registry	see cancer_ss_stg	see cancer_ss_stg	
liver_ss_stg47	C	cancer registry	see cancer_ss_stg47	see cancer_ss_stg47	
liver_ss_stgv	C	cancer registry	see cancer_ss_stgv	see cancer_ss_stgv	
liver_status	C	cancer registry	see cancer_status	see cancer_status	
liver_tnmclinm	C	cancer registry	see cancer_tnmclinm	see cancer_tnmclinm	
liver_tnmclinn	C	cancer registry	see cancer_tnmclinn	see cancer_tnmclinn	
liver_tnmclint	C	cancer registry	see cancer_tnmclint	see cancer_tnmclint	
liver_tnmpathm	C	cancer registry	see cancer_tnmpathm	see cancer_tnmpathm	
liver_tnmpathn	C	cancer registry	see cancer_tnmpathn	see cancer_tnmpathn	
liver_tnmpatht	C	cancer registry	see cancer_tnmpatht	see cancer_tnmpatht	
liver_xnode	C	cancer registry	see cancer_xnode	see cancer_xnode	
livercan	N	cancer registry	see cancercan	see cancercan	
lung_ajcc_stg	C	cancer registry	see cancer_ajcc_stg	see cancer_ajcc_stg	
lung_ajccseer	C	cancer registry	see cancer_ajccseer	see cancer_ajccseer	
lung_behv	C	cancer registry	see cancer_behv	see cancer_behv	
lung_dxconf	C	cancer registry	see cancer_dxconf	see cancer_dxconf	
lung_dxdt	N	cancer registry	see cancer_dxdt	see cancer_dxdt	
lung_grade	C	cancer registry	see cancer_grade	see cancer_grade	
lung_hist	C	cancer registry	see cancer_hist	see cancer_hist	
lung_histv	C	cancer registry	see cancer_histv	see cancer_histv	
lung_lateral	C	cancer registry	see cancer_lateral	see cancer_lateral	
lung_mort	N	cancer registry	see cancer_mort	see cancer_mort	
lung_pnode	C	cancer registry	see cancer_pnode	see cancer_pnode	
lung_seqno	C	cancer registry	see cancer_seqno	see cancer_seqno	
lung_site	C	cancer registry	see cancer_site	see cancer_site	
lung_siterec3	N	cancer registry	see cancer_siterec3	see cancer_siterec3	
lung_ss_stg	C	cancer registry	see cancer_ss_stg	see cancer_ss_stg	

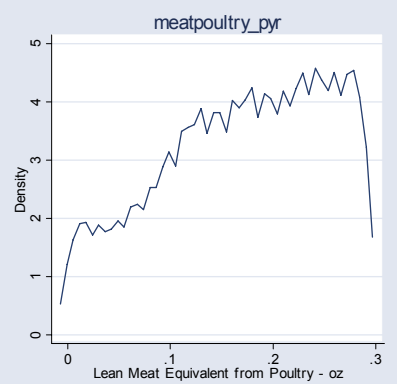
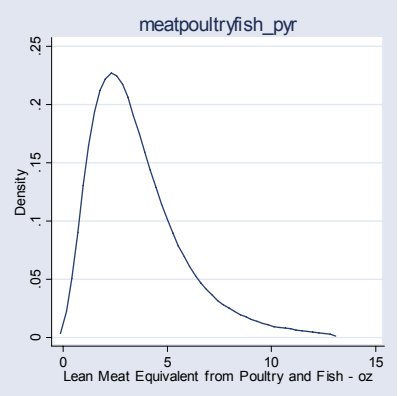
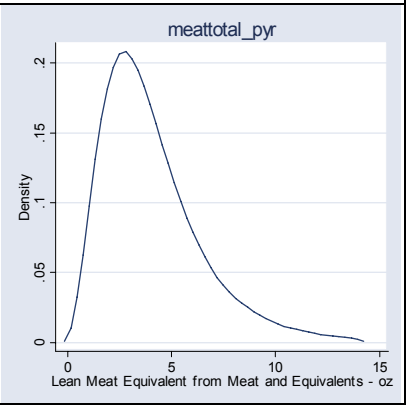
Variable Name	Type	Basis	Description	Levels	Graph
lung_ss_stg47	C	cancer registry	see cancer_ss_stg47	see cancer_ss_stg47	
lung_ss_stgv	C	cancer registry	see cancer_ss_stgv	see cancer_ss_stgv	
lung_status	C	cancer registry	see cancer_status	see cancer_status	
lung_tnmclinm	C	cancer registry	see cancer_tnmclinm	see cancer_tnmclinm	
lung_tnmclinn	C	cancer registry	see cancer_tnmclinn	see cancer_tnmclinn	
lung_tnmclint	C	cancer registry	see cancer_tnmclint	see cancer_tnmclint	
lung_tnmpathm	C	cancer registry	see cancer_tnmpathm	see cancer_tnmpathm	
lung_tnmpathn	C	cancer registry	see cancer_tnmpathn	see cancer_tnmpathn	
lung_tnmpatht	C	cancer registry	see cancer_tnmpatht	see cancer_tnmpatht	
lung_xnode	C	cancer registry	see cancer_xnode	see cancer_xnode	
lungcan	N	cancer registry	see cancercan	see cancercan	
LuteinZeaxanth_NDSR	N	DietAARP derived	Lutein + Zeaxanth – mcg (NDS-R)	Continuous (range = 9.82 → 109,159.59)	
Lycopene_NDSR	N	DietAARP derived	Lycopene – mcg (NDS-R)	Continuous (range = 0 → 564,155.44)	
lymphleuk	N	chancer registry	see cancercan	see cancercan	
lymphleuk_ajcc_stg	C	cancer registry	see cancer_ajcc_stg	see cancer_ajcc_stg	
lymphleuk_ajccseer	C	cancer registry	see cancer_ajccseer	see cancer_ajccseer	

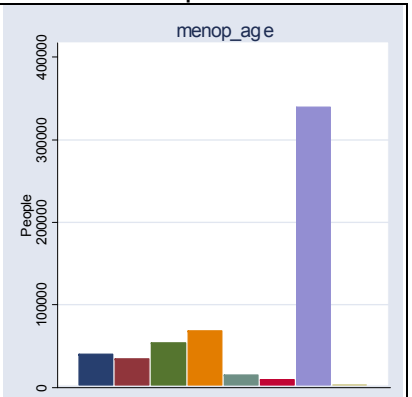
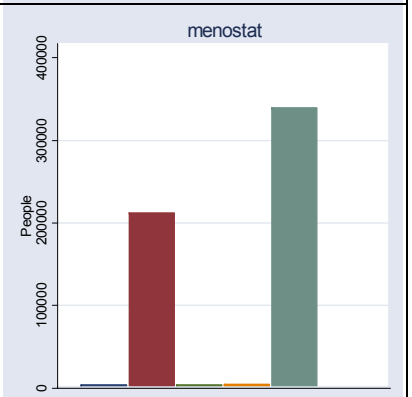
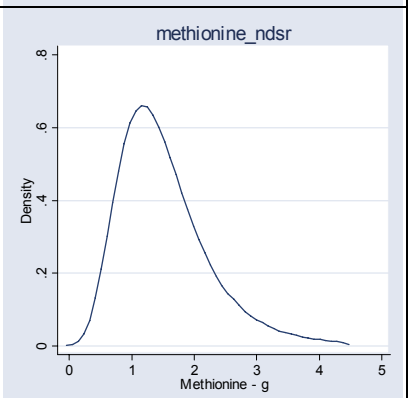
Variable Name	Type	Basis	Description	Levels	Graph
lymphleuk_behv	C	cancer registry	see cancer_behv	see cancer_behv	
lymphleuk_dxconf	C	cancer registry	see cancer_dxconf	see cancer_dxconf	
lymphleuk_dxdt	N	cancer registry	see cancer_dxdt	see cancer_dxdt	
lymphleuk_grade	C	cancer registry	see cancer_grade	see cancer_grade	
lymphleuk_hist	C	cancer registry	see cancer_hist	see cancer_hist	
lymphleuk_histv	C	cancer registry	see cancer_histv	see cancer_histv	
lymphleuk_lateral	C	cancer registry	see cancer_lateral	see cancer_lateral	
lymphleuk_mort	N	cancer registry	see cancer_mort	see cancer_mort	
lymphleuk_pnode	C	cancer registry	see cancer_pnode	see cancer_pnode	
lymphleuk_seqno	C	cancer registry	see cancer_seqno	see cancer_seqno	
lymphleuk_site	C	cancer registry	see cancer_site	see cancer_site	
lymphleuk_siterec3	N	cancer registry	see cancer_siterec3	see cancer_siterec3	
lymphleuk_ss_stg	C	cancer registry	see cancer_ss_stg	see cancer_ss_stg	
lymphleuk_ss_stg47	C	cancer registry	see cancer_ss_stg47	see cancer_ss_stg47	
lymphleuk_ss_stgv	C	cancer registry	see cancer_ss_stgv	see cancer_ss_stgv	
lymphleuk_status	C	cancer registry	see cancer_status	see cancer_status	
lymphleuk_tnmclinm	C	cancer registry	see cancer_tnmclinm	see cancer_tnmclinm	
lymphleuk_tnmclinn	C	cancer registry	see cancer_tnmclinn	see cancer_tnmclinn	
lymphleuk_tnmclint	C	cancer registry	see cancer_tnmclint	see cancer_tnmclint	
lymphleuk_tnmpathm	C	cancer registry	see cancer_tnmpathm	see cancer_tnmpathm	
lymphleuk_tnmpathn	C	cancer registry	see cancer_tnmpathn	see cancer_tnmpathn	
lymphleuk_tnmpatht	C	cancer registry	see cancer_tnmpatht	see cancer_tnmpatht	
lymphleuk_xnode	C	cancer registry	see cancer_xnode	see cancer_xnode	

Variable Name	Type	Basis	Description	Levels	Graph
Magnesium	N	DietAARP derived	Magnesium – mg	Continuous (range = 1.45 → 8,881.50)	
MARRIAGE	N	Cleaned from Q34	Marital status	1 = Married or living as married (*n* = 389,787) 2 = Widowed (*n* = 61,787) 3 = Divorced (*n* = 76,735) 4 = Separated (*n* = 6,593) 5 = Never married (*n* = 26,777) 9 = Unknown (*n* = 4,728)	
MarStat	C	Cleaned from Q34	Current marital status	0 = Married or living as married (*n* = 389,787) 1 = Widowed (*n* = 61,787) 2 = Divorced (*n* = 76,735) 3 = Separated (*n* = 6,593) 4 = Never married (*n* = 26,777) E = Error (*n* =782) M = Missing (*n* = 3,946)	

Variable Name	Type	Basis	Description	Levels	Graph
MeatBeefPork_Pyr	N	DietAARP derived	Pyramid ounces of lean meat equivalent from beef, pork, lamb, etc.	Continuous (range = 0 → 118.59)	
MeatEggs_Pyr	N	DietAARP derived	Pyramid ounces of lean meat equivalent from eggs	Continuous (range = 0 → 5.88)	
MeatFish_Pyr	N	DietAARP derived	Pyramid ounces of lean meat equivalent from fish / other seafood	Continuous (range = 0 → 40.20)	

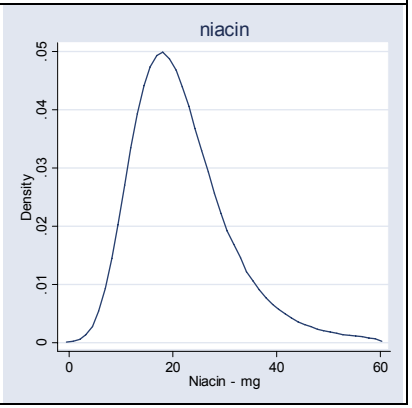
Variable Name	Type	Basis	Description	Levels	Graph
MeatLuncheon_Pyr	N	DietAARP derived	Pyramid ounces of lean meat equivalent from franks / luncheon meats	Continuous (range = 0 → 36.92)	
MeatNuts_Pyr	N	DietAARP derived	Pyramid ounces of lean meat equivalent from nuts / seeds	Continuous (range = 0 → 10.94)	
MeatOrgan_Pyr	N	DietAARP derived	Pyramid ounces of lean meat equivalent from organ meats	Continuous (range = 0 → 9.66)	

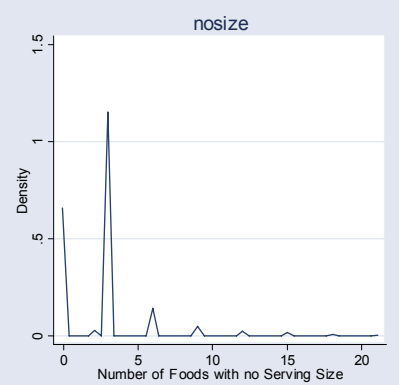
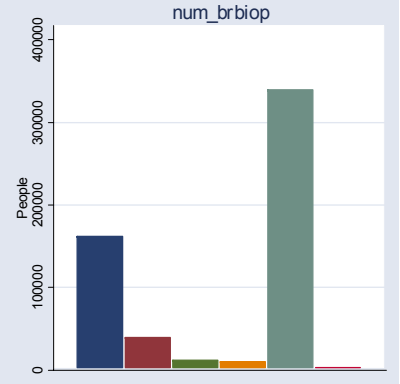
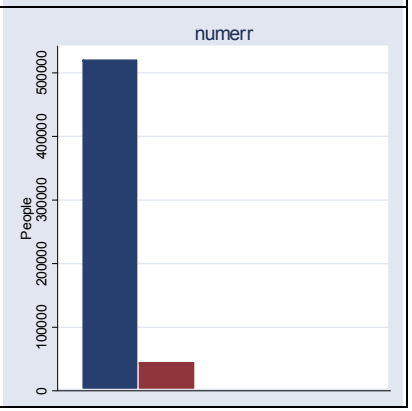
Variable Name	Type	Basis	Description	Levels	Graph
MeatPoultry_Pyr	N	DietAARP derived	Pyramid ounces of lean meat equivalent from poultry	Continuous (range = 0 → 62.15)	
MeatPoultryFish_Pyr	N	DietAARP derived	Pyramid ounces of lean meat equivalent from meat, poultry, fish	Continuous (range = 0 → 259.31)	
MeatSoy_Pyr	N	DietAARP derived	Pyramid ounces of lean meat equivalent from soy products	Continuous (range = 0 → 0.11)	uninformative graph
MeatTotal_Pyr	N	DietAARP derived	Pyramid ounces of lean meat equivalent from meat and equivalents	Continuous (range = 0 → 274.66)	

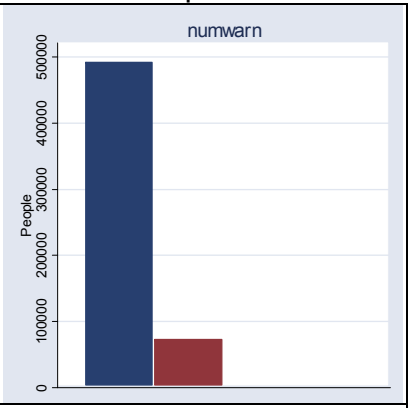
Variable Name	Type	Basis	Description	Levels	Graph
MENOP_AGE	N	Cleaned from Q50	Age at menopause	1 = <40 (*n* = 40,711) 2 = 40-44 (*n* = 35,089) 3 = 45-49 (*n* = 53,853) 4 = 50-54 (*n* = 68,973) 5 = ≥55 (*n* = 15,359) 6 = Still menstruating (*n* = 9,685) 8 = Not applicable – other gender (*n* = 339,671) 9 = Unknown (*n* = 3,066)	
MENOSTAT	N	Derived from Q50, Q51, Q52, Q53, Q55, Q56	Menopause status	1 = Premenopausal (*n* = 4,041) 2 = Postmenopausal (*n* = 211,995) 3 = Probably premenopausal (*n* = 3,551) 4 = Probably postmenopausal (*n* =4,888) 8 = not applicable – other gender (*n* =339,671) 9 = Unknown (*n* = 2,261)	
Methionine_NDSR	N	DietAARP derived	Methionine – g (NDS-R)	Continuous (range = 0 → 77.93)	
miscell_ajcc_stg	C	cancer registry	see cancer_ajcc_stg	see cancer_ajcc_stg	
miscell_ajccseer	C	cancer registry	see cancer_ajccseer	see cancer_ajccseer	

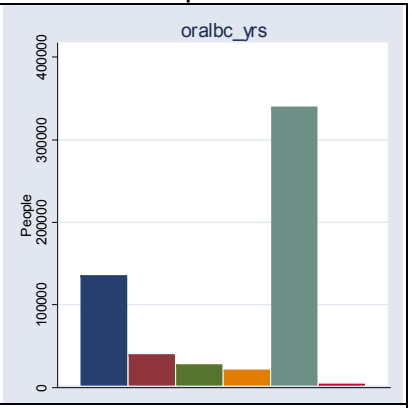
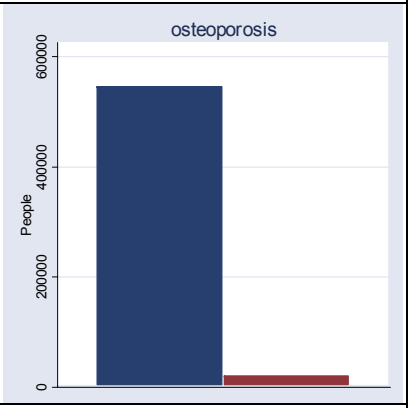
Variable Name	Type	Basis	Description	Levels	Graph
miscell_behv	C	cancer registry	see cancer_behv	see cancer_behv	
miscell_dxconf	C	cancer registry	see cancer_dxconf	see cancer_dxconf	
miscell_dxdt	N	cancer registry	see cancer_dxdt	see cancer_dxdt	
miscell_grade	C	cancer registry	see cancer_grade	see cancer_grade	
miscell_hist	C	cancer registry	see cancer_hist	see cancer_hist	
miscell_histv	C	cancer registry	see cancer_histv	see cancer_histv	
miscell_lateral	C	cancer registry	see cancer_lateral	see cancer_lateral	
miscell_mort	N	cancer registry	see cancer_mort	see cancer_mort	
miscell_pnode	C	cancer registry	see cancer_pnode	see cancer_pnode	
miscell_seqno	C	cancer registry	see cancer_seqno	see cancer_seqno	
miscell_site	C	cancer registry	see cancer_site	see cancer_site	
miscell_siterec3	N	cancer registry	see cancer_siterec3	see cancer_siterec3	
miscell_ss_stg	C	cancer registry	see cancer_ss_stg	see cancer_ss_stg	
miscell_ss_stg47	C	cancer registry	see cancer_ss_stg47	see cancer_ss_stg47	
miscell_ss_stgv	C	cancer registry	see cancer_ss_stgv	see cancer_ss_stgv	
miscell_status	C	cancer registry	see cancer_status	see cancer_status	
miscell_tnmclinm	C	cancer registry	see cancer_tnmclinm	see cancer_tnmclinm	
miscell_tnmclinn	C	cancer registry	see cancer_tnmclinn	see cancer_tnmclinn	
miscell_tnmclint	C	cancer registry	see cancer_tnmclint	see cancer_tnmclint	
miscell_tnmpathm	C	cancer registry	see cancer_tnmpathm	see cancer_tnmpathm	
miscell_tnmpathn	C	cancer registry	see cancer_tnmpathn	see cancer_tnmpathn	
miscell_tnmpatht	C	cancer registry	see cancer_tnmpatht	see cancer_tnmpatht	
miscell_xnode	C	cancer registry	see cancer_xnode	see cancer_xnode	
miscellcan	N	cancer registry	see cancercan	see cancercan	
myeloma	N	cancer registry	see cancercan	see cancercan	
myeloma_ajcc_stg	C	cancer registry	see cancer_ajcc_stg	see cancer_ajcc_stg	
myeloma_ajccseer	C	cancer registry	see cancer_ajccseer	see cancer_ajccseer	
myeloma_behv	C	cancer registry	see cancer_behv	see cancer_behv	
myeloma_dxconf	C	cancer registry	see cancer_dxconf	see cancer_dxconf	
myeloma_dxdt	N	cancer registry	see cancer_dxdt	see cancer_dxdt	
myeloma_grade	C	cancer registry	see cancer_grade	see cancer_grade	
myeloma_hist	C	cancer registry	see cancer_hist	see cancer_hist	
myeloma_histv	C	cancer registry	see cancer_histv	see cancer_histv	
myeloma_lateral	C	cancer registry	see cancer_lateral	see cancer_lateral	
myeloma_mort	N	cancer registry	see cancer_mort	see cancer_mort	
myeloma_pnode	C	cancer registry	see cancer_pnode	see cancer_pnode	
myeloma_seqno	C	cancer registry	see cancer_seqno	see cancer_seqno	
myeloma_site	C	cancer registry	see cancer_site	see cancer_site	
myeloma_siterec3	N	cancer registry	see cancer_siterec3	see cancer_siterec3	

Variable Name	Type	Basis	Description	Levels	Graph
myeloma_ss_stg	C	cancer registry	see cancer_ss_stg	see cancer_ss_stg	
myeloma_ss_stg47	C	cancer registry	see cancer_ss_stg47	see cancer_ss_stg47	
myeloma_ss_stgv	C	cancer registry	see cancer_ss_stgv	see cancer_ss_stgv	
myeloma_status	C	cancer registry	see cancer_status	see cancer_status	
myeloma_tnmclinm	C	cancer registry	see cancer_tnmclinm	see cancer_tnmclinm	
myeloma_tnmclinn	C	cancer registry	see cancer_tnmclinn	see cancer_tnmclinn	
myeloma_tnmclint	C	cancer registry	see cancer_tnmclint	see cancer_tnmclint	
myeloma_tnmpathm	C	cancer registry	see cancer_tnmpathm	see cancer_tnmpathm	
myeloma_tnmpathn	C	cancer registry	see cancer_tnmpathn	see cancer_tnmpathn	
myeloma_tnmpatht	C	cancer registry	see cancer_tnmpatht	see cancer_tnmpatht	
myeloma_xnode	C	cancer registry	see cancer_xnode	see cancer_xnode	
myemonoleuk	N	cancer registry	see cancercan	see cancercan	
myemonoleuk_ajcc_stg	C	cancer registry	see cancer_ajcc_stg	see cancer_ajcc_stg	
myemonoleuk_ajccseer	C	cancer registry	see cancer_ajccseer	see cancer_ajccseer	
myemonoleuk_behv	C	cancer registry	see cancer_behv	see cancer_behv	
myemonoleuk_dxconf	C	cancer registry	see cancer_dxconf	see cancer_dxconf	
myemonoleuk_dxdt	N	cancer registry	see cancer_dxdt	see cancer_dxdt	
myemonoleuk_grade	C	cancer registry	see cancer_grade	see cancer_grade	
myemonoleuk_hist	C	cancer registry	see cancer_hist	see cancer_hist	
myemonoleuk_histv	C	cancer registry	see cancer_histv	see cancer_histv	
myemonoleuk_lateral	C	cancer registry	see cancer_lateral	see cancer_lateral	
myemonoleuk_mort	N	cancer registry	see cancer_mort	see cancer_mort	
myemonoleuk_pnode	C	cancer registry	see cancer_pnode	see cancer_pnode	
myemonoleuk_seqno	C	cancer registry	see cancer_seqno	see cancer_seqno	
myemonoleuk_site	C	cancer registry	see cancer_site	see cancer_site	
myemonoleuk_siterec3	N	cancer registry	see cancer_siterec3	see cancer_siterec3	
myemonoleuk_ss_stg	C	cancer registry	see cancer_ss_stg	see cancer_ss_stg	
myemonoleuk_ss_stg47	C	cancer registry	see cancer_ss_stg47	see cancer_ss_stg47	
myemonoleuk_ss_stgv	C	cancer registry	see cancer_ss_stgv	see cancer_ss_stgv	
myemonoleuk_status	C	cancer registry	see cancer_status	see cancer_status	
myemonoleuk_tnmclinm	C	cancer registry	see cancer_tnmclinm	see cancer_tnmclinm	
myemonoleuk_tnmclinn	C	cancer registry	see cancer_tnmclinn	see cancer_tnmclinn	
myemonoleuk_tnmclint	C	cancer registry	see cancer_tnmclint	see cancer_tnmclint	
myemonoleuk_tnmpathm	C	cancer registry	see cancer_tnmpathm	see cancer_tnmpathm	
myemonoleuk_tnmpathn	C	cancer registry	see cancer_tnmpathn	see cancer_tnmpathn	
myemonoleuk_tnmpatht	C	cancer registry	see cancer_tnmpatht	see cancer_tnmpatht	
myemonoleuk_xnode	C	cancer registry	see cancer_xnode	see cancer_xnode	
nhl	N	cancer registry	see cancercan	see cancercan	
nhl_ajcc_stg	C	cancer registry	see cancer_ajcc_stg	see cancer_ajcc_stg	

Variable Name	Type	Basis	Description	Levels	Graph
nhl_ajccseer	C	cancer registry	see cancer_ajccseer	see cancer_ajccseer	
nhl_behv	C	cancer registry	see cancer_behv	see cancer_behv	
nhl_dxconf	C	cancer registry	see cancer_dxconf	see cancer_dxconf	
nhl_dxdt	N	cancer registry	see cancer_dxdt	see cancer_dxdt	
nhl_grade	C	cancer registry	see cancer_grade	see cancer_grade	
nhl_hist	C	cancer registry	see cancer_hist	see cancer_hist	
nhl_histv	C	cancer registry	see cancer_histv	see cancer_histv	
nhl_lateral	C	cancer registry	see cancer_lateral	see cancer_lateral	
nhl_mort	N	cancer registry	see cancer_mort	see cancer_mort	
nhl_pnode	C	cancer registry	see cancer_pnode	see cancer_pnode	
nhl_seqno	C	cancer registry	see cancer_seqno	see cancer_seqno	
nhl_site	C	cancer registry	see cancer_site	see cancer_site	
nhl_siterec3	N	cancer registry	see cancer_siterec3	see cancer_siterec3	
nhl_ss_stg	C	cancer registry	see cancer_ss_stg	see cancer_ss_stg	
nhl_ss_stg47	C	cancer registry	see cancer_ss_stg47	see cancer_ss_stg47	
nhl_ss_stgv	C	cancer registry	see cancer_ss_stgv	see cancer_ss_stgv	
nhl_status	C	cancer registry	see cancer_status	see cancer_status	
nhl_tnmclinm	C	cancer registry	see cancer_tnmclinm	see cancer_tnmclinm	
nhl_tnmclinn	C	cancer registry	see cancer_tnmclinn	see cancer_tnmclinn	
nhl_tnmclint	C	cancer registry	see cancer_tnmclint	see cancer_tnmclint	
nhl_tnmpathm	C	cancer registry	see cancer_tnmpathm	see cancer_tnmpathm	
nhl_tnmpathn	C	cancer registry	see cancer_tnmpathn	see cancer_tnmpathn	
nhl_tnmpatht	C	cancer registry	see cancer_tnmpatht	see cancer_tnmpatht	
nhl_xnode	C	cancer registry	see cancer_xnode	see cancer_xnode	
Niacin	N	DietAARP	Niacin – mg	Continuous (range = 0.04 → 807.87)	

Variable Name	Type	Basis	Description	Levels	Graph
NoSize	N	DietAARP derived	Number of foods with no serving size	Continuous (range = 0 → 116)	
NUM_BRBIOP	N	raw	Number of breast biopsies	0 = 0 breast biopsies (*n* = 161,809) 1 = 1 breast biopsy (*n* = 39,383) 2 = 2 breast biopsies (*n* = 12,264) 3 = 3 breast biopsies (*n* = 10,297) 8 = Not applicable – other gender (*n* = 339,671) 9 = Unknown (*n* = 2,983)	
NumErr	N	DietAARP derived	Total number of errors	0 = 0 errors (*n* = 519,775) 1 = 1 error (*n* = 44,508) 2 = 2 errors (*n* = 1,940) 3 = 3 errors (*n* = 177) 4 = 4 errors (*n* = 7)	

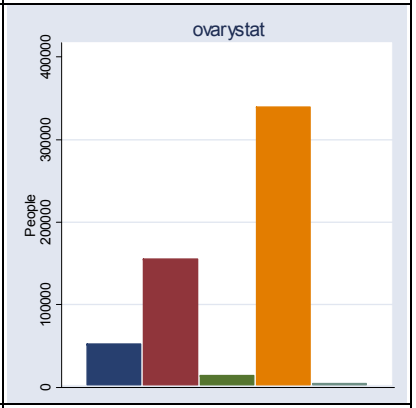
Variable Name	Type	Basis	Description	Levels	Graph
NumWarn	N	DietAARP derived	Total number of warnings	0 = 0 warnings (*n* = 491,805) 1 = 1 warning (*n* = 72,664) 2 = 2 warnings (*n* = 1,911) 3 = 3 warnings (*n* = 27)	
oral_ajcc_stg	C	cancer registry	see cancer_ajcc_stg	see cancer_ajcc_stg	
oral_ajccseer	C	cancer registry	see cancer_ajccseer	see cancer_ajccseer	
oral_behv	C	cancer registry	see cancer_behv	see cancer_behv	
oral_dxconf	C	cancer registry	see cancer_dxconf	see cancer_dxconf	
oral_dxdt	N	cancer registry	see cancer_dxdt	see cancer_dxdt	
oral_grade	C	cancer registry	see cancer_grade	see cancer_grade	
oral_hist	C	cancer registry	see cancer_hist	see cancer_hist	
oral_histv	C	cancer registry	see cancer_histv	see cancer_histv	
oral_lateral	C	cancer registry	see cancer_lateral	see cancer_lateral	
oral_mort	N	cancer registry	see cancer_mort	see cancer_mort	
oral_pnode	C	cancer registry	see cancer_pnode	see cancer_pnode	
oral_seqno	C	cancer registry	see cancer_seqno	see cancer_seqno	
oral_site	C	cancer registry	see cancer_site	see cancer_site	
oral_siterec3	N	cancer registry	see cancer_siterec3	see cancer_siterec3	
oral_ss_stg	C	cancer registry	see cancer_ss_stg	see cancer_ss_stg	
oral_ss_stg47	C	cancer registry	see cancer_ss_stg47	see cancer_ss_stg47	
oral_ss_stgv	C	cancer registry	see cancer_ss_stgv	see cancer_ss_stgv	
oral_status	C	cancer registry	see cancer_status	see cancer_status	
oral_tnmclinm	C	cancer registry	see cancer_tnmclinm	see cancer_tnmclinm	
oral_tnmclinn	C	cancer registry	see cancer_tnmclinn	see cancer_tnmclinn	
oral_tnmclint	C	cancer registry	see cancer_tnmclint	see cancer_tnmclint	
oral_tnmpathm	C	cancer registry	see cancer_tnmpathm	see cancer_tnmpathm	
oral_tnmpathn	C	cancer registry	see cancer_tnmpathn	see cancer_tnmpathn	
oral_tnmpatht	C	cancer registry	see cancer_tnmpatht	see cancer_tnmpatht	
oral_xnode	C	cancer registry	see cancer_xnode	see cancer_xnode	

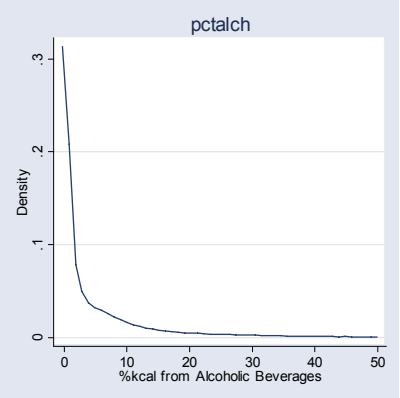
Variable Name	Type	Basis	Description	Levels	Graph
ORALBC_YRS	N	Cleaned from Q47	Years taken oral contraceptives (birth control)	0 = Never (or <1 year) (*n* = 135,353) 1 = 1-4 years (*n* = 39,200) 2 = 5-9 years (*n* = 27,422) 3 = 10+ years (*n* = 21,213) 8 = Not applicable –other gender (*n* = 339,671) 9 = Unknown (*n* = 3,548)	
oralcan	N	cancer registry	see cancercan	see cancercan	
OSTEOPOROSIS	N	Cleaned from Q40E	Self-reported history of osteoporosis	0 = No (*n* = 545,479) 1 = Yes (*n* = 20,928)	
othbil_ajcc_stg	C	cancer registry	see cancer_ajcc_stg	see cancer_ajcc_stg	
othbil_ajccseer	C	cancer registry	see cancer_ajccseer	see cancer_ajccseer	
othbil_behv	C	cancer registry	see cancer_behv	see cancer_behv	
othbil_dxconf	C	cancer registry	see cancer_dxconf	see cancer_dxconf	
othbil_dxdt	N	cancer registry	see cancer_dxdt	see cancer_dxdt	
othbil_grade	C	cancer registry	see cancer_grade	see cancer_grade	
othbil_hist	C	cancer registry	see cancer_hist	see cancer_hist	
othbil_histv	C	cancer registry	see cancer_histv	see cancer_histv	
othbil_lateral	C	cancer registry	see cancer_lateral	see cancer_lateral	
othbil_mort	N	cancer registry	see cancer_mort	see cancer_mort	
othbil_pnode	C	cancer registry	see cancer_pnode	see cancer_pnode	
othbil_seqno	C	cancer registry	see cancer_seqno	see cancer_seqno	
othbil_site	C	cancer registry	see cancer_site	see cancer_site	

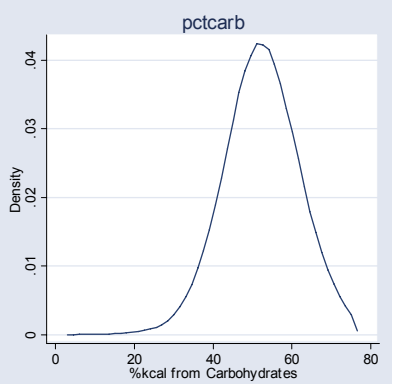
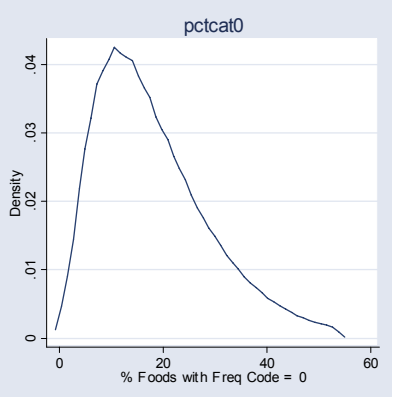
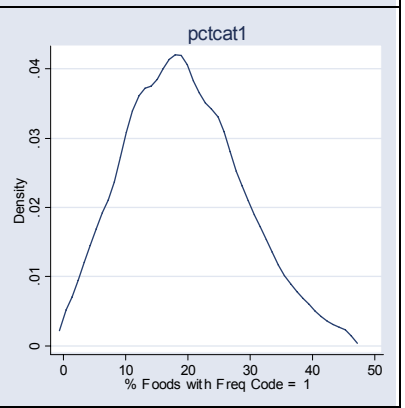
Variable Name	Type	Basis	Description	Levels	Graph
othbil_siterec3	N	cancer registry	see cancer_siterec3	see cancer_siterec3	
othbil_ss_stg	C	cancer registry	see cancer_ss_stg	see cancer_ss_stg	
othbil_ss_stg47	C	cancer registry	see cancer_ss_stg47	see cancer_ss_stg47	
othbil_ss_stgv	C	cancer registry	see cancer_ss_stgv	see cancer_ss_stgv	
othbil_status	C	cancer registry	see cancer_status	see cancer_status	
othbil_tnmclinm	C	cancer registry	see cancer_tnmclinm	see cancer_tnmclinm	
othbil_tnmclinn	C	cancer registry	see cancer_tnmclinn	see cancer_tnmclinn	
othbil_tnmclint	C	cancer registry	see cancer_tnmclint	see cancer_tnmclint	
othbil_tnmpathm	C	cancer registry	see cancer_tnmpathm	see cancer_tnmpathm	
othbil_tnmpathn	C	cancer registry	see cancer_tnmpathn	see cancer_tnmpathn	
othbil_tnmpatht	C	cancer registry	see cancer_tnmpatht	see cancer_tnmpatht	
othbil_xnode	C	cancer registry	see cancer_xnode	see cancer_xnode	
othbilcan	N	cancer registry	see cancercan	see cancercan	
othdig_ajcc_stg	C	cancer registry	see cancer_ajcc_stg	see cancer_ajcc_stg	
othdig_ajccseer	C	cancer registry	see cancer_ajccseer	see cancer_ajccseer	
othdig_behv	C	cancer registry	see cancer_behv	see cancer_behv	
othdig_dxconf	C	cancer registry	see cancer_dxconf	see cancer_dxconf	
othdig_dxdt	N	cancer registry	see cancer_dxdt	see cancer_dxdt	
othdig_grade	C	cancer registry	see cancer_grade	see cancer_grade	
othdig_hist	C	cancer registry	see cancer_hist	see cancer_hist	
othdig_histv	C	cancer registry	see cancer_histv	see cancer_histv	
othdig_lateral	C	cancer registry	see cancer_lateral	see cancer_lateral	
othdig_mort	N	cancer registry	see cancer_mort	see cancer_mort	
othdig_pnode	C	cancer registry	see cancer_pnode	see cancer_pnode	
othdig_seqno	C	cancer registry	see cancer_seqno	see cancer_seqno	
othdig_site	C	cancer registry	see cancer_site	see cancer_site	
othdig_siterec3	N	cancer registry	see cancer_siterec3	see cancer_siterec3	
othdig_ss_stg	C	cancer registry	see cancer_ss_stg	see cancer_ss_stg	
othdig_ss_stg47	C	cancer registry	see cancer_ss_stg47	see cancer_ss_stg47	
othdig_ss_stgv	C	cancer registry	see cancer_ss_stgv	see cancer_ss_stgv	
othdig_status	C	cancer registry	see cancer_status	see cancer_status	
othdig_tnmclinm	C	cancer registry	see cancer_tnmclinm	see cancer_tnmclinm	
othdig_tnmclinn	C	cancer registry	see cancer_tnmclinn	see cancer_tnmclinn	
othdig_tnmclint	C	cancer registry	see cancer_tnmclint	see cancer_tnmclint	
othdig_tnmpathm	C	cancer registry	see cancer_tnmpathm	see cancer_tnmpathm	
othdig_tnmpathn	C	cancer registry	see cancer_tnmpathn	see cancer_tnmpathn	
othdig_tnmpatht	C	cancer registry	see cancer_tnmpatht	see cancer_tnmpatht	
othdig_xnode	C	cancer registry	see cancer_xnode	see cancer_xnode	
othdigcan	N	cancer registry	see cancercan	see cancercan	

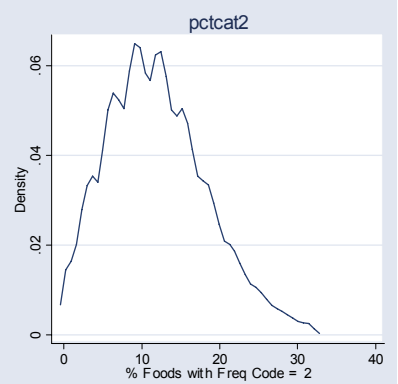
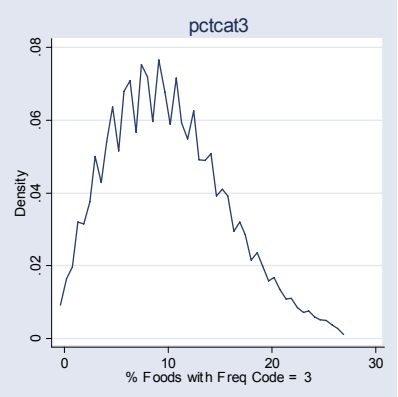
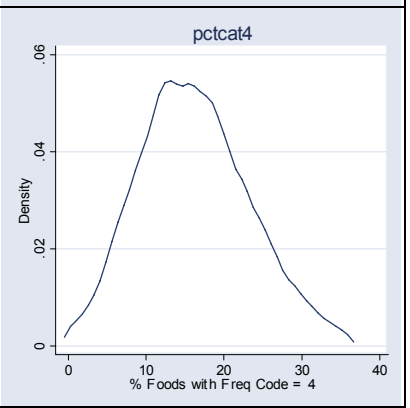
Variable Name	Type	Basis	Description	Levels	Graph
otherleuk	N	cancer registry	see cancercan	see cancercan	
otherleuk_ajcc_stg	C	cancer registry	see cancer_ajcc_stg	see cancer_ajcc_stg	
otherleuk_ajccseer	C	cancer registry	see cancer_ajccseer	see cancer_ajccseer	
otherleuk_behv	C	cancer registry	see cancer_behv	see cancer_behv	
otherleuk_dxconf	C	cancer registry	see cancer_dxconf	see cancer_dxconf	
otherleuk_dxdt	N	cancer registry	see cancer_dxdt	see cancer_dxdt	
otherleuk_grade	C	cancer registry	see cancer_grade	see cancer_grade	
otherleuk_hist	C	cancer registry	see cancer_hist	see cancer_hist	
otherleuk_histv	C	cancer registry	see cancer_histv	see cancer_histv	
otherleuk_lateral	C	cancer registry	see cancer_lateral	see cancer_lateral	
otherleuk_mort	N	cancer registry	see cancer_mort	see cancer_mort	
otherleuk_pnode	C	cancer registry	see cancer_pnode	see cancer_pnode	
otherleuk_seqno	C	cancer registry	see cancer_seqno	see cancer_seqno	
otherleuk_site	C	cancer registry	see cancer_site	see cancer_site	
otherleuk_siterec3	N	cancer registry	see cancer_siterec3	see cancer_siterec3	
otherleuk_ss_stg	C	cancer registry	see cancer_ss_stg	see cancer_ss_stg	
otherleuk_ss_stg47	C	cancer registry	see cancer_ss_stg47	see cancer_ss_stg47	
otherleuk_ss_stgv	C	cancer registry	see cancer_ss_stgv	see cancer_ss_stgv	
otherleuk_status	C	cancer registry	see cancer_status	see cancer_status	
otherleuk_tnmclinm	C	cancer registry	see cancer_tnmclinm	see cancer_tnmclinm	
otherleuk_tnmclinn	C	cancer registry	see cancer_tnmclinn	see cancer_tnmclinn	
otherleuk_tnmclint	C	cancer registry	see cancer_tnmclint	see cancer_tnmclint	
otherleuk_tnmpathm	C	cancer registry	see cancer_tnmpathm	see cancer_tnmpathm	
otherleuk_tnmpathn	C	cancer registry	see cancer_tnmpathn	see cancer_tnmpathn	
otherleuk_tnmpatht	C	cancer registry	see cancer_tnmpatht	see cancer_tnmpatht	
otherleuk_xnode	C	cancer registry	see cancer_xnode	see cancer_xnode	
othfem_ajcc_stg	C	cancer registry	see cancer_ajcc_stg	see cancer_ajcc_stg	
othfem_ajccseer	C	cancer registry	see cancer_ajccseer	see cancer_ajccseer	
othfem_behv	C	cancer registry	see cancer_behv	see cancer_behv	
othfem_dxconf	C	cancer registry	see cancer_dxconf	see cancer_dxconf	
othfem_dxdt	N	cancer registry	see cancer_dxdt	see cancer_dxdt	
othfem_grade	C	cancer registry	see cancer_grade	see cancer_grade	
othfem_hist	C	cancer registry	see cancer_hist	see cancer_hist	
othfem_histv	C	cancer registry	see cancer_histv	see cancer_histv	
othfem_lateral	C	cancer registry	see cancer_lateral	see cancer_lateral	
othfem_mort	N	cancer registry	see cancer_mort	see cancer_mort	
othfem_pnode	C	cancer registry	see cancer_pnode	see cancer_pnode	
othfem_seqno	C	cancer registry	see cancer_seqno	see cancer_seqno	
othfem_site	C	cancer registry	see cancer_site	see cancer_site	

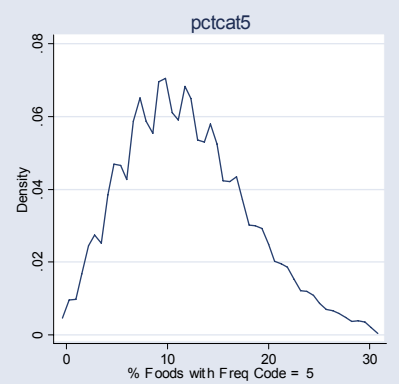
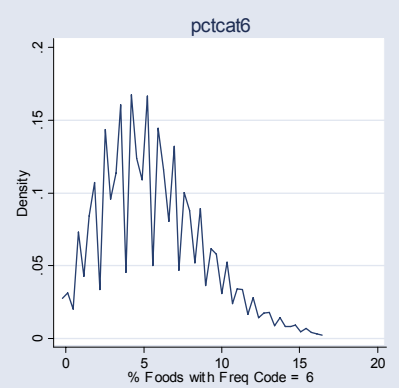
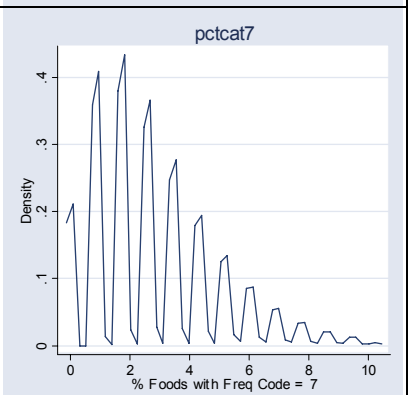
Variable Name	Type	Basis	Description	Levels	Graph
othfem_siterec3	N	cancer registry	see cancer_siterec3	see cancer_siterec3	
othfem_ss_stg	C	cancer registry	see cancer_ss_stg	see cancer_ss_stg	
othfem_ss_stg47	C	cancer registry	see cancer_ss_stg47	see cancer_ss_stg47	
othfem_ss_stgv	C	cancer registry	see cancer_ss_stgv	see cancer_ss_stgv	
othfem_status	C	cancer registry	see cancer_status	see cancer_status	
othfem_tnmclinm	C	cancer registry	see cancer_tnmclinm	see cancer_tnmclinm	
othfem_tnmclinn	C	cancer registry	see cancer_tnmclinn	see cancer_tnmclinn	
othfem_tnmclint	C	cancer registry	see cancer_tnmclint	see cancer_tnmclint	
othfem_tnmpathm	C	cancer registry	see cancer_tnmpathm	see cancer_tnmpathm	
othfem_tnmpathn	C	cancer registry	see cancer_tnmpathn	see cancer_tnmpathn	
othfem_tnmpatht	C	cancer registry	see cancer_tnmpatht	see cancer_tnmpatht	
othfem_xnode	C	cancer registry	see cancer_xnode	see cancer_xnode	
othfemcan	N	cancer registry	see cancercan	see cancercan	
othmale_ajcc_stg	C	cancer registry	see cancer_ajcc_stg	see cancer_ajcc_stg	
othmale_ajccseer	C	cancer registry	see cancer_ajccseer	see cancer_ajccseer	
othmale_behv	C	cancer registry	see cancer_behv	see cancer_behv	
othmale_dxconf	C	cancer registry	see cancer_dxconf	see cancer_dxconf	
othmale_dxdt	N	cancer registry	see cancer_dxdt	see cancer_dxdt	
othmale_grade	C	cancer registry	see cancer_grade	see cancer_grade	
othmale_hist	C	cancer registry	see cancer_hist	see cancer_hist	
othmale_histv	C	cancer registry	see cancer_histv	see cancer_histv	
othmale_lateral	C	cancer registry	see cancer_lateral	see cancer_lateral	
othmale_mort	N	cancer registry	see cancer_mort	see cancer_mort	
othmale_pnode	C	cancer registry	see cancer_pnode	see cancer_pnode	
othmale_seqno	C	cancer registry	see cancer_seqno	see cancer_seqno	
othmale_site	C	cancer registry	see cancer_site	see cancer_site	
othmale_siterec3	N	cancer registry	see cancer_siterec3	see cancer_siterec3	
othmale_ss_stg	C	cancer registry	see cancer_ss_stg	see cancer_ss_stg	
othmale_ss_stg47	C	cancer registry	see cancer_ss_stg47	see cancer_ss_stg47	
othmale_ss_stgv	C	cancer registry	see cancer_ss_stgv	see cancer_ss_stgv	
othmale_status	C	cancer registry	see cancer_status	see cancer_status	
othmale_tnmclinm	C	cancer registry	see cancer_tnmclinm	see cancer_tnmclinm	
othmale_tnmclinn	C	cancer registry	see cancer_tnmclinn	see cancer_tnmclinn	
othmale_tnmclint	C	cancer registry	see cancer_tnmclint	see cancer_tnmclint	
othmale_tnmpathm	C	cancer registry	see cancer_tnmpathm	see cancer_tnmpathm	
othmale_tnmpathn	C	cancer registry	see cancer_tnmpathn	see cancer_tnmpathn	
othmale_tnmpatht	C	cancer registry	see cancer_tnmpatht	see cancer_tnmpatht	
othmale_xnode	C	cancer registry	see cancer_xnode	see cancer_xnode	
othmalecan	N	cancer registry	see cancercan	see cancercan	

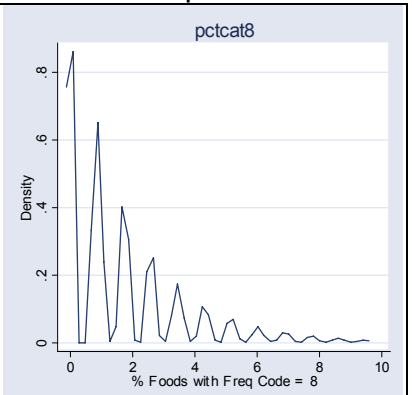
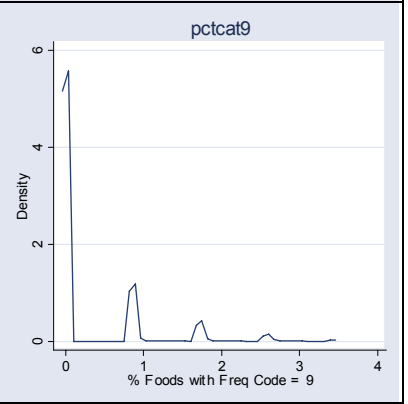
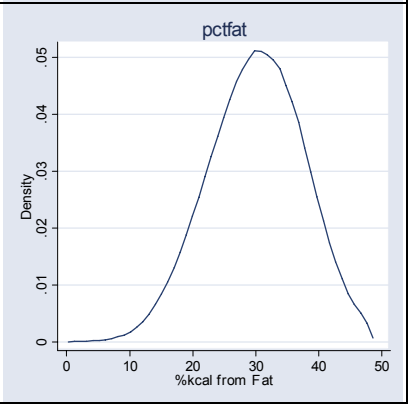
Variable Name	Type	Basis	Description	Levels	Graph
ovary_ajcc_stg	C	cancer registry	see cancer_ajcc_stg	see cancer_ajcc_stg	
ovary_ajccseer	C	cancer registry	see cancer_ajccseer	see cancer_ajccseer	
ovary_behv	C	cancer registry	see cancer_behv	see cancer_behv	
ovary_dxconf	C	cancer registry	see cancer_dxconf	see cancer_dxconf	
ovary_dxdt	N	cancer registry	see cancer_dxdt	see cancer_dxdt	
ovary_grade	C	cancer registry	see cancer_grade	see cancer_grade	
ovary_hist	C	cancer registry	see cancer_hist	see cancer_hist	
ovary_histv	C	cancer registry	see cancer_histv	see cancer_histv	
ovary_lateral	C	cancer registry	see cancer_lateral	see cancer_lateral	
ovary_mort	N	cancer registry	see cancer_mort	see cancer_mort	
ovary_pnode	C	cancer registry	see cancer_pnode	see cancer_pnode	
ovary_seqno	C	cancer registry	see cancer_seqno	see cancer_seqno	
ovary_site	C	cancer registry	see cancer_site	see cancer_site	
ovary_siterec3	N	cancer registry	see cancer_siterec3	see cancer_siterec3	
ovary_ss_stg	C	cancer registry	see cancer_ss_stg	see cancer_ss_stg	
ovary_ss_stg47	C	cancer registry	see cancer_ss_stg47	see cancer_ss_stg47	
ovary_ss_stgv	C	cancer registry	see cancer_ss_stgv	see cancer_ss_stgv	
ovary_status	C	cancer registry	see cancer_status	see cancer_status	
ovary_tnmclinm	C	cancer registry	see cancer_tnmclinm	see cancer_tnmclinm	
ovary_tnmclinn	C	cancer registry	see cancer_tnmclinn	see cancer_tnmclinn	
ovary_tnmclint	C	cancer registry	see cancer_tnmclint	see cancer_tnmclint	
ovary_tnmpathm	C	cancer registry	see cancer_tnmpathm	see cancer_tnmpathm	
ovary_tnmpathn	C	cancer registry	see cancer_tnmpathn	see cancer_tnmpathn	
ovary_tnmpatht	C	cancer registry	see cancer_tnmpatht	see cancer_tnmpatht	
ovary_xnode	C	cancer registry	see cancer_xnode	see cancer_xnode	
ovarycan	N	cancer registry	see cancercan	see cancercan	
OVARYSTAT	N	Cleaned from Q53	Ovary status	1 = Both ovaries removed (*n* = 52,499) 2 = Both ovaries intact (*n* = 155,254) 3 = Other surgery to ovaries (*n* = 14,434) 8 = Not applicable – other gender (*n* = 339,671) 9 = Unknown (*n* = 4,549)	
pancreas_ajcc_stg	C	cancer registry	see cancer_ajcc_stg	see cancer_ajcc_stg	

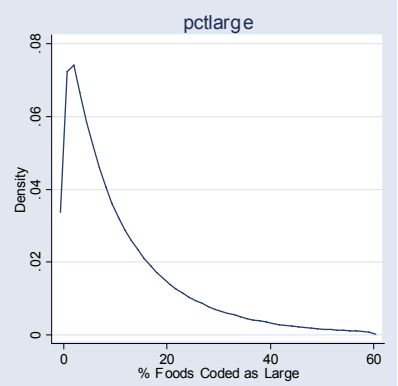
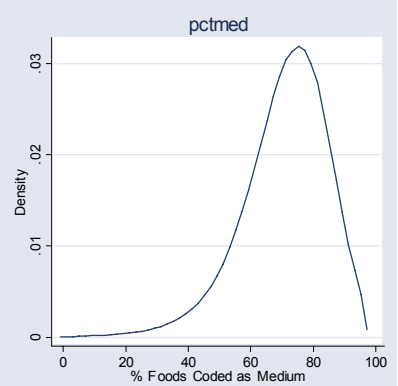
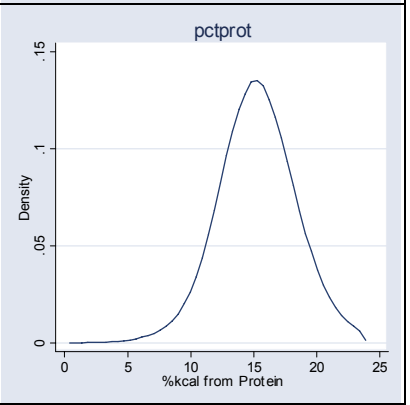
Variable Name	Type	Basis	Description	Levels	Graph
pancreas_ajccseer	C	cancer registry	see cancer_ajccseer	see cancer_ajccseer	
pancreas_behv	C	cancer registry	see cancer_behv	see cancer_behv	
pancreas_dxconf	C	cancer registry	see cancer_dxconf	see cancer_dxconf	
pancreas_dxdt	N	cancer registry	see cancer_dxdt	see cancer_dxdt	
pancreas_grade	C	cancer registry	see cancer_grade	see cancer_grade	
pancreas_hist	C	cancer registry	see cancer_hist	see cancer_hist	
pancreas_histv	C	cancer registry	see cancer_histv	see cancer_histv	
pancreas_lateral	C	cancer registry	see cancer_lateral	see cancer_lateral	
pancreas_mort	N	cancer registry	see cancer_mort	see cancer_mort	
pancreas_pnode	C	cancer registry	see cancer_pnode	see cancer_pnode	
pancreas_seqno	C	cancer registry	see cancer_seqno	see cancer_seqno	
pancreas_site	C	cancer registry	see cancer_site	see cancer_site	
pancreas_siterec3	N	cancer registry	see cancer_siterec3	see cancer_siterec3	
pancreas_ss_stg	C	cancer registry	see cancer_ss_stg	see cancer_ss_stg	
pancreas_ss_stg47	C	cancer registry	see cancer_ss_stg47	see cancer_ss_stg47	
pancreas_ss_stgv	C	cancer registry	see cancer_ss_stgv	see cancer_ss_stgv	
pancreas_status	C	cancer registry	see cancer_status	see cancer_status	
pancreas_tnmclinm	C	cancer registry	see cancer_tnmclinm	see cancer_tnmclinm	
pancreas_tnmclinn	C	cancer registry	see cancer_tnmclinn	see cancer_tnmclinn	
pancreas_tnmclint	C	cancer registry	see cancer_tnmclint	see cancer_tnmclint	
pancreas_tnmpathm	C	cancer registry	see cancer_tnmpathm	see cancer_tnmpathm	
pancreas_tnmpathn	C	cancer registry	see cancer_tnmpathn	see cancer_tnmpathn	
pancreas_tnmpatht	C	cancer registry	see cancer_tnmpatht	see cancer_tnmpatht	
pancreas_xnode	C	cancer registry	see cancer_xnode	see cancer_xnode	
pancreascan	N	cancer registry	see cancercan	see cancercan	
PctAlch	N	DietAARP derived	Pct Kcal – alcoholic beverages	Continuous (range = 0 → 98.28)	

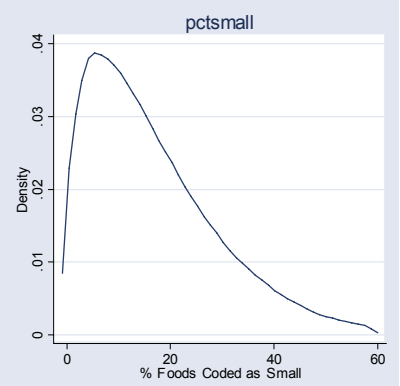
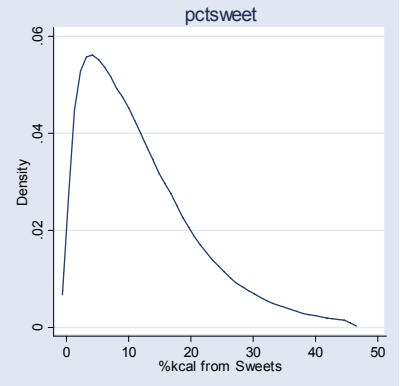
Variable Name	Type	Basis	Description	Levels	Graph
PctCarb	N	DietAARP derived	Pct Kcal – carbohydrates	Continuous (range = 3.61 → 100.2)	
PctCat0	N	DietAARP derived	Pct of foods with freq code = 0	Continuous (range = 0 → 91.45)	
PctCat1	N	DietAARP derived	Pct of foods with freq code = 1	Continuous (range = 0 → 94.44)	

Variable Name	Type	Basis	Description	Levels	Graph
PctCat2	N	DietAARP derived	Pct of foods with freq code = 2	Continuous (range = 0 → 86.46)	
PctCat3	N	DietAARP derived	Pct of foods with freq code = 3	Continuous (range = 0 → 76.07)	
PctCat4	N	DietAARP derived	Pct of foods with freq code = 4	Continuous (range = 0 → 93.18)	

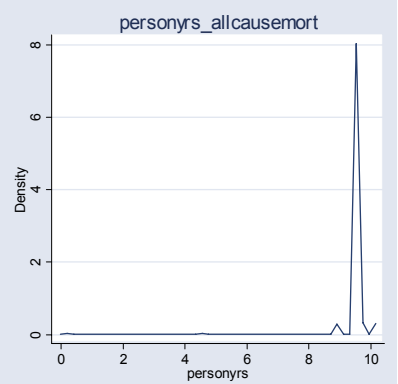
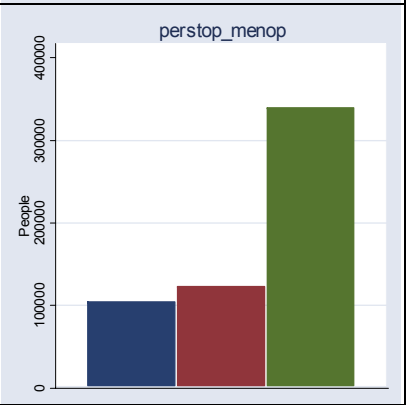
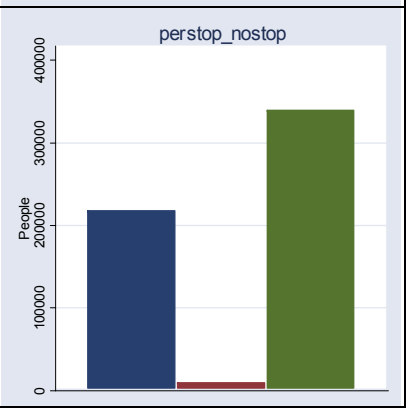
Variable Name	Type	Basis	Description	Levels	Graph
PctCat5	N	DietAARP derived	Pct of foods with freq code = 5	Continuous (range = 0 → 86.54)	
PctCat6	N	DietAARP derived	Pct of foods with freq code = 6	Continuous (range = 0 → 50.45)	
PctCat7	N	DietAARP derived	Pct of foods with freq code = 7	Continuous (range = 0 → 82.91)	

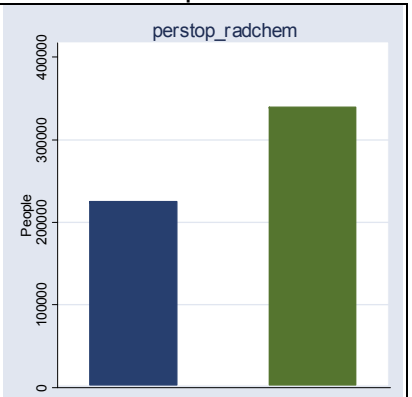
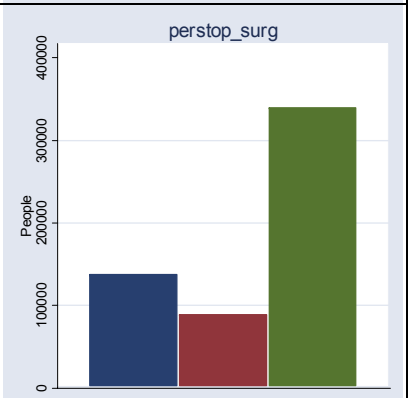
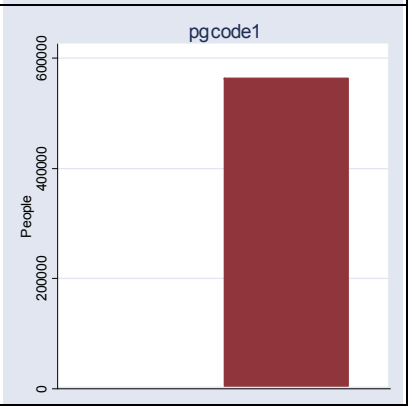
Variable Name	Type	Basis	Description	Levels	Graph
PctCat8	N	DietAARP derived	Pct of foods with freq code = 8	Continuous (range = 0 → 95.65)	
PctCat9	N	DietAARP derived	Pct of foods with freq code = 9	Continuous (range = 0 → 96.49)	
PctFat	N	DietAARP derived	Pct Kcal - Fat	Continuous (range = 0.7 → 87.31)	

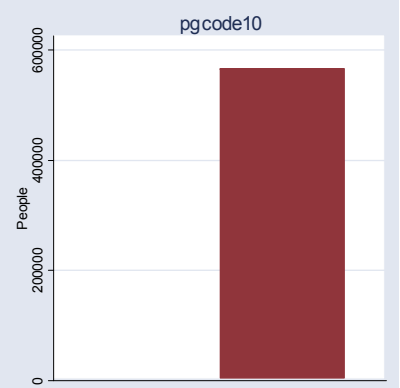
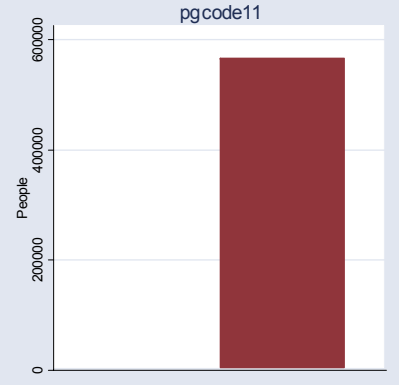
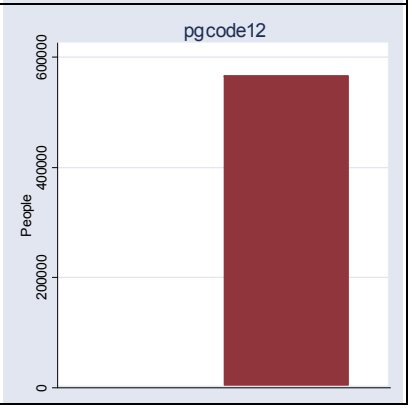
Variable Name	Type	Basis	Description	Levels	Graph
PctLarge	N	DietAARP derived	Percent of foods with a non-zero frequency coded or imputed as large	Continuous (range = 0 → 100)	
PctMed	N	DietAARP derived	Percent of foods with a non-zero frequency coded or imputed as medium	Continuous (range = 0 → 100)	
PctProt	N	DietAARP derived	Pct Kcal – Protein	Continuous (range = 0.6 → 53.35)	

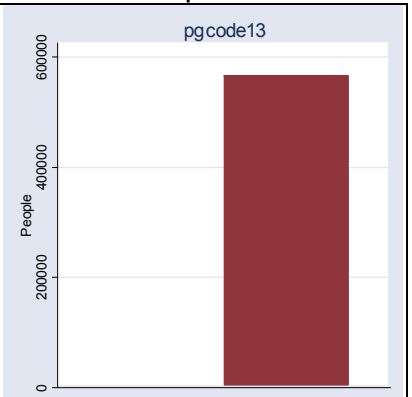
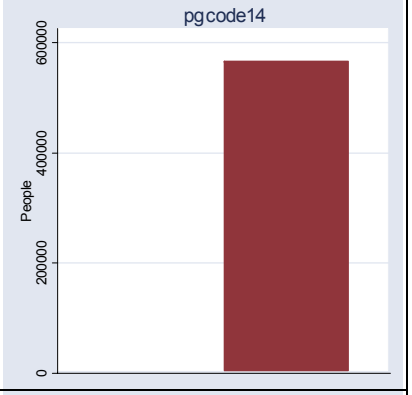
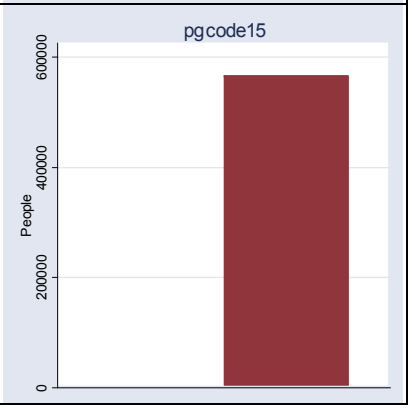
Variable Name	Type	Basis	Description	Levels	Graph
PctSmall	N	DietAARP derived	Percent of foods with a non-zero frequency coded or imputed as small	Continuous (range = 0 → 100)	
PctSweet	N	DietAARP derived	Pct Kcal - sweets	Continuous (range = 0 → 92.71)	
penis_ajcc_stg	C	cancer registry	see cancer_ajcc_stg	see cancer_ajcc_stg	
penis_ajccseer	C	cancer registry	see cancer_ajccseer	see cancer_ajccseer	
penis_behv	C	cancer registry	see cancer_behv	see cancer_behv	
penis_dxconf	C	cancer registry	see cancer_dxconf	see cancer_dxconf	
penis_dxdt	N	cancer registry	see cancer_dxdt	see cancer_dxdt	
penis_grade	C	cancer registry	see cancer_grade	see cancer_grade	
penis_hist	C	cancer registry	see cancer_hist	see cancer_hist	
penis_histv	C	cancer registry	see cancer_histv	see cancer_histv	
penis_lateral	C	cancer registry	see cancer_lateral	see cancer_lateral	
penis_mort	N	cancer registry	see cancer_mort	see cancer_mort	
penis_pnode	C	cancer registry	see cancer_pnode	see cancer_pnode	
penis_seqno	C	cancer registry	see cancer_seqno	see cancer_seqno	
penis_site	C	cancer registry	see cancer_site	see cancer_site	
penis_siterec3	N	cancer registry	see cancer_siterec3	see cancer_siterec3	

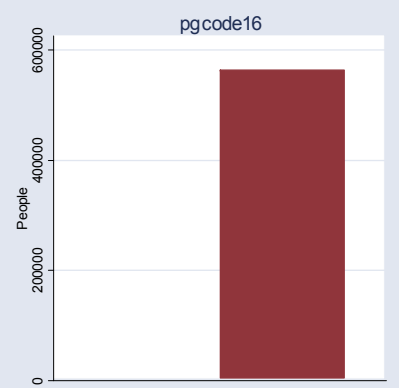
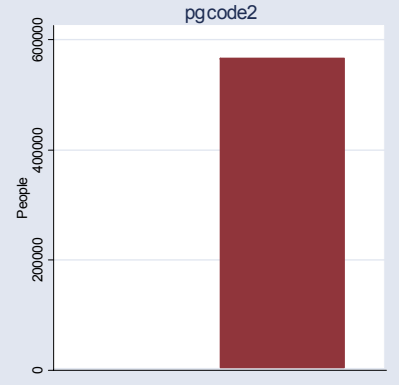
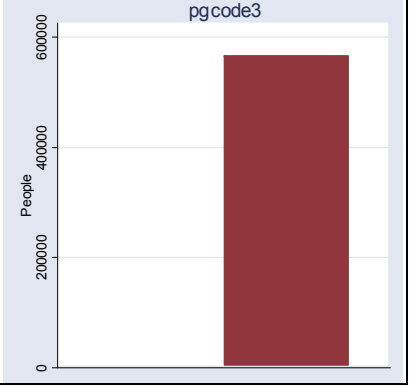
Variable Name	Type	Basis	Description	Levels	Graph
penis_ss_stg	C	cancer registry	see cancer_ss_stg	see cancer_ss_stg	
penis_ss_stg47	C	cancer registry	see cancer_ss_stg47	see cancer_ss_stg47	
penis_ss_stgv	C	cancer registry	see cancer_ss_stgv	see cancer_ss_stgv	
penis_status	C	cancer registry	see cancer_status	see cancer_status	
penis_tnmclinm	C	cancer registry	see cancer_tnmclinm	see cancer_tnmclinm	
penis_tnmclinn	C	cancer registry	see cancer_tnmclinn	see cancer_tnmclinn	
penis_tnmclint	C	cancer registry	see cancer_tnmclint	see cancer_tnmclint	
penis_tnmpathm	C	cancer registry	see cancer_tnmpathm	see cancer_tnmpathm	
penis_tnmpathn	C	cancer registry	see cancer_tnmpathn	see cancer_tnmpathn	
penis_tnmpatht	C	cancer registry	see cancer_tnmpatht	see cancer_tnmpatht	
penis_xnode	C	cancer registry	see cancer_xnode	see cancer_xnode	
peniscan	N	cancer registry	see cancercan	see cancercan	
perito_ajcc_stg	C	cancer registry	see cancer_ajcc_stg	see cancer_ajcc_stg	
perito_ajccseer	C	cancer registry	see cancer_ajccseer	see cancer_ajccseer	
perito_behv	C	cancer registry	see cancer_behv	see cancer_behv	
perito_dxconf	C	cancer registry	see cancer_dxconf	see cancer_dxconf	
perito_dxdt	N	cancer registry	see cancer_dxdt	see cancer_dxdt	
perito_grade	C	cancer registry	see cancer_grade	see cancer_grade	
perito_hist	C	cancer registry	see cancer_hist	see cancer_hist	
perito_histv	C	cancer registry	see cancer_histv	see cancer_histv	
perito_lateral	C	cancer registry	see cancer_lateral	see cancer_lateral	
perito_mort	N	cancer registry	see cancer_mort	see cancer_mort	
perito_pnode	C	cancer registry	see cancer_pnode	see cancer_pnode	
perito_seqno	C	cancer registry	see cancer_seqno	see cancer_seqno	
perito_site	C	cancer registry	see cancer_site	see cancer_site	
perito_siterec3	N	cancer registry	see cancer_siterec3	see cancer_siterec3	
perito_ss_stg	C	cancer registry	see cancer_ss_stg	see cancer_ss_stg	
perito_ss_stg47	C	cancer registry	see cancer_ss_stg47	see cancer_ss_stg47	
perito_ss_stgv	C	cancer registry	see cancer_ss_stgv	see cancer_ss_stgv	
perito_status	C	cancer registry	see cancer_status	see cancer_status	
perito_tnmclinm	C	cancer registry	see cancer_tnmclinm	see cancer_tnmclinm	
perito_tnmclinn	C	cancer registry	see cancer_tnmclinn	see cancer_tnmclinn	
perito_tnmclint	C	cancer registry	see cancer_tnmclint	see cancer_tnmclint	
perito_tnmpathm	C	cancer registry	see cancer_tnmpathm	see cancer_tnmpathm	
perito_tnmpathn	C	cancer registry	see cancer_tnmpathn	see cancer_tnmpathn	
perito_tnmpatht	C	cancer registry	see cancer_tnmpatht	see cancer_tnmpatht	
perito_xnode	C	cancer registry	see cancer_xnode	see cancer_xnode	
peritocan	N	cancer registry	see cancercan	see cancercan	

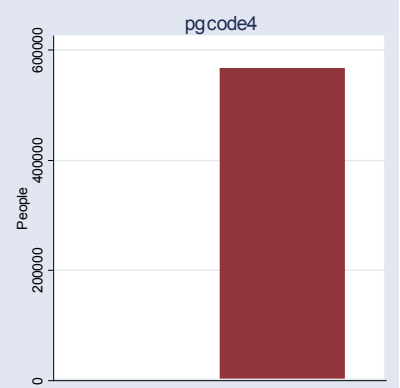
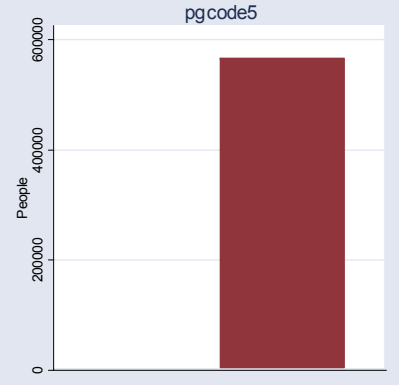
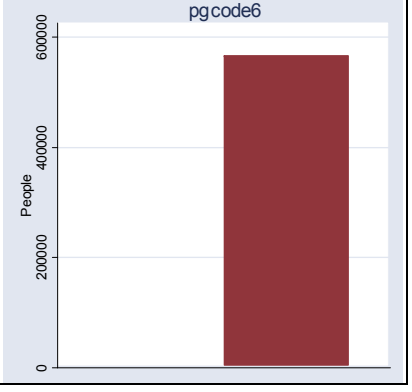
Variable Name	Type	Basis	Description	Levels	Graph
personyrs_allcausemort	N	cancer registry	Calculated person years from entry date to either (1) DOD or (2) end of study (12/31/00).	Continuous (range = 0 → 10.16)	
PERSTOP_MENOP	N	Cleaned from Q51B	Did periods stop because of natural menopause?	0 = No (*n* = 104,020) 1 = Yes (*n* = 122,716) 8 = Not applicable – other gender (*n* = 339,671) 9 = Unknown (*n* = 0)	
PERSTOP_NOSTOP	N	Cleaned from Q51A	Periods did not stop?	0 = No, periods stopped (*n* = 217,465) 1 = Yes, periods did not stop (*n* = 9,271) 8 = Not applicable – other gender (*n* = 339,671) 9 = Unknown (*n* = 0)	

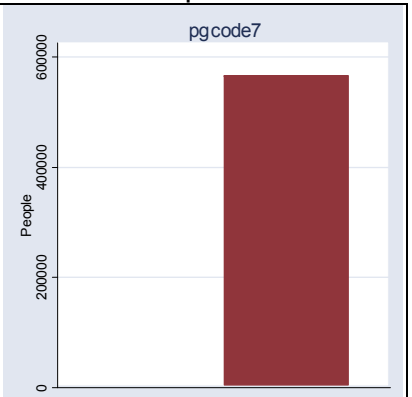
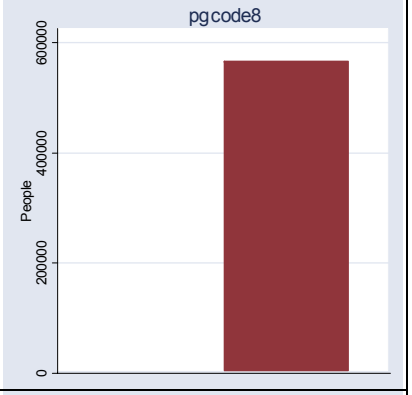
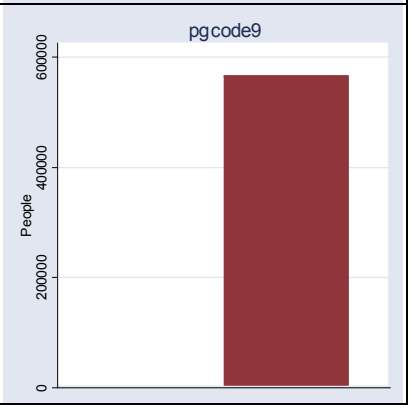
Variable Name	Type	Basis	Description	Levels	Graph
PERSTOP_RADCHEM	N	Cleaned from Q51D	Did periods stop because of radiation or chemotherapy?	0 = No (*n* = 225,342) 1 = Yes (*n* = 1,394) 8 = Not applicable – other gender (*n* = 339,671) 9 = Unknown (*n* = 0)	
PERSTOP_SURG	N	Cleaned from Q51C	Did periods stop because of surgery?	0 = No (*n* = 138,005) 1 = Yes (*n* = 88,731) 8 = Not applicable – other gender (*n* = 339,671) 9 = Unknown (*n* = 0)	
PgCode1	N	DietAARP derived	Page 1 coded (not skipped)	0 = Skipped (*n* = 2,376) 1 = Not skipped (*n* = 564,031)	

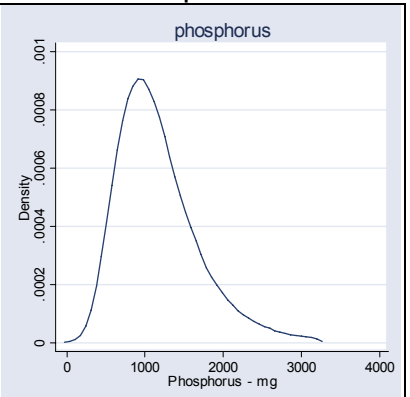
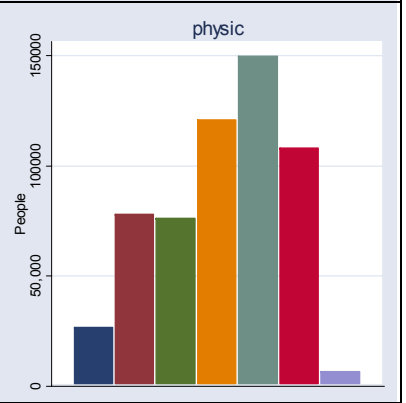
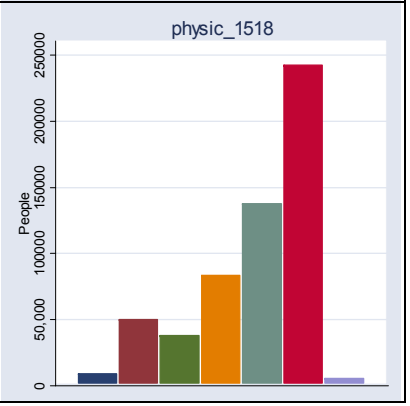
Variable Name	Type	Basis	Description	Levels	Graph
PgCode10	N	DietAARP derived	Page 10 coded (not skipped)	0 = Skipped (*n* = 698) 1 = Not skipped (*n* = 565,709)	
PgCode11	N	DietAARP derived	Page 11 coded (not skipped)	0 = Skipped (*n* = 440) 1 = Not skipped (*n* = 565,967)	
PgCode12	N	DietAARP derived	Page 12 coded (not skipped)	0 = Skipped (*n* = 319) 1 = Not skipped (*n* = 566,088)	

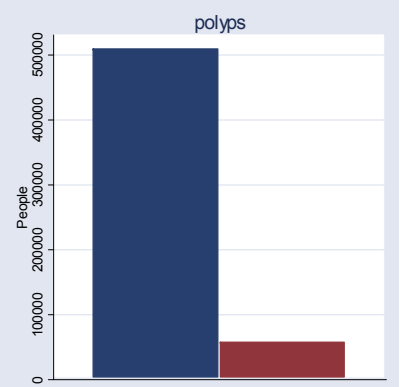
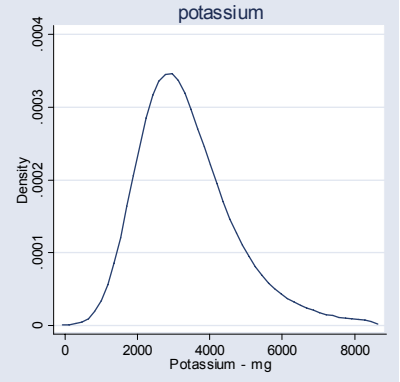
Variable Name	Type	Basis	Description	Levels	Graph
PgCode13	N	DietAARP derived	Page 13 coded (not skipped)	0 = Skipped (*n* = 322) 1 = Not skipped (*n* = 566,085)	
PgCode14	N	DietAARP derived	Page 14 coded (not skipped)	0 = Skipped (*n* = 594) 1 = Not skipped (*n* = 565,813)	
PgCode15	N	DietAARP derived	Page 15 coded (not skipped)	0 = Skipped (*n* = 541) 1 = Not skipped (*n* = 565,866)	

Variable Name	Type	Basis	Description	Levels	Graph
PgCode16	N	DietAARP derived	Page 16 coded (not skipped)	0 = Skipped (*n* = 2,561) 1 = Not skipped (*n* = 563,846)	
PgCode2	N	DietAARP derived	Page 2 coded (not skipped)	0 = Skipped (*n* = 261) 1 = Not skipped (*n* = 566,146)	
PgCode3	N	DietAARP derived	Page 3 coded (not skipped)	0 = Skipped (*n* = 349) 1 = Not skipped (*n* = 566,058)	

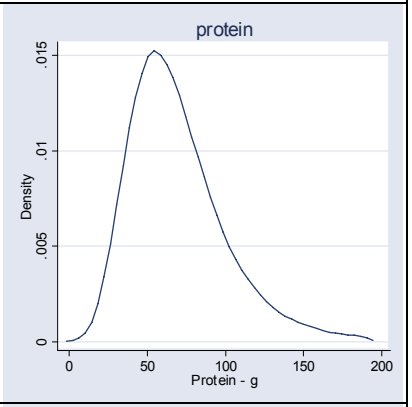
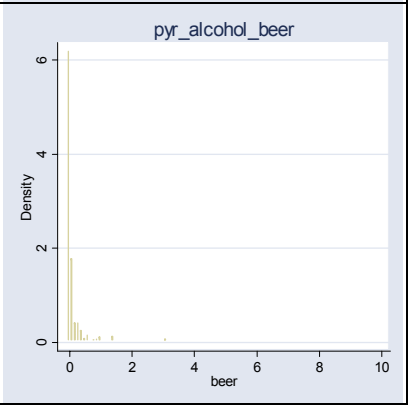
Variable Name	Type	Basis	Description	Levels	Graph
PgCode4	N	DietAARP derived	Page 4 coded (not skipped)	0 = Skipped (*n* = 270) 1 = Not skipped (*n* = 566,137)	
PgCode5	N	DietAARP derived	Page 5 coded (not skipped)	0 = Skipped (*n* = 254) 1 = Not skipped (*n* = 566,153)	
PgCode6	N	DietAARP derived	Page 6 coded (not skipped)	0 = Skipped (*n* = 543) 1 = Not skipped (*n* = 565,864)	

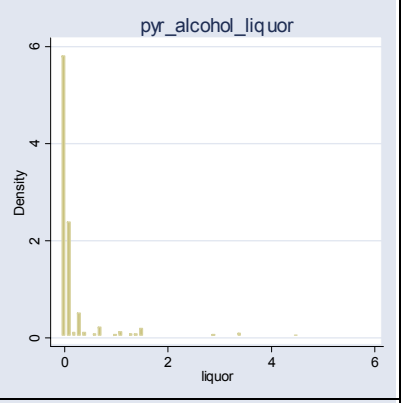
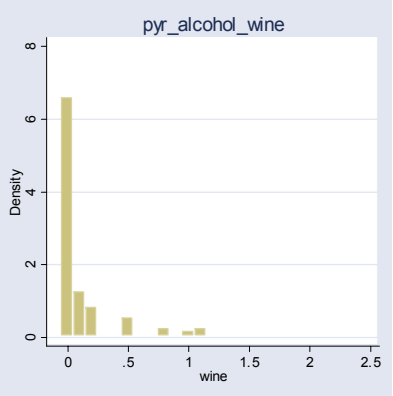
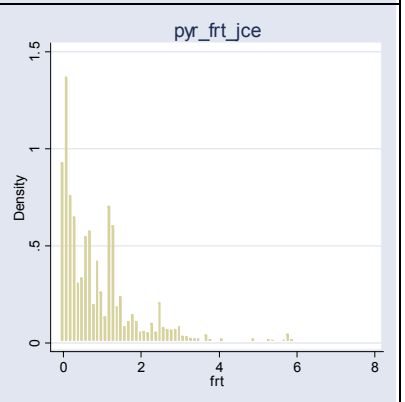
Variable Name	Type	Basis	Description	Levels	Graph
PgCode7	N	DietAARP derived	Page 7 coded (not skipped)	0 = Skipped (*n* = 283) 1 = Not skipped (*n* = 566,124)	
PgCode8	N	DietAARP derived	Page 8 coded (not skipped)	0 = Skipped (*n* = 633) 1 = Not skipped (*n* = 565,774)	
PgCode9	N	DietAARP derived	Page 9 coded (not skipped)	0 = Skipped (*n* = 349) 1 = Not skipped (*n* = 566,058)	

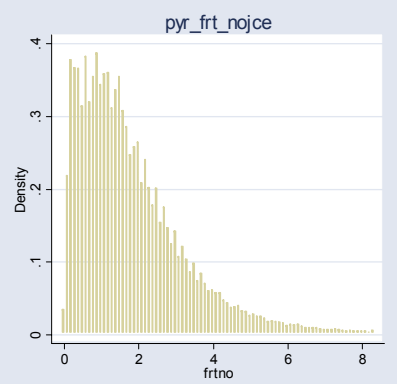
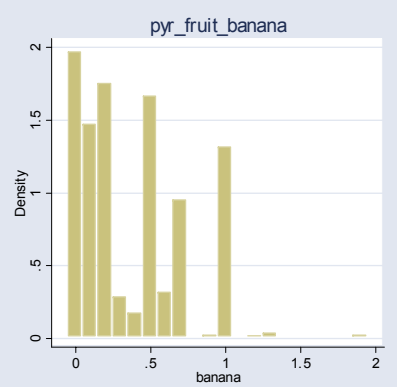
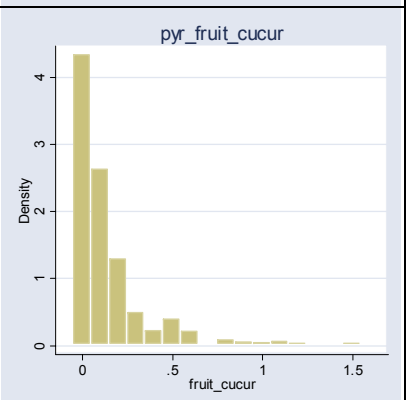
Variable Name	Type	Basis	Description	Levels	Graph
Phosphorus	N	DietAARP derived	Phosphorus – mg	Continuous (range = 3.46 → 43,824.79)	
PHYSIC	N	Cleaned from Q32	Physical activity ≥ 20 minutes (in the past 12 months) that caused increases in breathing or heart rate, or worked up a sweat.	0 = Never (*n* = 26,772) 1 = Rarely (*n* = 78,085) 2 = 1-3 times per month (*n* = 76,365) 3 = 1-2 times per week (*n* = 120,772) 4 = 3-4 times per week (*n* = 149,715) 5 = 5 or more times per week (*n* = 108,189) 9 = Unknown (*n* = 6,509)	
PHYSIC_1518	N	Cleaned from Q33	Physical activity ≥ 20 minutes (ages 15-18 years) that caused increases in breathing or heart rate, or worked up a sweat.	0 = Never (*n* = 9,006) 1 = Rarely (*n* = 50,275) 2 = 1-3 times per month (*n* = 38,017) 3 = 1-2 times per week (*n* = 83,422) 4 = 3-4 times per week (*n* = 137,610) 5 = 5 or more times per week (*n* = 242,643) 9 = Unknown (*n* = 5,434)	

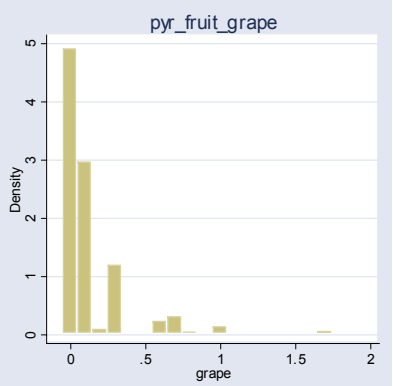
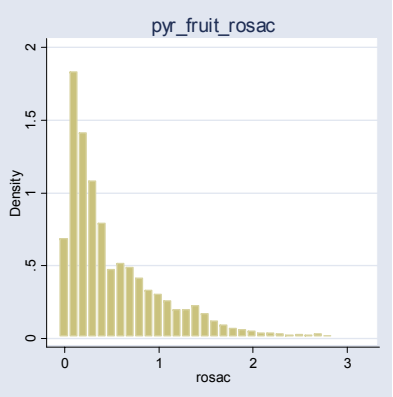
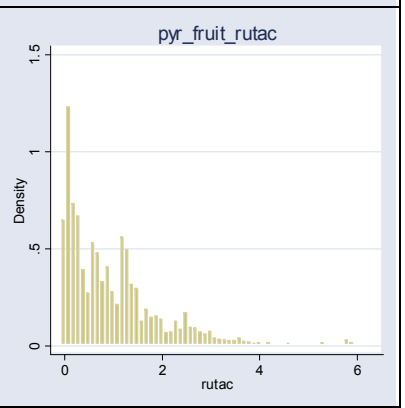
Variable Name	Type	Basis	Description	Levels	Graph
POLYPS	N	Cleaned from Q40G	Self-reported history of polyps of colon or rectum	0 = No (*n* = 509,228) 1 = Yes (*n* = 57,179)	
Potassium	N	DietAARP derived	Postassium – mg	Continuous (range = 19.88 → 99,070.65)	
prostate_acidphos	N	Cancer registries	Prostate Cancer: Acid Phosphatase	0 = Test Not Done (includes cases diagnosed at autopsy) 1 = Test Done, Results Positive/Elevated 2 = Test Done, Results Negative/Normal 3 = Test Done, Results Borderline or Undetermined Whether Positive or Negative 4 = Range 1 9 = Not Applicable or for cases diagnosed after January 1, 2004 .m = Registry did not return hormone receptor data	
prostate_ajcc_stg	C	cancer registry	see cancer_ajcc_stg	see cancer_ajcc_stg	

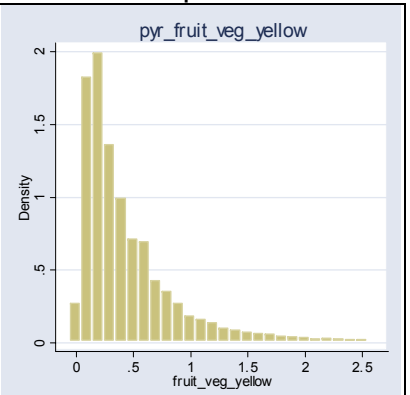
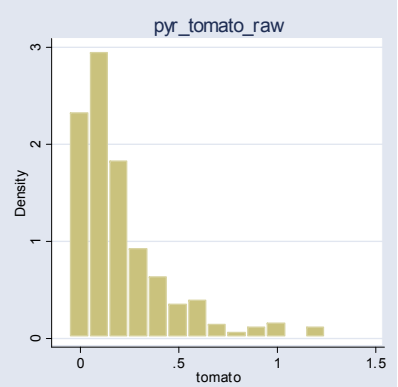
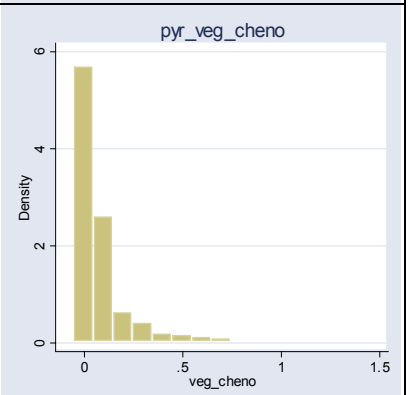
Variable Name	Type	Basis	Description	Levels	Graph
prostate_ajccseer	C	cancer registry	see cancer_ajccseer	see cancer_ajccseer	
prostate_behv	C	cancer registry	see cancer_behv	see cancer_behv	
prostate_dxconf	C	cancer registry	see cancer_dxconf	see cancer_dxconf	
prostate_dxdt	N	cancer registry	see cancer_dxdt	see cancer_dxdt	
prostate_grade	C	cancer registry	see cancer_grade	see cancer_grade	
prostate_hist	C	cancer registry	see cancer_hist	see cancer_hist	
prostate_histv	C	cancer registry	see cancer_histv	see cancer_histv	
prostate_lateral	C	cancer registry	see cancer_lateral	see cancer_lateral	
prostate_mort	N	cancer registry	see cancer_mort	see cancer_mort	
prostate_pnode	C	cancer registry	see cancer_pnode	see cancer_pnode	
prostate_psa	N	Cancer registries	Prostate Cancer: Prostate Specific Antigen	0 = Test Not Done (includes cases diagnosed at autopsy) 1 = Test Done, Results Positive/Elevated 2 = Test Done, Results Negative/Normal 3 = Test Done, Results Borderline or Undetermined Whether Positive or Negative 4 = Range 1 < 5,000 mIU/ml 5 = Range 2 5,000 - 50,000 mIU/ml 6 = Range 3 >50,000 mIU/ml 8 = Test Ordered, Results Not in Chart 9 = Unknown If Test Done or Ordered; No Information (includes deathcertificate-only cases) .m = Registry did not return hormone receptor data	
prostate_seqno	C	cancer registry	see cancer_seqno	see cancer_seqno	
prostate_site	C	cancer registry	see cancer_site	see cancer_site	
prostate_siterec3	N	cancer registry	see cancer_siterec3	see cancer_siterec3	
prostate_ss_stg	C	cancer registry	see cancer_ss_stg	see cancer_ss_stg	
prostate_ss_stg47	C	cancer registry	see cancer_ss_stg47	see cancer_ss_stg47	
prostate_ss_stgv	C	cancer registry	see cancer_ss_stgv	see cancer_ss_stgv	
prostate_status	C	cancer registry	see cancer_status	see cancer_status	
prostate_tnmclinm	C	cancer registry	see cancer_tnmclinm	see cancer_tnmclinm	
prostate_tnmclinn	C	cancer registry	see cancer_tnmclinn	see cancer_tnmclinn	
prostate_tnmclint	C	cancer registry	see cancer_tnmclint	see cancer_tnmclint	
prostate_tnmpathm	C	cancer registry	see cancer_tnmpathm	see cancer_tnmpathm	

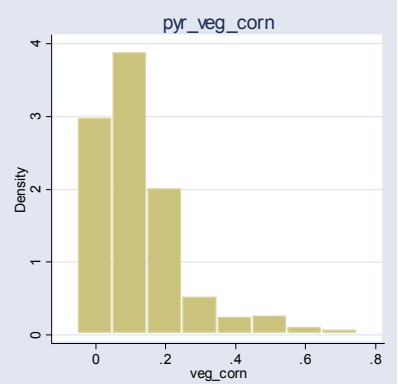
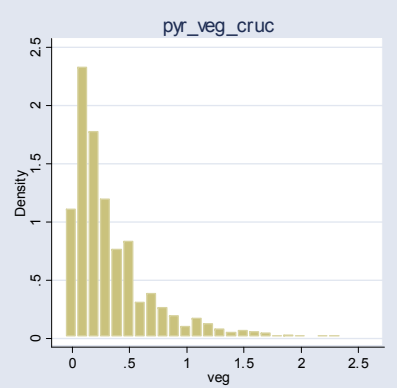
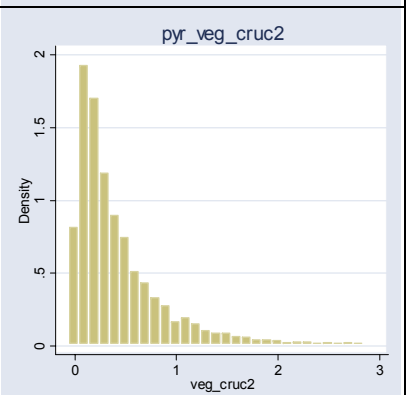
Variable Name	Type	Basis	Description	Levels	Graph
prostate_tnmpathn	C	cancer registry	see cancer_tnmpathn	see cancer_tnmpathn	
prostate_tnmpatht	C	cancer registry	see cancer_tnmpatht	see cancer_tnmpatht	
prostate_xnode	C	cancer registry	see cancer_xnode	see cancer_xnode	
prostatecan	N	cancer registry	see cancercan	see cancercan	
Protein	N	DietAARP derived	Protein - g	Continuous (range = 0.21 → 3,245.87)	
pyr_alcohol_beer	N	DietAARP derived	Total drinks of alcohol from beer per day	Continuous (range = 0 → 33.32)	

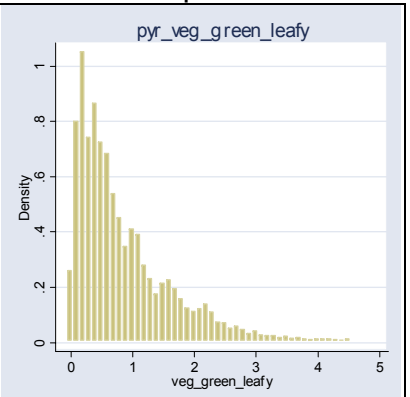
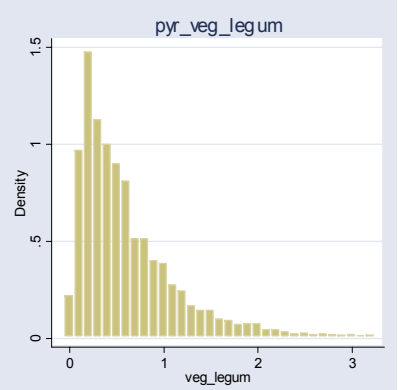
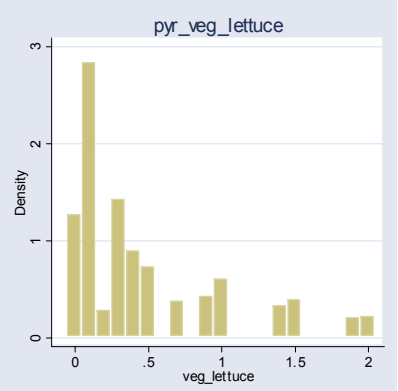
Variable Name	Type	Basis	Description	Levels	Graph
pyr_alcohol_liquor	N	DietAARP derived	Total drinks of alcohol from liquor per day	Continuous (range = 0 → 42.49)	
pyr_alcohol_wine	N	DietAARP derived	Total drinks of alcohol from wine per day	Continuous (range = 0 → 17.15)	
pyr_frt_jce	N	DietAARP derived	Pyramid servings of fruit juice per day	Continuous (range = 0 → 43.33)	

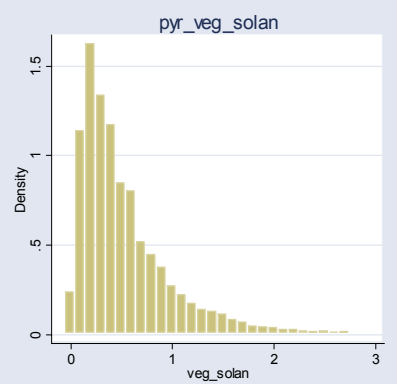
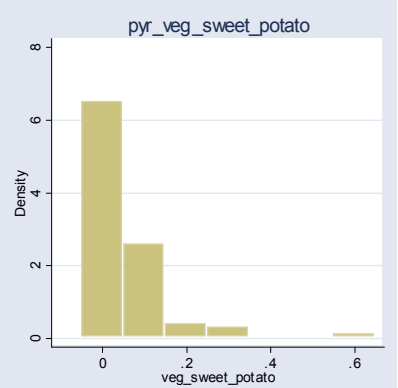
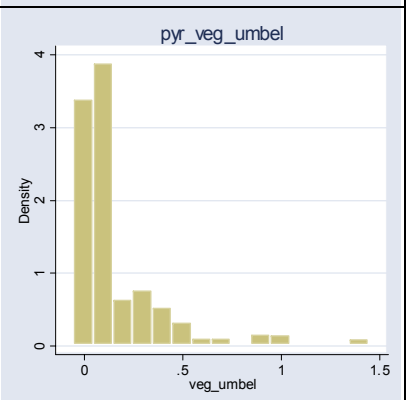
Variable Name	Type	Basis	Description	Levels	Graph
pyr_frt_nojce	N	DietAARP derived	Pyramid servings of fruit (not including juice) per day	Continuous (range = 0 → 51.48)	
pyr_fruit_banana	N	Investigator created (Yikyung Park)	Pyramid servings of bananas (musaceae) (day)	Continuous (range = 0 → 2.62)	
pyr_fruit_cucur	N	Investigator created (Yikyung Park)	Pyramid servings of cucurbitaceae (day)	Continuous (range = 0 → 6.3)	

Variable Name	Type	Basis	Description	Levels	Graph
pyr_fruit_grape	N	Investigator created (Yikyung Park)	Pyramid servings of grapes (vitaceae) (day)	Continuous (range = 0 → 7.8)	
pyr_fruit_rosac	N	Investigator created (Yikyung Park)	Pyramid servings of rosaceae (day)	Continuous (range = 0 → 18.49)	
pyr_fruit_rutac	N	Investigator created (Yikyung Park)	Pyramid servings of rutaceae (day)	Continuous (range = 0 → 26.66)	

Variable Name	Type	Basis	Description	Levels	Graph
pyr_fruit_veg_yellow	N	Investigator created (Yikyung Park)	Pyramid servings of deep yellow fruits and vegetables (day)	Continuous (range = 0 → 19.87)	
pyr_tomato_raw	N	DietAARP derived	Pyramid servings of raw tomatoes per day	Continuous (range = 0 → 2.6)	
pyr_veg_cheno	N	Investigator created (Yikyung Park)	Pyramid servings of chenopodiaceae (day)	Continuous (range = 0 → 6.8)	

Variable Name	Type	Basis	Description	Levels	Graph
pyr_veg_corn	N	Investigator created (Yikyung Park)	Pyramid servings of fresh corn (gramineae) (day)	Continuous (range = 0 → 5.26)	
pyr_veg_cruc	N	DietAARP derived	Pyramid servings of cruciferous vegetables per day	Continuous (range = 0 → 16.62)	
pyr_veg_cruc2	N	Investigator created (Yikyung Park)	Pyramid servings of cruciferous vegetables (2nd def. - incl. a portion of spinach) (day)	Continuous (range = 0 → 19.9)	

Variable Name	Type	Basis	Description	Levels	Graph
pyr_veg_green_leafy	N	Investigator created (Yikyung Park)	Pyramid servings of dark green vegetables, including lettuce (day)	Continuous (range = 0 → 22.06)	
pyr_veg_legum	N	Investigator created (Yikyung Park)	Pyramid servings of legums (day)	Continuous (range = 0 → 24.98)	
pyr_veg_lettuce	N	Investigator created (Yikyung Park)	Pyramid servings of lettuce (compositae) (day)	Continuous (range = 0 → 4.08)	

Variable Name	Type	Basis	Description	Levels	Graph
pyr_veg_solan	N	Investigator created (Yikyung Park)	Pyramid servings of solanaceae (day)	Continuous (range = 0 → 31.79)	
pyr_veg_sweet_potato	N	Investigator created (Yikyung Park)	Pyramid servings of sweet potatoes (convolvulaceae) (day)	Continuous (range = 0 → 4.7)	
pyr_veg_umbel	N	Investigator created (Yikyung Park)	Pyramid servings of umbelliferae (day)	Continuous (range = 0 → 4.36)	

Variable Name	Type	Basis	Description	Levels	Graph
Q10A1	C	raw	Hot dogs, did not eat this food		
Q10A2	C	raw	Hot dogs, regular fat		
Q10A3	C	raw	Hot dogs, low-fat		
Q10B1	C	raw	Cold cuts, did not eat this food		
Q10B2	C	raw	Cold cuts, regular fat		
Q10B3	C	raw	Cold cuts, low-fat		
Q10C1	C	raw	Bacon, did not eat this food		
Q10C2	C	raw	Bacon, regular fat		
Q10C3	C	raw	Bacon, low-fat		
Q10D1	C	raw	Sausage, did not eat this food		
Q10D2	C	raw	Sausage, regular fat		
Q10D3	C	raw	Sausage, low-fat		
Q11	C	raw	Lean or regular ground beef		
Q12	C	raw	Lean or regular beef steaks, roasts, chops		
Q13	C	raw	Chicken, with or without skin		
Q14	C	raw	Chicken, light or dark meat		
Q15	C	raw	Canned tuna, water or oil packed		
Q16A1	C	raw	Type of eggs, ddi not eat eggs		
Q16A2	C	raw	Type of eggs, whole eggs		
Q16A3	C	raw	Type of eggs, egg whiles		
Q16A4	C	raw	Type of eggs, egg substitutes		
Q17A1	C	raw	Eggs cooked, in oil		
Q17A2	C	raw	Eggs cooked, in oil spray		
Q17A3	C	raw	Eggs cooked, in butter		
Q17A4	C	raw	Eggs cooked, in margarine		
Q17A5	C	raw	Eggs cooked, poached or boiled		
Q17A6	C	raw	Eggs cooked, in non-stick pan		
Q18A1	C	raw	Oatmeal, frequency adding butter or margarine		
Q18A2	C	raw	Pancakes, frequency adding butter or margarine		
Q18A3	C	raw	Potatoes, frequency adding butter or margarine		
Q18A4	C	raw	Rice, frequency adding butter or margarine		
Q18A5	C	raw	Pasta, frequency adding butter or margarine		
Q18A6	C	raw	Cooked vegetables, frequency adding butter or margarine		
Q19	C	raw	Cooking, butter or margarine		
Q20A1	C	raw	Type of margarine, did not use margarine		

Variable Name	Type	Basis	Description	Levels	Graph
Q20A2	C	raw	Type of margarine, regular stick		
Q20A3	C	raw	Type of margarine, regular tub		
Q20A4	C	raw	Type of margarine, diet stick		
Q20A5	C	raw	Type of margarine, diet tub		
Q20A6	C	raw	Type of margarine, stick or tub blend		
Q21	C	raw	Cooking frequency, oil, butter margarine		
Q22A1	C	raw	Cooking fat/oils, don't know		
Q22A2	C	raw	Cooking fat/oils, margarine		
Q22A3	C	raw	Cooking fat/oils, butter		
Q22A4	C	raw	Cooking fat/oils, lard, fatback, bacon fat		
Q22A5	C	raw	Cooking fat/oils, vegetable shortening		
Q22A6	C	raw	Cooking fat/oils, oil spray (like Pam)		
Q22A7	C	raw	Cooking fat/oils, oil, liquid		
Q22B1	C	raw	Type of oil, don't know		
Q22B2	C	raw	Type of oil, corn		
Q22B3	C	raw	Type of oil, olive		
Q22B4	C	raw	Type of oil, safflower		
Q22B5	C	raw	Type of oil, sunflower		
Q22B6	C	raw	Type of oil, canola		
Q22B7	C	raw	Type of oil, other		
Q23	C	raw	Type of bread in sandwiches		
Q24	C	raw	Type of bread not in sandwiches		
Q25A1	C	raw	Sweetener, did not drink coffee or tea		
Q25A2	C	raw	Sweetener, did not add sweetener		
Q25A3	C	raw	Sweetener, sugar or honey		
Q25A4	C	raw	Sweetener, equal or aspartame		
Q25A5	C	raw	Sweetener, saccharin or sweet-n-low		
Q25A6	C	raw	Sweetener, other sweetener		
Q26A1	C	raw	Milk/creamer, did not use milk/creamer		
Q26A2	C	raw	Milk/creamer, low-fat, non-dairy creamer		
Q26A3	C	raw	Milk/creamer, regular fat, non-dairy		
Q26A4	C	raw	Milk/creamer, evaporated or condensed		
Q26A5	C	raw	Milk/creamer, cream or half-n-half		
Q26A6	C	raw	Milk/creamer, whole milk		
Q26A7	C	raw	Milk/creamer, 1% or 2% milk		
Q26A8	C	raw	Milk/creamer, skim milk		
Q27	C	raw	Did participant take any vitamins or minerals?		
Q28A	C	raw	Stress-tabs type, how often		
Q28B	C	raw	Therapeutic or theragran, how often		

Variable Name	Type	Basis	Description	Levels	Graph
Q28C	C	raw	One-a-day type, how often		
Q29A	C	raw	Single supplements, iron		
Q29B	C	raw	Single supplements, zinc		
Q29C	C	raw	Single supplements, selenium		
Q29D	C	raw	Single supplements, folic acid		
Q29E	C	raw	Single supplements, none		
Q30A1	C	raw	Vitamin A, how often		
Q30A2	C	raw	Vitamin A, amount		
Q30B1	C	raw	Beta-carotene, how often		
Q30B2	C	raw	Beta-carotene, amount		
Q30C1	C	raw	Vitamin C, how often		
Q30C2	C	raw	Vitamin C, amount		
Q30D1	C	raw	Vitamin E, how often		
Q30D2	C	raw	Vitamin E, amount		
Q30E1	C	raw	Calcium, how often		
Q30E2	C	raw	Calcium, amount		
Q31	C	raw	Activity level at work		
Q32	C	raw	Current physical activity frequency		
Q33	C	raw	Physical activity frequency, ages 15-18		
Q39	C	raw	How participant describes their general health		
Q40A	C	raw	Ever had gallbladder stones/disease		
Q40B	C	raw	Ever had diabetes		
Q40C	C	raw	Ever had heart disease		
Q40D	C	raw	Ever had emphysema		
Q40E	C	raw	Ever had osteoporosis		
Q40F	C	raw	Ever had bone fracture after age 45		
Q40G	C	raw	Ever had polyps of colon or rectum		
Q40H	C	raw	Ever had end-stage renal disease		
Q40I	C	raw	Ever had stroke		
Q40J	C	raw	Has the participant ever been told that they had a condition listed: No		
Q41	C	raw	Participant or relatives dx with any cancer		
Q41A1	C	raw	Prostate cancer , you		
Q41A2	C	raw	Breast cancer, you		
Q41A3	C	raw	Colon cancer, you		
Q41A4	C	raw	Other cancer, you		
Q41B1	C	raw	Prostate cancer, father		
Q41B2	C	raw	Colon cancer, father		
Q41B3	C	raw	Other cancer, father		

Variable Name	Type	Basis	Description	Levels	Graph
Q41C1	C	raw	Prostate cancer, brother		
Q41C2	C	raw	Colon cancer, brother		
Q41C3	C	raw	Other cancer, brother		
Q41D1	C	raw	Prostate cancer, son		
Q41D2	C	raw	Colon cancer, son		
Q41D3	C	raw	Other cancer, son		
Q41E1	C	raw	Breast cancer, mother		
Q41E2	C	raw	Colon cancer, mother		
Q41E3	C	raw	Other cancer, mother		
Q41F1	C	raw	Breast cancer, sister		
Q41F2	C	raw	Colon cancer, sister		
Q41F3	C	raw	Other cancer, sister		
Q41G1	C	raw	Breast cancer, daughter		
Q41G2	C	raw	Colon cancer, daughter		
Q41G3	C	raw	Other cancer, daughter		
Q42	C	raw	Has participant smokes 100 cigarettes or more		
Q43	C	raw	Does participant currently smoke or have they stopped		
Q44	C	raw	Number of cigarettes smoke(d) per day		
Q45	C	raw	Has participant ever smoked pipes or cigars regularly		
Q46	C	raw	Age at first menstrual period		
Q47	C	raw	Number or years of oral contraceptive usage		
Q48	C	raw	Number of live-born children participant has had		
Q49	C	raw	Age when participant gave birth to first child		
Q50	C	raw	Age at last menstrual period		
Q51A	C	raw	Why periods stopped, periods did not stop		
Q51B	C	raw	Why periods stopped, natural menopause		
Q51C	C	raw	Why periods stopped, surgery		
Q51D	C	raw	Why periods stopped, radiation or chemotherapy		
Q52	C	raw	Has participant had a hysterectomy (removal of uterus)		
Q53	C	raw	Has participant had surgery to ovaries		
Q54	C	raw	Number of times participant had a biopsy of the breast		
Q55	C	raw	Is participant currently taking replacement		

Variable Name	Type	Basis	Description	Levels	Graph
			hormones		
Q56	C	raw	Number of years using replacement hormones		
Q6A1	C	raw	Q6: soft drinks; did not drink		
Q6A2	C	raw	Q6: soft drinks; sugar-free		
Q6A3	C	raw	Q6: soft drinks; regular		
Q6B1	C	raw	Q6: Hi-C, lemonade, Kool-aid; did not drink		
Q6B2	C	raw	Q6: Hi-C, lemonade, Kool-aid; sugar-free		
Q6B3	C	raw	Q6: Hi-C, lemonade, Kool-aid; regular		
Q6C1	C	raw	Q6: Sweetened iced tea; did not drink		
Q6C2	C	raw	Q6: Sweetened iced tea;sugar-free		
Q6C3	C	raw	Q6: Sweetened iced tea;regular		
Q7A1	C	raw	Q7: soft drinks; did not drink		
Q7A2	C	raw	Q7: soft drinks; caffeine-free		
Q7A3	C	raw	Q7: soft drinks; caffeine-containing		
Q7B1	C	raw	Q7: coffee; doid not drink		
Q7B2	C	raw	Q7: coffee; caffeine-free		
Q7B3	C	raw	Q7: coffee; caffeine-containing		
Q7C1	C	raw	Q7: hot tea; did not drink		
Q7C2	C	raw	Q7: hot tea; caffeine-free		
Q7C3	C	raw	Q7: hot tea; caffeine-containing		
Q7D1	C	raw	Q7: iced tea; did not drink		
Q7D2	C	raw	Q7: iced tea; caffeine-free		
Q7D3	C	raw	Q7: iced tea; caffeine-containing		
Q8A	C	raw	Q8: number of servings of vegetables per day		
Q8B	C	raw	Q8: number of servings of fruits per day		
Q9A1	C	raw	Sour cream, did not eat this food		
Q9A2	C	raw	Sour cream, regular fat		
Q9A3	C	raw	Sour cream, low-fat		
Q9A4	C	raw	Sour cream, non-fat		
Q9B1	C	raw	Cream cheese, did not eat this food		
Q9B2	C	raw	Cream cheese, regular fat		
Q9B3	C	raw	Cream cheese, low-fat		
Q9B4	C	raw	Cream cheese, non-fat		
Q9C1	C	raw	Cottage cheese, did not eat this food		
Q9C2	C	raw	Cottage cheese, regular fat		
Q9C3	C	raw	Cottage cheese, low-fat		
Q9C4	C	raw	Cottage cheese, non-fat		
Q9D1	C	raw	Other cheese, did not eat this food		

Variable Name	Type	Basis	Description	Levels	Graph
Q9D2	C	raw	Other cheese, regular fat		
Q9D3	C	raw	Other cheese, low-fat		
Q9D4	C	raw	Other cheese, non-fat		
Q9E1	C	raw	Crackers, did not eat this food		
Q9E2	C	raw	Crackers, regular fat		
Q9E3	C	raw	Crackers, low-fat		
Q9E4	C	raw	Crackers, non-fat		
Q9F1	C	raw	Potato chips, etc, did not eat this food		
Q9F2	C	raw	Potato chips, etc, regular fat		
Q9F3	C	raw	Potato chips, etc, low-fat		
Q9F4	C	raw	Potato chips, etc, non-fat		
Q9G1	C	raw	Cookies/brownies, did not eat this food		
Q9G2	C	raw	Cookies/brownies, regular fat		
Q9G3	C	raw	Cookies/brownies, low-fat		
Q9G4	C	raw	Cookies/brownies, non-fat		
Q9H1	C	raw	Cake, did not eat this food		
Q9H2	C	raw	Cake, regular fat		
Q9H3	C	raw	Cake, low-fat		
Q9H4	C	raw	Cake, non-fat		
Q9I1	C	raw	Mayo/mayo dressing, did not eat this food		
Q9I2	C	raw	Mayo/mayo dressing, regular fat		
Q9I3	C	raw	Mayo/mayo dressing, low-fat		
Q9I4	C	raw	Mayo/mayo dressing, non-fat		
Q9J1	C	raw	Salad dressing, did not eat this food		
Q9J2	C	raw	Salad dressing, regular fat		
Q9J3	C	raw	Salad dressing, low-fat		
Q9J4	C	raw	Salad dressing, non-fat		
QP10A1	C	raw	Freq: fried fish		
QP10A2	C	raw	Size: fried fish		
QP10B1	C	raw	Freq: other fist		
QP10B2	C	raw	Size: other fish		
QP10C1	C	raw	Freq: bean-based soups		
QP10C2	C	raw	Size: bean-based soups		
QP10D1	C	raw	Freq: cream soups		
QP10D2	C	raw	Size: cream soups		
QP10E1	C	raw	Freq: tomato or vegetable soups		
QP10E2	C	raw	Size: tomato or vegetable soups		
QP10F1	C	raw	Freq: pizza		
QP10F2	C	raw	Size:pizza		

Variable Name	Type	Basis	Description	Levels	Graph
QP10G1	C	raw	Freq: crackers		
QP10G2	C	raw	Size: crackers		
QP10H1	C	raw	Freq: cornbread		
QP10H2	C	raw	Size: cornbread		
QP10I1	C	raw	Freq: biscuits		
QP10I2	C	raw	Size: biscuits		
QP10J1	C	raw	Freq: flour or corn tortillas		
QP10J2	C	raw	Size: flour or corn tortillas		
QP10K1	C	raw	Freq: potato chips		
QP10K2	C	raw	Size: potato chips		
QP10L1	C	raw	Freq: popcorn		
QP10L2	C	raw	Size: popcorn		
QP10M1	C	raw	Freq: peanut butter		
QP10M2	C	raw	Size: peanut butter		
QP11A1	C	raw	Freq: peanuts, walnuts		
QP11A2	C	raw	Size: peanuts, walnuts		
QP11B1	C	raw	Freq: sour cream		
QP11B2	C	raw	Size: sour cream		
QP11C1	C	raw	Freq: cheese		
QP11C2	C	raw	Size: cheese		
QP11D1	C	raw	Freq: frozen yogurt		
QP11D2	C	raw	Size: frozen yogurt		
QP11E1	C	raw	Freq: regular ice cream		
QP11E2	C	raw	Size: regular ice cream		
QP11F1	C	raw	Freq: cake		
QP11F2	C	raw	Size: cake		
QP11G1	C	raw	Freq: cookies/brownies		
QP11G2	C	raw	Size: cookies/brownies		
QP11H1	C	raw	Freq: doughnuts		
QP11H2	C	raw	Size: doughnuts		
QP11I1	C	raw	Freq: fruit pie		
QP11I2	C	raw	Size: fruit pie		
QP11J1	C	raw	Freq: cream, custard, or meringue pie		
QP11J2	C	raw	Size: cream, custard, or meringue pie		
QP11K1	C	raw	Freq: pumpkin or sweet potato pie		
QP11K2	C	raw	Size: pumpkin or sweet potato pie		
QP11L1	C	raw	Freq: chocolate candy		
QP11L2	C	raw	Size: chocolate candy		
QP11M1	C	raw	Freq: other candy		

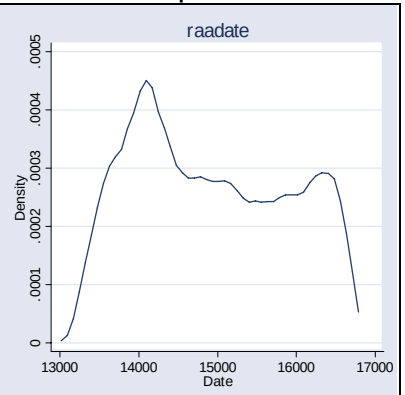
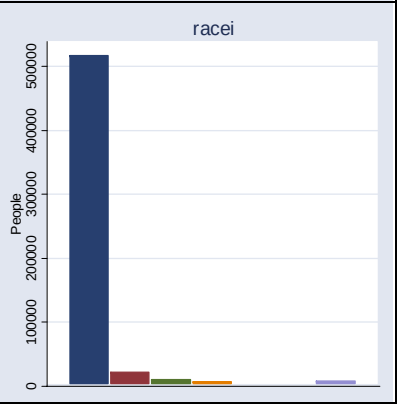
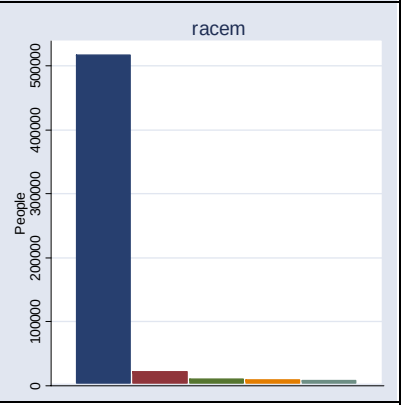
Variable Name	Type	Basis	Description	Levels	Graph
QP11M2	C	raw	Size: other candy		
QP12A	C	raw	How many eggs?		
QP12B	C	raw	How many cups of coffee?		
QP12C	C	raw	Hot many cups of hot tea?		
QP12D	C	raw	How many cups of iced tea?		
QP2A1	C	raw	Freq: tomato juice or vegetable juice		
QP2A2	C	raw	Size: tomato juice or vegetable juice		
QP2B1	C	raw	Freq: orange juice or grapefruit juice		
QP2B2	C	raw	Size: orange juice or grapefruit juice		
QP2C1	C	raw	Freq: other fruit juice		
QP2C2	C	raw	Size: other fruit juice		
QP2D1	C	raw	Freq: drinks, such as Hi-C or lemonade		
QP2D2	C	raw	Size: drinks, such as Hi-C or lemonade		
QP2E1	C	raw	Freq: soft drinks (diet or regular)		
QP2E2	C	raw	Size: soft drinks (diet or regular)		
QP2F1	C	raw	Freq: whole milk, as a drink		
QP2F2	C	raw	Size: whole milk, as a drink		
QP2G1	C	raw	Freq: 1% or 2% fat milk as a drink		
QP2G2	C	raw	Size: 1% or 2% fat milk as a drink		
QP3A1	C	raw	Freq: skim, non-fat, ½% fat milk as a drink		
QP3A2	C	raw	Size: skim, non-fat, ½% fat milk as a drink		
QP3B1	C	raw	Freq: beer (in summer)		
QP3B2	C	raw	Size: beer (in summer)		
QP3C1	C	raw	Freq: beer (in fall, winter, and spring)		
QP3C2	C	raw	Size: beer (in fall, winter, and spring)		
QP3D1	C	raw	Freq: wine or wine coolers		
QP3D2	C	raw	Size: wine or wine coolers		
QP3E1	C	raw	Freq: liquor or mixed drinks		
QP3E2	C	raw	Size: liquor or mixed drinks		
QP3F1	C	raw	Freq: cottage cheese		
QP3F2	C	raw	Size: cottage cheese		
QP3G1	C	raw	Freq: yogurt		
QP3G2	C	raw	Size: yogurt		
QP3H1	C	raw	Freq: pancakes		
QP3H2	C	raw	Size: pancakes		
QP3I1	C	raw	Freq: oatmeal (in winter)		
QP3I2	C	raw	Size: oatmeal (in winter)		
QP3J1	C	raw	Freq: oatmeal (in spring, summer, and fall)		
QP3J2	C	raw	Size: oatmeal (in spring, summer, and fall)		

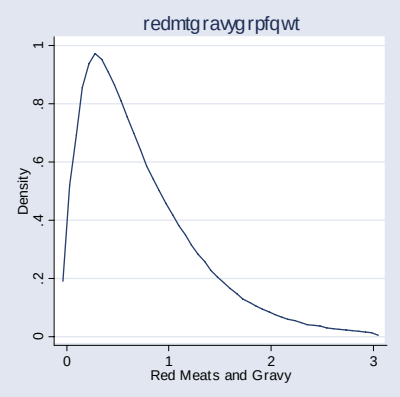
Variable Name	Type	Basis	Description	Levels	Graph
QP4A1	C	raw	Freq: cold cereal		
QP4A2	C	raw	Size: cold cereal		
QP4A3	C	raw	Ratio: Total or Product 19		
QP4A4	C	raw	Ratio: high-fiber cereals		
QP4A5	C	raw	Ratio: other fiber cereals		
QP4A6	C	raw	Ratio: any other cold cereal		
QP4B1	C	raw	Ratio: whole milk (4%)		
QP4B2	C	raw	Size: whole milk (4%)		
QP4C1	C	raw	Ratio: 1% or 2% fat milk		
QP4C2	C	raw	Size: 1% or 2% fat milk		
QP4D1	C	raw	Ratio: skim, non-fat, or ½% fat milk		
QP4D2	C	raw	Size: skim, non-fat, or ½% fat milk		
QP4E1	C	raw	Freq: applesauce		
QP4E2	C	raw	Size: applesauce		
QP4F1	C	raw	Freq: apples		
QP4F2	C	raw	Size: apples		
QP4G1	C	raw	Freq: pears (fresh, canned, or frozen)		
QP4G2	C	raw	Size: pears (fresh, canned, or frozen)		
QP4H1	C	raw	Freq: bananas		
QP4H2	C	raw	Size: bananas		
QP5A1	C	raw	Freq: dried fruit		
QP5A2	C	raw	Size: dried fruit		
QP5B1	C	raw	Freq: peaches, nectarines, plums		
QP5B2	C	raw	Size: peaches, nectarines, plums		
QP5C1	C	raw	Freq: cantaloupe (in season)		
QP5C2	C	raw	Size: cantaloupe (in season)		
QP5D1	C	raw	Freq: other melon (in season)		
QP5D2	C	raw	Size: other melon (in season)		
QP5E1	C	raw	Freq: strawberries (in season)		
QP5E2	C	raw	Size: strawberries (in season)		
QP5F1	C	raw	Freq: oranges, tangerines, tangelos		
QP5F2	C	raw	Size: oranges, tangerines, tangelos		
QP5G1	C	raw	Freq: grapefruit		
QP5G2	C	raw	Size: grapefruit		
QP5H1	C	raw	Freq: grapes		
QP5H2	C	raw	Size: grapes		
QP5I1	C	raw	Freq: cooked greens		
QP5I2	C	raw	Size: cooked greens		
QP5J1	C	raw	Freq: raw greens		

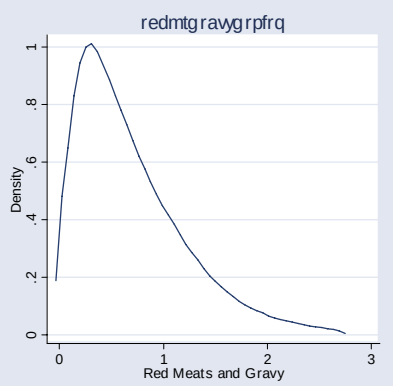
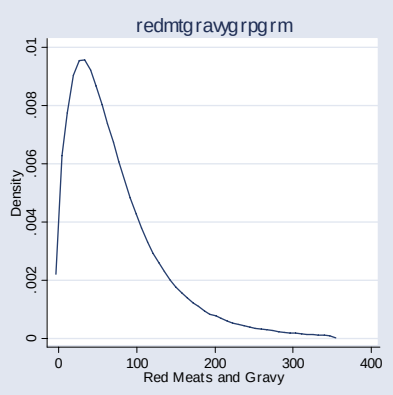
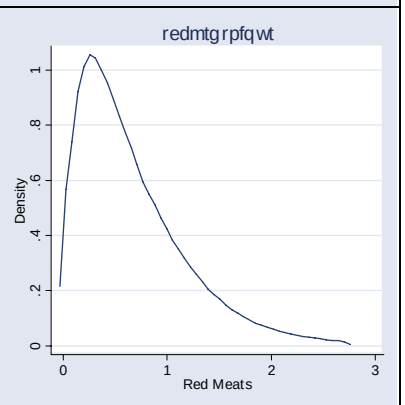
Variable Name	Type	Basis	Description	Levels	Graph
QP5J2	C	raw	Size: raw greens		
QP5K1	C	raw	Freq: cole slaw		
QP5K2	C	raw	Size: cole slaw		
QP5L1	C	raw	Freq: carrots		
QP5L2	C	raw	Size: carrots		
QP5M1	C	raw	Freq: string beans		
QP5M2	C	raw	Size: string beans		
QP6A1	C	raw	Freq: peas		
QP6A2	C	raw	Size: peas		
QP6B1	C	raw	Freq: fresh corn (in season)		
QP6B2	C	raw	Size: fresh corn (in season)		
QP6C1	C	raw	Freq: corn (during the rest of the year)		
QP6C2	C	raw	Size: corn (during the rest of the year)		
QP6D1	C	raw	Freq: broccoli (fresh or frozen)		
QP6D2	C	raw	Size: broccoli (fresh or frozen)		
QP6E1	C	raw	Freq: cauliflower or Brussels sprouts		
QP6E2	C	raw	Size: cauliflower or Brussels sprouts		
QP6F1	C	raw	Freq: mixed vegetables		
QP6F2	C	raw	Size: mixed vegetables		
QP6G1	C	raw	Freq: tomatoes (in season)		
QP6G2	C	raw	Size: tomatoes (in season)		
QP6H1	C	raw	Freq: tomatoes (during the rest of the year)		
QP6H2	C	raw	Size: tomatoes (during the rest of the year)		
QP6I1	C	raw	Freq: sweet peppers		
QP6I2	C	raw	Size: sweet peppers		
QP6J1	C	raw	Freq: lettuce salads		
QP6J2	C	raw	Size: lettuce salads		
QP6K1	C	raw	Freq: salad dressing for salads/vegetables		
QP6K2	C	raw	Size: salad dressing for salads/vegetables		
QP6L1	C	raw	Freq: sweet potatoes or yams		
QP6L2	C	raw	Size: sweet potatoes or yams		
QP6M1	C	raw	Freq: French fries		
QP6M2	C	raw	Size: French fries		
QP7A1	C	raw	Freq: potato salad		
QP7A2	C	raw	Size: potato salad		
QP7B1	C	raw	Freq: baked, boiled, mashed potatoes		
QP7B2	C	raw	Size: baked, boiled, mashed potatoes		
QP7C1	C	raw	Freq: salsa		
QP7C2	C	raw	Size: salsa		

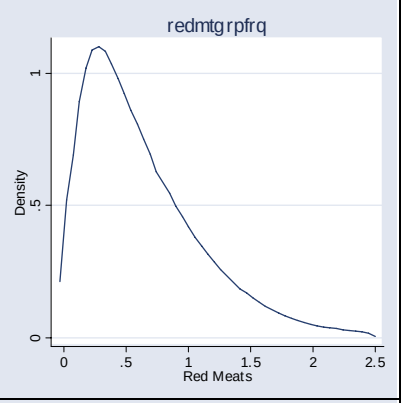
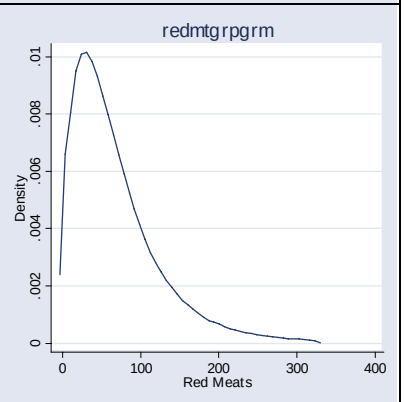
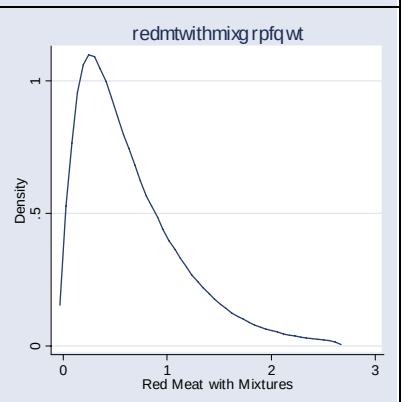
Variable Name	Type	Basis	Description	Levels	Graph
QP7D1	C	raw	Freq: chili		
QP7D2	C	raw	Size: chili		
QP7E1	C	raw	Freq: beans (baked, refried, etc.)		
QP7E2	C	raw	Size: beans (baked, refried, etc.)		
QP7F1	C	raw	Freq: rice		
QP7F2	C	raw	Size: rice		
QP7G1	C	raw	Freq: lasagna		
QP7G2	C	raw	Size: lasagna		
QP7H1	C	raw	Freq: macaroni and cheese		
QP7H2	C	raw	Size: macaroni and cheese		
QP7I1	C	raw	Freq: pasta, spaghetti, and other noodles		
QP7I2	C	raw	Size: pasta, spaghetti, and other noodles		
QP7J1	C	raw	Freq: tomato sauce with meat		
QP7J2	C	raw	Size: tomato sauce with meat		
QP7K1	C	raw	Freq: tomato sauce without meat		
QP7K2	C	raw	Size: tomato sauce without meat		
QP7L1	C	raw	Freq: bagels		
QP7L2	C	raw	Size: bagels		
QP7M1	C	raw	Freq: breads (for sandwiches)		
QP7M2	C	raw	Size: breads (for sandwiches)		
QP8A1	C	raw	Freq: breads (not for sandwiches)		
QP8A2	C	raw	Size: breads (not for sandwiches)		
QP8B1	C	raw	Freq: cream cheese		
QP8B2	C	raw	Size: cream cheese		
QP8C1	C	raw	Freq: butter or margarine on bread		
QP8C2	C	raw	Size: butter or margarine on bread		
QP8D1	C	raw	Freq: mayonnaise on bread		
QP8D2	C	raw	Size: mayonnaise on bread		
QP8E1	C	raw	Freq: mayonnaise in salad		
QP8E2	C	raw	Size: mayonnaise in salad		
QP8F1	C	raw	Freq: turkey or chicken cold cuts		
QP8F2	C	raw	Size: turkey or chicken cold cuts		
QP8G1	C	raw	Freq: cold cuts (ham, bologna, etc.)		
QP8G2	C	raw	Size: cold cuts (ham, bologna, etc.)		
QP8H1	C	raw	Freq: tuna		
QP8H2	C	raw	Size: tuna		
QP8I1	C	raw	Freq: hot dogs		
QP8I2	C	raw	Size: hot dogs		
QP8J1	C	raw	Freq: ground chicken or turkey		

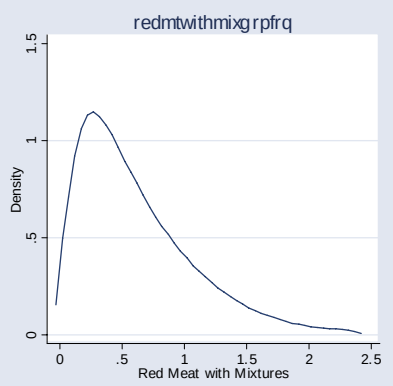
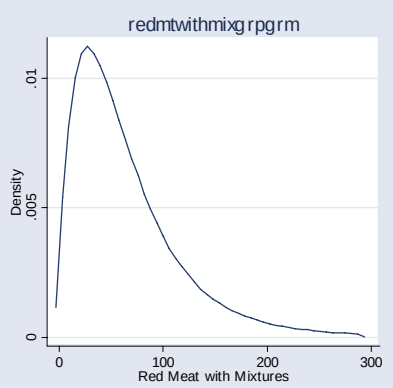
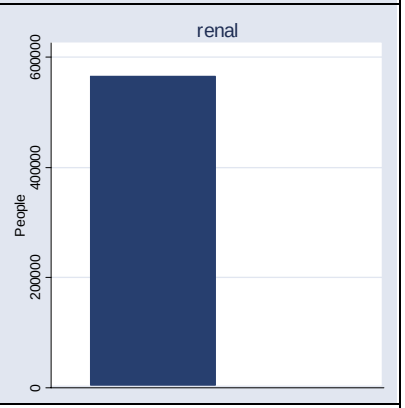
Variable Name	Type	Basis	Description	Levels	Graph
QP8J2	C	raw	Size: ground chicken or turkey		
QP8K1	C	raw	Freq: beef hamburgers		
QP8K2	C	raw	Size: beef hamburgers		
QP8L1	C	raw	Freq: ground beef		
QP8L2	C	raw	Size: ground beef		
QP8M1	C	raw	Freq: beef stew		
QP8M2	C	raw	Size: beef stew		
QP9A1	C	raw	Freq: roast beef (sandwiches)		
QP9A2	C	raw	Size: roast beef (sandwiches)		
QP9B1	C	raw	Freq: roast beef (not in sandwiches)		
QP9B2	C	raw	Size: roast beef (not in sandwiches)		
QP9C1	C	raw	Freq: steak (beef)		
QP9C2	C	raw	Size: steak (beef)		
QP9D1	C	raw	Freq: roast turkey		
QP9D2	C	raw	Size: roast turkey		
QP9E1	C	raw	Freq: fried chicken		
QP9E2	C	raw	Size: fried chicken		
QP9F1	C	raw	Freq: baked or broiled chicken		
QP9F2	C	raw	Size: baked or broiled chicken		
QP9G1	C	raw	Freq: chicken – salads, etc.		
QP9G2	C	raw	Size: chicken – salads, etc.		
QP9H1	C	raw	Freq: roast ham or ham steak		
QP9H2	C	raw	Size: roast ham or ham steak		
QP9I1	C	raw	Freq: pork		
QP9I2	C	raw	Size: pork		
QP9J1	C	raw	Freq: meat gravy		
QP9J2	C	raw	Size: meat gravy		
QP9K1	C	raw	Freq: liver		
QP9K2	C	raw	Size: liver		
QP9L1	C	raw	Freq: bacon		
QP9L2	C	raw	Size: bacon		
QP9M1	C	raw	Freq: sausage		
QP9M2	C	raw	Size: sausage		

Variable Name	Type	Basis	Description	Levels	Graph
RAADATE	N		Date when participant moved outside registry ascertainment area	Continuous (range = 13,118 → 16,680)	
RACEI	N	Cleaned from Q36	Race of participant	1 = Non-Hispanic White (*n* = 516,923) 2 = Non-Hispanic Black (*n* = 21,995) 3 = Hispanic (*n* =10,554) 4 = Asian (*n* =6,838) 5 = Pacific Islander (*n* =671) 6 = American Indian/Alaskan Native (*n* = 1,636) 9 = Unknown (*n* = 7,790)	
RACEM	N	Cleaned from Q36	Race, combined Asian, Pacific Islander, and Native American	1 = Non-Hispanic White (*n* = 516,923) 2 = Non-Hispanic Black (*n* = 21,995) 3 = Hispanic (*n* =10,554) 4 = Asian, Pacific Islander, or American Indian/Alaskan Native (*n* = 9,145) 9 = Unknown (*n* = 7,790)	
rectal_ajcc_stg	C	cancer registry	see cancer_ajcc_stg	see cancer_ajcc_stg	
rectal_ajccseer	C	cancer registry	see cancer_ajccseer	see cancer_ajccseer	

Variable Name	Type	Basis	Description	Levels	Graph
rectal_behv	C	cancer registry	see cancer_behv	see cancer_behv	
rectal_dxconf	C	cancer registry	see cancer_dxconf	see cancer_dxconf	
rectal_dxdt	N	cancer registry	see cancer_dxdt	see cancer_dxdt	
rectal_grade	C	cancer registry	see cancer_grade	see cancer_grade	
rectal_hist	C	cancer registry	see cancer_hist	see cancer_hist	
rectal_histv	C	cancer registry	see cancer_histv	see cancer_histv	
rectal_lateral	C	cancer registry	see cancer_lateral	see cancer_lateral	
rectal_mort	N	cancer registry	see cancer_mort	see cancer_mort	
rectal_pnode	C	cancer registry	see cancer_pnode	see cancer_pnode	
rectal_seqno	C	cancer registry	see cancer_seqno	see cancer_seqno	
rectal_site	C	cancer registry	see cancer_site	see cancer_site	
rectal_siterec3	N	cancer registry	see cancer_siterec3	see cancer_siterec3	
rectal_ss_stg	C	cancer registry	see cancer_ss_stg	see cancer_ss_stg	
rectal_ss_stg47	C	cancer registry	see cancer_ss_stg47	see cancer_ss_stg47	
rectal_ss_stgv	C	cancer registry	see cancer_ss_stgv	see cancer_ss_stgv	
rectal_status	C	cancer registry	see cancer_status	see cancer_status	
rectal_tnmclinm	C	cancer registry	see cancer_tnmclinm	see cancer_tnmclinm	
rectal_tnmclinn	C	cancer registry	see cancer_tnmclinn	see cancer_tnmclinn	
rectal_tnmclint	C	cancer registry	see cancer_tnmclint	see cancer_tnmclint	
rectal_tnmpathm	C	cancer registry	see cancer_tnmpathm	see cancer_tnmpathm	
rectal_tnmpathn	C	cancer registry	see cancer_tnmpathn	see cancer_tnmpathn	
rectal_tnmpatht	C	cancer registry	see cancer_tnmpatht	see cancer_tnmpatht	
rectal_xnode	C	cancer registry	see cancer_xnode	see cancer_xnode	
rectalcan	N	cancer registry	see cancercan	see cancercan	
RedMtGravyGrpFqWt	N		Weighted frequency of red meats and gravy (using portion size)	Continuous (range = 0 → 42)	

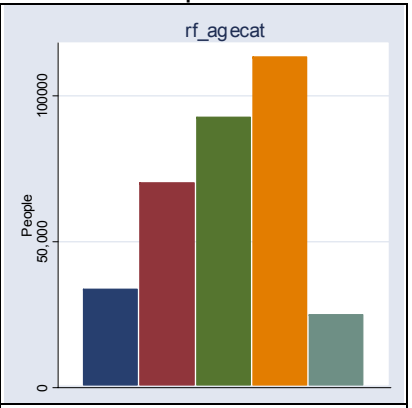
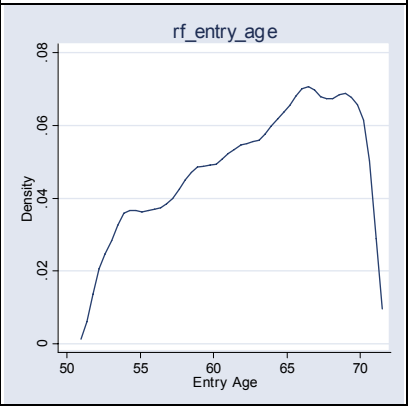
Variable Name	Type	Basis	Description	Levels	Graph
RedMtGravyGrpFrq	N		Daily group frequency of red meats and gravy	Continuous (range = 0 → 28)	
RedMtGravyGrpGrm	N		Gram amount of red meats and gravy per day	Continuous (range = 0 → 6,908.98)	
RedMtGrpFqWt	N		Weighted frequency of red meats (using portion size)	Continuous (range = 0 → 39)	

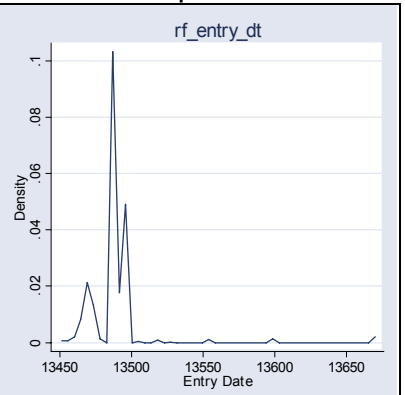
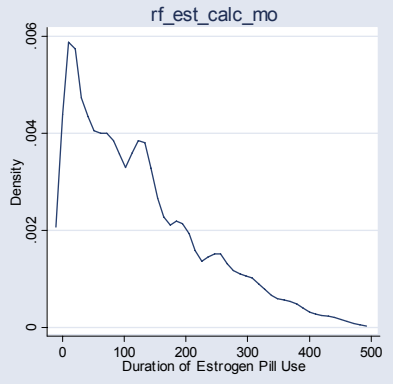
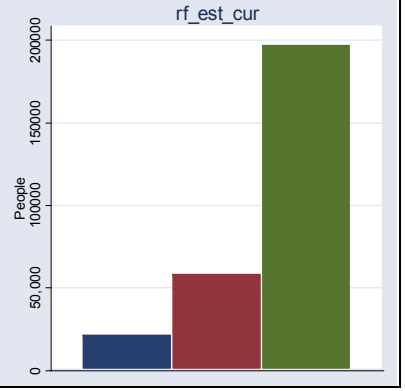
Variable Name	Type	Basis	Description	Levels	Graph
RedMtGrpFrq	N		Daily group frequency of red meats	Continuous (range = 0 → 26)	
RedMtGrpGrm	N		Gram amount of red meats per day	Continuous (range = 0 → 6,505.18)	
RedMtwithMixGrpFqWt	N		Weighted frequency of red meat with mixtures (using portion size)	Continuous (range = 0 → 38.02)	

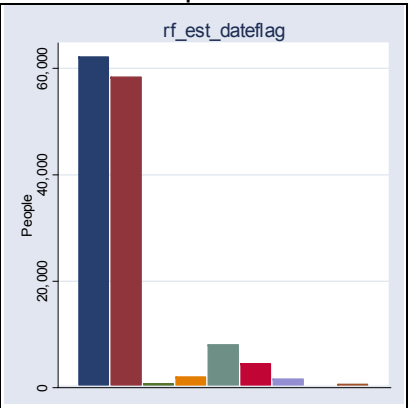
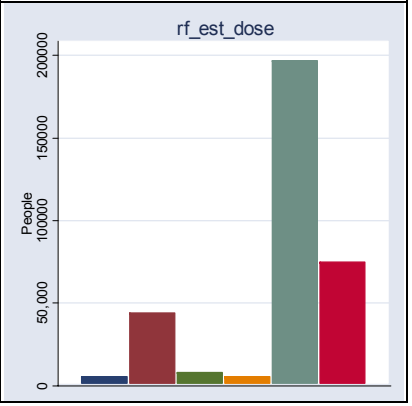
Variable Name	Type	Basis	Description	Levels	Graph
RedMtwithMixGrpFrq	N		Daily group frequency of red meat with mixtures	Continuous (range = 0 → 25.35)	
RedMtwithMixGrpGrm	N		Gram amount of red meat with mixtures per day	Continuous (range = 0 → 5,514.76)	
RENAL	N	Cleaned from Q40H	Self-reported history of end-stage renal disease	0 = No (*n* = 565,108) 1 = Yes (*n* = 1,299)	
respir_ajcc_stg	C	cancer registry	see cancer_ajcc_stg	see cancer_ajcc_stg	
respir_ajccseer	C	cancer registry	see cancer_ajccseer	see cancer_ajccseer	

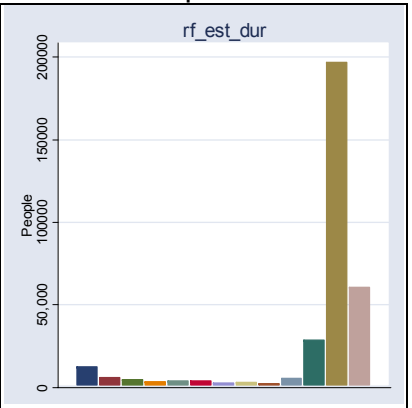
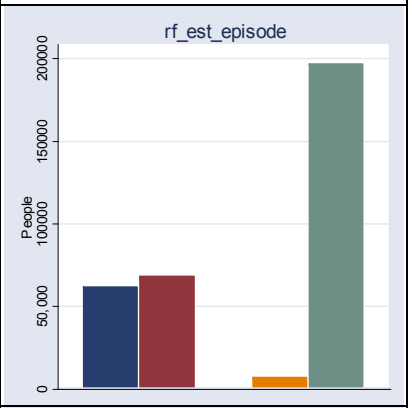
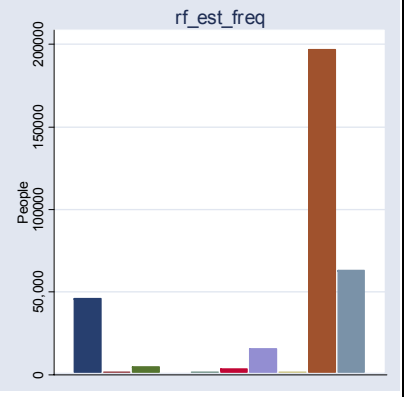
Variable Name	Type	Basis	Description	Levels	Graph
respir_behv	C	cancer registry	see cancer_behv	see cancer_behv	
respir_dxconf	C	cancer registry	see cancer_dxconf	see cancer_dxconf	
respir_dxdt	N	cancer registry	see cancer_dxdt	see cancer_dxdt	
respir_grade	C	cancer registry	see cancer_grade	see cancer_grade	
respir_hist	C	cancer registry	see cancer_hist	see cancer_hist	
respir_histv	C	cancer registry	see cancer_histv	see cancer_histv	
respir_lateral	C	cancer registry	see cancer_lateral	see cancer_lateral	
respir_mort	N	cancer registry	see cancer_mort	see cancer_mort	
respir_pnode	C	cancer registry	see cancer_pnode	see cancer_pnode	
respir_seqno	C	cancer registry	see cancer_seqno	see cancer_seqno	
respir_site	C	cancer registry	see cancer_site	see cancer_site	
respir_siterec3	N	cancer registry	see cancer_siterec3	see cancer_siterec3	
respir_ss_stg	C	cancer registry	see cancer_ss_stg	see cancer_ss_stg	
respir_ss_stg47	C	cancer registry	see cancer_ss_stg47	see cancer_ss_stg47	
respir_ss_stgv	C	cancer registry	see cancer_ss_stgv	see cancer_ss_stgv	
respir_status	C	cancer registry	see cancer_status	see cancer_status	
respir_tnmclinm	C	cancer registry	see cancer_tnmclinm	see cancer_tnmclinm	
respir_tnmclinn	C	cancer registry	see cancer_tnmclinn	see cancer_tnmclinn	
respir_tnmclint	C	cancer registry	see cancer_tnmclint	see cancer_tnmclint	
respir_tnmpathm	C	cancer registry	see cancer_tnmpathm	see cancer_tnmpathm	
respir_tnmpathn	C	cancer registry	see cancer_tnmpathn	see cancer_tnmpathn	
respir_tnmpatht	C	cancer registry	see cancer_tnmpatht	see cancer_tnmpatht	
respir_xnode	C	cancer registry	see cancer_xnode	see cancer_xnode	
respircan	N	cancer registry	see cancercan	see cancercan	
retroper_ajcc_stg	C	cancer registry	see cancer_ajcc_stg	see cancer_ajcc_stg	
retroper_ajccseer	C	cancer registry	see cancer_ajccseer	see cancer_ajccseer	
retroper_behv	C	cancer registry	see cancer_behv	see cancer_behv	
retroper_dxconf	C	cancer registry	see cancer_dxconf	see cancer_dxconf	
retroper_dxdt	N	cancer registry	see cancer_dxdt	see cancer_dxdt	
retroper_grade	C	cancer registry	see cancer_grade	see cancer_grade	
retroper_hist	C	cancer registry	see cancer_hist	see cancer_hist	
retroper_histv	C	cancer registry	see cancer_histv	see cancer_histv	
retroper_lateral	C	cancer registry	see cancer_lateral	see cancer_lateral	
retroper_mort	N	cancer registry	see cancer_mort	see cancer_mort	
retroper_pnode	C	cancer registry	see cancer_pnode	see cancer_pnode	
retroper_seqno	C	cancer registry	see cancer_seqno	see cancer_seqno	
retroper_site	C	cancer registry	see cancer_site	see cancer_site	
retroper_siterec3	N	cancer registry	see cancer_siterec3	see cancer_siterec3	
retroper_ss_stg	C	cancer registry	see cancer_ss_stg	see cancer_ss_stg	

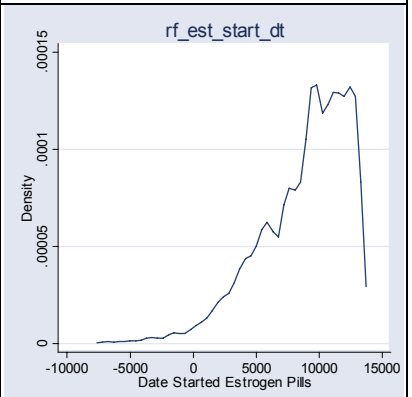
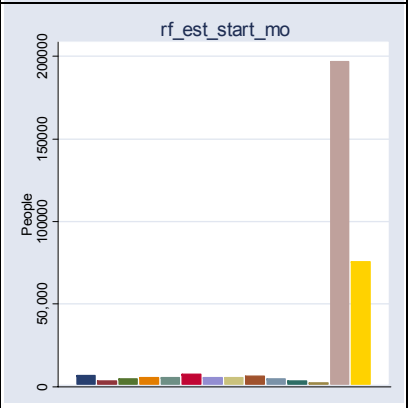
Variable Name	Type	Basis	Description	Levels	Graph
retroper_ss_stg47	C	cancer registry	see cancer_ss_stg47	see cancer_ss_stg47	
retroper_ss_stgv	C	cancer registry	see cancer_ss_stgv	see cancer_ss_stgv	
retroper_status	C	cancer registry	see cancer_status	see cancer_status	
retroper_tnmclinm	C	cancer registry	see cancer_tnmclinm	see cancer_tnmclinm	
retroper_tnmclinn	C	cancer registry	see cancer_tnmclinn	see cancer_tnmclinn	
retroper_tnmclint	C	cancer registry	see cancer_tnmclint	see cancer_tnmclint	
retroper_tnmpathm	C	cancer registry	see cancer_tnmpathm	see cancer_tnmpathm	
retroper_tnmpathn	C	cancer registry	see cancer_tnmpathn	see cancer_tnmpathn	
retroper_tnmpatht	C	cancer registry	see cancer_tnmpatht	see cancer_tnmpatht	
retroper_xnode	C	cancer registry	see cancer_xnode	see cancer_xnode	
retropercan	N	cancer registry	see cancercan	see cancercan	

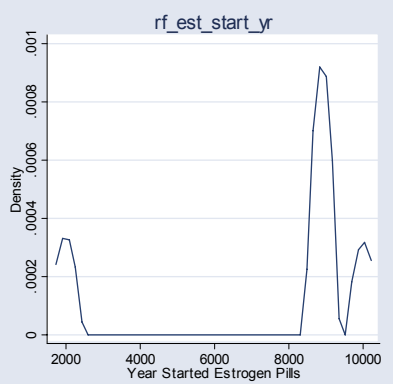
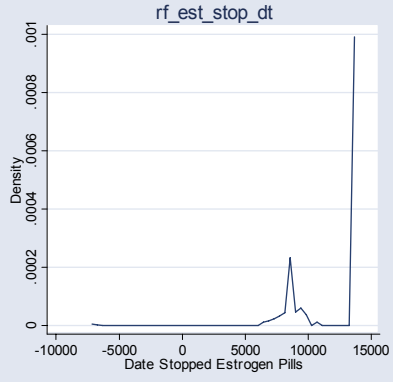
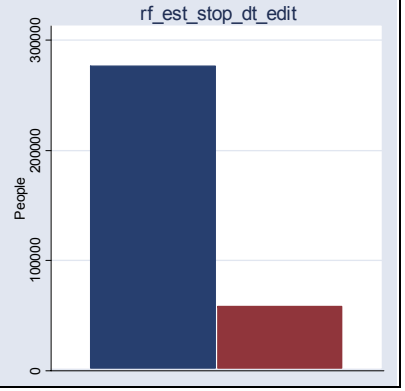
Variable Name	Type	Basis	Description	Levels	Graph
RF_AGECAT	N	Analysis variables	Categorical entry age group (RFQ)	1 = <55 years (*n* = 33,770) 2 = 55-59 years (*n* = 70,208) 3 = 60-64 years (*n* = 92,721) 4 = 65-69 years (*n* = 113,241) 5 = ≥ 70 years (*n* =24,970)	
rf_BARCODE	C	Questionnaire mailing logistics	Barcode on the risk factor questionnaire		
rf_BNUM	C	Questionnaire mailing logistics			
rf_BOXA	C	raw			
RF_ENTRY_AGE	N	Analysis variables	Age of entry into study, for RFQ analysis (RFQ)	Continuous (range = 51.29 → 72.12)	

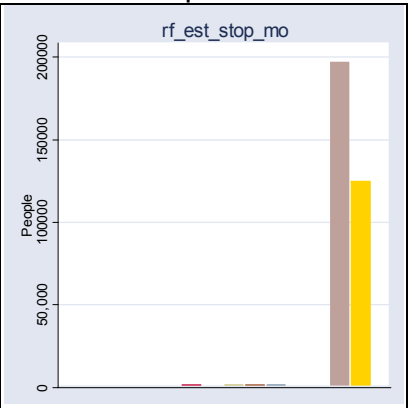
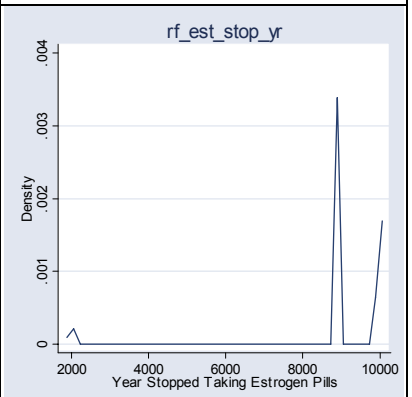
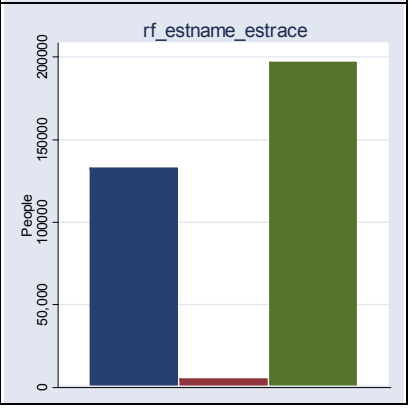
Variable Name	Type	Basis	Description	Levels	Graph
rf_entry_dt	N	raw	Date of entry into the study, for Risk Factor Questionnaire analyses	Continuous (range = 13,452 → 13,786)	
RF_EST_CALC_MO	N	Derived (see appendix)	Duration of overall estrogen pill use (in months) (RFQ)	Continuous (range = 0 → 684) . = Missing	
RF_EST_CUR	N	Cleaned from RF_Q32_1	Is the participant still taking estrogen pills? (RFQ)	0 = No (*n* = 21,536) 1 = Yes (*n* = 58,351) 8 = Not applicable – other gender (*n* =196,852) 9 = Unknown (*n* = 58,171)	

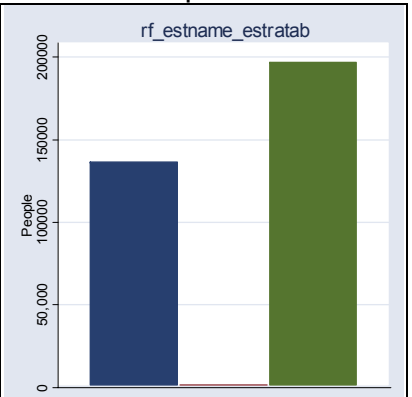
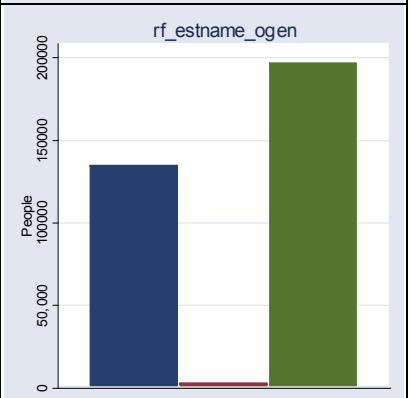
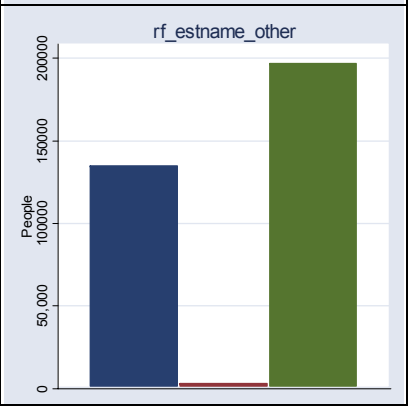
Variable Name	Type	Basis	Description	Levels	Graph
RF_EST_DATEFLAG	N	Derived see appendix	Estrogen date statu (RFQ)	0 = Missing year for both start date and stop date (*n* = 62,101) 1 = Valid start date and stop date (*n* = 58,398) 2 = Valid start date and missing month for stop date (*n* = 706) 3 = Valid start date and missing year for stop date (*n* = 2,022) 4 = Valid stop date and missing month for start date (*n* = 7,981) 5 = Valid stop date and missing year for start date (*n* = 4,464) 6 = Missing month for both start date and stop date (*n* = 1,585) 7 = Missing year for start date and missing month for stop date (*n* = 236) 8 = Missing year for stop date and missing month for start date (*n* = 565)	
RF_EST_DOSE	N	Cleaned from Q36	What was the dosage of estrogen pills taken? (RFQ)	1 = 0.3 mg (*n* = 5,464) 2 = 0.625 mg (*n* = 44,209) 3 = 1.250 mg (*n* = 7,856) 4 = Other (*n* = 5,653) 8 = Not applicable – other gender (*n* = 196,852) 9 = Unknown (*n* = 74,876)	

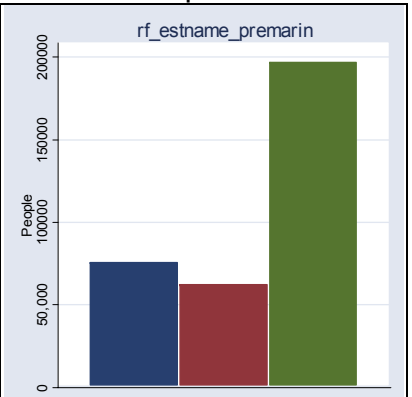
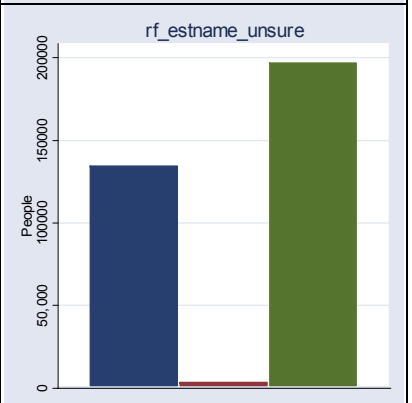
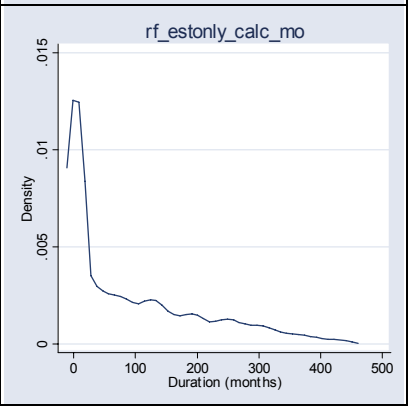
Variable Name	Type	Basis	Description	Levels	Graph
RF_EST_DUR	N	Cleaned from RF_Q33	How many years did the participant take estrogen pills? (RFQ)	1 = 1 year or less (*n* = 12,316) 2 = 2 years (*n* = 6,036) 3 = 3 years (*n* = 4,788) 4 = 4 years (*n* = 3,549) 5 = 5 years (*n* = 4,051) 6 = 6 years (*n* = 4,071) 7 = 7 years (*n* = 2,735) 8 = 8 years (*n* = 3,127) 9 = 9 years (*n* = 2,326) 10 = 10 years (*n* = 5,532) 11 = More than 10 years (*n* =28,646) 88 = Not applicable – other gender (*n* = 196,852) 99 = Unknown (*n* = 60,881)	
RF_EST_EPISODE	N	Derived (see appendix)	Estrogen hormone episode status (RFQ)	0 = No data for start or end dates (*n* = 62,101(1 = Valid year for both start and end dates (*n* = 68,476) 2 = Valid year for both start and end dates, but start date listed after end date (*n* = 194) 3 = No year date for start and/or end dates (*n* = 7,287) 4 = Not applicable – other gender (*n* = 196,852)	
RF_EST_FREQ	N	Cleaned from Q35	How often were estrogen pills usually taken by the participant? (RFQ)	1 = Every day (*n* = 45,975) 2 = Every other day (*n* = 1,683) 3 = In 5 day cycles followed by 2 days off (*n* = 4,784) 4 = In 6 day cycles followed by 1 day off (*n* = 585) 5 = In cycles, 20 days on followed by some days off (*n* = 1,369) 6 = In cycles, 21 days on followed by some days off (*n* = 3,567) 7 = In cycles, 25 days on followed by some days off (*n* = 1,364) 8 = Other (*n* =1,364) 88 = Not applicable– other gender (*n*	

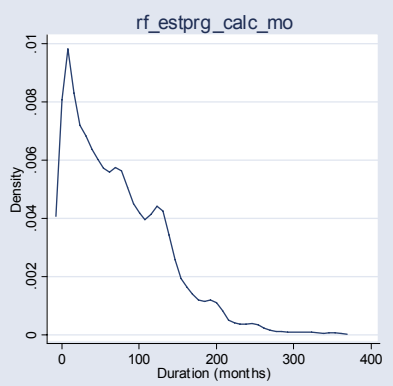
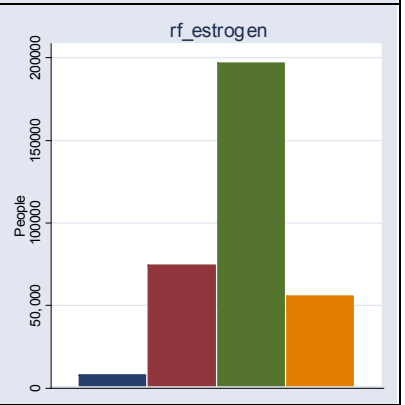
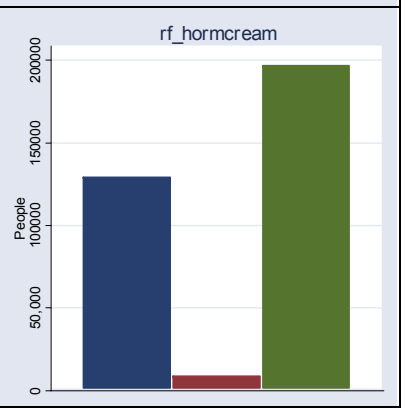
Variable Name	Type	Basis	Description	Levels	Graph
				= 196,852) 99 = Unknown (*n* =62,999)	
RF_EST_START_DT	N	Derived see appendix	Date participant started taking estrogen pills (RFQ) (SAS date)	Continuous (range = -7,291 → 14,593) . = missing	
RF_EST_START_MO	N	Cleaned from RF_Q31_2A	Month participant started taking estrogen pills (RFQ)	1 (*n* = 6,659) 2 (*n* = 3,482) 3 (*n* = 4,941) 4 (*n* = 5,471) 5 (*n* = 5,791) 6 (*n* = 7,755) 7 (*n* = 5,590) 8 (*n* = 5,622) 9 (*n* = 6,447) 10 (*n* = 4,806) 11 (*n* = 3,411) 12 (*n* = 2,239) 88 = Not applicable – other gender (*n* = 196,852) 99 = Unknown (*n* = 75,844)	

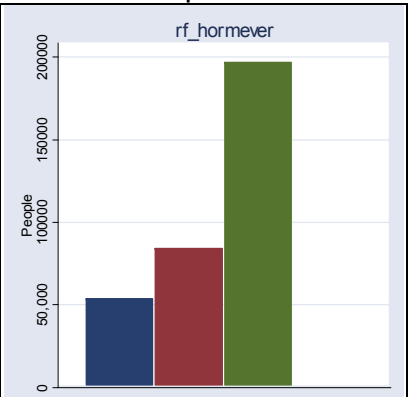
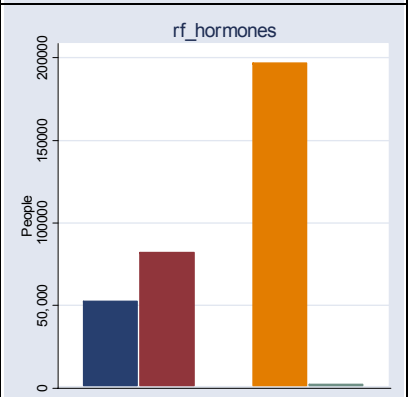
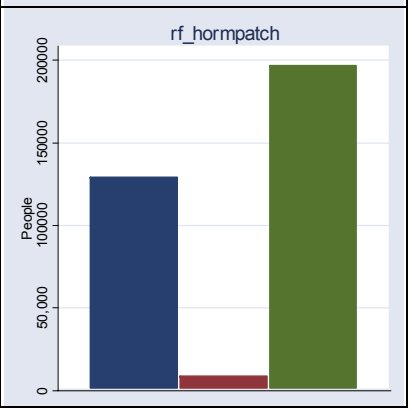
Variable Name	Type	Basis	Description	Levels	Graph
RF_EST_START_YR	N	Cleaned from RF_Q31YR	Year participant started taking estrogen pills (RFQ) [1940-1999]	Continuous (range = 1940 → 9999) 8888 = Not applicable – other gender (*n* = 196,852) 9999 = Unknown (*n* = 66,801)	
RF_EST_STOP_DT	N	Derived see appendix	Date participant stopped taking estrogen pills (RFQ) (SAS date)	Continuous (range = -7,170 → 14,502) . = missing	
RF_EST_STOP_DT_EDIT	N	Derived see appendix	Estrogen stop date set to RFQ scan date (RFQ)	0 = No (*n* = 276,534) 1 = Yes (*n* = 58,376)	

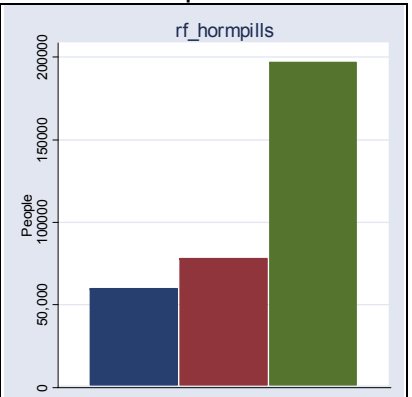
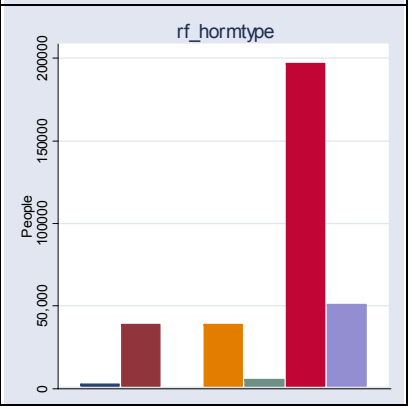
Variable Name	Type	Basis	Description	Levels	Graph
RF_EST_STOP_MO	N	Cleaned from RF_Q32_2A	Month participant stopped taking estrogen pills (RFQ)	1 (*n* = 1,087) 2 (*n* = 678) 3 (*n* = 925) 4 (*n* = 916) 5 (*n* = 1,080) 6 (*n* = 1,524) 7 (*n* = 1,183) 8 (*n* = 1,383) 9 (*n* = 1,502) 10 (*n* = 1,366) 11 (*n* = 849) 12 (*n* = 825) 88 = Not applicable – other gender (*n* = 196,852) 99 = Unknown (*n* = 124,740)	
RF_EST_STOP_YR	N	Cleaned from RF_Q32YR	Year participant stopped taking estrogen pills (RFQ) [1940-1999]	Continuous (range = 1940 → 9999) 8888 = Not applicable – other gender (*n* = 196,852) 9999 = Unknown (*n* = 122,547)	
RF_ESTNAME_ESTRACE	N	Cleaned from Q34C	Name of estrogen pill taken longest – Estrace (RFQ)	0 = No (*n* = 132,771) 1 = Yes (*n* = 5,287) 8 = Not applicable – other gender (*n* = 196,852)	

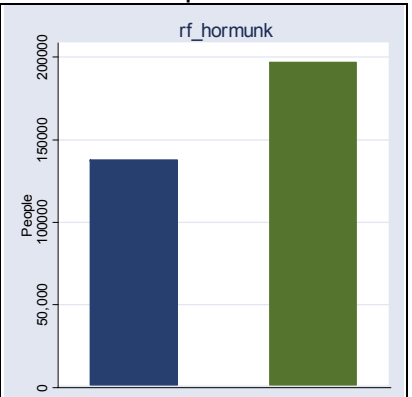
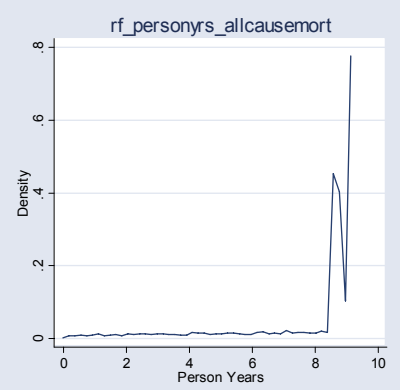
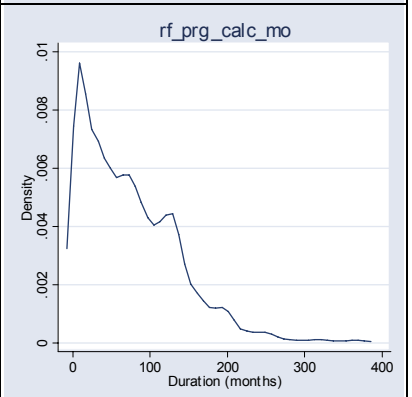
Variable Name	Type	Basis	Description	Levels	Graph
RF_ESTNAME_ESTRATAB	N	Cleaned from Q34D	Name of estrogen pill taken longest – Estratab or Estratest (RFQ)	0 = No (*n* = 136,430) 1 = Yes (*n* = 1,628) 8 = Not applicable – other gender (*n* = 196,852)	
RF_ESTNAME_OGEN	N	Cleaned from Q34B	Name of estrogen pill taken longest – Ogen (RFQ)	0 = No (*n* = 134,958) 1 = Yes (*n* = 3,100) 8 = Not applicable – other gender (*n* = 196,852)	
RF_ESTNAME_OTHER	N	Cleaned from Q34E	Name of estrogen pill taken longest – Other (RFQ)	0 = No (*n* = 134,742) 1 = Yes (*n* = 3,316) 8 = Not applicable – other gender (*n* = 196,852)	

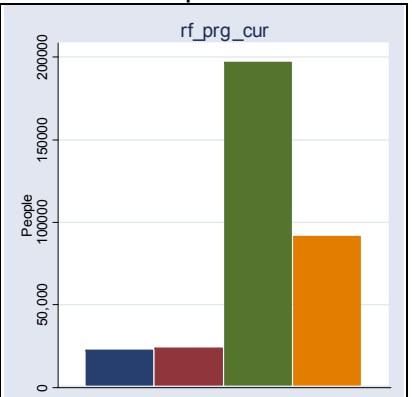
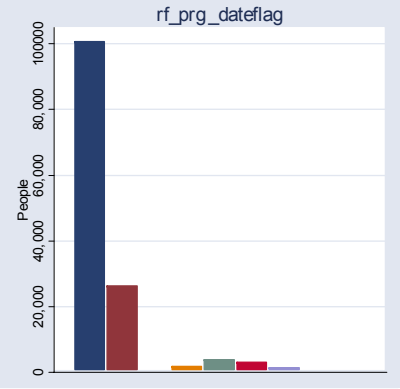
Variable Name	Type	Basis	Description	Levels	Graph
RF_ESTNAME_PREMARIN	N	Cleaned from Q34A	Name of estrogen pill taken longest – Premarin (RFQ)	0 = No (*n* = 75,744) 1 = Yes (*n* = 62,314) 8 = Not applicable – other gender (*n* = 196,852)	
RF_ESTNAME_UNSURE	N	Cleaned from Q34F	Name of estrogen pill taken longest – Unsure (RFQ)	0 = No (*n* = 134,540) 1 = Yes (*n* = 3,518) 8 = Not applicable – other gender (*n* = 196,852)	
RF_ESTONLY_CALC_MO	N	Derived (see appendix)	Duration of estrogen-only pill use (in months) (RFQ)	Continuous (range = 0 → 684)	

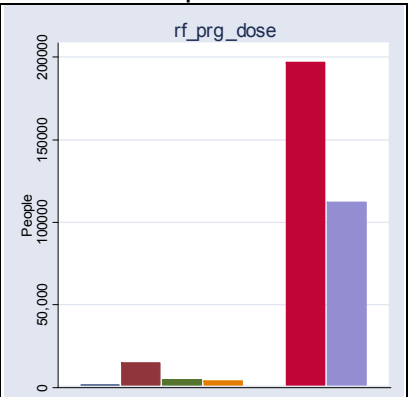
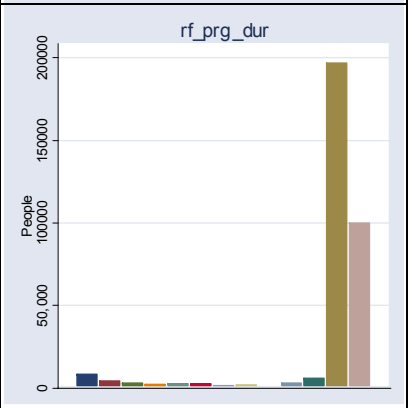
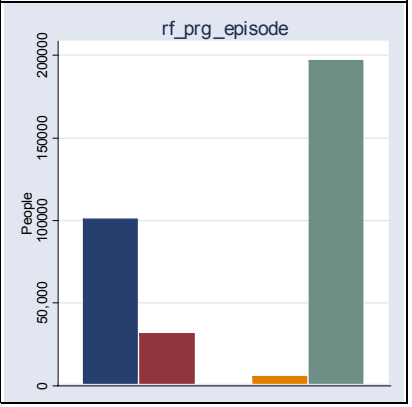
Variable Name	Type	Basis	Description	Levels	Graph
RF_ESTPRG_CALC_MO	N	Derived (see appendix)	Duration of combined estrogen and progestin pill use (in months) (RFQ)	Continuous (range = 0 → 680)	
RF_ESTROGEN	N	Cleaned from RF_Q31_1	Has the participant ever taken estrogen hormone pills, such as Premarin? (RFQ)	0 = No (*n* = 7,862) 1 = Yes (*n* = 74,852) 8 = Not applicable – other gender (*n* = 196,852) 9 = Unknown (*n* = 55,675)	
RF_HORMCREAM	N	Cleaned from RF_Q30B	Female hormones taken – has the participant used vaginal creams or suppositories? (RFQ)	0 = No (*n* = 129,227) 1 = Yes (*n* = 8,831) 8 = Not applicable – other gender (*n* = 196,852)	

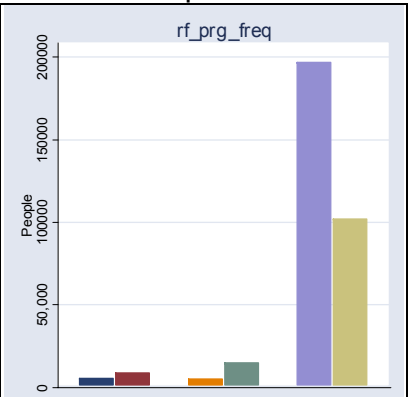
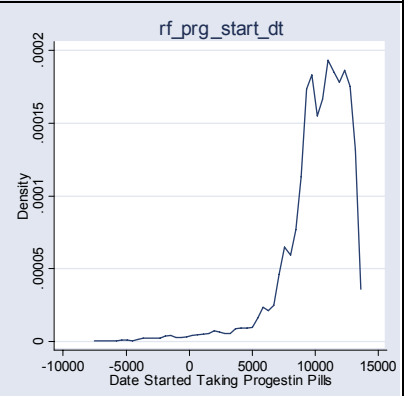
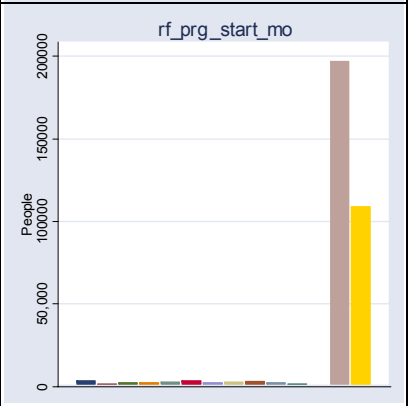
Variable Name	Type	Basis	Description	Levels	Graph
RF_HORMEVER	N	Derived see appendix	Has the participant ever taken female replacement hormones? (baseline + RFQ) (RFQ)	0 = No (*n* = 53,735) 1 = Yes (*n* = 84,215) 8 = Not applicable – other gender (*n* = 196,852) 9 = Unknown (*n* = 108)	
RF_HORMONES	N	Cleaned from RF_Q29	Has the participant ever taken female hormones (during or after menopause)? (RFQ)	0 = No (*n* = 52,548) 1 = Yes (*n* = 82,308) 2 = Not sure (*n* = 850) 8 = Not applicable – other gender (*n* = 196,852) 9 = Unknown (*n* = 2,352)	
RF_HORMPATCH	N	Cleaned from RF_Q30C	Did the participant take female hormones in the form of a patch? (RFQ)	0 = No (*n* = 129,286) 1 = Yes (*n* = 8,772) 8 = Not applicable – other gender (*n* = 196,852)	

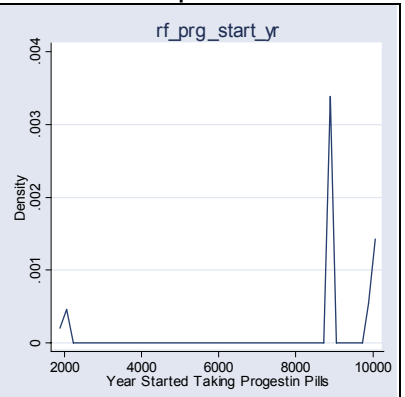
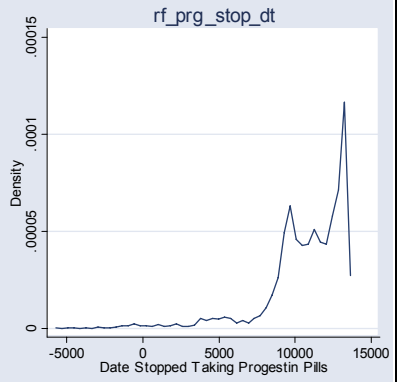
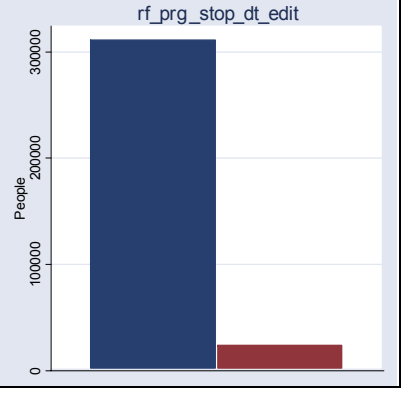
Variable Name	Type	Basis	Description	Levels	Graph
RF_HORMPILLS	N	Cleaned from RF_Q30A	Did the participant take female hormones in the form of a pill? (RFQ)	0 = No (*n* = 59,768) 1 = Yes (*n* = 78,290) 8 = Not applicable – other gender (*n* = 196,852)	
RF_HORMSHOT	N	Cleaned from RF_Q30D	Did the participant take female hormones in the form of a shot? (RFQ)	0 = No (*n* = 134,509) 1 = Yes (*n* = 3,549) 8 = Not applicable – other gender (*n* = 196,852)	
RF_HORMTYPE	N	Derived see appendix	Type of female replacement hormones used (baseline + RFQ) (RFQ)	0 = Never used hormones (*n* = 2,918) 1 = Used Estrogen only (*n* = 38,852) 2 = Used Progestin only (*n* = 851) 3 = Used both Estrogen and Progestin (*n* = 38,801) 4 = Hormones used, type unknown (*n* = 5,711) 8 = Not applicable – other gender (*n* = 196,852) 9 = Unknown (*n* = 50,925)	

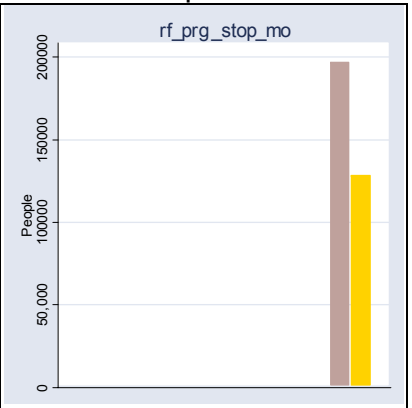
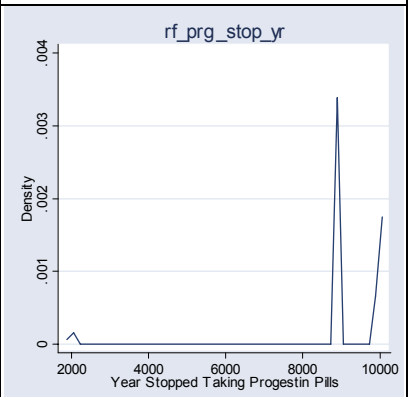
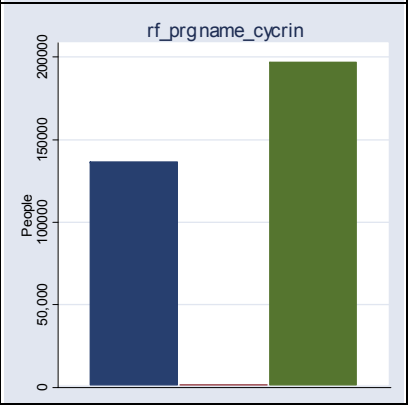
Variable Name	Type	Basis	Description	Levels	Graph
RF_HORMUNK	N	Cleaned from RF_Q30E	Is the participant unsure of the female hormones taken? (RFQ)	0 = No (*n* = 137,644) 1 = Yes (*n* = 414) 8 = Not applicable – other gender (*n* = 196,852)	
rf_personyrs_allcausemort	N	raw	Person years, for Risk Factor Questionnaire all cause mortality analyses	Continuous (range = 0 → 9.17)	
RF_PRG_CALC_MO	N	Derived (see appendix)	Duration of overall progesterone or progestin pill use (in months) (RFQ)	Continuous (range = 0 → 680) . = missing	

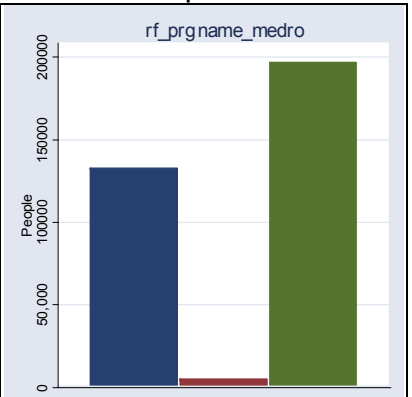
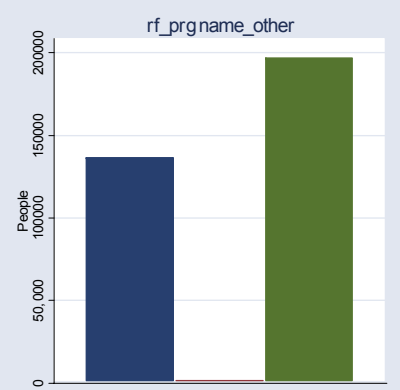
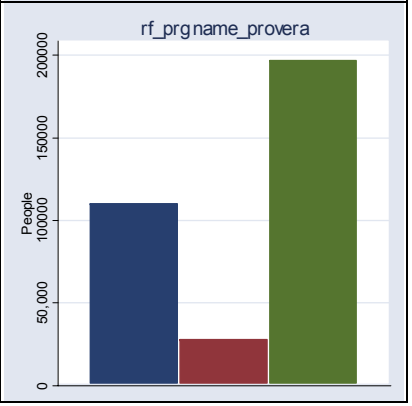
Variable Name	Type	Basis	Description	Levels	Graph
RF_PRG_CUR	N	Cleaned from RF_Q38_1	Is the participant still taking progesterone or progestin pills? (RFQ)	0 = No (*n* = 22,425) 1 = Yes (*n* = 23,945) 8 = Not applicable – other gender (*n* = 196,852) 9 = Unknown (*n* = 91,688)	
RF_PRG_DATEFLAG	N	Derived (see appendix)	Progesterone or progestin date status (RFQ)	0 = Missing year for both start date and stop date (*n* = 100,650) 1 = Valid start date and stop date (*n* = 26,327) 2 = Valid start date and missing month for stop date (*n* = 394) 3 = Valid start date and missing year for stop date (*n* = 1,886) 4 = Valid stop date and missing month for start date (*n* = 3,768) 5 = Valid stop date and missing year for start date (*n* = 2,958) 6 = Missing month for both start date and stop date (*n* = 1,290) 7 = Missing year for start date and missing month for stop date (*n* = 166) 8 = Missing year for stop date and missing month for start date (*n* = 619)	

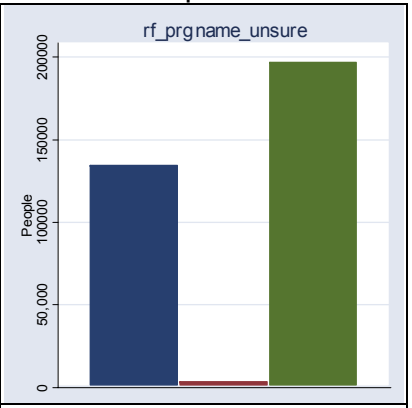
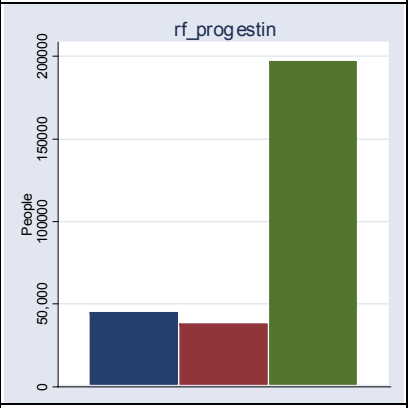
Variable Name	Type	Basis	Description	Levels	Graph
RF_PRG_DOSE	N	Cleaned from Q42	What was the dosage of progesterone or progestin pills taken? (RFQ)	1 = Less than 1 mg (*n* = 1,597) 2 = 2.5 mg (*n* = 15,093) 3 = 5.0 mg (*n* = 4,592) 4 = 10.0 mg (*n* = 4,124) 5 = Other (*n* = 494) 8 = Not applicable – other gender (*n* = 196,852) 9 = Unknown (*n* = 112,158)	
RF_PRG_DUR	N	Cleaned from RF_Q39	Years the participant took progesterone or progestin pills? (RFQ)	1 = 1 year or less (*n* = 8,467) 2 = 2 years (*n* = 4,286) 3 = 3 years (*n* = 3,343) 4 = 4 years (*n* = 2,486) 5 = 5 years (*n* = 2,855) 6 = 6 years (*n* = 2,688) 7 = 7 years (*n* = 1,730) 8 = 8 years (*n* = 1,996) 9 = 9 years (*n* = 1,290) 10 = 10 years (*n* = 3,073) 11 = More than 10 years (*n* = 6,026) 88 = Not applicable – other gender (*n* = 196,852) 99 = Unknown (*n* = 99,818)	
RF_PRG_EPISODE	N	Derived (see appendix)	Progesterone or progestin hormone episode status (RFQ)	0 = No data for start or end dates (*n* = 100,650) 1 = Valid year for both start and end dates (*n* = 31,666) 2 = Valid year for both start and end dates, but start date listed after end date (*n* = 113) 3 = No year date for start and/or end dates (*n* = 5,629) 8 = Not applicable – other gender (*n* = 196,852)	

Variable Name	Type	Basis	Description	Levels	Graph
RF_PRG_FREQ	N	Cleaned from Q41	How often were progesterone or progestin pills usually taken (RFQ)	1 = Less than 10 days per month (*n* = 5,655) 2 = 10 to 14 days per month (*n* = 8,685) 3 = 15 to 19 days per month (*n* = 896) 4 = 20 to 25 days per month (*n* = 5,013) 5 = Every day (*n* = 14,943) 6 = (*n* = 704) 8 = Not applicable – other gender (*n* = 196,852) 9 = Unknown (*n* = 102,162)	
RF_PRG_START_DT	N	Derived (see appendix)	Date participant started taking progesterone or progestin pills (RFQ) (SAS date)	Continuous (range = -7,291 → 14,532) . = Missing	
RF_PRG_START_MO	N	Cleaned from RF_Q37_2A	Month participant started taking progesterone or progestin pills (RFQ)	1 = January (*n* = 3,382) 2 = February (*n* = 1,529) 3 = March (*n* = 2,236) 4 = April (*n* = 2,470) 5 = May (*n* = 2,588) 6 = June (*n* = 3,618) 7 = July (*n* = 2,528) 8 = August (*n* = 2,717) 9 = September (*n* = 3,075) 10 = October (*n* = 2,289) 11 = November (*n* = 1,629) 12 = December (*n* = 1,055) 88 = Not applicable – other gender (*n* = 196,852) 99 = Unknown (*n* = 108,942)	

Variable Name	Type	Basis	Description	Levels	Graph
RF_PRG_START_YR	N	Cleaned from RF_Q37YR	Year participant started taking progesterone or progestin pills (RFQ)	Continuous (range = 1940 → 9999) 8888 = Not applicable – other gender (*n* = 196,852) 9999 = Unknown (*n* = 103,774)	
RF_PRG_STOP_DT	N	Derived (see appendix)	Date stopped taking progesterone or progestin pills (RFQ) (SAS date)	Continuous (range = -5,648 → 13,802) . = Missing	
RF_PRG_STOP_DT_EDIT	N	Derived (see appendix)	Progesterone or progestin stop date set to RFQ scan date? (RFQ)	0 = No (*n* = 310,949) 1 = Yes (*n* = 23,961)	

Variable Name	Type	Basis	Description	Levels	Graph
RF_PRG_STOP_MO	N	Cleaned from RF_Q38_2A	Month participant stopped taking progesterone or progestin pills (RFQ)	1 = January (*n* = 854) 2 = February (*n* = 503) 3 = March (*n* = 633) 4 = April (*n* = 643) 5 = May (*n* = 787) 6 = June (*n* = 1,099) 7 = July (*n* = 853) 8 = August (*n* = 977) 9 = September (*n* = 1,084) 10 = October (*n* = 955) 11 = November (*n* = 603) 12 = December (*n* = 632) 88 = Not applicable – other gender (*n* = 196,852) 99 = Unknown (*n* = 128,435)	
RF_PRG_STOP_YR	N	Cleaned from RF_Q38YR	Year participant stopped taking progesterone or progestin pills (RFQ)	Continuous (range = 1941 → 9999) 8888 = Not applicable – other gender (*n* = 196,852) 9999 = Unknown (*n* = 126,755)	
RF_PRGNAME_CYCRIN	N	Cleaned from Q40C	Name of progestin pill taken longest – Cycrin (RFQ)	0 = No (*n* = 136,342) 1 = Yes (*n* = 1,716) 8 = Not applicable – other gender (*n* = 196,852)	

Variable Name	Type	Basis	Description	Levels	Graph
RF_PRGNAME_MEDRO	N	Cleaned from Q40B	Name of progestin pill taken longest – Medroxyprogesterone (RFQ)	0 = No (*n* = 132,987) 1 = Yes (*n* = 5,071) 8 = Not applicable – other gender (*n* = 196,852)	
RF_PRGNAME_OTHER	N	Cleaned from Q40D	Name of progestin pill taken longest – Other (RFQ)	0 = No (*n* = 136,351) 1 = Yes (*n* = 1,707) 8 = Not applicable – other gender (*n* = 196,852)	
RF_PRGNAME_PROVERA	N	Cleaned from Q40A	Name of progestin pill taken longest – Provera (RFQ)	0 = No (*n* = 110,105) 1 = Yes (*n* = 27,953) 8 = Not applicable – other gender (*n* = 196,852)	

Variable Name	Type	Basis	Description	Levels	Graph
RF_PRGNAME_UNSURE	N	Cleaned from Q40E	Name of progestin pill taken longest – Unsure (RFQ)	0 = No (*n* = 134,623) 1 = Yes (*n* = 3,435) 8 = Not applicable – other gender (*n* = 196,852)	
RF_PRGONLY_CALC_MO	N	Derived (see appendix)	Duration of progestin-only pill use (in months) (RFQ)		
RF_PROGESTIN	N	Cleaned from RF_Q37_1	Has the participant ever taken progesterone or progestin hormone pills, such as Provera? (RFQ)	0 = No (*n* = 44,851) 1 = Yes (*n* = 37,) 8 = Not applicable – other gender (*n* = 196,852) 9 = Unknown (*n* = 55,234)	
rf_Q10_1	C	raw	During the past 12 months, did you take generic aspirin, Bayer, Bufferin, Anacin, Ecotrin, or Excedrin?		
rf_Q10_2	C	raw	How often did you usually take generic aspirin, Bayer, Bufferin, Anacin, Ecotrin, or Excedrin?		
rf_Q11_1	C	raw	During the past 12 months, did you take generic ibuprofen, Advil, Nuprin, Motrin, Aleve, etc.?		
rf_Q11_2	C	raw	How often did you usually take generic ibuprofen, Advil, Nuprin, Motrin, Aleve, etc.?		
rf_Q12A	C	raw	During the past 12 months, did you take any		

Variable Name	Type	Basis	Description	Levels	Graph
			of the following fiber supplements on a regular basis: No fiber supplements?		
rf_Q12B	C	raw	During the past 12 months, did you take any of the following fiber supplements on a regular basis: Psyllium products (such as Metamucil, Fiberall, Serutan, Perdiem, or Correctol)?		
rf_Q12C	C	raw	During the past 12 months, did you take any of the following fiber supplements on a regular basis: Methylcellulose / Cellulose products (such as Citrucel or Unifiber)?		
rf_Q12D	C	raw	During the past 12 months, did you take any of the following fiber supplements on a regular basis: Fibercon?		
rf_Q12E	C	raw	During the past 12 months, did you take any of the following fiber supplements on a regular basis: Bran supplements (such as raw bran, bran wafers, etc.)?		
rf_Q13A	C	raw	During the past 12 months, did you take any of the following calcium-containing antacids on a regular basis: No antacids?		
rf_Q13B	C	raw	During the past 12 months, did you take any of the following calcium-containing antacids on a regular basis: Tums or Tums Extra Strength?		
rf_Q13C	C	raw	During the past 12 months, did you take any of the following calcium-containing antacids on a regular basis: Rolaids Calcium Rich or Rolaids Sodium Free?		
rf_Q13D	C	raw	During the past 12 months, did you take any of the following calcium-containing antacids on a regular basis: Titralac or Titralac Plus?		
rf_Q13E	C	raw	During the past 12 months, did you take any of the following calcium-containing antacids on a regular basis: Mylanta Gel Caps?		
rf_Q13F	C	raw	During the past 12 months, did you take any of the following calcium-containing antacids on a regular basis: Alka-Mints?		
rf_Q13G	C	raw	During the past 12 months, did you take any of the following calcium-containing antacids		

Variable Name	Type	Basis	Description	Levels	Graph
			on a regular basis: other antacids containing calcium?		
rf_Q13H	C	raw	During the past 12 months, did you take any of the following calcium-containing antacids on a regular basis: other antacids, don't know if they contained calcium?		
rf_Q14	C	raw	During the past 3 years, have you had a test for blood in the stool, for example, a fecal occult blood test?		
rf_Q15A	C	raw	During the past 3 years, did you have any of the following procedures to examine your colon or rectum: yes, flexible sigmoidoscopy?		
rf_Q15B	C	raw	During the past 3 years, did you have any of the following procedures to examine your colon or rectum: yes, colonoscopy?		
rf_Q15C	C	raw	During the past 3 years, did you have any of the following procedures to examine your colon or rectum: yes, proctoscopy?		
rf_Q15D	C	raw	During the past 3 years, did you have any of the following procedures to examine your colon or rectum: yes, don't know which type?		
rf_Q15E	C	raw	During the past 3 years, did you have any of the following procedures to examine your colon or rectum: no?		
rf_Q16	C	raw	Do you have any full- or half-sisters, full- or half-brothers, daughters, or sons, either living or deceased?		
rf_Q17	C	raw	How many full- and half-sisters do you have, both living and deceased?		
rf_Q18	C	raw	How many full- and half-brothers do you have, both living and deceased?		
rf_Q19	C	raw	How many daughters do you have, both living and deceased?		
rf_Q1A	C	raw	Date of birth: month		
rf_Q1B_1	C	raw	Date of birth: first digit of day		
rf_Q1B_2	C	raw	Date of birth: second digit of day		
rf_Q1C_1	C	raw	Date of birth: fist digit of year (year in two-digit format)		
rf_Q1C_2	C	raw	Date of birth: second digit of year (year in two-digit format)		

Variable Name	Type	Basis	Description	Levels	Graph
rf_Q2	C	raw	During the past 12 months, did you eat hamburgers, cheeseburgers, beef steak, bacon or chicken?		
rf_Q20	C	raw	How many sons do you have, both living and deceased?		
rf_Q21	C	raw	Have any of the relatives counted in Questions 17-20 ever been diagnosed with any type of cancer, except for basal-cell skin cancer?		
rf_Q22_1A	C	raw	Number of full- or half-brothers diagnosed with prostate caner?		
rf_Q22_1B	C	raw	Number of sons diagnosed with prostate cancer?		
rf_Q22_2C	C	raw	Number of full- or half-sisters diagnosed with ovarian cancer?		
rf_Q22_2D	C	raw	Number of daughters diagnosed with ovarian cancer?		
rf_Q22_3A	C	raw	Number of full- or half-brothers diagnosed with breast cancer?		
rf_Q22_3B	C	raw	Number of sons diagnosed with breast cancer?		
rf_Q22_3C	C	raw	Number of full- or half-sisters diagnosed with breast cancer?		
rf_Q22_3D	C	raw	Number of daughters diagnosed with breast cancer?		
rf_Q22_4B	C	raw	Number of sons diagnosed with colon or rectal cancer?		
rf_Q22_4C	C	raw	Number of full- or half-sisters diagnosed with colon or rectal cancer?		
rf_Q22_4D	C	raw	Number of daughters diagnosed with colon or rectal cancer?		
rf_Q22_5A	C	raw	Number of full- or half-brothers diagnosed with other cancers (except basal-cell skin cancer)?		
rf_Q22_5B	C	raw	Number of sons diagnosed with other cancers (except basal-cell skin cancer)?		
rf_Q22_5C	C	raw	Number of full- or half-sisters diagnosed with other cancers (except basal-cell skin cancer)?		
rf_Q22_5D	C	raw	Number of daughters diagnosed with other		

Variable Name	Type	Basis	Description	Levels	Graph
			cancers (except basal-cell skin cancer)?		
rf_Q22_A4	C	raw	Number of full- or half-brothers diagnosed with colon or rectal cancer?		
rf_Q23_1	C	raw	Have you or your parents ever been diagnosed with breast cancer or ovarian cancer?		
rf_Q23_2_1A	C	raw	Please mark this circle if you have ever been diagnosed with breast cancer		
rf_Q23_2_1B	C	raw	Please mark this circle if your mother has/had ever been diagnosed with breast cancer		
rf_Q23_2_1C	C	raw	Please mark this circle if your father has/had ever been diagnosed with breast cancer		
rf_Q23_2_2A	C	raw	Please mark this circle if you have ever been diagnosed with ovarian cancer		
rf_Q23_2_2B	C	raw	Please mark this circle if your mother has/had ever been diagnosed with ovarian cancer		
rf_Q24_1	C	raw	Have any of your grandfathers, grandmothers, uncles, aunts, nephews, or nieces ever been diagnosed with any type of cancer, except basal-cell skin cancer?		
rf_Q24_2_1A	C	raw	Please mark this circle if your grandfather has/had ever been diagnosed with prostate cancer		
rf_Q24_2_1B	C	raw	Please mark this circle if your uncle has/had ever been diagnosed with prostate cancer		
rf_Q24_2_1C	C	raw	Please mark this circle if your nephew has/had ever been diagnosed with prostate cancer		
rf_Q24_2_2D	C	raw	Please mark this circle if your grandmother has/had ever been diagnosed with ovarian cancer		
rf_Q24_2_2E	C	raw	Please mark this circle if your aunt has/had ever been diagnosed with ovarian cancer		
rf_Q24_2_2F	C	raw	Please mark this circle if your niece has/had ever been diagnosed with ovarian cancer		
rf_Q24_2_3A	C	raw	Please mark this circle if your grandfather has/had ever been diagnosed with breast cancer		

Variable Name	Type	Basis	Description	Levels	Graph
rf_Q24_2_3B	C	raw	Please mark this circle if your uncle has/had ever been diagnosed with breast cancer		
rf_Q24_2_3C	C	raw	Please mark this circle if your nephew has/had ever been diagnosed with breast cancer		
rf_Q24_2_3D	C	raw	Please mark this circle if your grandmother has/had ever been diagnosed with breast cancer		
rf_Q24_2_3E	C	raw	Please mark this circle if your aunt has/had ever been diagnosed with breast cancer		
rf_Q24_2_3F	C	raw	Please mark this circle if your niece has/had ever been diagnosed with breast cancer		
rf_Q24_2_4A	C	raw	Please mark this circle if your grandfather has/had ever been diagnosed with colon or rectal cancer		
rf_Q24_2_4B	C	raw	Please mark this circle if your uncle has/had ever been diagnosed with colon or rectal cancer		
rf_Q24_2_4C	C	raw	Please mark this circle if your nephew has/had ever been diagnosed with colon or rectal cancer		
rf_Q24_2_4D	C	raw	Please mark this circle if your grandmother has/had ever been diagnosed with colon or rectal cancer		
rf_Q24_2_4E	C	raw	Please mark this circle if your aunt has/had ever been diagnosed with colon or rectal cancer		
rf_Q24_2_4F	C	raw	Please mark this circle if your niece has/had ever been diagnosed with colon or rectal cancer		
rf_Q24_2_5A	C	raw	Please mark this circle if your grandfather has/had ever been diagnosed with other cancers except basal-cell skin cancer		
rf_Q24_2_5B	C	raw	Please mark this circle if your uncle has/had ever been diagnosed with other cancer except basal-cell skin cancer		
rf_Q24_2_5C	C	raw	Please mark this circle if your nephew has/had ever been diagnosed with other cancers except basal-cell skin cancer		
rf_Q24_2_5D	C	raw	Please mark this circle if your grandmother		

Variable Name	Type	Basis	Description	Levels	Graph
			has/had ever been diagnosed with other cancers except basal-cell skin cancer		
rf_Q24_2_5E	C	raw	Please mark this circle if your aunt has/had ever been diagnosed with other cancers except basal-cell skin cancer		
rf_Q24_2_5F	C	raw	Please mark this circle if your niece has/had ever been diagnosed with other cancers except basal-cell skin cancer		
rf_Q25	C	raw	Are you a twin?		
rf_Q26A	C	raw	Please mark this circle if your father has/had been diagnosed with diabetes mellitus (sugar diabetes)		
rf_Q26B	C	raw	Please mark this circle if your mother has/had been diagnosed with diabetes mellitus (sugar diabetes)		
rf_Q26C	C	raw	Please mark this circle if your brother has/had been diagnosed with diabetes mellitus (sugar diabetes)		
rf_Q26D	C	raw	Please mark this circle if your sister has/had been diagnosed with diabetes mellitus (sugar diabetes)		
rf_Q26E	C	raw	Please mark this circle if none of these relative has/had been diagnosed with diabetes mellitus (sugar diabetes)		
rf_Q27	C	raw	In the past 3 years, did you have a rectal examination on your prostate?		
rf_Q28	C	raw	In the past 3 years, did you have a PSA blood test to screen for prostate cancer?		
rf_Q28_2B	C	raw			
rf_Q29	C	raw	Have you taken any female hormones during or after menopause?		
rf_Q3_1	C	raw	During the past 12 months, when you ate hamburgers or cheeseburgers, how were they usually cooked?		
rf_Q3_2	C	raw	During the past 12 months, when you ate steak (beef), how was it usually cooked?		
rf_Q3_3	C	raw	During the past 12 months, when you ate bacon, how was it usually cooked?		
rf_Q3_4			During the past 12 months, when you ate chicken, how was it usually cooked?		

Variable Name	Type	Basis	Description	Levels	Graph
rf_Q30A	C	raw	Please mark this circle if the type of hormones taken were pills		
rf_Q30B	C	raw	Please mark this circle if the type of hormones taken were vaginal creams or suppositories		
rf_Q30C	C	raw	Please mark this circle if the type of hormones taken was a patch		
rf_Q30D	C	raw	Please mark this circle if the type of hormones taken were shots		
rf_Q30E	C	raw	Please mark this circle if you are not sure of the type of hormones taken		
rf_Q31_1	C	raw	Have you ever taken estrogen hormone pills, such as Premarin?		
rf_Q31_2A	C	raw	Month in which participant began to take estrogen hormone pills, such as Premarin		
rf_Q31_2B	C	raw	First digit of year in which participant began to take estrogen hormone pills, such as Premarin (year in two-digit format)		
rf_Q31_2C	C	raw	Second digit of year in which participant began to take estrogen hormone pills, such as Premarin (year in two-digit format)		
rf_Q31yr	N	raw	What year did you start taking estrogen hormone pills, such a Premarin?		
rf_Q32_1	C	raw	Are you still taking estrogen pills?		
rf_Q32_2A	C	raw	Month in which participant stopped taking estrogen hormone pills		
rf_Q32_2B	C	raw	First digit of year in which participant stopped taking estrogen hormone pills (year in two-digit format)		
rf_Q32_2C	C	raw	Second digit of year in which participant stopped taking estrogen hormone pills (year in two-digit format)		
rf_Q32yr	N	raw	What year did you stop taking estrogen hormone pills, such as Premarin?		
rf_Q33	C	raw	How many year have you taken estrogen pills?		
rf_Q34A	C	raw	Please mark this circle if Premarin was the name of the estrogen pills you took for the longest period of time.		
rf_Q34B	C	raw	Please mark this circle if Ogen was the name		

Variable Name	Type	Basis	Description	Levels	Graph
			of the estrogen pills you took for the longest period of time.		
rf_Q34C	C	raw	Please mark this circle if Estrace was the name of the estrogen pills you took for the longest period of time.		
rf_Q34D	C	raw	Please mark this circle if Estratab or Estratest was the name of the estrogen pills you took for the longest period of time.		
rf_Q34E	C	raw	Please mark this circle if there was some other name of the estrogen pills you took for the longest period of time		
rf_Q34F	C	raw	Please mark this circle if you do not know the name of the estrogen pills you took the longest period of time		
rf_Q35	C	raw	How often did you usually take the estrogen pills reported in Question 34?		
rf_Q36	C	raw	What was the dosage of the estrogen pills you reported in Question 34?		
rf_Q37_1	C	raw	Have you ever taken progesterone or progestin pills, such as Provera?		
rf_Q37_2A	C	raw	Month in which participant began to take progesterone or progestin pills, such as Provera		
rf_Q37_2B	C	raw	First digit of year in which participant began to take progesterone or progestin pills, such as Provera (year in two-digit format)		
rf_Q37_2C	C	raw	Second digit of year in which participant began to take progesterone or progestin pills, such as Provera (year in two-digit format)		
rf_Q37yr	N	raw	What year did you start taking progesterone or progestin pills?		
rf_Q38_1	C	raw	Are you still taking progesterone or progestin pills?		
rf_Q38_2A	C	raw	Month in which participant stopped taking progesterone or progestin pills		
rf_Q38_2B	C	raw	First digit of year in which participant stopped taking progesterone or progestin pills (year in two-digit format)		
rf_Q38_2C	C	raw	Second digit of year in which participant stopped taking progesterone or progestin		

Variable Name	Type	Basis	Description	Levels	Graph
			pills (year in two-digit format)		
rf_Q38yr	N	raw	What year did you stop taking progesterone or progestin pills?		
rf_Q39	C	raw	How many years have you taken progesterone or progestin pills?		
rf_Q4_1	C	raw	During the past 12 months, when you ate hamburgers or cheeseburgers, how well were they usually cooked on the outside?		
rf_Q4_2	C	raw	During the past 12 months, when you ate steak (beef), how well was it usually cooked on the outside?		
rf_Q4_3	C	raw	During the past 12 months, when you ate bacon, how well was it usually cooked on the outside?		
rf_Q4_4	C	raw	During the past 12 months, when you ate pan-fried chicken, how well was it usually cooked on the outside?		
rf_Q4_5	C	raw	During the pas t12 months, when you ate grilled or barbecued chicken, how well was it usually cooked on the outside?		
rf_Q40A	C	raw	Please mark this circle if Provera was the name of the progesterone or progestin pills you took for the longest period of time		
rf_Q40B	C	raw	Please mark this circle if Medroxyprogesterone was the name of the progesterone or progestin pills you took for the longest period of time		
rf_Q40C	C	raw	Please mark this circle if Cycrin was the name of the progesterone or progestin pills you took for the longest period of time		
rf_Q40D	C	raw	Please mark this circle if there was some other name of the progesterone or progestin pills you took for the longest period of time		
rf_Q40E	C	raw	Please mark this circle if you do not know the name of the progesterone or progestin pills you took for the longest period of time		
rf_Q41	C	raw	How often did you usually take the progesterone or progestin pills you reported on Question 40?		
rf_Q42	C	raw	What was the dosage of the progesterone or		

Variable Name	Type	Basis	Description	Levels	Graph
			progestin pills you reported in Question 40?		
rf_Q43	C	raw	Have you ever been told by a doctor that you had benign breast lumps or fibrocystic breast disease?		
rf_Q44	C	raw	Have you had a mammogram in the past 3 years?		
rf_Q45	C	raw	Have you had an ultrasound or scan of your ovaries in the past 3 years?		
rf_Q46	C	raw	Have you had a blood test for ovarian cancer, for example, CA-125 in the past 3 years?		
rf_Q47_1	C	raw	Have you ever been told by a doctor that you had high blood pressure (hypertension)?		
rf_Q47_2	C	raw	Have you ever been told by a doctor that you had a high cholesterol level>?		
rf_Q48	C	raw	Have you ever had a job that required physically demanding work?		
rf_Q49	C	raw	How many physically demanding jobs have you ever held?		
rf_Q5_1	C	raw	During the past 12 months, when you ate hamburgers or cheeseburgers, how well were they usually cooked on the inside?		
rf_Q5_2	C	raw	During the past 12 months, when you ate steak(beef), how well was it usually cooked on the inside?		
rf_Q50	C	raw	What is the total number of years that you have worked in these physically demanding jobs?		
rf_Q51_1	C	raw	Have you ever had a job in which you walked or biked to work for most days of the week?		
rf_Q51_2	C	raw	What was the total number of years you had the job(s) in which you walked or biked to work for most days of the week?		
rf_Q52	C	raw	How much time did you spend watching television or videos during a typical 24-hour period in the past 12 months?		
rf_Q53_A	C	raw	How many hours did you spend sleeping at night during a typical 24-hour period in the past 12 months?		
rf_Q53_B	C	raw	How many hours did you spend napping in the daytime during a typical 24-hour period in		

Variable Name	Type	Basis	Description	Levels	Graph
			the past 12 months?		
rf_Q53_C	C	raw	How many hours did you spend sitting during a typical 24-hour period in the past 12 months?		
rf_Q54_1	C	raw	How often did you participate in light activities at the following ages and time: 15-18 years old?		
rf_Q54_2	C	raw	How often did you participate in light activities at the following ages and time: 19-29 years old?		
rf_Q54_3	C	raw	How often did you participate in light activities at the following ages and time: 35-39 years old?		
rf_Q54_4	C	raw	How often did you participate in light activities at the following ages and time: in the past 10 years?		
rf_Q55_1	C	raw	How often did you participate in moderate to vigorous activities at the following ages and time: 15-18 years old?		
rf_Q55_2	C	raw	How often did you participate in moderate to vigorous activities at the following ages and time: 19-29 years old?		
rf_Q55_3	C	raw	How often did you participate in moderate to vigorous activities at the following ages and time: 35-39 years old?		
rf_Q55_4	C	raw	How often did you participate in moderate to vigorous activities at the following ages and time: in the past 10 years?		
rf_Q56A	C	raw	Feet portion of participant's height at age 18		
rf_Q56B	C	raw	Inches portion of participant's height at age 18		
rf_Q56ht	N	raw	How tall were you at about age 18?		
rf_Q57_1A	C	raw	First digit (hundreds place) of weight at age 18 (in pounds)		
rf_Q57_1B	C	raw	Second digit (tens place) of weight at age 18 (in pounds)		
rf_Q57_1C	C	raw	Third digit (ones place) of weight at age 18 (in pounds)		
rf_Q57_2A	C	raw	First digit (hundreds place) of weight at age 35 (in pounds)		

Variable Name	Type	Basis	Description	Levels	Graph
rf_Q57_2B	C	raw	Second digit (tens place) of weight at age 35 (in pounds)		
rf_Q57_2C	C	raw	Third digit (ones place) of weight at age 35 (in pounds)		
rf_Q57_3A	C	raw	First digit (hundreds place) of weight at age 50 (in pounds)		
rf_Q57_3B	C	raw	Second digit (tens place) of weight at age 50 (in pounds)		
rf_Q57_3C	C	raw	Third digit (ones place) of weight at age 50 (in pounds)		
rf_Q57wt18	N	raw	About how much did you weigh at age 18?		
rf_Q57wt35	N	raw	About how much did you weigh at age 35?		
rf_Q57wt50	N	raw	About how much did you weigh at age 50?		
rf_Q58_1A	C	raw	First digit (hundreds place) of maximum adult weight (in pounds)		
rf_Q58_1B	C	raw	Second digit (tens place) of maximum adult weight (in pounds)		
rf_Q58_1C	C	raw	Third digit (ones place) of maximum adult weight (in pounds)		
rf_Q58_2	C	raw	How old were you when you weighted your most?		
rf_Q58wtmax	N	raw	What was your maximum adult weight?		
rf_Q59_1A	C	raw	First digit (hundreds place) of minimum adult weight (in pounds)		
rf_Q59_1B	C	raw	Second digit (tens place) of minimum adult weight (in pounds)		
rf_Q59_1C	C	raw	Third digit (ones place) of minimum adult weight (in pounds)		
rf_Q59_2	C	raw	How old were you when you weighted your least?		
rf_Q59wtmin	N	raw	What was your minimum adult weight?		
rf_Q6	C	raw	During the past 12 months, when you ate chicken, how well was it usually cooked on the inside?		
rf_Q60	C	raw	Where do you carry most of your weight on your body?		
rf_Q61	C	raw	If you gained weight when you were around 40 to 59 years old, where on your body did you mainly tend to add the weight at that time?		

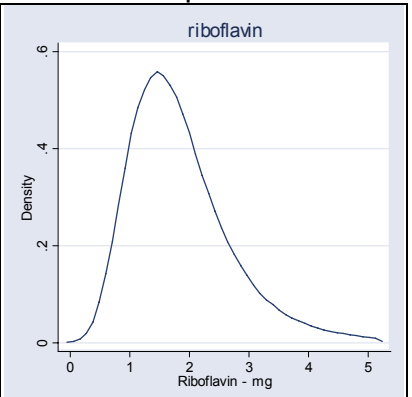
Variable Name	Type	Basis	Description	Levels	Graph
rf_Q62_1A	C	raw	First digit (tens place) of current waist inches		
rf_Q62_1B	C	raw	Second digit (ones place) of current waist inches		
rf_Q62_1C	C	raw	Fraction of an inch of current waist inches		
rf_Q62_2A	C	raw	First digit (tens place) of current hip inches		
rf_Q62_2B	C	raw	Second digit (ones place) of current hip inches		
rf_Q62_2C	C	raw	Fraction of an inch of current hip inches		
rf_Q62hip	N	raw	Measurement of the hip in inches		
rf_Q62waist	N	raw	Measurement of the waist in inches		
rf_Q7	C	raw	During the past 12 months, how often did you eat the drippings or gravy from beef, bacon, or chicken?		
rf_Q8_1	C	raw	Ten years ago, how often did you drink whole milk, including on cereals?		
rf_Q8_10	C	raw	Ten years ago, how often did you eat pizza?		
rf_Q8_11	C	raw	Ten years ago, how often did you eat tomato or vegetable soups?		
rf_Q8_12	C	raw	Ten years ago, how often did you eat beans, such as baked, refried, pintos, kidney, or lima?		
rf_Q8_13	C	raw	Ten years ago, how often did you eat peanut butter?		
rf_Q8_14	C	raw	Ten years ago, how often did you eat canned tuna?		
rf_Q8_15	C	raw	Ten years ago, how often did you eat hot dogs or frankfurters?		
rf_Q8_16	C	raw	Ten years ago, how often did you eat cold cuts or luncheon meats, such as ham, bologna, salami, corned beef, or pastrami?		
rf_Q8_17	C	raw	Ten years ago, how often did you eat cheese or cheese spreads?		
rf_Q8_18	C	raw	Ten years ago, how often did you eat ground beef in hamburgers, cheeseburgers, meatloaf, meatballs, or casseroles?		
rf_Q8_19	C	raw	Ten years ago, how often did you eat roast beef or steak (including in sandwiches)?		
rf_Q8_2	C	raw	Ten years ago, how often did you drink low-fat milks (2%, 1%, skin), including on cereals?		

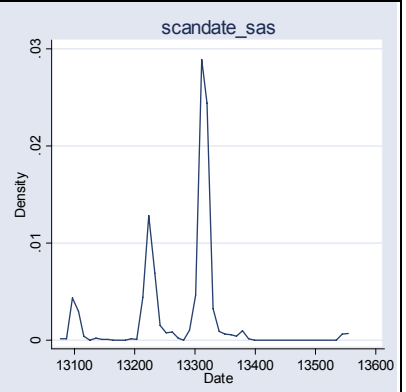
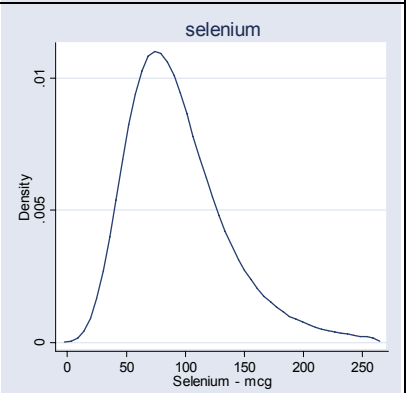
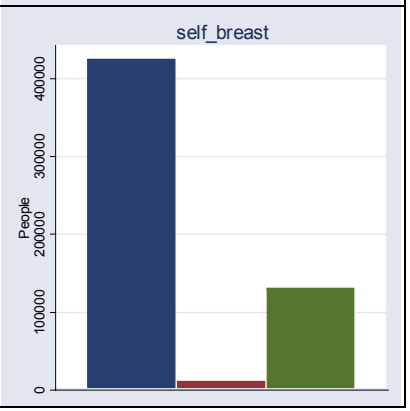
Variable Name	Type	Basis	Description	Levels	Graph
rf_Q8_20	C	raw	Ten years ago, how often did you eat chicken or turkey (including in sandwiches, casseroles, salads, and other mixed dishes)?		
rf_Q8_21	C	raw	Ten years ago, how often did you eat gravy?		
rf_Q8_22	C	raw	Ten years ago, how often did you eat white bread or rolls?		
rf_Q8_23	C	raw	Ten years ago, how often did you eat dark bread or rolls (rye, whole grain, whole wheat, pumpernickel, etc.)?		
rf_Q8_24	C	raw	Ten years ago, how often did you eat French fries, home fries, or hash brown potatoes?		
rf_Q8_25	C	raw	Ten years ago, how often did you eat other potatoes (baked, mashed, or boiled)?		
rf_Q8_26	C	raw	Ten years ago, how often did you eat lettuce salads (with or without other vegetables)?		
rf_Q8_27	C	raw	Ten years ago, how often did you eat fresh tomatoes (including in salads)?		
rf_Q8_28	C	raw	Ten years ago, how often did you eat mayonnaise (including on sandwiches, tuna, and potato salad)?		
rf_Q8_29	C	raw	Ten years ago, how often did you eat salad dressings for salads or vegetables?		
rf_Q8_3	C	raw	Ten years ago, how often did you drink orange juice or grapefruit juice?		
rf_Q8_30	C	raw	Ten years ago, how often did you eat broccoli?		
rf_Q8_31	C	raw	Ten years ago, how often did you eat carrots?		
rf_Q8_32	C	raw	Ten years ago, how often did you eat other vegetables (such as corn, peas, or green beans)?		
rf_Q8_33	C	raw	Ten years ago, how often did you eat real butter (including on bread and vegetables)?		
rf_Q8_34	C	raw	Ten years ago, how often did you eat margarine (including on bread and vegetables)?		
rf_Q8_35	C	raw	Ten years ago, how often did you eat cake?		
rf_Q8_36	C	raw	Ten years ago, how often did you eat cookies or brownies?		
rf_Q8_37	C	raw	Ten years ago, how often did you eat ice		

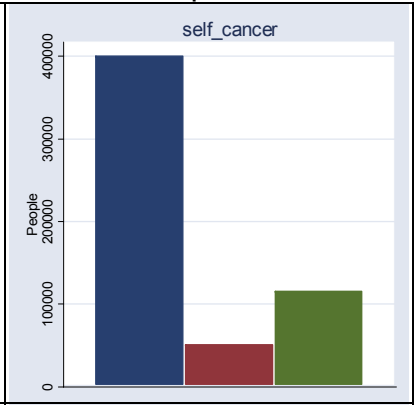
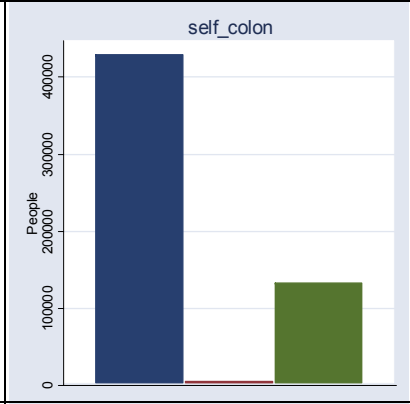
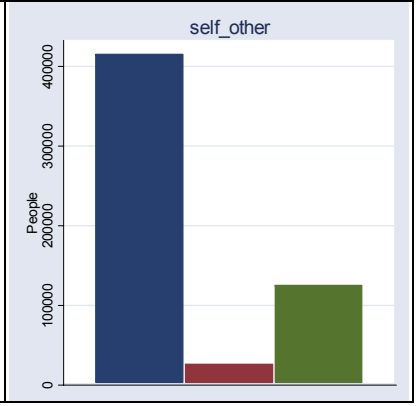
Variable Name	Type	Basis	Description	Levels	Graph
			cream and milk shakes?		
rf_Q8_4	C	raw	Ten years ago, how often did you eat oranges, grapefruit, or tangerines?		
rf_Q8_5	C	raw	Ten years ago, how often did you eat fresh apples (not cooked)?		
rf_Q8_6	C	raw	Ten years ago, how often did you eat canned fruits, such as peaches, pears, or applesauce?		
rf_Q8_7	C	raw	Ten years ago, how often did you eat eggs?		
rf_Q8_8	C	raw	Ten years ago, how often did you eat bacon or sausage?		
rf_Q8_9	C	raw	Ten years ago, how often did you eat doughnuts, sweet rolls, Danishes, sweet muffins, or dessert breads?		
rf_Q9_1	C	raw	When you were 12-13 years old, how often did you drink whole milk, including on cereals?		
rf_Q9_10	C	raw	When you were 12-13 years old, how often did you eat pizza?		
rf_Q9_11	C	raw	When you were 12-13 years old, how often did you eat tomato or vegetable soups?		
rf_Q9_12	C	raw	When you were 12-13 years old, how often did you eat beans, such as baked, refried, pintos, kidney, or lima?		
rf_Q9_13	C	raw	When you were 12-13 years old, how often did you eat peanut butter?		
rf_Q9_14	C	raw	When you were 12-13 years old, how often did you eat canned tuna?		
rf_Q9_15	C	raw	When you were 12-13 years old, how often did you eat hot dogs or frankfurters?		
rf_Q9_16	C	raw	When you were 12-13 years old, how often did you eat cold cuts or luncheon meats, such as ham, bologna, salami, corned beef, or pastrami?		
rf_Q9_17	C	raw	When you were 12-13 years old, how often did you eat cheese or cheese spreads?		
rf_Q9_18	C	raw	When you were 12-13 years old, how often did you eat ground beef in hamburgers, cheeseburgers, meatloaf, meatballs, or casseroles?		

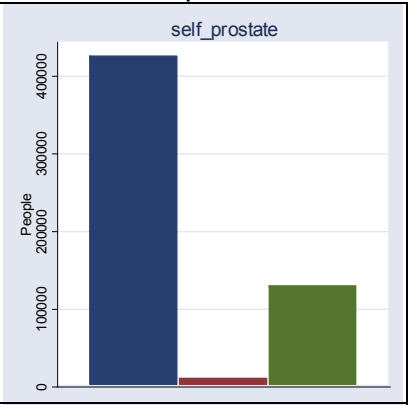
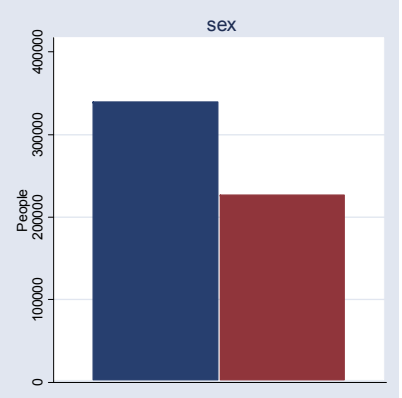
Variable Name	Type	Basis	Description	Levels	Graph
rf_Q9_19	C	raw	When you were 12-13 years old, how often did you eat roast beef or steak (including in sandwiches)?		
rf_Q9_2	C	raw	When you were 12-13 years old, how often did you drink low-fat milks (2%, 1%, skin), including on cereals?		
rf_Q9_20	C	raw	When you were 12-13 years old, how often did you eat chicken or turkey (including in sandwiches, casseroles, salads, and other mixed dishes)?		
rf_Q9_21	C	raw	When you were 12-13 years old, how often did you eat gravy?		
rf_Q9_22	C	raw	When you were 12-13 years old, how often did you eat white bread or rolls?		
rf_Q9_23	C	raw	When you were 12-13 years old, how often did you eat dark bread or rolls (rye, whole grain, whole wheat, pumpernickel, etc.)?		
rf_Q9_24	C	raw	When you were 12-13 years old, how often did you eat French fries, home fries, or hash brown potatoes?		
rf_Q9_25	C	raw	When you were 12-13 years old, how often did you eat other potatoes (baked, mashed, or boiled)?		
rf_Q9_26	C	raw	When you were 12-13 years old, how often did you eat lettuce salads (with or without other vegetables)?		
rf_Q9_27	C	raw	When you were 12-13 years old, how often did you eat fresh tomatoes (including in salads)?		
rf_Q9_28	C	raw	When you were 12-13 years old, how often did you eat mayonnaise (including on sandwiches, tuna, and potato salad)?		
rf_Q9_29	C	raw	When you were 12-13 years old, how often did you eat salad dressings for salads or vegetables?		
rf_Q9_3	C	raw	When you were 12-13 years old, how often did you drink orange juice or grapefruit juice?		
rf_Q9_30	C	raw	When you were 12-13 years old, how often did you eat broccoli?		
rf_Q9_31	C	raw	When you were 12-13 years old, how often		

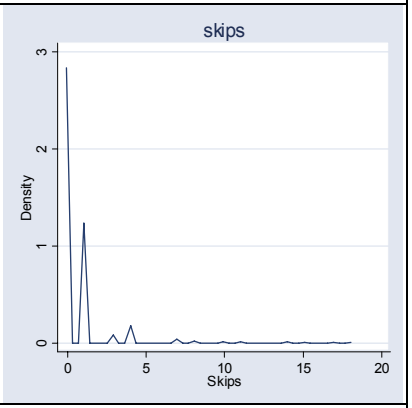
Variable Name	Type	Basis	Description	Levels	Graph
			did you eat carrots?		
rf_Q9_32	C	raw	When you were 12-13 years old, how often did you eat other vegetables (such as corn, peas, or green beans)?		
rf_Q9_33	C	raw	When you were 12-13 years old, how often did you eat real butter (including on bread and vegetables)?		
rf_Q9_34	C	raw	When you were 12-13 years old, how often did you eat margarine (including on bread and vegetables)?		
rf_Q9_35	C	raw	When you were 12-13 years old, how often did you eat cake?		
rf_Q9_36	C	raw	When you were 12-13 years old, how often did you eat cookies or brownies?		
rf_Q9_37	C	raw	When you were 12-13 years old, how often did you eat ice cream and milk shakes?		
rf_Q9_4	C	raw	When you were 12-13 years old, how often did you eat oranges, grapefruit, or tangerines?		
rf_Q9_5	C	raw	When you were 12-13 years old, how often did you eat fresh apples (not cooked)?		
rf_Q9_6	C	raw	When you were 12-13 years old, how often did you eat canned fruits, such as peaches, pears, or applesauce?		
rf_Q9_7	C	raw	When you were 12-13 years old, how often did you eat eggs?		
rf_Q9_8	C	raw	When you were 12-13 years old, how often did you eat bacon or sausage?		
rf_Q9_9	C	raw	When you were 12-13 years old, how often did you eat doughnuts, sweet rolls, Danishes, sweet muffins, or dessert breads?		
rf_SEQNUM	C	raw			
rf_STACK	C	raw			
rf_UNSPEC	C	raw			

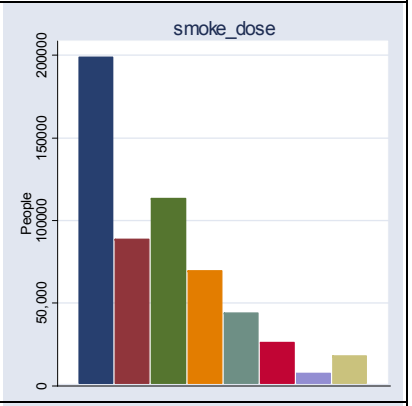
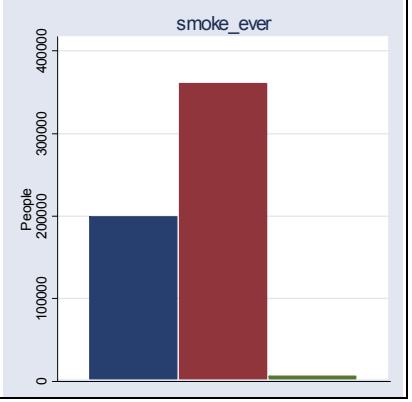
Variable Name	Type	Basis	Description	Levels	Graph
Riboflavin	N	DietAARP derived	Riboflavin - mg	Continuous (range = 0 → 69.16)	

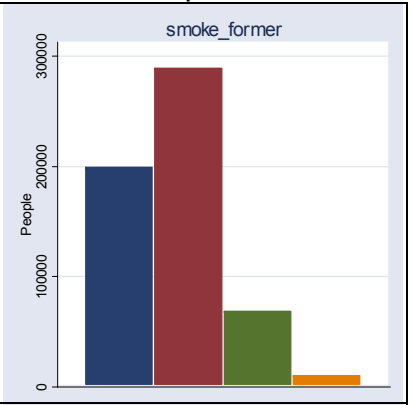
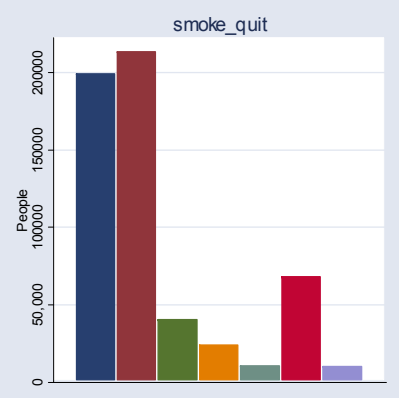
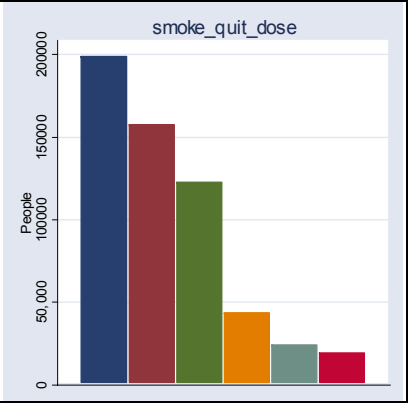
Variable Name	Type	Basis	Description	Levels	Graph
Scandate_sas	N	Questionnaire mailing logistics	Date questionnaire was scanned	Continuous (range = 13,081 → 13,550)	
Selenium	N	DietAARP derived	Selenium – mcg	Continuous (range = 0.23 → 4,188.09)	
SELF_BREAST	N	Cleaned from Q41A2	Has the participant ever been diagnosed with breast cancer?	0 = No (*n*= 424,451) 1 = Yes (*n*= 11,029) 9 = Unknown (*n*= 130,927)	

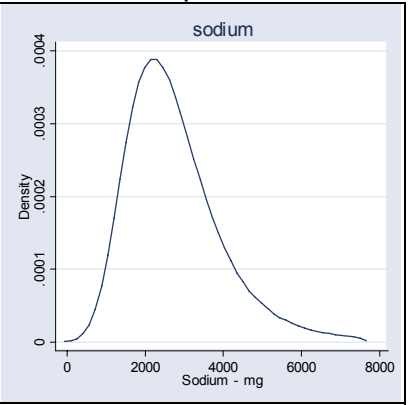
Variable Name	Type	Basis	Description	Levels	Graph
SELF_CANCER	N	Derived from Q41A1-Q41A4	Has the participant ever been diagnosed with cancer?	0 = No (*n*= 399,814) 1 = Yes (*n*= 50,591) 9 = Unknown (*n*= 116,002)	
SELF_COLON	N	Cleaned from Q41A3	Has the participant ever been diagnosed with colon cancer?	0 = No (*n*= 428,823) 1 = Yes (*n*= 5,168) 9 = Unknown (*n*= 132,416)	
SELF_OTHER	N	Cleaned from Q41A4	Has the participant ever been diagnosed with cancer other than breast, colon, or prostate?	0 = No (*n*= 415,146) 1 = Yes (*n*= 26,162) 9 = Unknown (*n*= 125,099)	

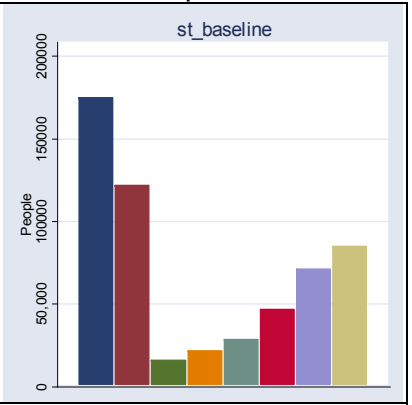
Variable Name	Type	Basis	Description	Levels	Graph
SELF_PROSTATE	N	Cleaned from Q41A1	Has the participant ever been diagnosed with prostate cancer?	0 = No (*n*= 425,446) 1 = Yes (*n*= 11,024) 9 = Unknown (*n*= 129,937)	
Sex	N		Sex	0 = Male (*n*= 339,671) 1 = Female (*n*= 226,736)	
skin_ajcc_stg	C	cancer registry	see cancer_ajcc_stg	see cancer_ajcc_stg	
skin_ajccseer	C	cancer registry	see cancer_ajccseer	see cancer_ajccseer	
skin_behv	C	cancer registry	see cancer_behv	see cancer_behv	
skin_dxconf	C	cancer registry	see cancer_dxconf	see cancer_dxconf	
skin_dxdt	N	cancer registry	see cancer_dxdt	see cancer_dxdt	
skin_grade	C	cancer registry	see cancer_grade	see cancer_grade	
skin_hist	C	cancer registry	see cancer_hist	see cancer_hist	
skin_histv	C	cancer registry	see cancer_histv	see cancer_histv	
skin_lateral	C	cancer registry	see cancer_lateral	see cancer_lateral	
skin_mort	N	cancer registry	see cancer_mort	see cancer_mort	
skin_pnode	C	cancer registry	see cancer_pnode	see cancer_pnode	
skin_seqno	C	cancer registry	see cancer_seqno	see cancer_seqno	
skin_site	C	cancer registry	see cancer_site	see cancer_site	
skin_siterec3	N	cancer registry	see cancer_siterec3	see cancer_siterec3	

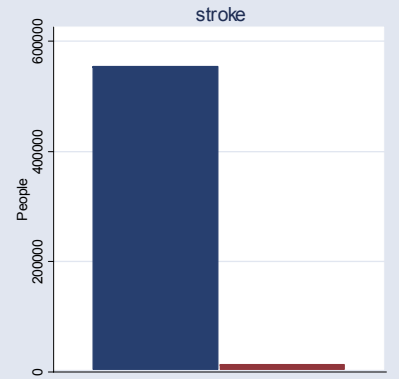
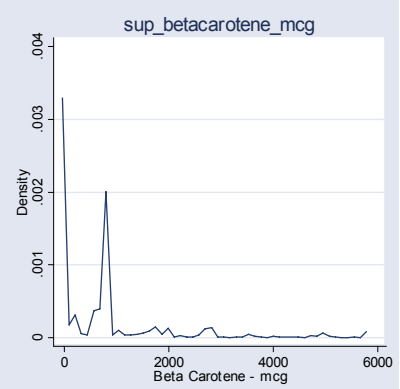
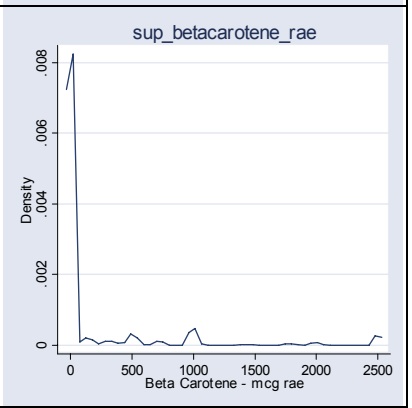
Variable Name	Type	Basis	Description	Levels	Graph
skin_ss_stg	C	cancer registry	see cancer_ss_stg	see cancer_ss_stg	
skin_ss_stg47	C	cancer registry	see cancer_ss_stg47	see cancer_ss_stg47	
skin_ss_stgv	C	cancer registry	see cancer_ss_stgv	see cancer_ss_stgv	
skin_status	C	cancer registry	see cancer_status	see cancer_status	
skin_tnmclinm	C	cancer registry	see cancer_tnmclinm	see cancer_tnmclinm	
skin_tnmclinn	C	cancer registry	see cancer_tnmclinn	see cancer_tnmclinn	
skin_tnmclint	C	cancer registry	see cancer_tnmclint	see cancer_tnmclint	
skin_tnmpathm	C	cancer registry	see cancer_tnmpathm	see cancer_tnmpathm	
skin_tnmpathn	C	cancer registry	see cancer_tnmpathn	see cancer_tnmpathn	
skin_tnmpatht	C	cancer registry	see cancer_tnmpatht	see cancer_tnmpatht	
skin_xnode	C	cancer registry	see cancer_xnode	see cancer_xnode	
skincan	N	cancer registry	see cancercan	see cancercan	
Skips	N	DietAARP derived	Number of food frequencies skipped	Continuous (range = 0 → 107)	
smallint_ajcc_stg	C	cancer registry	see cancer_ajcc_stg	see cancer_ajcc_stg	
smallint_ajccseer	C	cancer registry	see cancer_ajccseer	see cancer_ajccseer	
smallint_behv	C	cancer registry	see cancer_behv	see cancer_behv	
smallint_dxconf	C	cancer registry	see cancer_dxconf	see cancer_dxconf	
smallint_dxdt	N	cancer registry	see cancer_dxdt	see cancer_dxdt	
smallint_grade	C	cancer registry	see cancer_grade	see cancer_grade	
smallint_hist	C	cancer registry	see cancer_hist	see cancer_hist	
smallint_histv	C	cancer registry	see cancer_histv	see cancer_histv	
smallint_lateral	C	cancer registry	see cancer_lateral	see cancer_lateral	
smallint_mort	N	cancer registry	see cancer_mort	see cancer_mort	
smallint_pnode	C	cancer registry	see cancer_pnode	see cancer_pnode	
smallint_seqno	C	cancer registry	see cancer_seqno	see cancer_seqno	
smallint_site	C	cancer registry	see cancer_site	see cancer_site	
smallint_siterec3	N	cancer registry	see cancer_siterec3	see cancer_siterec3	

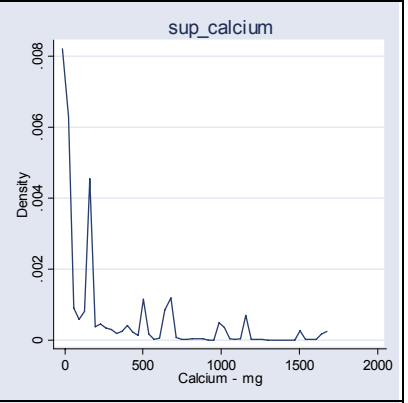
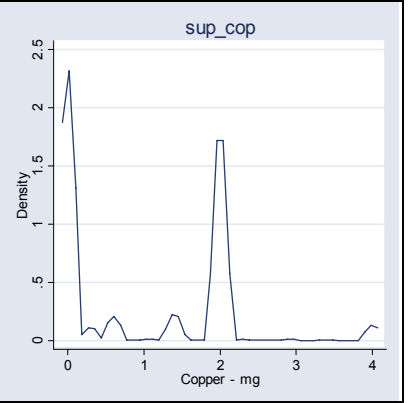
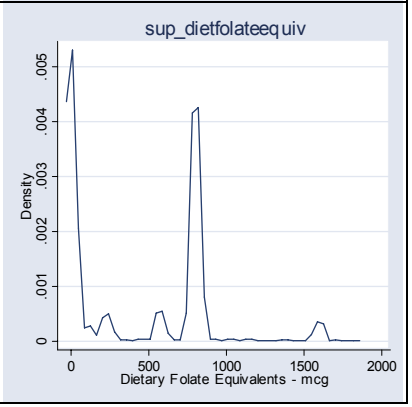
Variable Name	Type	Basis	Description	Levels	Graph
smallint_ss_stg	C	cancer registry	see cancer_ss_stg	see cancer_ss_stg	
smallint_ss_stg47	C	cancer registry	see cancer_ss_stg47	see cancer_ss_stg47	
smallint_ss_stgv	C	cancer registry	see cancer_ss_stgv	see cancer_ss_stgv	
smallint_status	C	cancer registry	see cancer_status	see cancer_status	
smallint_tnmclinm	C	cancer registry	see cancer_tnmclinm	see cancer_tnmclinm	
smallint_tnmclinn	C	cancer registry	see cancer_tnmclinn	see cancer_tnmclinn	
smallint_tnmclint	C	cancer registry	see cancer_tnmclint	see cancer_tnmclint	
smallint_tnmpathm	C	cancer registry	see cancer_tnmpathm	see cancer_tnmpathm	
smallint_tnmpathn	C	cancer registry	see cancer_tnmpathn	see cancer_tnmpathn	
smallint_tnmpatht	C	cancer registry	see cancer_tnmpatht	see cancer_tnmpatht	
smallint_xnode	C	cancer registry	see cancer_xnode	see cancer_xnode	
smallintcan	N	cancer registry	see cancercan	see cancercan	
SMOKE_DOSE	N	Derived from Q42, Q43, Q44	Smoking dose	0 = Never smoked (*n*= 199,056) 1 = 1-10 cigarettes a day (*n*= 88,543) 2 = 11-20 cigarettes a day (*n*= 113,434) 3 = 21-30 cigarettes a day (*n*= 69,463) 4 = 31-40 cigarettes a day (*n*= 43,975) 5 = 41-60 cigarettes a day (*n*= 26,432) 6 = ≥60 cigarettes a day (*n*= 7,470) 9 = Unknown (*n*= 18,034)	
SMOKE_EVER	N	Derived from Q42, Q43, Q44	Did participant ever smoke?	0 = No (*n*= 199,056) 1 = Yes (*n*= 360,738) 9 = Unknown (*n*= 6,613)	

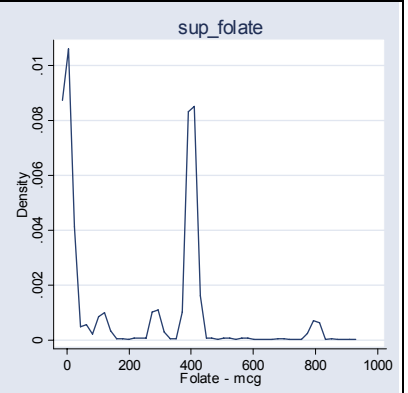
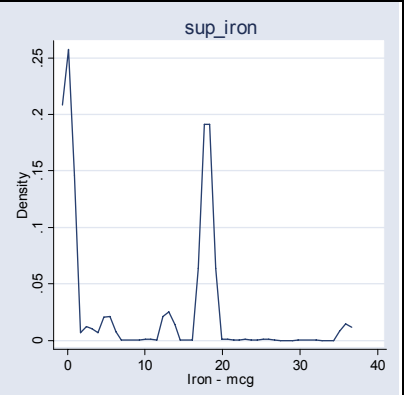
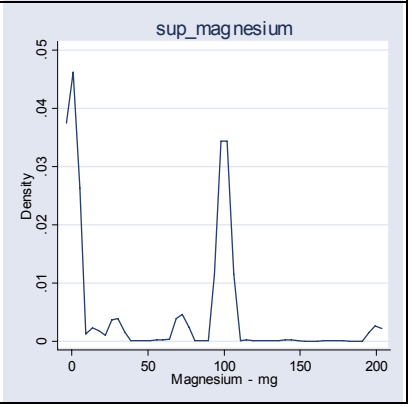
Variable Name	Type	Basis	Description	Levels	Graph
SMOKE_FORMER	N	Derived from Q42, Q43, Q44	Smoking status	0 = Never smoked (*n*= 199,056) 1 = Former smoker (*n*= 288,994) 2 = Current smoker (*n*= 68,289) 0 = Unknown (*n*= 10,068)	
SMOKE_QUIT	N	Derived from Q42, Q43, Q44	Quit smoking status	0 = Never smoked (*n*= 199,056) 1 = Stopped 10 or more years ago (*n*= 213,356) 2 = Stopped 5-9 years ago (*n*= 40,719) 3 = Stopped 1-4 years ago (*n*= 24,118) 4 = Stopped within last year (*n*= 10,801) 5 = Currently smoking (*n*= 68,289) 9 = Unknown (*n*= 10,068)	
SMOKE_QUIT_DOSE	N	Derived from Q42, Q43, Q44	Smoking status and dose combined	0 = Never smoked (*n*= 199,056) 1 = Quit, ≤20 cigarettes a day (*n*= 157,367) 2 = Quit, >20 cigarettes a day (*n*= 122,846) 3 = Currently smoking, ≤20 cigarettes a day (*n*= 43,807) 4 = Currently smoking, >20 cigarettes a day (*n*= 24,097) 9 = Unknown (*n*= 19,234)	

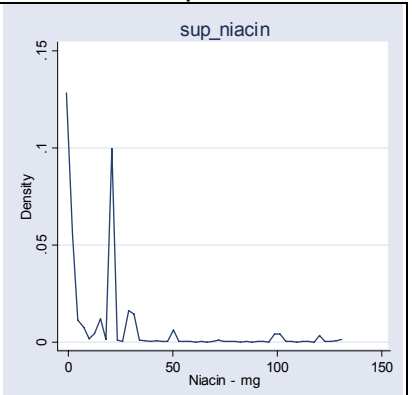
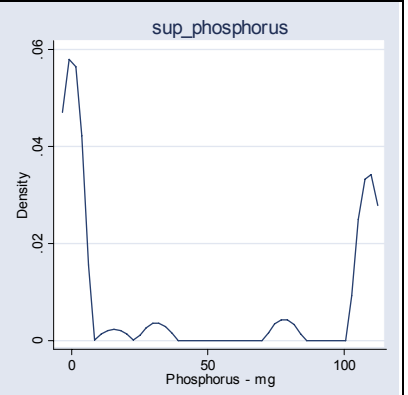
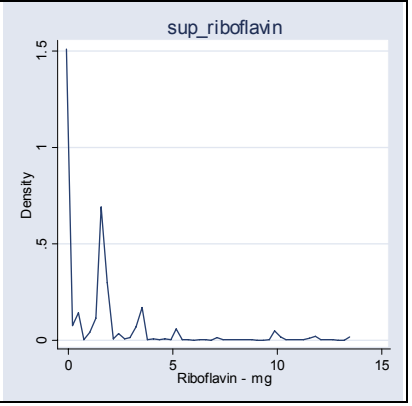
Variable Name	Type	Basis	Description	Levels	Graph
Sodium	N	DietAARP derived	Sodium – mg	Continuous (range = 7.95 → 124,746)	
soft_ajcc_stg	C	cancer registry	see cancer_ajcc_stg	see cancer_ajcc_stg	
soft_ajccseer	C	cancer registry	see cancer_ajccseer	see cancer_ajccseer	
soft_behv	C	cancer registry	see cancer_behv	see cancer_behv	
soft_dxconf	C	cancer registry	see cancer_dxconf	see cancer_dxconf	
soft_dxdt	N	cancer registry	see cancer_dxdt	see cancer_dxdt	
soft_grade	C	cancer registry	see cancer_grade	see cancer_grade	
soft_hist	C	cancer registry	see cancer_hist	see cancer_hist	
soft_histv	C	cancer registry	see cancer_histv	see cancer_histv	
soft_lateral	C	cancer registry	see cancer_lateral	see cancer_lateral	
soft_mort	N	cancer registry	see cancer_mort	see cancer_mort	
soft_pnode	C	cancer registry	see cancer_pnode	see cancer_pnode	
soft_seqno	C	cancer registry	see cancer_seqno	see cancer_seqno	
soft_site	C	cancer registry	see cancer_site	see cancer_site	
soft_siterec3	N	cancer registry	see cancer_siterec3	see cancer_siterec3	
soft_ss_stg	C	cancer registry	see cancer_ss_stg	see cancer_ss_stg	
soft_ss_stg47	C	cancer registry	see cancer_ss_stg47	see cancer_ss_stg47	
soft_ss_stgv	C	cancer registry	see cancer_ss_stgv	see cancer_ss_stgv	
soft_status	C	cancer registry	see cancer_status	see cancer_status	
soft_tnmclinm	C	cancer registry	see cancer_tnmclinm	see cancer_tnmclinm	
soft_tnmclinn	C	cancer registry	see cancer_tnmclinn	see cancer_tnmclinn	
soft_tnmclint	C	cancer registry	see cancer_tnmclint	see cancer_tnmclint	
soft_tnmpathm	C	cancer registry	see cancer_tnmpathm	see cancer_tnmpathm	
soft_tnmpathn	C	cancer registry	see cancer_tnmpathn	see cancer_tnmpathn	
soft_tnmpatht	C	cancer registry	see cancer_tnmpatht	see cancer_tnmpatht	
soft_xnode	C	cancer registry	see cancer_xnode	see cancer_xnode	
softcan	N	cancer registry	see cancercan	see cancercan	

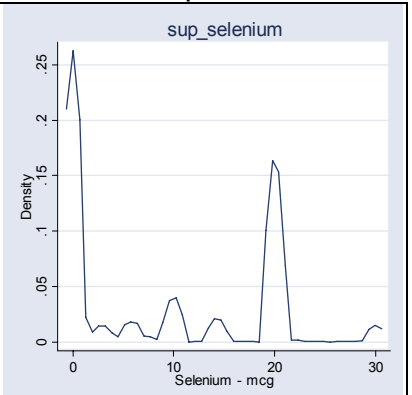
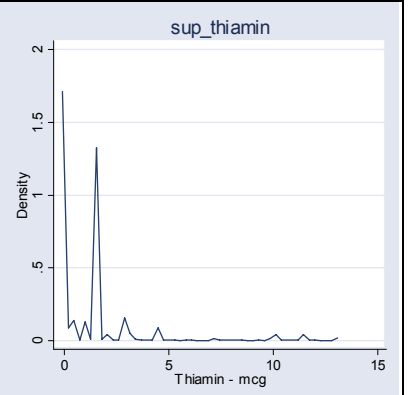
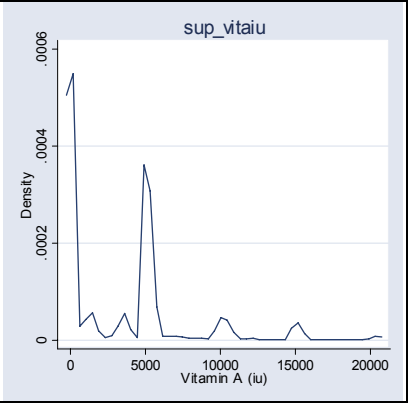
Variable Name	Type	Basis	Description	Levels	Graph
ST_baseline	N	AARP frame	State in which participant resides	CA = 175,090 FL = 122,013 GA = 15,994 LA = 21,720 MI = 28,574 NC = 46,950 NJ = 71,068 PA = 84,998	
stomach_ajcc_stg	C	cancer registry	see cancer_ajcc_stg	see cancer_ajcc_stg	
stomach_ajccseer	C	cancer registry	see cancer_ajccseer	see cancer_ajccseer	
stomach_behv	C	cancer registry	see cancer_behv	see cancer_behv	
stomach_dxconf	C	cancer registry	see cancer_dxconf	see cancer_dxconf	
stomach_dxdt	N	cancer registry	see cancer_dxdt	see cancer_dxdt	
stomach_grade	C	cancer registry	see cancer_grade	see cancer_grade	
stomach_hist	C	cancer registry	see cancer_hist	see cancer_hist	
stomach_histv	C	cancer registry	see cancer_histv	see cancer_histv	
stomach_lateral	C	cancer registry	see cancer_lateral	see cancer_lateral	
stomach_mort	N	cancer registry	see cancer_mort	see cancer_mort	
stomach_pnode	C	cancer registry	see cancer_pnode	see cancer_pnode	
stomach_seqno	C	cancer registry	see cancer_seqno	see cancer_seqno	
stomach_site	C	cancer registry	see cancer_site	see cancer_site	
stomach_siterec3	N	cancer registry	see cancer_siterec3	see cancer_siterec3	
stomach_ss_stg	C	cancer registry	see cancer_ss_stg	see cancer_ss_stg	
stomach_ss_stg47	C	cancer registry	see cancer_ss_stg47	see cancer_ss_stg47	
stomach_ss_stgv	C	cancer registry	see cancer_ss_stgv	see cancer_ss_stgv	
stomach_status	C	cancer registry	see cancer_status	see cancer_status	
stomach_tnmclinm	C	cancer registry	see cancer_tnmclinm	see cancer_tnmclinm	
stomach_tnmclinn	C	cancer registry	see cancer_tnmclinn	see cancer_tnmclinn	
stomach_tnmclint	C	cancer registry	see cancer_tnmclint	see cancer_tnmclint	
stomach_tnmpathm	C	cancer registry	see cancer_tnmpathm	see cancer_tnmpathm	
stomach_tnmpathn	C	cancer registry	see cancer_tnmpathn	see cancer_tnmpathn	
stomach_tnmpatht	C	cancer registry	see cancer_tnmpatht	see cancer_tnmpatht	
stomach_xnode	C	cancer registry	see cancer_xnode	see cancer_xnode	
stomachcan	N	cancer registry	see cancercan	see cancercan	

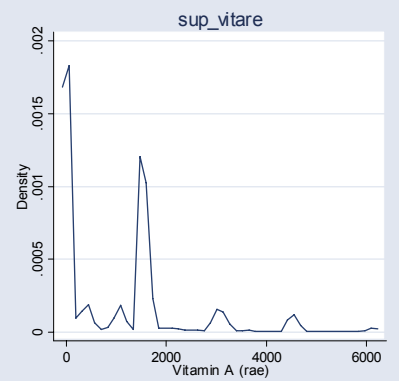
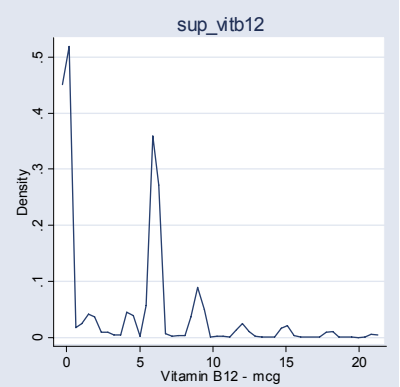
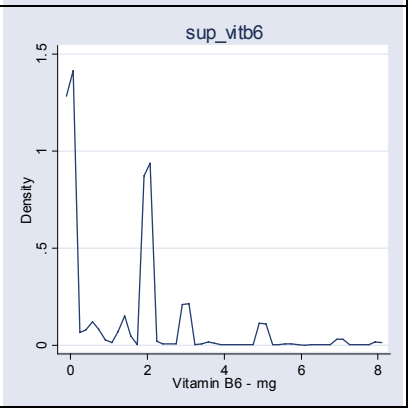
Variable Name	Type	Basis	Description	Levels	Graph
STROKE	N	Cleaned from Q40I	Self-reported history of stroke	0 = No (*n*= 553,595) 1 = Yes (*n*= 12,812)	
Sup_BetaCarotene_mcg	N	DietAARP derived	Beta Carotene (mcg) – supplemental	Continuous (range = 0 → 6,575)	
Sup_BetaCarotene_RAE	N	DietAARP derived	Beta Carotene (mcg RAE) – supplemental	Continuous (range = 0 → 2,500)	

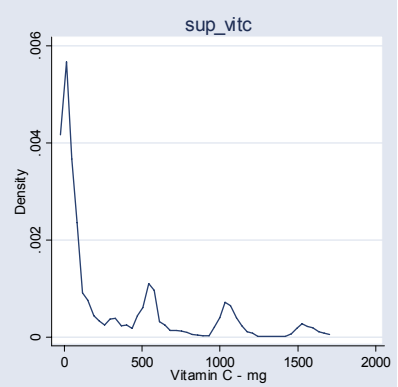
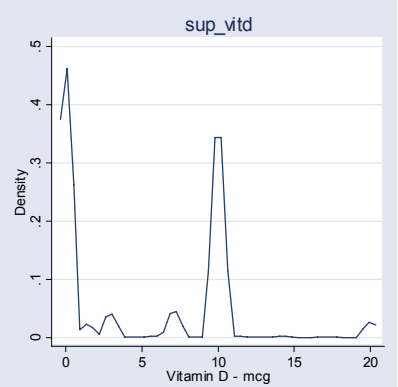
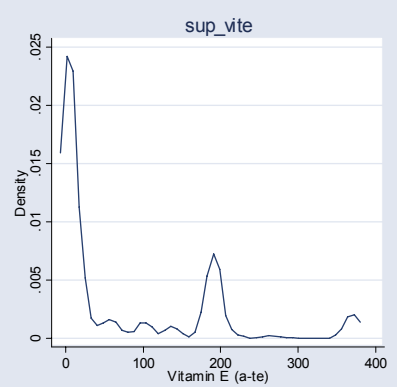
Variable Name	Type	Basis	Description	Levels	Graph
Sup_Calcium	N	DietAARP derived	Calcium (mg) – supplemental	Continuous (range = 0 → 1,662)	
Sup_Copper	N	DietAARP derived	Copper (mg) - supplemental	Continuous (range = 0 → 4)	
Sup_DietFolateEquiv	N	DietAARP derived	Dietary Folate Equivalents (mcg) – supplemental	Continuous (range = 0 → 2,400)	

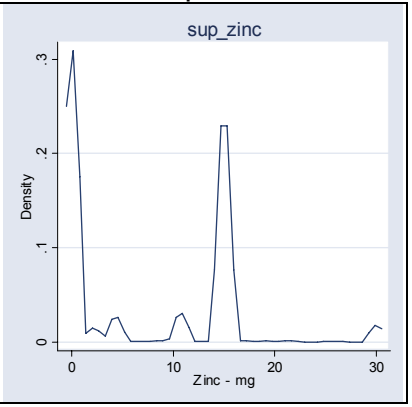
Variable Name	Type	Basis	Description	Levels	Graph
Sup_Folate	N	DietAARP derived	Folate (mcg) – supplemental	Continuous (range = 0 → 1,200)	
Sup_Iron	N	DietAARP derived	Iron (mg) – supplemental	Continuous (range = 0 → 36)	
Sup_Magnesium	N	DietAARP derived	Magnesium (mg) – supplemental	Continuous (range = 0 → 200)	

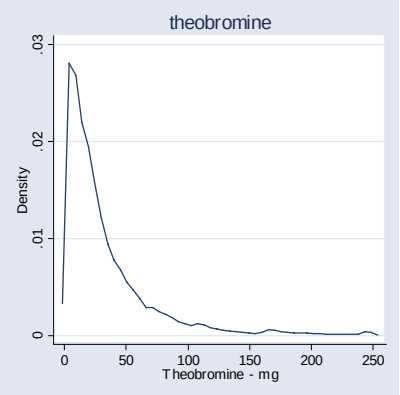
Variable Name	Type	Basis	Description	Levels	Graph
Sup_Niacin	N	DietAARP derived	Niacin (mg) – supplemental	Continuous (range = 0 → 150)	
Sup_Phosphorus	N	DietAARP derived	Phosphorus (mg) – supplemental	Continuous (range = 0 → 109)	
Sup_Riboflavin	N	DietAARP derived	Riboflavin (mg) – supplemental	Continuous (range = 0 → 15.1)	

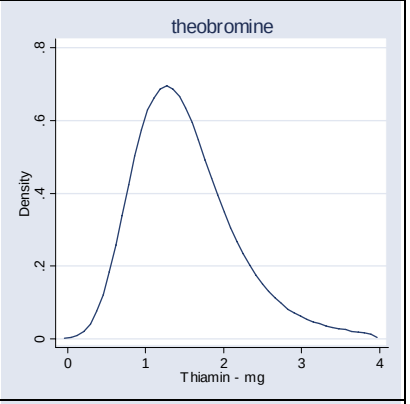
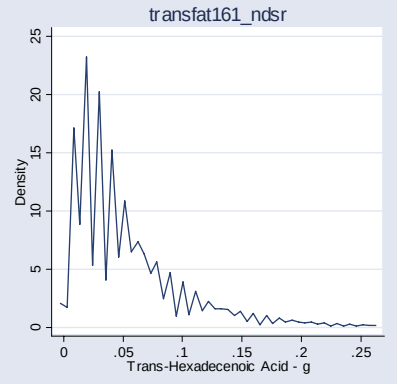
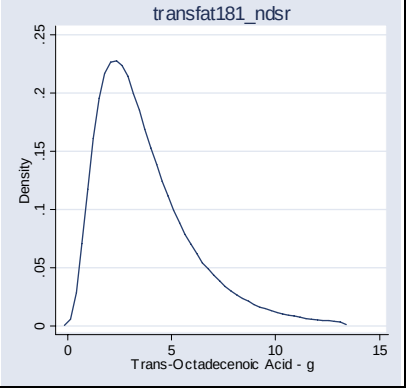
Variable Name	Type	Basis	Description	Levels	Graph
Sup_Selenium	N	DietAARP derived	Selenium (mcg) – supplemental	Continuous (range = 0 → 30)	
Sup_Thiamin	N	DietAARP derived	Thiamin (mg) – supplemental	Continuous (range = 0 → 14.5)	
Sup_VitAIU	N	DietAARP derived	Vitamin A (IU) – supplemental	Continuous (range = 0 → 35,500)	

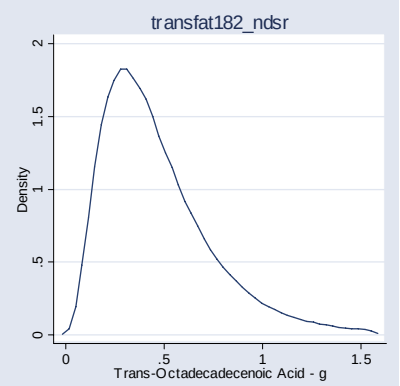
Variable Name	Type	Basis	Description	Levels	Graph
Sup_VitARE	N	DietAARP derived	Vitamin A (RAE) – supplemental	Continuous (range = 0 → 10,650)	
Sup_VitB12	N	DietAARP derived	Vitamin B12 (mcg) – supplemental	Continuous (range = 0 → 27)	
Sup_VitB6	N	DietAARP derived	Vitamin B6 (mg) – supplemental	Continuous (range = 0 → 10)	

Variable Name	Type	Basis	Description	Levels	Graph
Sup_VitC	N	DietAARP derived	Vitamin C (mg)– supplemental	Continuous (range = 0 → 2,180)	
Sup_VitD	N	DietAARP derived	Vitamin D (mcg) – supplemental	Continuous (range = 0 → 20)	
Sup_VitE	N	DietAARP derived	Vitamin E (a-TE) – supplemental	Continuous (range = 0 → 400.5)	

Variable Name	Type	Basis	Description	Levels	Graph
Sup_Zinc	N	DietAARP derived	Zinc (mg) – supplemental	Continuous (range = 0 → 30)	

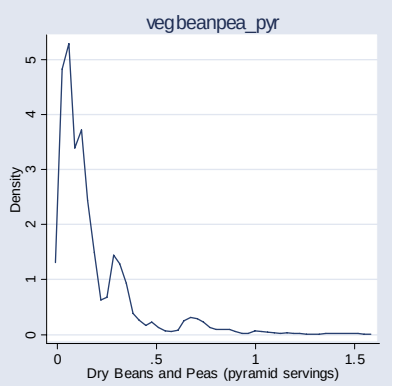
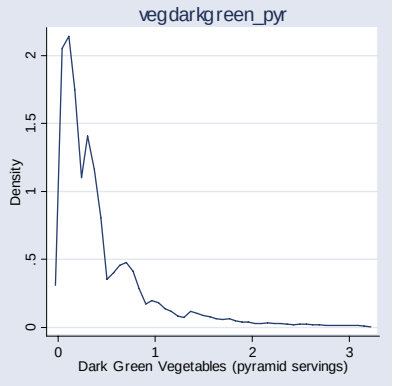
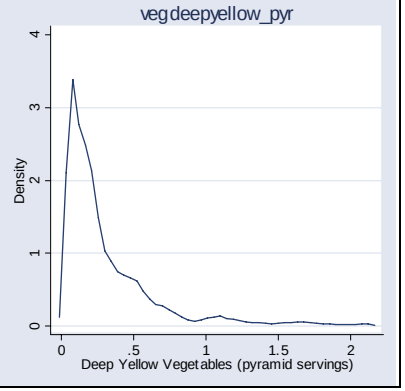
Variable Name	Type	Basis	Description	Levels	Graph
testis_ajcc_stg	C	cancer registry	see cancer_ajcc_stg	see cancer_ajcc_stg	
testis_ajccseer	C	cancer registry	see cancer_ajccseer	see cancer_ajccseer	
testis_behv	C	cancer registry	see cancer_behv	see cancer_behv	
testis_dxconf	C	cancer registry	see cancer_dxconf	see cancer_dxconf	
testis_dxdt	N	cancer registry	see cancer_dxdt	see cancer_dxdt	
testis_grade	C	cancer registry	see cancer_grade	see cancer_grade	
testis_hist	C	cancer registry	see cancer_hist	see cancer_hist	
testis_histv	C	cancer registry	see cancer_histv	see cancer_histv	
testis_lateral	C	cancer registry	see cancer_lateral	see cancer_lateral	
testis_mort	N	cancer registry	see cancer_mort	see cancer_mort	
testis_pnode	C	cancer registry	see cancer_pnode	see cancer_pnode	
testis_seqno	C	cancer registry	see cancer_seqno	see cancer_seqno	
testis_site	C	cancer registry	see cancer_site	see cancer_site	
testis_siterec3	N	cancer registry	see cancer_siterec3	see cancer_siterec3	
testis_ss_stg	C	cancer registry	see cancer_ss_stg	see cancer_ss_stg	
testis_ss_stg47	C	cancer registry	see cancer_ss_stg47	see cancer_ss_stg47	
testis_ss_stgv	C	cancer registry	see cancer_ss_stgv	see cancer_ss_stgv	
testis_status	C	cancer registry	see cancer_status	see cancer_status	
testis_tnmclinm	C	cancer registry	see cancer_tnmclinm	see cancer_tnmclinm	
testis_tnmclinn	C	cancer registry	see cancer_tnmclinn	see cancer_tnmclinn	
testis_tnmclint	C	cancer registry	see cancer_tnmclint	see cancer_tnmclint	
testis_tnmpathm	C	cancer registry	see cancer_tnmpathm	see cancer_tnmpathm	
testis_tnmpathn	C	cancer registry	see cancer_tnmpathn	see cancer_tnmpathn	
testis_tnmpatht	C	cancer registry	see cancer_tnmpatht	see cancer_tnmpatht	
testis_xnode	C	cancer registry	see cancer_xnode	see cancer_xnode	
testiscan	N	cancer registry	see cancercan	see cancercan	
Theobromine	N	DietAARP derived	Theobromine – mg	Continuous (range = 0 → 1,566.28)	

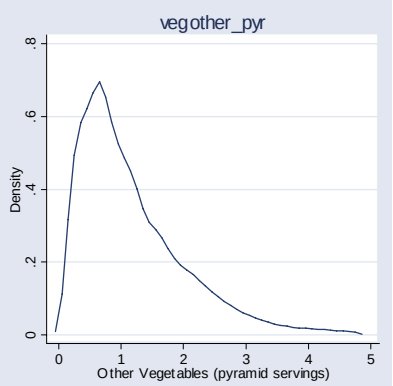
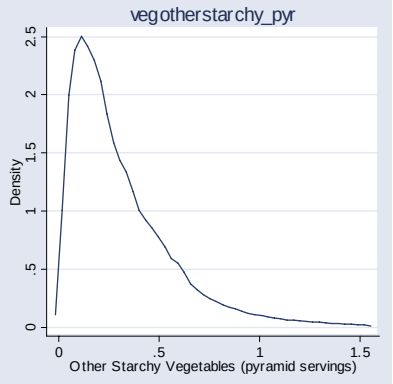
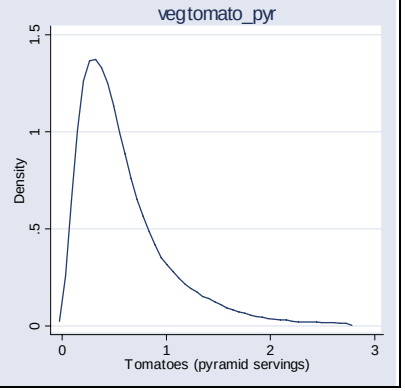
Variable Name	Type	Basis	Description	Levels	Graph
Thiamin	N	DietAARP derived	Thiamin – mg	Continuous (range = 0 → 48.09)	
TransFat161_NDSR	N		16:1 TRANS (trans-hexadecenoic acid) – g (NDS-R)	Continuous (range = 0 → 4.78)	
TransFat181_NDSR	N		18:1 TRANS (trans-octadecenoic acid [elaidic acid]) – g (NDS-R)	Continuous (range = 0 → 212.15)	

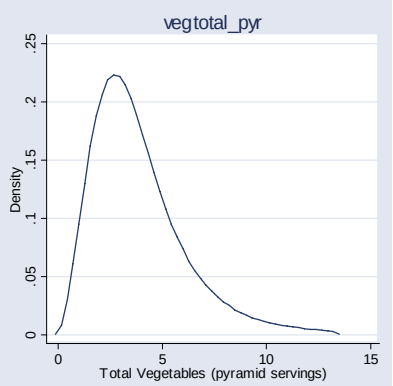
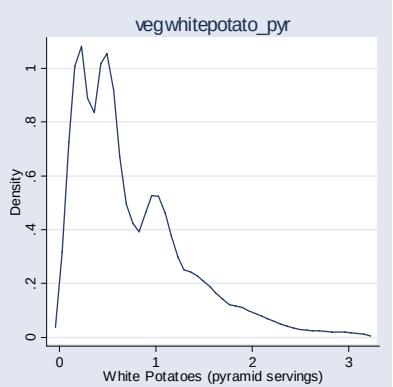
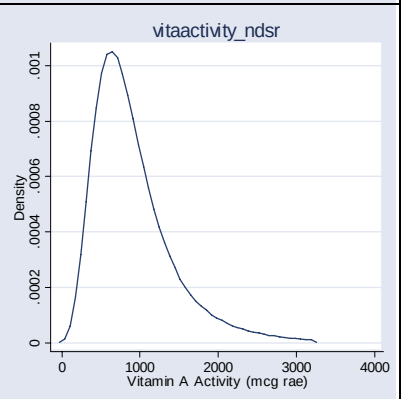
Variable Name	Type	Basis	Description	Levels	Graph
TransFat182_NDSR	N		18:2 TRANS (trans-octadecadienoic acid [linolelaidic acid]) – g (NDS-R)	Continuous (range = 0 → 23.48)	
TransFattyAcids_NDSR	N		Total trans-fatty acids (TRANS) – g (NDS-R)	Continuous (range = 0.01 → 239.35)	
UNDERLYINGCOD_BROADGROUP	C	NDI and investigator created	Collapsed groups for Underlying Cause of Death, defined by NCI (please see Study Web Site)	01 = Oral Cavity and Pharynx (cancer) 02 = Digestive System (cancer) 03 = Respiratory System (cancer) 04 = Soft Tissue including Heart (cancer) 05 = Skin excluding Basal and Squamous (cancer) 06 = Female Genital System and Breast (cancer) 07 = Male Genital System (cancer) 08 = Urinary System (cancer) 09 = Endocrine System (cancer) 10 = Lymphoma (cancer)	

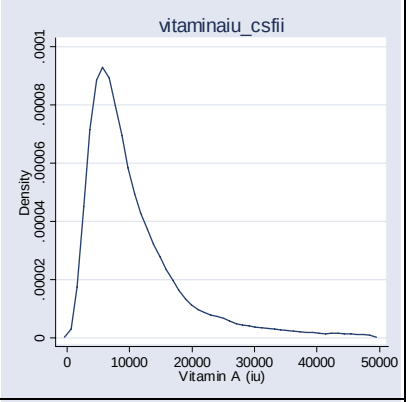
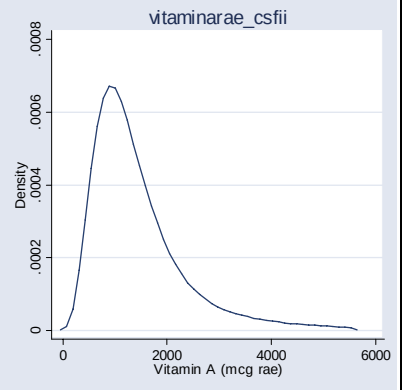
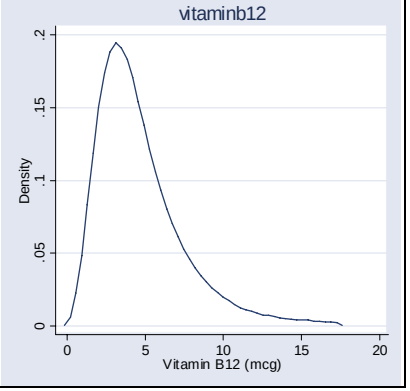
Variable Name	Type	Basis	Description	Levels	Graph
				11 = Leukemia (cancer) 12 = Miscellaneous cancer 13 = Infectious Causes 14 = Diabetes 15 = Alzheimer's (ICD-9 and 10 only) 16 = Cardiovascular Disease 17 = Respiratory Disease 18 = Chronic Liver Disease 19 = Nephritis, Nephrotic Syndrome and Nephrosis 20 = Congenital/Perinatal 21 = Accident, Suicide, or Homicide 22 = Other/Unknown Cause of Death	
UNDERLYINGCOD_ICD	C	NDI	ICD code for Underlying Cause of Death		uninformative graph
urin_ajcc_stg	C	cancer registry	see cancer_ajcc_stg	see cancer_ajcc_stg	
urin_ajccseer	C	cancer registry	see cancer_ajccseer	see cancer_ajccseer	
urin_behv	C	cancer registry	see cancer_behv	see cancer_behv	
urin_dxconf	C	cancer registry	see cancer_dxconf	see cancer_dxconf	
urin_dxdt	N	cancer registry	see cancer_dxdt	see cancer_dxdt	
urin_grade	C	cancer registry	see cancer_grade	see cancer_grade	
urin_hist	C	cancer registry	see cancer_hist	see cancer_hist	
urin_histv	C	cancer registry	see cancer_histv	see cancer_histv	
urin_lateral	C	cancer registry	see cancer_lateral	see cancer_lateral	
urin_mort	N	cancer registry	see cancer_mort	see cancer_mort	
urin_pnode	C	cancer registry	see cancer_pnode	see cancer_pnode	
urin_seqno	C	cancer registry	see cancer_seqno	see cancer_seqno	
urin_site	C	cancer registry	see cancer_site	see cancer_site	
urin_siterec3	N	cancer registry	see cancer_siterec3	see cancer_siterec3	
urin_ss_stg	C	cancer registry	see cancer_ss_stg	see cancer_ss_stg	
urin_ss_stg47	C	cancer registry	see cancer_ss_stg47	see cancer_ss_stg47	
urin_ss_stgv	C	cancer registry	see cancer_ss_stgv	see cancer_ss_stgv	
urin_status	C	cancer registry	see cancer_status	see cancer_status	
urin_tnmclinm	C	cancer registry	see cancer_tnmclinm	see cancer_tnmclinm	
urin_tnmclinn	C	cancer registry	see cancer_tnmclinn	see cancer_tnmclinn	
urin_tnmclint	C	cancer registry	see cancer_tnmclint	see cancer_tnmclint	
urin_tnmpathm	C	cancer registry	see cancer_tnmpathm	see cancer_tnmpathm	

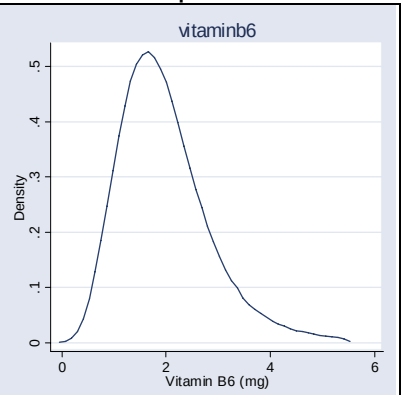
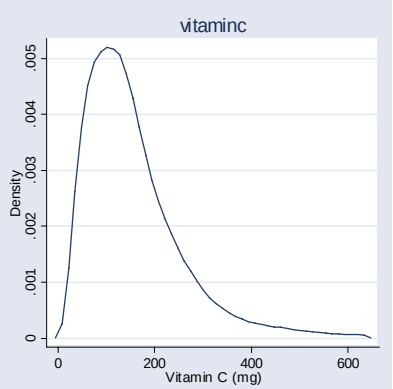
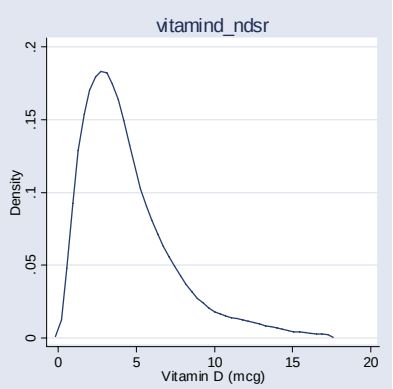
Variable Name	Type	Basis	Description	Levels	Graph
urin_tnmpathn	C	cancer registry	see cancer_tnmpathn	see cancer_tnmpathn	
urin_tnmpatht	C	cancer registry	see cancer_tnmpatht	see cancer_tnmpatht	
urin_xnode	C	cancer registry	see cancer_xnode	see cancer_xnode	
urincan	N	cancer registry	see cancercan	see cancercan	
vagina_ajcc_stg	C	cancer registry	see cancer_ajcc_stg	see cancer_ajcc_stg	
vagina_ajccseer	C	cancer registry	see cancer_ajccseer	see cancer_ajccseer	
vagina_behv	C	cancer registry	see cancer_behv	see cancer_behv	
vagina_dxconf	C	cancer registry	see cancer_dxconf	see cancer_dxconf	
vagina_dxdt	N	cancer registry	see cancer_dxdt	see cancer_dxdt	
vagina_grade	C	cancer registry	see cancer_grade	see cancer_grade	
vagina_hist	C	cancer registry	see cancer_hist	see cancer_hist	
vagina_histv	C	cancer registry	see cancer_histv	see cancer_histv	
vagina_lateral	C	cancer registry	see cancer_lateral	see cancer_lateral	
vagina_mort	N	cancer registry	see cancer_mort	see cancer_mort	
vagina_pnode	C	cancer registry	see cancer_pnode	see cancer_pnode	
vagina_seqno	C	cancer registry	see cancer_seqno	see cancer_seqno	
vagina_site	C	cancer registry	see cancer_site	see cancer_site	
vagina_siterec3	N	cancer registry	see cancer_siterec3	see cancer_siterec3	
vagina_ss_stg	C	cancer registry	see cancer_ss_stg	see cancer_ss_stg	
vagina_ss_stg47	C	cancer registry	see cancer_ss_stg47	see cancer_ss_stg47	
vagina_ss_stgv	C	cancer registry	see cancer_ss_stgv	see cancer_ss_stgv	
vagina_status	C	cancer registry	see cancer_status	see cancer_status	
vagina_tnmclinm	C	cancer registry	see cancer_tnmclinm	see cancer_tnmclinm	
vagina_tnmclinn	C	cancer registry	see cancer_tnmclinn	see cancer_tnmclinn	
vagina_tnmclint	C	cancer registry	see cancer_tnmclint	see cancer_tnmclint	
vagina_tnmpathm	C	cancer registry	see cancer_tnmpathm	see cancer_tnmpathm	
vagina_tnmpathn	C	cancer registry	see cancer_tnmpathn	see cancer_tnmpathn	
vagina_tnmpatht	C	cancer registry	see cancer_tnmpatht	see cancer_tnmpatht	
vagina_xnode	C	cancer registry	see cancer_xnode	see cancer_xnode	
vaginacan	N	cancer registry	see cancercan	see cancercan	
VegAdjFl	N	DietAARP derived	Adjustment Option Flag – Vegetables	0 = Not adjusted (*n* = 566,407) 1 = Adjusted down (*n* = 0) 2 = Adjusted up (*n* = 0)	uninformative graph

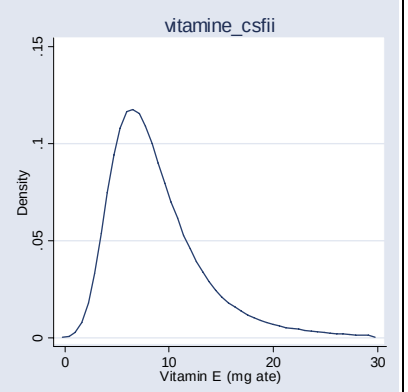
Variable Name	Type	Basis	Description	Levels	Graph
VegBeanPea_Pyr	N	DietAARP derived	Number of dry bean and pea pyramid servings	Continuous (range = 0 → 13.82)	
VegDarkGreen_Pyr	N	DietAARP derived	Number of dark-green vegetable pyramid servings	Continuous (range = 0 → 18.38)	
VegDeepYellow_Pyr	N	DietAARP derived	Number of deep-yellow vegetable pyramid servings	Continuous (range = 0 → 14.68)	

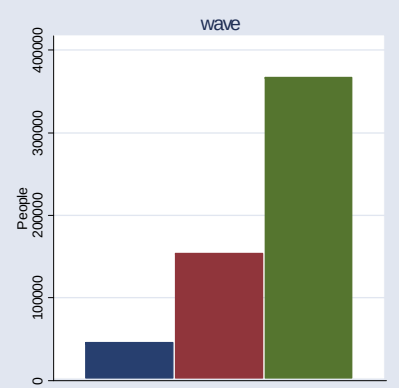
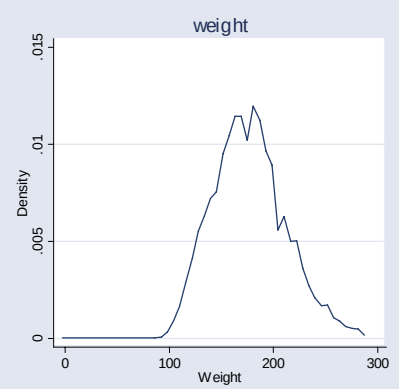
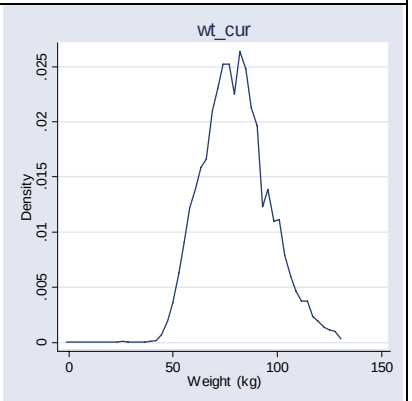
Variable Name	Type	Basis	Description	Levels	Graph
VegOther_Pyr	N	DietAARP derived	Number of other vegetable pyramid servings	Continuous (range = 0 → 41.13)	
VegOtherStarchy_Pyr	N	DietAARP derived	Number of other starchy vegetable pyramid servings	Continuous (range = 0 → 13.92)	
VegTomato_Pyr	N	DietAARP derived	Number of tomato pyramid servings	Continuous (range = 0 → 34.79)	

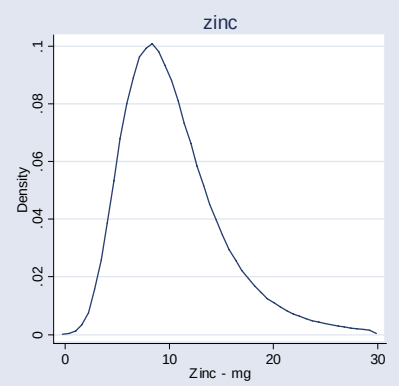
Variable Name	Type	Basis	Description	Levels	Graph
VegTotal_Pyr	N	DietAARP derived	Total number of vegetable pyramid servings	Continuous (range = 0 → 150.85)	
VegWhitePotato_Pyr	N	DietAARP derived	Number of white potato pyramid servings	Continuous (range = 0 → 28.64)	
VitAActivity_NDSR	N	DietAARP derived	Total Vitamin A activity – mcg RAE (NDS-R)	Continuous (range =0 → 73,435.41)	

Variable Name	Type	Basis	Description	Levels	Graph
VitaminAIU_CSFII	N	DietAARP derived	Vitamin A – IU (CSFII)	Continuous (range =0 → 526,400.3)	
VitaminARAE_CSFII	N	DietAARP derived	Vitamin A – mcg RAE (CSFII)	Continuous (range = 0 → 81,293.55)	
VitaminB12	N	DietAARP derived	Vitamin B12 – mcg	Continuous (range = 0 → 526.55)	

Variable Name	Type	Basis	Description	Levels	Graph
VitaminB6	N	DietAARP derived	Vitamin B6 – mg	Continuous (range = 0 → 65.36)	
VitaminC	N	DietAARP derived	Vitamin C – mg	Continuous (range = 0 → 4,910.2)	
VitaminD_NDSR	N	DietAARP derived	Vitamin D(calciferol) – mcg (NDS-R)	Continuous (range = 0 → 169.84)	

Variable Name	Type	Basis	Description	Levels	Graph
VitaminE_CSFII	N	DietAARP derived	Vitamin E – mg ATE (CSFII)	Continuous (range = 0 → 323.93)	
vulva_ajcc_stg	C	cancer registry	see cancer_ajcc_stg	see cancer_ajcc_stg	
vulva_ajccseer	C	cancer registry	see cancer_ajccseer	see cancer_ajccseer	
vulva_behv	C	cancer registry	see cancer_behv	see cancer_behv	
vulva_dxconf	C	cancer registry	see cancer_dxconf	see cancer_dxconf	
vulva_dxdt	N	cancer registry	see cancer_dxdt	see cancer_dxdt	
vulva_grade	C	cancer registry	see cancer_grade	see cancer_grade	
vulva_hist	C	cancer registry	see cancer_hist	see cancer_hist	
vulva_histv	C	cancer registry	see cancer_histv	see cancer_histv	
vulva_lateral	C	cancer registry	see cancer_lateral	see cancer_lateral	
vulva_mort	N	cancer registry	see cancer_mort	see cancer_mort	
vulva_pnode	C	cancer registry	see cancer_pnode	see cancer_pnode	
vulva_seqno	C	cancer registry	see cancer_seqno	see cancer_seqno	
vulva_site	C	cancer registry	see cancer_site	see cancer_site	
vulva_siterec3	N	cancer registry	see cancer_siterec3	see cancer_siterec3	
vulva_ss_stg	C	cancer registry	see cancer_ss_stg	see cancer_ss_stg	
vulva_ss_stg47	C	cancer registry	see cancer_ss_stg47	see cancer_ss_stg47	
vulva_ss_stgv	C	cancer registry	see cancer_ss_stgv	see cancer_ss_stgv	
vulva_status	C	cancer registry	see cancer_status	see cancer_status	
vulva_tnmclinm	C	cancer registry	see cancer_tnmclinm	see cancer_tnmclinm	
vulva_tnmclinn	C	cancer registry	see cancer_tnmclinn	see cancer_tnmclinn	
vulva_tnmclint	C	cancer registry	see cancer_tnmclint	see cancer_tnmclint	
vulva_tnmpathm	C	cancer registry	see cancer_tnmpathm	see cancer_tnmpathm	
vulva_tnmpathn	C	cancer registry	see cancer_tnmpathn	see cancer_tnmpathn	
vulva_tnmpatht	C	cancer registry	see cancer_tnmpatht	see cancer_tnmpatht	
vulva_xnode	C	cancer registry	see cancer_xnode	see cancer_xnode	
vulvacan	N	cancer registry	see cancercan	see cancercan	

Variable Name	Type	Basis	Description	Levels	Graph
WAVE	C	Questionnaire mailing logistics	Mailing wave date	1 = 45,766 2 = 153,530 3 = 367,111	
Weight	N	Cleaned from Q4	A numeric value of weight in pounds for those who did not have a missing or error in any of the 3 bubbles.	Continuous (range = 0 → 999)	
WESTATID	C	Questionnaire mailing logistics	Respondent (participant) ID	Continuous	uninformative graph
WT_CUR	N	Cleaned from Q4	Converted weight at current age into kilograms	Continuous (range = 0 → 453.55) . = missing	

Variable Name	Type	Basis	Description	Levels	Graph
Zinc	N	DietAARP derived	Zinc – mg	Continuous (range = 0 → 458.83)	

Data Dictionary
Part III

Appendix A

DIET AND HEALTH STUDY
NATIONAL INSTITUTES OF HEALTH AND AARP

Table of Contents

Endpoints – General **(last updated August 2006, MB)**

Each investigator defines their own person time.

Cancer endpoints

1. Through December 31, 2000.
2. Derived from cancer registry reports
3. Death from cancer derived from cancer registries or NDI (underlying and contributing causes both count as cancer deaths)

Cause of Death analyses

1. Through December 31, 2001.
2. Derived from National Death Index
3. Contains:
    a) underlying COD and
    b) contributing cause of death. If people use COD as an endpoint, they are using underlying COD.

All-cause mortality

1. Through December 31, 2005
2. Derived from Social Security Death Master File
3. Contains vital status only

For more information please see: https://dceg.cancer.gov/nadhs/analysis_methods/how_to/how-to-use-the-all-cancer-analysis-file/

SEER Recode Variables **(last updated August 2006, MB)**

Allow for investigators to develop their own classifications of cancer or underlying COD without having to use ICD codings that have changed over time. The Recode variables allow for each cancer site, subsite, and COD to be grouped with one number.

CANCER_SITEREC3 shows how the SEER groupings in Cancer_SEERgroup matched up with the SEER web site. Some of the groupings contain more than one recode, so it can be used to select particular subsites. This is an efficient method to determine how a particular cancer was coded by the SEER program. http://seer.cancer.gov/siterecode/

UNDERLYING_CODREC: SEER recode (5-digit) of Underlying Cause of Death
http://seer.cancer.gov/codrecode/1969+_d09172004/index.html

Registry Matching **(last updated August 2006, MB)**

Cancer registry linkages are conducted to obtain cancer diagnosis information regarding NIH-AARP study participants. All persons in the study cohort are followed for case ascertainment within one or more of eight state cancer registries.

Linkage with eight cancer registries based on initial selection of AARP members residing within these eight locales: New Jersey, Florida, North Carolina, Michigan, Georgia, Pennsylvania, Louisiana, California.

Subject identifiers used for linking include addresses, social security number (if available), names, and dates of birth. Linkages allow for matching on partial social security number (SSN) or name matches and search for similarities of names, dates of birth, and addresses. There are at least a few digits in the SSN field for about 85% of the subjects. Because the SSN was collected on a 'bubble' form (and respondents' entries were scanned) some 9-digit SSN contain one or more errors, some SSN have a missing digit or two, and some have only a few digits. Because of this collection method, SSN is available in whole or part for 85% of the baseline cohort.

In the file of subject records, multiple records are included for subjects with more than one address in their address history and different records for variations in demographic data across sampling frame, baseline, and Risk Factor Questionnaire responses. For subjects who move from one registry state in the study to another, we search registry records from all pertinent registry areas for matches since baseline.

Extensive testing was performed to determine the quality of the linkage of study subjects to cancer registry records for diagnoses between 1995 and 2000. This testing demonstrated that estimated cancer incidence rates derived from NIH-AARP Study cancer registry search results did not deviate significantly from expected cancer incidence rates based on SEER data for the same states and cancer site classes (Table 1, Michaud et al, 2005), and that a Westat linkage program performed as well as standard record linkage software used by the six state registries that used both their standard linkage method and a Westat linkage program.

With respect to cancer incidence ascertainment accuracy through the end of 2000 (our first registry linkage), the end point ascertainment pilot study paper (Michaud et al.) showed a) similar rates for the cohort and SEER; b) an approximate 90% sensitivity for cancer based on self report plus medical records.

Regarding moving: through 2003, the date through which we will be ascertaining cancer cases in the second registry linkage carried out in 2006, the proportion of the cohort that is known to have moved out of the eight cancer registry areas is 5%. If we now take into account those for whom we do not have current addresses, we estimate that 7.9% (44,964 out of 566,404) of the cohort will have moved out of the eight cancer registries for that matching. This is a conservative (high) estimate based on the assumptions that 20% of participants with undeliverable addresses are not found in registry areas, all participants with addresses outside registry areas are not captured by registries, and these groups are mutually exclusive.

Mortality **(last updated August 2006, MB)**:

Sources of death information

Primary sources used for all cause mortality and cause specific mortality
SSA Death Match File (primary source of dead/not dead)
National Death Index (COD information)

Other information, used to identify potential deceased subjects who are searched in NDI. This information not directly used in mortality analyses.
Buccal Cell Study Responses
Cancer Registry Returns, Version 2
Followup Questionnaire Responses
Pilot Study Followup Quex, Box B
RFQ Box A

Social Security Administration (SSA) Death Master File (DMF) (**last updated August 2006, MB)**

SSA DMF records provide a date of death for participants whose cohort records match to the SSA DMF. Identifying information in the SSA DMF includes:

- Social Security Number (SSN, if available for the study participant);
- names; and,
- dates of birth.

- The Westat linkage program tolerates errors or variations in SSN, names, or dates of birth.
- Updates to the SSA DMF are received quarterly. The updates contain corrections of data on prior updates. Such changes in data area incorporated into a search dataset (currently >70 million records) before searching for matches to the cohort. As in the cancer registry linkage, alternate names or dates of birth are included to increase the chances of finding a match.
- The last update on these data was performed during January 2006, covering deaths through November 2005.
- In terms of determining death, SSA DMF has been found to be highly reliable and accurate. Reports of deaths in cancer registry case records and NDI+ search results lag behind the SSA DMF in a high percentage of deceased subjects. More than 95% of the 63,398 death records of subjects in the cohort appear in the SSA DMF initially. In the pilot follow-up study to both the SSA DMF and the NDI+, less than 5% of the 12,000 subjects (n=753) matched to the NDI, but not the SSA DMF. SSA DMF matches were also found that did not appear on the NDI.

National Death Index (NDI) **(last updated August 2006, MB)**

The NDI Plus search in 2003 provided cause of death (COD) information for all matched deaths through 2001. Only those people who were found to be deceased through other sources were searched in the NDI. Cause specific mortality endpoints will use NDI information. The NDI provides both an underlying (primary) and contributing COD. For most analyses, people should use underlying COD only.

Participants who had death reports only are treated differently than non-cases, and those who are registry confirmed cases.

- Death reports indicate that the participant did have cancer but we do not have histological confirmation and we do not know if the death was prevalent or incident in the follow-up time. For example, if someone was diagnosed of cancer in 1994 and dies in 1998, we would not have their registry report but they would appear as a death in NDI
- In 2004, we discussed modeling dates of incidence for these participants but decided against doing this in general. To do this crudely, the average survival time would be subtracted from the date of death for participants. However, for some cancers, especially

those with a long survival time, the incidence date would be before the beginning of the study. To obtain incident cancers within the follow-up time we would then accept some participants who died after the follow-up time because their incidence date would be within the follow-up time. For cancers with exceptionally long survival time, deaths that occur 5 to 10 years after follow up could be made incident during the follow-up.

- Participants who only had reports of cancer from the National Death Index were missed by the cancer registries. Using the death only reports, may create bias because they only reveal deadly cancers. Those who survived and were not caught by the registry would not be reported.

By Cancer Site:

Brain Cancer (last updated August 2006, MB)

- For case ascertainment between 1995-2000:
  - Only North Carolina cancer registry reported histo_M='0' (0=benign)
  - Cases of benign brain cancers were not collected from other states. Benign brain cancers were not uniformly reported until January 2004 when the Uniform Data Standards law went into effect, which required benign brain tumor information.
  - SEER data does not include benign tumors.

Colon and Rectal Cancers (last updated August 2006, MB)

Colorectalcan (and colorectal_dxdt, colorectal_site, etc.) combine colon and rectum. So, these variables indicate the first reported colon or rectal cancer by the SEER rules that were used to create coloncan and rectalcan. Coloncan, rectalcan, and their associated variables are still on the file.

Rectosigmoid Junctional Cancer (last updated August 2006, MB)

There appears to be no histological distinctions between rectosigmoid junctional cancer and other cancers of the colon, i.e, rectal, sigmoid and colonic. Anatomic differences between the rectum and sigmoid colon do exist and include vascularization, lymphatic drainage, and relationship to peritoneal mesothelium. Despite the lack of distinct mucosal characteristics between these sites, Nelson et al (1998, 1997), analyzed the Illinois tumor registry data by race and gender using SEER's 13 specific CRC regions, including rectosigmoid junctional cancer, and identified subsite specific relationships. Nelson et al (1998, 1997) comments that the division of 'proximal' and 'distal' colorectal cancer should be made at junction of descending and sigmoid colon. (Where it is usual is to consider distal colon as sigmoid plus descending, sometimes, as in Polyp Prevention Trial, considering splenic flexure as distal.)

Lung and Bronchus Cancers (last updated August 2006, MB)

Lungcan (lung_dxdt, lung_site, etc.) singles out the site "Lung and Bronchus" (site 340-349, SEER recode 22030) from the larger Respircan we had previously, so that lung-specific analysis can be performed more easily. Note that Respircan and its associated variables are also still on the file.

Lymphoma (last updated August 2006, MB)

- Below are the rules used to obtain the Multiple-Records File for Lymphoid Neoplasms in AARP (Lim; 2004-09-10)
  - Considering that lymphoid neoplasms are unique from other tumors, we will apply the following set of rules to the AARP lymphoid neoplasm (LN) file.
  - In the entire lymphoid neoplasm (LN) data file:
  - We will ignore SITE for now and go by just HISTO_T. Note differences in ICDO-2 vs. 3 (refer to Lindsay Morton's excel file of lymphoid cancer case definition 2004-08-09).
    - We may set up nodal vs. extranodal categorization using SITE information for possible usage in the future. → importance of this categorization?...increasing trend in extranodal → will discuss it further
  - We will divide all LN cases into subtypes and create variables to indicate them. Note that we will refer to these subtypes, and not the subtypes in the Excel definition file, in the following treatment rules of multiple records.

LYMPHG3= 1 if Hodgkin Lymphoma (see Lindsay's definition of HISTO_T codes in vs. 2 and 3)
2 if Multiple Myeloma
3 if NHL (all LN except HL and MM)

LYMPHG7= 1 if Hodgkin Lymphoma
2 if Multiple Myeloma
3 if DLBCL
4 if Follicular
5 if SLL or CLL
6 if T-cell*
7 if Other LN (all the remaining lymphoid after 1-6, including Unknowns that are not of GRADE 5 or 8)

* This category includes both (1) all T-cell neoplasms by HISTO_T codes in Lindsay's definition AND (2) Unknown cell lineage by HISTO_T and GRADE=5 or 8.

LYMPHG11= 1 if Hodgkin Lymphoma
2 if Multiple Myeloma
3 if DLBCL and immunoblastic
4 if other DLBCL
5 if Follicular
6 if SLL or CLL
7 if Other B-cell*
8 if subcutaneous T-cell (T-cell and MF/Sezary syndrome)
9 if Other T-cell**
10 if Unknown Lymphoblastic (leukemia or lymphoma)
11 if all other Unknown

* This category includes both (1) all B-cell neoplasms by HISTO_T other than 1-6 AND (2) Unknown by HISTO_T and GRADE=6.
** This category includes both (1) all T-cell neoplasms by HISTO_T other than MF/Sezary AND (2) Unknown cell lineage by HISTO_T and GRADE=5 or 8.

  - Include and flag death-only cases.
  - If there is a discrepancy between registry and NDI death causes or dates, flag them.

- In the multiple-records file: (N~194 cases)

- If a case has two or more diagnoses for Unknown only by HISTO_T
  - If no GRADE info, classify the case as above and take the earliest diagnosis date.
  - If GRADE info of same type (GRADE=6 for B vs. 5 or 8 for T), classify as above using the Unknown HISTO_T and GRADE. Take the earliest diagnosis date.
  - If two different GRADE types in the multiple records (GRADE=6 for B vs. 5 or 8 for T), flag and take the earliest GRADE type.
- If a case has the first diagnosis for a specific **subtype** (using the definition above) followed by one or more records for the same subtype or Unknown type diagnosis, take the first (earliest) diagnosis and date.
- If a case has an Unknown type diagnosis followed by one or more records for ONLY ONE specific **subtype** (according to the definition above) WITHIN A YEAR, then take the specific diagnosis and take the earliest diagnosis date for the Unknown.

- The following and some other scenario will remain in the multiple-records file after applying the rules above. → We will have another meeting to review these cases.
  - Cases that have the first Unknown diagnosis followed by a subtype diagnosis more than a year later
  - Cases that were diagnosed for two or more different subtypes
    - E.g. If someone is diagnosed for Hairy cell leukemia in 1999 and for Mantle cell lymphoma in 2000, this person's subtype remains the same as below.
      LN_SUB3=3; LN_SUB7=7; LN_SUB11=7
- Variable_SEER = case frequencies by SEER category/definition
- Unhee used old seergroup=17 to eliminate a few subjects that appear to have a conflict. That variable turned out to have some inaccuracies, so we would need to replicate that with one (or a combination of) the new seergroup levels (**is this still an issue, or has it been fixed?**
- IMS has applied SEER definitions to all of the cancer data we have, and created a new set of standardized cancer variables (the All Cancer File). The cancers that are of interest to you are the following CANCER_SEERGROUP levels:
  - 34 = Hodgkin Lymphoma
  - 35 = Non-Hodgkin Lymphoma
  - 36 = Myeloma
  - 37 = Lymphocytic Leukemia
  - 38 = Myeloid and Monocytic Leukemia
  - 39 = Other Leukemia
  - Please note that CANCER_SEERGROUP levels are very different from when you merged the two files together for your analysis.
- About spreadsheet:
  - _SEERGROUP levels were combined into one cancer variable, Lim_hemelymphcan. The attachment contains frequencies of it crossed with the (Unhee's variable) categorical (lymphg3,7,11) and individual cancer variables (hodgkin, nhl, dlbcl, tcell, etc.) from your code for the old Lymphoid Neoplasm file. The difference here is that the first cancer of any of these types is the only one recorded for any of these variables. The data are sorted by date and by all of the tiebreakers that were developed by NCI, and the best/earliest record that has any of the above types of SEER defined cancer is selected. Then all of the variables are set using the data from this record.

ICD-O-2 & -3 codes for all hematopoietic diseases

	ICD-O-3 codes	ICD-O-2 codes
LYMPHOID NEOPLASMS		
B-cell neoplasms - 9670, 9671, 9673, 9678-9680, 9684, 9687, 9689-9691, 9695, 9698, 9699, 9731-9734, 9761, 9764, 9823, 9826, 9940		
Burkitt lymphoma/ leukaemia	**9687, 9826**	**9687, 9826**
Burkitt leukaemia	9826	9826
Burkitt lymphoma	9687	9687
DLBCL/Marginal zone	**9678-9680, 9684, 9689, 9699**	**9680-9684, 9688, 9710-9712, 9715**
DLBCL/MZ - DLBCL, immunoblastic	9684	9684
DLBCL/MZ - other	9678-9680	9680-9683, 9688, 9712
DLBCL/MZ - MZ	9689, 9699	9710, 9711, 9715
Follicular lymphoma	**9690, 9691, 9695, 9698**	**9690-9693, 9695-9698**
Hairy cell leukaemia	**9940**	**9940, 9941**
Lymphoplasmacytic	**9671**	**9671**
Mantle cell lymphoma	**9673**	**9673, 9674, 9677**
Plasma cell neoplasm	**9731-9734**	**9731, 9732, 9830**
Multiple myeloma	9732	9732
Plasma cell leukaemia	9733	9830
Plasmacytoma	9731, 9734	9731
SLL/CLL	**9670, 9823**	**9670, 9823**
CLL	9823	9823
SLL	9670	9670
B-cell, other	**9761, 9764**	**9761, 9764**
Waldenstrom	9761	9761
Immunoproliferative small intestinal disease	9764	9764
T-cell neoplasms - 9700-9702, 9705, 9708, 9709, 9714, 9716-9719, 9827, 9831, 9948		
MF/Sezary syndrome	**9700, 9701**	**9700, 9701**
Mycosis fungoides	9700	9700
Sezary syndrome	9701	9701
Peripheral T-cell lymphoma	**9702, 9705, 9708, 9714, 9716, 9827**	**9702-9708, 9714, 9716, 9827**
Peripheral T – Angioimmunoblastic	9705	9705
Peripheral T – Anaplastic large cell (T/null cell)	9714	9714
Peripheral T-cell, NOS	9702, 9708, 9716, 9827	9702-9704, 9706-9708, 9716, 9827
T/NK-other	**9709, 9717-9719, 9831, 9948**	**9702, 9709, 9713, 9717, 9800, 9801**

Hodgkin lymphomas – 9650-9655, 9659, 9661-9665, 9667		
HL, classical	**9650-9655, 9661-9665, 9667**	**9650, 9652-9655, 9657, 9658, 9661-9667**
HL, classical, lymphocyte depleted/mixed cellularity	9652-9655	9652-9655
HL, classical, lymphocyte depleted	9653-9655	9653-9655
HL, classical, mixed cellularity	9652	9652
HL, classical, nodular sclerosis	9663-9665, 9667	9663-9667
HL, classical, NOS	9650, 9651, 9661, 9662	9650, 9657, 9658, 9661, 9662
HL, classical, lymphocyte-rich	9651	9657, 9658
HL, classical, NOS	9650, 9661, 9662	9650, 9661, 9662
HL, nodular lymphocyte predominant	**9659**	**9659, 9660**
Unknown cell lineage - 9590, 9591, 9596, 9675, 9727-9729, 9820, 9832-9837, 9970		
Lymphoblastic leukaemia/ lymphoma	**9727-9729, 9835-9837**	**9685, 9821, 9828**
Lymphoblastic leukaemia	9835-9837	9821, 9828
Lymphoblastic lymphoma	9727-9729	9685
Prolymphocytic leukaemia	**9832-9834**	**9825**
Other/Unknown	**9590, 9591, 9596, 9675, 9820, 9970**	**9590-9595, 9672, 9675, 9682, 9686, 9694, 9820, 9822, 9824, 9850, 9970**
OTHER HEMATOPOIETIC DISEASES		
Myelodysplastic/ Myeloproliferative diseases	**9945, 9946, 9950, 9960-9964, 9975, 9980, 9982-9987, 9989**	**9803, 9842, 9868, 9950, 9960-9962, 9980-9984, 9989**
Myeloid leukaemias	**9840, 9860, 9861, 9863, 9866, 9867, 9870-9876, 9891, 9895-9897, 9910, 9920, 9930, 9931**	**9840, 9841, 9860-9864, 9866, 9867, 9870-9874, 9880, 9890-9894, 9910, 9930-9932**
Leukaemias, NOS	**9800, 9801, 9805**	**9800-9804**
Mast cell neoplasms	**9740-9742**	**9740, 9741, 9900**
Histiocytic and Dendritic-cell neoplasms	**9750-9758**	**9720, 9722, 9723**
Macrophage/histiocytic neoplasm	9755	9723
Dendritic cell neoplasms	9751-9754, 9756-9758	9720, 9722
Other immunoproliferative diseases	**9760, 9762, 9765-9769**	**9760, 9762, 9763, 9765-9768**

Upper Gastrointestinal Tract Cancers (UGI Cancer)

1. The Head and Neck — Below specific codes + C142 & C148
    a. Oral cavity — C000-C069
    b. Salivary glands — C070-C089
    c. Nasopharynx — C110-C119
    d. Oro- and Hypopharynx — C090-C109 + C129 + C130-C140
    e. Laryngeal squamous cell carcinoma
2. Esophageal
    a. squamous cell carcinoma (ESCC)
    b. adenocarcinoma (EADC)
    - Flag_NOS
3. Gastric cardia adenocarcinoma
4. Gastric non-cardia adenocarcinoma

RULES

1. Only Histo_M = 3 are included for all sites (primary site tumor)
2. Follow-up was stopped after the first head and neck cancer diagnosis, regardless of site.

Variable Name	Group	SEER Site Group	Site*	Histology
Ugican	All	20010-21020 and 22020	C000-C169, C320-C329	All
ugi_headneck	Combined ugi_oralcavity, ugi_squamous_salivarygland, ugi_nasopharynx, ugi_orohypopharynx, ugi_otheroral, ugi_larynxsquamous			
ugi_oralcavity		20010-20050	C000-C069	Does not include Salivary Gland (20030, C070-C089)
	Lips	20010	C000-C009	Excluding (8430,8450,9140)
	Tongue	20020	C019-C029	Excluding (8140,8200,8246,8450,8940,9170,9731,9680,9698,9702)
	Floor of Mouth	20040	C040-C049	Excluding (8140,8430)
	Gum	20050	C030-C039	Excluding (8200,8310,8430,8450,9140,9680)

	Palate	20050	C050-C059	Excluding (8140,8430,8562,8200,8480,9684)
	Other Mouth	20050	C060-C069	Excluding (8140,8430,8490,8200,9684)
ugi_salivarygland	Salivary Gland	20030	C070-C089	All
ugi_squamous_salivarygland	Salivary Gland	20030	C070-C089	8050-8084
ugi_nasopharynx	Nasopharynx	20060	C110-C119	Excluding (9140)
ugi_orohypopharynx		20070-20090	C090-C139	
	Tonsil	20070	C090-C099	Excluding (9715,9680,9673,9590,9698, 9699,)
	Oropharynx	20080	C100-C109	All (No exclusions yet)
	Hypopharynx: Piriform Sinus	20090	C129	All (No exclusions yet)
	Hypopharynx: Postcricoid Region	20090	C130-C139	Excluding (9674)
ugi_otheroral		20100		
	Pharynx, NOS	20100	C140	Excluding (9715,9590)
	Waldeyer	20100	C142	Excluding (9674)
	Overlapping Lip, Oral Cavity, Pharynx	20100	C148	Excluding (8430)
ugi_larynxsquamous	Larynx	22020	C320-C329	Excluding(8120,8140,9220)
ugi_esophageal	Esophagus	21010	C150-C159	All
ugi_esoph_NOS	Esophagus, NOS	21010	C150-C159	8010,8021,8560
ugi_esoph_SSC	Esophagus, Squamous Cell Carcinoma	21010	C150-C159	8041,8070,8071,8072,8074
ugi_esoph_ADC	Esophagus, Adenocarcinoma	21010	C150-C159	8140,8142,8144,8261,8310,8480,8481,8570
ugi_gastric_cardia_adeno	Gastric Cardia (GC)	21020	C160	Excluding(8070,8072,8240,8246,8260,8560,>=8800)
ugi_gastric_noncardia_adeno	Gastric Non-Cardia (NC)	21020	C161-C169	Excluding(8070,8072,8240,8246,8260,8560,>=8800)

Appendix B

DIET AND HEALTH STUDY
NATIONAL INSTITUTES OF HEALTH AND AARP

Table of Contents

New Nutrition Variables

Aspartame Variables (last updated August 2006, MB)

- The variables describing aspartame content were created separately for men and women for small (less than 10oz or 1 can), medium (10 to 12oz or 1 can), and large (more than 12oz or 1 can) size units using questions from the baseline questionnaire (QP2D2 and QP2E2).
- QP2E2 asks for frequency and size of soft drinks (both diet and regular) consumed. A total daily frequency of soda consumption (f_soda_diet_size) was defined as the sum of the daily frequency of soda, caffeinated and decaffeinated, times a multiplier dependent on sex and the participant's response to frequency. For men who answered that they did not drink soft drinks (QP2E2 = 0) their multiplier was 1.11. For men who answered 2, women who answered 0, and women who answered 2, their multipliers were 3.42, 1.09, and 3.24, respectively.
- For participants who responded with the medium size (QP2E2=1), no differences by sex were taken into account. Participants with missing or error values for this question were recoded to show as "medium size soda drinkers". The multiplier for these participants was 1.76.
- QP2D2 asks for frequency and size of drinks such as Hi-C, lemonade, and Kool-Aid (both diet and regular) consumed. A total daily frequency of fruit punch consumption (f_fruitpunch_size) was defined as f_fruitpunch_diet times a multiplier dependent on sex and frequency of fruit punch. For men who answered 0 to QP2D2, their multiplier was 0.32. For men who answered 1, men who answered 2, women who answered 0, women who answered 1, and women who answered 2, their multipliers were 0.51, 1.02, 0.22, 0.49, and 0.98, respectively.
- A total daily frequency of aspartame-sweetened tea (f_tea_swt_diet_size) was defined as the sum of the daily frequency of tea, caffeinated and decaffeinated (f_tea_decaf_swt_diet and f_tea_reg_swt_diet) multiplied by 0.99.
- A total daily frequency of aspartame-sweetened coffee (f_aspartame_cof_size) was defined as the product of the frequency of aspartame-sweetened coffee multiplied by 0.35.
- A weighted sum of sex/size-specific daily frequency of diet soda, punch, iced tea, coffee, and tea with aspartame (f_dietall_wtsize) was defined as the sum of the previously created variables (f_soda_diet_size, f_fruitpunch_size, f_tea_swt_diet_size, and f_aspartame_cof_size).
- Multipliers used in the calculations of these variables were derived from an NDS-R source**. These variables were separated by sex where such information was available.

```
/*************************************************************************
*Conversion For Aspartame Content And For Men/Women Specific S/M/L Size Units
*************************************************************************/
data pbbrain;
 set pbbrain;
 if sex=0 and QP2E2="0"
                                                        then
f_soda_diet_size=1.11*(f_soda_diet_caff + f_soda_diet_decaf);
 if sex=0 and QP2E2="2"
                                                        then
f_soda_diet_size=3.42*(f_soda_diet_caff + f_soda_diet_decaf);

 if sex=1 and QP2E2="0"
                                                        then
f_soda_diet_size=1.09*(f_soda_diet_caff + f_soda_diet_decaf);
 if sex=1 and QP2E2="2"
                                                        then
f_soda_diet_size=3.24*(f_soda_diet_caff + f_soda_diet_decaf);

 if QP2E2="1" or QP2E2="E" or QP2E2="M" or QP2E2=.
then f_soda_diet_size=1.76*(f_soda_diet_caff + f_soda_diet_decaf);
```

```
 if sex=0 and QP2D2="0"
                                                              then
f_fruitpunch_size=0.32*f_fruitpunch_diet;
 if sex=0 and (QP2D2="1" or QP2D2="E" or QP2D2="M" or QP2D2=.)       then
f_fruitpunch_size=0.51*f_fruitpunch_diet;
 if sex=0 and QP2D2="2"
                                                              then
f_fruitpunch_size=1.02*f_fruitpunch_diet;

 if sex=1 and QP2D2="0"
                                                              then
f_fruitpunch_size=0.33*f_fruitpunch_diet;
 if sex=1 and (QP2D2="1" or QP2D2="E" or QP2D2="M" or QP2D2=.)       then
f_fruitpunch_size=0.49*f_fruitpunch_diet;
 if sex=1 and QP2D2="2"
                                                              then
f_fruitpunch_size=0.98*f_fruitpunch_diet;

 f_tea_swt_diet_size=0.99*(f_tea_decaf_swt_diet + f_tea_reg_swt_diet);
 f_aspartame_cof_size=0.35*f_aspartame_cof;

 f_dietall_wtsize=           f_soda_diet_size + f_fruitpunch_size +
f_tea_swt_diet_size + f_aspartame_cof_size;
 label f_dietall_wtsize="WEIGHTED sum of sex/size-specific daily freq of diet
soda, punch, iced tea, coffee/tea with aspartame";
 proc univariate normal plot data=pbbrain;
  var f_dietall_wtsize ;
run;
```

Folate Variables (last updated August 2006, MB)

- A variable (totfol) describing total folate (combining dietary based on postfortification estimation and supplemental vitamins) was defined by the sum of the variables folate_ndsr and sup_folate.
- A variable (totdfe) describing total dietary folate equivalents from food and supplements based on post-fortification content was defined by the sum of the variable folateequiv_ndsr and sup_dietfolateequiv.
- A variable (totprefol) describing total folate based on pre-fortification content was defined by the sum of the variables folatepre1998 and sup_folate.
- A variable (totsynfol) describing total synthetic folate (folate fortified in food plus supplemental folate) based on postfortification estimation was defined by the sum of the variables folatesynthetic_ndsr and sup_folate.

```
*************************************************************************
****************Combine Dietary And Supplemental Vitamins*****************
*************************************************************************/
 totfol=  folate_ndsr                    +sup_folate;
 totdfe= folateequiv_ndsr +sup_dietfolateequiv;      /* for total dietary
folate equivalents, from food and supplements, based on post-fortification
content */
 totprefol=          folatepre1998                +sup_folate;  /*total
folate based on pre-fortification content */
 totsynfol=         folatesynthetic_ndsr       +sup_folate;  /* total
synthetic folate, which is folate fortified in food plus supplemental folate
*/
```

Fruit and Vegetable Variables: Botanical Groups (last updated August 2006, MB)

- Additional variables for pyramid servings of fruits and vegetables per day were created based on botanical characteristics of the food.
- pyr_fruit_cucur
    - Contains the sum of the pyramid servings of fruit from cantaloupe, other melon, and pumpkins, per day.
- pyr_fruit_rosac
    - Contains the sum of the pyramid servings of fruit from apples, applesauce, pears, peaches, nectarines, plums, and strawberries, per day.
- pyr_veg_cheno
    - This variable, describing pyramid servings of chenopodiaceae per day, was created by adding the products of cooked and raw spinach greens by multipliers. The multiplier for cooked spinach greens was 0.45, and the multiplier for raw spinach greens was 0.9.
        - Proportional factors were applied to tease out spinach from other greens. In the FFQ and food source file, spinach and other greens were treated as one item. According to CSFII data, 45% of cooked greens and 90% of raw greens were spinach and the rest of them were cruciferous greens. Because this variable separates spinach from other greens, proportional factors were applied.
- pyr_veg_lettuce
    - Contains the pyramid servings of lettuce (compositae) per day.
- pyr_veg_cruc2
    - Contains the sum of the variable pyr_veg_cruc plus the products of cooked and raw spinach greens by multipliers. The multiplier for cooked spinach greens was 0.55, and the multiplier for raw spinach greens was 0.1.
        - Proportional factors were applied to tease out spinach from other greens. In the FFQ and food source file, spinach and other greens were treated as one item. According to CSFII data, 55% of cooked greens and 10% of raw greens were spinach and the rest of them were cruciferous greens. Because this variable separates spinach from other greens, proportional factors were applied.
- pyr_veg_corn
    - Contains the pyramid servings of corn (gramineae) per day.
- pyr_veg_legum
    - Contains the sum of the pyramid servings of dried beans, peas, soups based beans, and string beans, per day.
- pyr_fruit_banana
    - Contains the pyramid servings of bananas per day.
- pyr_fruit_rutac
    - Contains the sum of the pyramid servings of grapefruit, oranges-tangelos, orange juice, and grapefruit juice, per day.
- pyr_veg_solan
    - Contains the sum of the pyramid servings of peppers, raw tomatoes, tomato salsa, tomato juice, tomato sauce with meat, and tomato sauce without meat, per day.
- pyr_veg_umbel
    - Contains the sum of the pyramid servings of carrots, celery, parsnips, and fennel (if it exists in food groups), per day.
- pyr_veg_sweet_potato
    - Contains the pyramid servings of sweet potatoes (convolvulaceae) per day.
- pyr_fruit_grape
    - Contains the pyramid servings of grapes (vitaceae) per day.
- pyr_veg_green_leafy
    - Contains the sum of the variable vegdarkgreen_pyr and the variable pyr_veg_lettuce.
- pyr_fruit_veg_yellow

  - Contains the sum of the variable vegdeepyellow_pyr, pyramid servings of cantaloupe, and pyramid servings of peach multiplied by 0.69.

- The program "foodsource_neal.sas" describes how botanicals are classified:

```
data temp;
set broad ;
format bgroup $8.;
if broadcode in (815)        then bgroup= "CHENO1"; /*raw*/
if broadcode in (820)        then bgroup= "CHENO2";/* cooked*/
if broadcode in (760)        then bgroup= "COMP";
if broadcode in (830,880,910) then bgroup= "CRUC1";
if broadcode in (610,615)     then bgroup= "CUCUR";
if broadcode in (900)        then bgroup= "GRAMI";
if broadcode in (870,890)     then bgroup= "LEGUM1";
if broadcode in (605)        then bgroup= "MUSAC";
if broadcode in (570,572,580,625,590)     then bgroup= "ROSAC";
if broadcode in (540,550,700)            then bgroup= "RUTAC";
if broadcode in (940,860,861,862,864,718) then bgroup= "SOLAN";
if broadcode in (840)                    then bgroup= "UMBEL";
if broadcode in (640)                    then bgroup= "VITA";
if broadcode in (590)                    then bgroup= "PEACH";
if broadcode in (610)                    then bgroup= "CAN";
if broadcode in (740)       then bgroup= "CONVOL";
```

- In this data step foods are assigned to food groups based on their broad codes. Some foods (namely cantaloupe and peaches/nectarines/plums, which are broadcodes 610 and 590 respectively) belong in more than one food group, but the code above only allows them to be assigned to one. For example, cantaloupe initially gets assigned to the "CUCUR" group, but then farther down is re-assigned to the "CAN" group. Similarly, peaches/nectarines/plums are initially assigned to the "ROSAC" group, but are later re-assigned to the "PEACH" group. Rewriting the program in such a way as to allow foods to be assigned to more than one group will render results more accurate and consistent.

Gram/Frequency Variables (last updated August 2006, MB)

- Daily Frequency
  - The daily frequency describes how many times a participant ate the food per day.
  - It does not use the serving size to calculate the number. (So, if a participant reported eating hamburgers twice a week, their weekly frequency would be two regardless of whether it was a small or large serving size.
- Grams
  - Generally more precise than the daily frequency variable because it incorporates the serving size.
  - Calculations for Grams Variables
    - Sun: /prj/dietaarp/curtin/sasdata/grams.groups.v8x.gz
    - Documentation: /prj/ dietaarp /documentation/grams.foods.calculations.doc
    - NUMBER OF OBSERVATIONS: 567992
    - FILE VERSION DATE: 10/6/04
  - This listing has gram variables that were calculated based on values from the gram variables of individual foods from the DietAARP food database. All gram variables not listed in this document are directly from the DietAARP.

Variable Name	Calculation
g_butter_total	Sum of: g_butter_bread g_butter_other g_butter_panc g_butter_pot g_butter_veg
g_butter_total	Sum of: g_butter_bread g_butter_other g_butter_panc g_butter_pot g_butter_veg
g_cheese_total	Sum of: g_cheese_lowfat g_cheese_nonfat g_cheese_reg
g_chicken_dark	Sum of: g_chick_fr_dark_ns g_chick_fr_dark_ws g_chick_dark_ws g_chick_dark_ns
g_chicken_light	Sum of: g_chick_fr_light_ns g_chick_fr_light_ws g_chick_light_ws g_chick_light_ns
g_chicken_total	Sum of: g_coldcut_poultry g_chick_fr_light_ws g_chick_fr_light_ns g_chick_fr_dark_ws g_chick_fr_dark_ns g_chick_light_ws g_chick_light_ns g_chick_dark_ws

	g_chick_dark_ns g_poultry_ground g_chick_mix
g_coffee_total	Sum of: g_coffee_decaf_nosug g_coffee_reg_nosug
g_creamch_total	Sum of: g_creamch_lowfat g_creamch_nonfat g_creamch_reg
g_crm_sour_total	Sum of: g_crm_sour_lowfat g_crm_sour_nonfat g_crm_sour_reg
g_fish_other	Sum of: g_fish_fr_fa g_fish_nf_nfa
g_fish_total	Sum of: g_tuna_can_oil g_tuna_can_water g_fish_fr_fa g_fish_nf_nfa
g_food_milk	g_milk_1_2_cer g_milk_1_2_cof g_milk_1_2_not_cof g_milk_evap_cof g_milk_skim_cer g_milk_skim_cof g_milk_skim_not_cof g_milk_whole_cer g_milk_whole_cof g_milk_whole_not_cof g_crm_cof g_crm_nd_diet g_crm_nd_reg g_apple g_applesce g_bacon_lean g_bacon_reg g_banana g_beans_dried g_beans_green g_beef_stew g_beefrst_lean g_beefrst_reg g_beefrst_sand g_biscuit g_bread_white g_bread_whole_gr g_broccoli g_butter_bread g_butter_other

	g_butter_panc g_butter_pot g_butter_veg g_cake_lowfat g_cake_reg g_candy_choc g_candy_oth g_cantaloupe g_carrot g_caul_brus_spr g_cereal_fort g_cereal_good_fiber g_cereal_hi_fiber g_cereal_hot g_cereal_other g_cheese_lowfat g_cheese_nonfat g_cheese_reg g_chick_dark_ns g_chick_dark_ws g_chick_fr_dark_ns g_chick_fr_dark_ws g_chick_fr_light_ns g_chick_fr_light_ws g_chick_light_ns g_chick_light_ws g_chick_mix g_chili g_chips_lowfat g_chips_reg g_coldcut_lowfat g_coldcut_poultry g_coldcut_reg g_coleslaw g_cookie_lowfat g_cookie_reg g_corn g_cornbread g_cottagech_lowfat g_cottagech_reg g_cracker_lowfat g_cracker_reg g_creamch_lowfat g_creamch_nonfat g_creamch_reg g_crm_sour_lowfat g_crm_sour_nonfat g_crm_sour_reg g_donut g_egg_sub g_eggs_fa g_eggs_nfa g_eggs_white

	g_engl_muf_bagel g_fish_fr_fa g_fish_nf_nfa g_fruit_dried_no_apr g_fruit_other g_grapefruit g_grapes g_gravy g_ham_not_lunch g_hamb_lean g_hamb_reg g_hotdog_lowfat g_hotdog_reg g_icecream_reg g_lard g_lasagna g_lettuce g_liver g_macaroni g_marg_butter_bread g_marg_butter_other g_marg_butter_panc g_marg_butter_pot g_marg_butter_veg g_marg_diet_bread g_marg_diet_other g_marg_diet_panc g_marg_diet_pot g_marg_diet_veg g_marg_stk_bread g_marg_stk_other g_marg_stk_panc g_marg_stk_pot g_marg_stk_veg g_marg_tub_bread g_marg_tub_other g_marg_tub_panc g_marg_tub_pot g_marg_tub_veg g_mayo_salad_diet g_mayo_salad_nofat g_mayo_salad_reg g_mayo_sand_diet g_mayo_sand_nonfat g_mayo_sand_reg g_meatlf g_melon_other g_nuts_butter g_nuts_whole g_oil_canola g_oil_corn g_oil_olive g_oil_other

	g_orange g_pancake g_pasta g_peach_nect_plum g_pear g_peas g_peppers g_pie_custard g_pie_fruit g_pie_pumpkin g_pizza g_popcorn g_pork g_pot_fr g_pot_salad g_pot_swt g_pot_wht g_poultry_ground g_rice g_salad_dress_lowfat g_salad_dress_nofat g_salad_dress_reg g_sausage_lowfat g_sausage_reg g_shortening g_soup_bean g_soup_creamed g_soup_veg g_spinach_ckd g_spinach_raw g_stk_lean g_stk_reg g_strawberry g_sugar_honey g_tomato_raw g_tomato_salsa g_tomsauce_meat g_tomsauce_nomeat g_tortilla g_tuna_can_oil g_tuna_can_water g_turkey g_veg_med g_veg_oth g_yogurt g_yogurt_frz
g_food_milk_bevcalor	g_coffee_decaf_nosug g_coffee_reg_nosug g_tea_decaf_swt g_tea_reg_swt g_soda_reg_caff g_soda_reg_decaf g_fruitpunch_reg

	g_beer g_liquor g_wine g_orangjce g_juice_other g_tomatojce g_milk_1_2_cer g_milk_1_2_cof g_milk_1_2_not_cof g_milk_evap_cof g_milk_skim_cer g_milk_skim_cof g_milk_skim_not_cof g_milk_whole_cer g_milk_whole_cof g_milk_whole_not_cof g_crm_cof g_crm_nd_diet g_crm_nd_reg g_apple g_applesce g_bacon_lean g_bacon_reg g_banana g_beans_dried g_beans_green g_beef_stew g_beefrst_lean g_beefrst_reg g_beefrst_sand g_biscuit g_bread_white g_bread_whole_gr g_broccoli g_butter_bread g_butter_other g_butter_panc g_butter_pot g_butter_veg g_cake_lowfat g_cake_reg g_candy_choc g_candy_oth g_cantaloupe g_carrot g_caul_brus_spr g_cereal_fort g_cereal_good_fiber g_cereal_hi_fiber g_cereal_hot

	g_cereal_other g_cheese_lowfat g_cheese_nonfat g_cheese_reg g_chick_dark_ns g_chick_dark_ws g_chick_fr_dark_ns g_chick_fr_dark_ws g_chick_fr_light_ns g_chick_fr_light_ws g_chick_light_ns g_chick_light_ws g_chick_mix g_chili g_chips_lowfat g_chips_reg g_coldcut_lowfat g_coldcut_poultry g_coldcut_reg g_coleslaw g_cookie_lowfat g_cookie_reg g_corn g_cornbread g_cottagech_lowfat g_cottagech_reg g_cracker_lowfat g_cracker_reg g_creamch_lowfat g_creamch_nonfat g_creamch_reg g_crm_sour_lowfat g_crm_sour_nonfat g_crm_sour_reg g_donut g_egg_sub g_eggs_fa g_eggs_nfa g_eggs_white g_engl_muf_bagel g_fish_fr_fa g_fish_nf_nfa g_fruit_dried_no_apr g_fruit_other g_grapefruit g_grapes g_gravy g_ham_not_lunch g_hamb_lean g_hamb_reg g_hotdog_lowfat g_hotdog_reg g_icecream_reg

	g_lard g_lasagna g_lettuce g_liver g_macaroni g_marg_butter_bread g_marg_butter_other g_marg_butter_panc g_marg_butter_pot g_marg_butter_veg g_marg_diet_bread g_marg_diet_other g_marg_diet_panc g_marg_diet_pot g_marg_diet_veg g_marg_stk_bread g_marg_stk_other g_marg_stk_panc g_marg_stk_pot g_marg_stk_veg g_marg_tub_bread g_marg_tub_other g_marg_tub_panc g_marg_tub_pot g_marg_tub_veg g_mayo_salad_diet g_mayo_salad_nofat g_mayo_salad_reg g_mayo_sand_diet g_mayo_sand_nonfat g_mayo_sand_reg g_meatlf g_melon_other g_nuts_butter g_nuts_whole g_oil_canola g_oil_corn g_oil_olive g_oil_other g_orange g_pancake g_pasta g_peach_nect_plum g_pear g_peas g_peppers g_pie_custard g_pie_fruit g_pie_pumpkin g_pizza g_popcorn g_pork g_pot_fr

	g_pot_salad g_pot_swt g_pot_wht g_poultry_ground g_rice g_salad_dress_lowfat g_salad_dress_nofat g_salad_dress_reg g_sausage_lowfat g_sausage_reg g_shortening g_soup_bean g_soup_creamed g_soup_veg g_spinach_ckd g_spinach_raw g_stk_lean g_stk_reg g_strawberry g_sugar_honey g_tomato_raw g_tomato_salsa g_tomsauce_meat g_tomsauce_nomeat g_tortilla g_tuna_can_oil g_tuna_can_water g_turkey g_veg_med g_veg_oth g_yogurt g_yogurt_frz
g_food_milk_juice	g_orangjce g_juice_other g_tomatojce g_milk_1_2_cer g_milk_1_2_cof g_milk_1_2_not_cof g_milk_evap_cof g_milk_skim_cer g_milk_skim_cof g_milk_skim_not_cof g_milk_whole_cer g_milk_whole_cof g_milk_whole_not_cof g_crm_cof g_crm_nd_diet g_crm_nd_reg g_apple g_applesce g_bacon_lean

	g_bacon_reg g_banana g_beans_dried g_beans_green g_beef_stew g_beefrst_lean g_beefrst_reg g_beefrst_sand g_biscuit g_bread_white g_bread_whole_gr g_broccoli g_butter_bread g_butter_other g_butter_panc g_butter_pot g_butter_veg g_cake_lowfat g_cake_reg g_candy_choc g_candy_oth g_cantaloupe g_carrot g_caul_brus_spr g_cereal_fort g_cereal_good_fiber g_cereal_hi_fiber g_cereal_hot g_cereal_other g_cheese_lowfat g_cheese_nonfat g_cheese_reg g_chick_dark_ns g_chick_dark_ws g_chick_fr_dark_ns g_chick_fr_dark_ws g_chick_fr_light_ns g_chick_fr_light_ws g_chick_light_ns g_chick_light_ws g_chick_mix g_chili g_chips_lowfat g_chips_reg g_coldcut_lowfat g_coldcut_poultry g_coldcut_reg g_coleslaw g_cookie_lowfat g_cookie_reg g_corn g_cornbread g_cottagech_lowfat

	g_cottagech_reg g_cracker_lowfat g_cracker_reg g_creamch_lowfat g_creamch_nonfat g_creamch_reg g_crm_sour_lowfat g_crm_sour_nonfat g_crm_sour_reg g_donut g_egg_sub g_eggs_fa g_eggs_nfa g_eggs_white g_engl_muf_bagel g_fish_fr_fa g_fish_nf_nfa g_fruit_dried_no_apr g_fruit_other g_grapefruit g_grapes g_gravy g_ham_not_lunch g_hamb_lean g_hamb_reg g_hotdog_lowfat g_hotdog_reg g_icecream_reg g_lard g_lasagna g_lettuce g_liver g_macaroni g_marg_butter_bread g_marg_butter_other g_marg_butter_panc g_marg_butter_pot g_marg_butter_veg g_marg_diet_bread g_marg_diet_other g_marg_diet_panc g_marg_diet_pot g_marg_diet_veg g_marg_stk_bread g_marg_stk_other g_marg_stk_panc g_marg_stk_pot g_marg_stk_veg g_marg_tub_bread g_marg_tub_other g_marg_tub_panc g_marg_tub_pot g_marg_tub_veg

	g_mayo_salad_diet g_mayo_salad_nofat g_mayo_salad_reg g_mayo_sand_diet g_mayo_sand_nonfat g_mayo_sand_reg g_meatlf g_melon_other g_nuts_butter g_nuts_whole g_oil_canola g_oil_corn g_oil_olive g_oil_other g_orange g_pancake g_pasta g_peach_nect_plum g_pear g_peas g_peppers g_pie_custard g_pie_fruit g_pie_pumpkin g_pizza g_popcorn g_pork g_pot_fr g_pot_salad g_pot_swt g_pot_wht g_poultry_ground g_rice g_salad_dress_lowfat g_salad_dress_nofat g_salad_dress_reg g_sausage_lowfat g_sausage_reg g_shortening g_soup_bean g_soup_creamed g_soup_veg g_spinach_ckd g_spinach_raw g_stk_lean g_stk_reg g_strawberry g_sugar_honey g_tomato_raw g_tomato_salsa g_tomsauce_meat g_tomsauce_nomeat g_tortilla

	g_tuna_can_oil g_tuna_can_water g_turkey g_veg_med g_veg_oth g_yogurt g_yogurt_frz
g_foodonly	Sum of: g_apple g_applesce g_bacon_lean g_bacon_reg g_banana g_beans_dried g_beans_green g_beef_stew g_beefrst_lean g_beefrst_reg g_beefrst_sand g_biscuit g_bread_white g_bread_whole_gr g_broccoli g_butter_bread g_butter_other g_butter_panc g_butter_pot g_butter_veg g_cake_lowfat g_cake_reg g_candy_choc g_candy_oth g_cantaloupe g_carrot g_caul_brus_spr g_cereal_fort g_cereal_good_fiber g_cereal_hi_fiber g_cereal_hot g_cereal_other g_cheese_lowfat g_cheese_nonfat g_cheese_reg g_chick_dark_ns g_chick_dark_ws g_chick_fr_dark_ns g_chick_fr_dark_ws g_chick_fr_light_ns g_chick_fr_light_ws g_chick_light_ns g_chick_light_ws g_chick_mix g_chili

	g_chips_lowfat g_chips_reg g_coldcut_lowfat g_coldcut_poultry g_coldcut_reg g_coleslaw g_cookie_lowfat g_cookie_reg g_corn g_cornbread g_cottagech_lowfat g_cottagech_reg g_cracker_lowfat g_cracker_reg g_creamch_lowfat g_creamch_nonfat g_creamch_reg g_crm_sour_lowfat g_crm_sour_nonfat g_crm_sour_reg g_donut g_egg_sub g_eggs_fa g_eggs_nfa g_eggs_white g_engl_muf_bagel g_fish_fr_fa g_fish_nf_nfa g_fruit_dried_no_apr g_fruit_other g_grapefruit g_grapes g_gravy g_ham_not_lunch g_hamb_lean g_hamb_reg g_hotdog_lowfat g_hotdog_reg g_icecream_reg g_lard g_lasagna g_lettuce g_liver g_macaroni g_marg_butter_bread g_marg_butter_other g_marg_butter_panc g_marg_butter_pot g_marg_butter_veg g_marg_diet_bread g_marg_diet_other g_marg_diet_panc g_marg_diet_pot

	g_marg_diet_veg g_marg_stk_bread g_marg_stk_other g_marg_stk_panc g_marg_stk_pot g_marg_stk_veg g_marg_tub_bread g_marg_tub_other g_marg_tub_panc g_marg_tub_pot g_marg_tub_veg g_mayo_salad_diet g_mayo_salad_nofat g_mayo_salad_reg g_mayo_sand_diet g_mayo_sand_nonfat g_mayo_sand_reg g_meatlf g_melon_other g_nuts_butter g_nuts_whole g_oil_canola g_oil_corn g_oil_olive g_oil_other g_orange g_pancake g_pasta g_peach_nect_plum g_pear g_peas g_peppers g_pie_custard g_pie_fruit g_pie_pumpkin g_pizza g_popcorn g_pork g_pot_fr g_pot_salad g_pot_swt g_pot_wht g_poultry_ground g_rice g_salad_dress_lowfat g_salad_dress_nofat g_salad_dress_reg g_sausage_lowfat g_sausage_reg g_shortening g_soup_bean g_soup_creamed g_soup_veg

	g_spinach_ckd g_spinach_raw g_stk_lean g_stk_reg g_strawberry g_sugar_honey g_tomato_raw g_tomato_salsa g_tomsauce_meat g_tomsauce_nomeat g_tortilla g_tuna_can_oil g_tuna_can_water g_turkey g_veg_med g_veg_oth g_yogurt g_yogurt_frz
g_high_temp	Sum of: g_stk_lean g_stk_reg g_hamb_lean g_hamb_reg g_bacon_reg g_bacon_lean g_sausage_reg g_m_sausage_lowfat g_pork
g_low_temp	Sum of: g_m_chili g_m_lasagna g_m_pizza g_m_tomsauce_meat g_m_meatlf g_m_beef_stew g_m_hotdog_lowfat g_beefrst_lean g_beefrst_reg g_beefrst_sand g_ham_not_lunch g_hotdog_reg g_liver g_coldcut_reg g_coldcut_lowfat g_coldcut_poultry g_chick_fr_light_ws g_chick_fr_light_ns g_chick_fr_dark_ws g_chick_fr_dark_ns g_chick_light_ws g_chick_light_ns g_chick_dark_ws g_chick_dark_ns

	g_poultry_ground g_chick_mix g_turkey g_tuna_can_oil g_tuna_can_water g_fish_fr_fa g_fish_nf_nfa
g_m_beef_stew	g_beef_stew * .255
g_m_chili	g_chili * .209
g_m_hotdog_lowfat	g_hotdog_lowfat * .5
g_m_meatlf	g_meatlf * .766
g_m_pizza	g_pizza * .156
g_m_sausage_lowfat	g_sausage_lowfat * .5
g_m_tomsauce_meat	g_tomsauce_meat * .185
g_marg_butter_total	Sum of: g_marg_butter_bread g_marg_butter_other g_marg_butter_panc g_marg_butter_pot g_marg_butter_veg
g_marg_diet_total	Sum of: g_marg_diet_bread g_marg_diet_other g_marg_diet_panc g_marg_diet_pot g_marg_diet_veg
g_marg_stk_total	Sum of: g_marg_stk_bread g_marg_stk_other g_marg_stk_panc g_marg_stk_pot g_marg_stk_veg
g_marg_tub_total	Sum of: g_marg_tub_bread g_marg_tub_other g_marg_tub_panc g_marg_tub_pot g_marg_tub_veg
g_mayo_total	Sum of: g_mayo_salad_diet g_mayo_salad_nofat g_mayo_salad_reg g_mayo_sand_diet g_mayo_sand_nonfat g_mayo_sand_reg
g_meat_red	Sum of : g_stk_lean g_stk_reg g_beefrst_lean g_beefrst_reg g_beefrst_sand g_m_beef_stew g_hamb_lean

	g_hamb_reg g_m_meatlf g_ham_not_lunch g_pork g_bacon_reg g_bacon_lean g_hotdog_reg g_liver g_coldcut_reg g_coldcut_lowfat g_m_lasagna g_m_pizza g_m_chili g_m_tomsauce_meat g_sausage_reg
g_meat_total	Sum of: g_m_chili g_m_lasagna g_m_pizza g_m_tomsauce_meat g_m_meatlf g_m_beef_stew g_m_sausage_lowfat g_m_hotdog_lowfat g_stk_lean g_stk_reg g_beefrst_lean g_beefrst_reg g_beefrst_sand g_hamb_lean g_hamb_reg g_ham_not_lunch g_pork g_bacon_reg g_bacon_lean g_sausage_reg g_hotdog_reg g_liver g_coldcut_reg g_coldcut_lowfat g_coldcut_poultry g_chick_fr_light_ws g_chick_fr_light_ns g_chick_fr_dark_ws g_chick_fr_dark_ns g_chick_light_ws g_chick_light_ns g_chick_dark_ws g_chick_dark_ns g_poultry_ground g_chick_mix g_turkey g_tuna_can_oil

	g_tuna_can_water g_fish_fr_fa g_fish_nf_nfa
g_meat_white	Sum of: g_coldcut_poultry g_chick_fr_light_ws g_chick_fr_light_ns g_chick_fr_dark_ws g_chick_fr_dark_ns g_chick_light_ws g_chick_light_ns g_chick_dark_ws g_chick_dark_ns g_poultry_ground g_chick_mix g_turkey g_tuna_can_oil g_tuna_can_water g_fish_fr_fa g_fish_nf_nfa g_m_sausage_lowfat g_m_hotdog_lowfat
g_milk_1_2	Sum of: g_milk_1_2_cer g_milk_1_2_cof g_milk_1_2_not_cof
g_milk_skim	Sum of: g_milk_skim_cer g_milk_skim_cof g_milk_skim_not_cof
g_milk_total	Sum of: g_milk_whole_cer g_milk_whole_cof g_milk_whole_not_cof
g_milk_whole	Sum of: g_milk_1_2_cer g_milk_1_2_cof g_milk_1_2_not_cof g_milk_skim_cer g_milk_skim_cof g_milk_skim_not_cof g_milk_whole_cer g_milk_whole_cof g_milk_whole_not_cof
g_process_3	Sum of: g_ham_not_lunch g_hotdog_reg g_m_hotdog_lowfat g_coldcut_reg g_coldcut_lowfat
g_process_5	Sum of: g_ham_not_lunch g_bacon_reg

	g_bacon_lean g_sausage_reg g_m_sausage_lowfat g_hotdog_reg g_m_hotdog_lowfat g_coldcut_reg g_coldcut_lowfat
g_process_6	Sum of: g_ham_not_lunch g_bacon_reg g_bacon_lean g_sausage_reg g_m_sausage_lowfat g_hotdog_reg g_m_hotdog_lowfat g_coldcut_reg g_coldcut_lowfat g_coldcut_poultry
g_red_high_temp	Sum of: g_stk_lean g_stk_reg g_hamb_lean g_hamb_reg g_bacon_reg g_bacon_lean g_sausage_reg g_pork
g_red_low_temp	Sum of: g_beefrst_lean g_beefrst_reg g_beefrst_sand g_m_beef_stew g_m_meatlf g_ham_not_lunch g_hotdog_reg g_liver g_coldcut_reg g_coldcut_lowfat g_m_lasagna g_m_pizza g_m_chili g_m_tomsauce_meat
g_red_notprocess	Sum of : g_stk_lean g_stk_reg g_beefrst_lean g_beefrst_reg g_beefrst_sand g_m_beef_stew g_hamb_lean g_hamb_reg g_m_meatlf

	g_pork g_liver g_m_lasagna g_m_pizza g_m_chili g_m_tomsauce_meat
g_salad_dressing_tot	Sum of: g_salad_dress_lowfat g_salad_dress_nofat g_salad_dress_reg
g_soda_total	Sum of: g_soda_diet_caff g_soda_diet_decaf g_soda_reg_caff g_soda_reg_decaf
g_tea_total	Sum of: g_tea_decaf_nosug g_tea_decaf_swt g_tea_decaf_swt_diet g_tea_reg_nosug g_tea_reg_swt g_tea_reg_swt_diet
g_total	Sum of all 204 foods
g_tuna	Sum of: g_tuna_can_oil g_tuna_can_water

Meat Variables (last updated August 2006, MB)

- For meat group variables, the percent portion of meat is specified below:
    - Beef stew, 25.5% meat
    - Beef, ground beef, meat balls, 76.6% meat
    - Sausage, turkey, low fat, 50% meat
    - Hot dogs, turkey, low fat, 50% meat
    - Lasagna, 10.3% meat
    - Pizza, 15.6% meat
    - Chili, 20.9% meat
    - Tomato sauce with meat, 18.5% meat

- The difference between g_meat_red and redmtwithmixgrpgrm is the categorization of low fat meats.
    - Low fat meats such as low-fat sausage actually tend to be made from turkey meat rather than red meat (which is the group you would usually put all sausages into).
        - Because of this, g_meat_red does not include low-fat sausages and low-fat hotdogs, whereas redmtwithmixgrpgrm does

- Combined meat variables
    - g_red_porksaus = g_pork + g_sausage_reg
    - g_red_non5 = g_meat_red - g_red5 ***or***
    - g_beefrst_lean + g_beefrst_reg + g_beefrst_sand + g_m_beef_stew + g_m_meatlf + g_ham_not_lunch + g_hotdog_reg + g_liver + g_coldcut_reg + g_coldcut_lowfat + g_m_lasagna + g_m_pizza + g_m_chili + g_m_tomsauce_meat

- Values for the meat-mutagens were created from the meat-cooking questions on the risk factor questionnaire using the CHARRED database.
    - For hamburgers, steak, and chicken, the risk factor questionnaire has separate doneness questions for the inside of the meat and the outside of the meat. The CHARRED program does not distinguish between the two.
        - In order to use the CHARRED program to obtain these values, the two questions (inside and outside doneness) were combined. A frequency / cross tabs on the two questions was ran to see how the two questions correlated**(results?).
    - In the RFQ, one of the possible cooking method answers is “Other (such as sautéed, basked, or microwaved)”. Because the CHARRED program does not have this option, these responses were treated as “microwaved” for the CHARRED program.

- <u>DietAARP Documentation of decisions affecting the calculation of HCA & PAH Variables</u>

- Meat cooking method and doneness questions (questions 3, 4, 5, & 6) from the risk factor questionnaire were used in conjunction with the CHARRED program to calculate the HCA & PAH variables. The variables will be missing for subjects who filled out the diet questionnaire, but did not fill out the risk factor questionnaire, unless the subject did not eat any hamburgers, steak, bacon, or chicken, in which case the variables will be zero. If a subject ate one of these foods (according to the diet questionnaire), but the answer to the corresponding cooking method or doneness question was missing, “Don’t know”, or “Didn’t eat this food”, then the most common cooking method or doneness level for that food was used. Note that there were no cooking method or doneness questions for pork chops, and also pork chops were not separated from other pork on the diet questionnaire, so pork chops did not contribute to any of the HCA/PAH variables.

- One of the possible answers to the cooking method question was “other (such as sautéed, baked, or microwaved)”. All of these answers were assigned to “microwaved” in CHARRED. There were two doneness questions for hamburger, steak, and pan-fried or grilled chicken on the risk factor questionnaire – one for the inside of the meat and one for the outside. Because the CHARRED

database does not make this distinction for doneness, it was decided (per Rashmi Sinha) to combine the answers to these questions as shown:

Hamburger/Steak		
Doneness on inside	**Doneness on outside**	**Doneness used in CHARRED**
Rare	Not browned	Rare
Rare	Lightly browned	Rare
Rare	Well-browned	Rare
Rare	Black or charred	Medium
Rare to medium-rare	Not browned	Rare
Rare to medium-rare	Lightly browned	Rare
Rare to medium-rare	Well-browned	Medium
Rare to medium-rare	Black or charred	Medium
Medium to medium-well	Not browned	Rare
Medium to medium-well	Lightly browned	Medium
Medium to medium-well	Well-browned	Medium
Medium to medium-well	Black or charred	Well-done
Well-done	Not browned	Medium
Well-done	Lightly browned	Medium
Well-done	Well-browned	Well-done
Well-done	Black or charred	Very well-done
Very well-done	Not browned	Well-done
Very well-done	Lightly browned	Well-done
Very well-done	Well-browned	Very well-done
Very well-done	Black or charred	Very well-done
* Note: For hamburger, if the answer to doneness on the inside was missing, “Don’t know”, or “Didn’t eat this food”, then “Well-done” was used. For steak, “Medium to medium-well” was used. For both steak and hamburger, if the answer to doneness on the outside was missing, “Don’t know”, or “Didn’t eat this food”, then “Well-browned” was used.		

Pan-Fried/Grilled Chicken		
Doneness on inside	**Doneness on outside**	**Doneness used in CHARRED**
Just until done	Not browned	Just done
Just until done	Lightly browned	Just done
Just until done	Well-browned	Well-done
Just until done	Black or charred	Well-done
Well-done	Not browned	Just done
Well-done	Lightly browned	Just done
Well-done	Well-browned	Well-done
Well-done	Black or charred	Very well-done
Very well-done	Not browned	Well-done
Very well-done	Lightly browned	Well-done
Very well-done	Well-browned	Very well-done
Very well-done	Black or charred	Very well-done
* Note: For both pan-fried and grilled chicken, if the answer to doneness on the inside was missing, “Don’t know”, or “Didn’t eat this food”, then “Well-done” was used. If the answer to doneness on the outside was missing, “Don’t know”, or “Didn’t eat this food”, then “Well-browned” was used.		

- Note that fried chicken (e.g. chicken nuggets) was assigned to fried chicken/deep-fried, and no doneness question was used. For broiled chicken or chicken cooked other ways, only the doneness on the inside was used (doneness on the outside was only asked for pan-fried or grilled chicken). The

answers to the doneness on the inside question for chicken correspond directly to the doneness levels for chicken in CHARRED. If the answer to this question was missing or "Didn't eat chicken", then "Well-done" was used.

- For bacon, only doneness on the outside was asked. Doneness in CHARRED was assigned as shown below:

Bacon	
Doneness on outside	**Doneness used in CHARRED**
Not browned	Just done
Lightly browned	Just done
Well-browned	Well-done
Black or charred	Very well-done
Missing, "Don't know", or "Didn't eat"	Well-done

Cleaned Exposure Variables (Baseline and RFQ)

Physical Activity in Baseline and RFQ (last updated August 2006, MB)

- Variables were created describing physical activity from the Baseline and the RFQ data sets.
- Baseline:
    - The variable physicwork describes physical activity within the past 12 months at work. It was calculated using data from the raw question variable q31:

```
/*********************************************************************
**********Physical Activity (within the past 12 months) at work********
*********************************************************************
**0: all day sitting
**1: mostly sitting with a fair amount of walking
**2: walking around a lot but not any lifting
**3: lift or carry light loads, or have to climb stairs or hills often
**4: do heavy work or carry heavy loads
**5: .E: error
**5: .M: missing
*********************************************************************/

data core;
set core;
if q31='0' then physicwork=0;
if q31='1' then physicwork=1;
if q31='2' then physicwork=2;
if q31='3' then physicwork=3;
if q31='4' then physicwork=4;
if q31='E' then physicwork=5;
if q31='M' then physicwork=5;

run;
```

- RFQ
    - The variables 115_29ex, 119_29ex, 135_39ex, 1currex, v15_18ex, v19_29ex, v35_39ex, and vcurrex describe amount of physical activity per week. These variables were created using the raw question variables rf_q54_1, rf_q54_2, rf_q54_3, rf_q54_4, rf_q55_1, rf_q55_2, rf_q55_3, and rf_q55_4:

```
/*********************************************************************
************************Physical Activity****************************
*********************************************************************
**0: Never
**1: rarely
**2: <1 hrs wk
**3: 1-3hrs/wk
**4: 4-7 hrs/wk
**5: >7 hrs/wk
```

```
**9: unknown (.M: missing, .E: error)
*********************************************************************/

data core;
set core;
if rf_q54_1='0' then l15_18ex=0;
if rf_q54_1='1' then l15_18ex=1;
if rf_q54_1='2' then l15_18ex=2;
if rf_q54_1='3' then l15_18ex=3;
if rf_q54_1='4' then l15_18ex=4;
if rf_q54_1='5' then l15_18ex=5;
if rf_q54_1='M' then l15_18ex=9;
if rf_q54_1='E' then l15_18ex=9;

if rf_q54_2='0' then l19_29ex=0;
if rf_q54_2='1' then l19_29ex=1;
if rf_q54_2='2' then l19_29ex=2;
if rf_q54_2='3' then l19_29ex=3;
if rf_q54_2='4' then l19_29ex=4;
if rf_q54_2='5' then l19_29ex=5;
if rf_q54_2='M' then l19_29ex=9;
if rf_q54_2='E' then l19_29ex=9;

if rf_q54_3='0' then l35_39ex=0;
if rf_q54_3='1' then l35_39ex=1;
if rf_q54_3='2' then l35_39ex=2;
if rf_q54_3='3' then l35_39ex=3;
if rf_q54_3='4' then l35_39ex=4;
if rf_q54_3='5' then l35_39ex=5;
if rf_q54_3='M' then l35_39ex=9;
if rf_q54_3='E' then l35_39ex=9;

if rf_q54_4='0' then lcurrex=0;
if rf_q54_4='1' then lcurrex=1;
if rf_q54_4='2' then lcurrex=2;
if rf_q54_4='3' then lcurrex=3;
if rf_q54_4='4' then lcurrex=4;
if rf_q54_4='5' then lcurrex=5;
if rf_q54_4='M' then lcurrex=9;
if rf_q54_4='E' then lcurrex=9;

if rf_q55_1='0' then v15_18ex=0;
if rf_q55_1='1' then v15_18ex=1;
if rf_q55_1='2' then v15_18ex=2;
if rf_q55_1='3' then v15_18ex=3;
if rf_q55_1='4' then v15_18ex=4;
if rf_q55_1='5' then v15_18ex=5;
if rf_q55_1='M' then v15_18ex=9;
if rf_q55_1='E' then v15_18ex=9;

if rf_q55_2='0' then v19_29ex=0;
if rf_q55_2='1' then v19_29ex=1;
if rf_q55_2='2' then v19_29ex=2;
if rf_q55_2='3' then v19_29ex=3;
```

```
if rf_q55_2='4' then v19_29ex=4;
if rf_q55_2='5' then v19_29ex=5;
if rf_q55_2='M' then v19_29ex=9;
if rf_q55_2='E' then v19_29ex=9;

if rf_q55_3='0' then v35_39ex=0;
if rf_q55_3='1' then v35_39ex=1;
if rf_q55_3='2' then v35_39ex=2;
if rf_q55_3='3' then v35_39ex=3;
if rf_q55_3='4' then v35_39ex=4;
if rf_q55_3='5' then v35_39ex=5;
if rf_q55_3='M' then v35_39ex=9;
if rf_q55_3='E' then v35_39ex=9;

if rf_q55_4='0' then vcurrex=0;
if rf_q55_4='1' then vcurrex=1;
if rf_q55_4='2' then vcurrex=2;
if rf_q55_4='3' then vcurrex=3;
if rf_q55_4='4' then vcurrex=4;
if rf_q55_4='5' then vcurrex=5;
if rf_q55_4='M' then vcurrex=9;
if rf_q55_4='E' then vcurrex=9;
```

- The variable jobphy describes the number of jobs a participant has held that were physically demanding. This variable was created from the raw question variables rf_q48 and rf_q49:

```
/*********************************************************************
*****************Number of Physically Demanding Jobs*******************
*********************************************************************
**0: Never
**1: 1-2 jobs
**2: 3-5 jobs
**3: 6 or more jobs
**9: .E: error
**9: .M: missing
*********************************************************************/
data core;
set core;
jobphy=rf_q48;
if rf_q48='E' then jobphy=9;
if rf_q48='M' then jobphy=9;
if rf_q49='0' then jobphy=1;
if rf_q49='1' then jobphy=2;
if rf_q49='2' then jobphy=3;
run;
```

- The variable jobphyyrs describes the number of years at a job which was physically demanding. This variable was created using the raw question variables rf_q48 and rf_q50:

```
/*********************************************************************
Number of Years With a Physically Demanding Job, Combining rf_q48 and
rf_q50*********************************************************************
*****************************************************************
**0: None or less than 1 year
**1: 1-2 years
**2: 3-5 years
**3: 6-9 years
**4: 10 or more years
**9: .E: error
**9: .M: missing
*********************************************************************/
data core;
set core;
if rf_q48='0' then jobphyyrs=0;;
if rf_q48='E' then jobphyyrs=9;
if rf_q48='M' then jobphyyrs=9;
if rf_q50='0' then jobphyyrs=0;;
if rf_q50='1' then jobphyyrs=1;;
if rf_q50='2' then jobphyyrs=2;;
if rf_q50='3' then jobphyyrs=3;;
if rf_q50='4' then jobphyyrs=4;;
run;
```

- The variable jobwalk describes the years in which a participant held a job in which he or she walked or biked. The variable was created using the raw question variables rf_q51_1 and rf_q51_2:

```
/*********************************************************************
**Job with Walking or Biking, Based on Question 51 (two sub_questions)*
*********************************************************************
**0: No
**1: less than 1 year
**2: 1-2 years
**3: 3-5 years
**4: 6-9 years
**5: 10 or more years
**9: .E: error
**9: .M: missing
*********************************************************************/
data core;
set core;
if rf_q51_1='0' then jobwalk=0;
if rf_q51_1='E' then jobwalk=9;
if rf_q51_1='M' then jobwalk=9;
if rf_q51_2='0' then jobwalk=1;
if rf_q51_2='1' then jobwalk=2;
if rf_q51_2='2' then jobwalk=3;
if rf_q51_2='3' then jobwalk=4;
if rf_q51_2='4' then jobwalk=5;
run;
```

- The variable tvwatch describes the hours (per week?*) spent watching tv. The variable was created using the raw question variable rf_q52:

```
/*************************************************************************
************************Time Watching TV*********************************
*************************************************************************
**0: None
**1: less than 1 hr
**2: 1-2 hrs
**3: 3-4 hrs
**4: 5-6 hrs
**5: 7-8 hrs
**6: 9 or more hrs
**9: .E: error
**9: .M: missing
*************************************************************************/
data core;
set core;
if rf_q52='0' then tvwatch=0;
if rf_q52='1' then tvwatch=1;
if rf_q52='2' then tvwatch=2;
if rf_q52='3' then tvwatch=3;
if rf_q52='4' then tvwatch=4;
if rf_q52='5' then tvwatch=5;
if rf_q52='6' then tvwatch=6;
if rf_q52='E' then tvwatch=9;
if rf_q52='M' then tvwatch=9;
run;
```

- The variable sleep describes how many hours of sleep per night a participant usually has. This variable was created using the raw question variable rf_q53_a:

```
/*************************************************************************
*****************Time Spent on Sleep per Night*****************************
*************************************************************************
**0: less than 5 hrs
**1: 5-6 hrs
**2: 7-8 hrs
**3: 9 or more hrs
**9: .E: error
**9: .M: missing
*************************************************************************/
data core;
set core;
if rf_q53_a='0' then sleep=0;
if rf_q53_a='1' then sleep=1;
if rf_q53_a='2' then sleep=2;
if rf_q53_a='3' then sleep=3;
if rf_q53_a='E' then sleep=9;
if rf_q53_a='M' then sleep=9;
run;
```

- The variable nap describes how many hours a participant naps for per day. It was created using the raw question variable rf_q53_b:

```
/*********************************************************************
*****************Time Spent Napping During the Day ********************
*********************************************************************
**0: none
**1: less than 1 hrs
**2: 1-2 hrs
**3: 3-4 hrs
**4: 5-6 hrs
**9: .E: error
**9: .M: missing
*********************************************************************/
data core;
set core;
if rf_q53_b='0' then nap=0;
if rf_q53_b='1' then nap=1;
if rf_q53_b='2' then nap=2;
if rf_q53_b='3' then nap=3;
if rf_q53_b='4' then nap=4;
if rf_q53_b='E' then nap=9;
if rf_q53_b='M' then nap=9;
run;
```

- The variable sitting describes the hours a participant spends sitting per day. This variable was created using the raw question variable rf_q53_c:

```
/*********************************************************************
*****************Time Spent Sitting During the Day********************
*********************************************************************
**0: less than 3 hrs
**1: 3-4 hrs
**2: 5-6 hrs
**3: 7-8 hrs
**4: 9 or more hrs
**9: .E: error
**9: .M: missing
*********************************************************************/
data core;
set core;
if rf_q53_c='0' then sitting=0;
if rf_q53_c='1' then sitting=1;
if rf_q53_c='2' then sitting=2;
if rf_q53_c='3' then sitting=3;
if rf_q53_c='4' then sitting=4;
if rf_q53_c='E' then sitting=9;
if rf_q53_c='M' then sitting=9;
run;
```

- The variables wtmax, wtmin, waist, hip, and whratio describe the maximum weight, minimum weight, waist measurement (in inches?**), hip measurement (in inches?**), and

the waist to hip ratio, respectively, for the participant. These variables were created using the raw question variables rf_q58wtmax, rf_q59wtmin, rf_q62waist, and rf_q62hip:

```
/*************************************************************************
**Minimum and Maximum Weight, Waist Measurements, and Hip Measurements*
*************************************************************************/
data core;
set core;
wtmax=rf_q58wtmax;
wtmin=rf_q59wtmin;
waist=rf_q62waist;
hip=rf_q62hip;
run;

data core;
set core;
whratio=waist/hip;
run;
```

- The variable weigbody describes the area of a participant's body most likely to carry the most weight. This variable was created using the raw question variable rf_q60:

```
/*************************************************************************
***************Body Part Most Likely To Carry Weight*****************
*************************************************************************
**0: equally all over
**1: chest and shoulder
**2: waist and stomach
**3: hip or thigh
**9: .E: error
**9: .M: missing
*************************************************************************/
data core;
set core;
if rf_q60='0' then weigbody=0;
if rf_q60='1' then weigbody=1;
if rf_q60='2' then weigbody=2;
if rf_q60='3' then weigbody=3;
if rf_q60='E' then weigbody=9;
if rf_q60='M' then weigbody=9;
if rf_q60='.' then weigbody=9;
run;
```

- The variable gain40_59 describes the area of a participant's body most likely to carry the most weight, or describes the participant as not gaining weight. This variable was created using the raw question variable rf_q61:

```
/*************************************************************************
****************Body Part Most Likely To Carry Weight****************
*************************************************************************
**0: does not gain weight over 40-59
```

```
**1: equally all over
**2: chest and shoulder
**3: waist and stomach
**4: hip or thigh
**9: .E: error
**9: .M: missing
*********************************************************************/
data core;
set core;
if rf_q61='0' then gain40_59=0;
if rf_q61='4' then gain40_59=1;
if rf_q61='1' then gain40_59=2;
if rf_q61='2' then gain40_59=3;
if rf_q61='3' then gain40_59=4;
if rf_q61='E' then gain40_59=9;
if rf_q61='M' then gain40_59=9;
if rf_q61='.' then gain40_59=9;
run;
```

Risk Factor Questionnaire Hormone Variables (last updated August 2006, MB)

- The original hormone variables were renamed and edited to recode "E" and "M" to a missing/unknown level, to recode some alphanumeric values into tens, elevens, etc., and to recode all males as "not applicable, other gender." Summary variables were created to combine these original variables into analysis variables
- New variables were also created for name of hormone used longest for both estrogen and progestin. However, no summary variables were made for these variables due to subjects choosing multiple hormone brands.
- RF_HORMEVER
  - Was created to indicate whether or not a subject ever used hormone pills. A subject was considered to have used hormones if they met any of the following criteria:
    - Indicated they took hormone pills
    - Indicated they were still taking estrogen or progestin pills
    - Indicated a year they began hormone usage or a year they ended hormone usage
    - Indicated a number of years they took estrogen or progestin pills
    - Indicated a name of an estrogen or progestin pill taken longest or specified "other"
    - Indicated a frequency of estrogen or progestin pill usage
    - Indicated a dosage of estrogen or progestin pill usage
- RF_HORMTYPE
  - Has been updated to take account of RFQ data in addition to baseline questionnaire data. The variable was updated using the specific hormone usage questions on the RFQ. Hormone type was based on whether subjects met any of the following criteria:
    - Indicated they were still taking estrogen or progestin pills
    - Indicated a year they began hormone usage or a year they ended hormone usage
    - Indicated a number of years they took estrogen or progestin pills
    - Indicated a name of an estrogen or progestin pill taken longest or specified other
    - Indicated a frequency of estrogen or progestin pill usage
    - Indicated a dosage of estrogen or progestin pill usage
      - If the subject did not meet any of the criteria that indicated specific hormone type usage, but did indicate they used hormones, either on the baseline questionnaire or the RFQ, they were considered to have used hormones, type unknown.
- Hormone duration
  - Two types of hormone duration variables were created based on the following guidelines:
    - *Hormone episode start dates* (RF_EST_START_DT and RF_PRG_START_DT) were created from the cleaned hormone episode start month and year variables (RF_EST_START_MO, RF_EST_START_YR, RF_PRG_START_MO, and RF_PRG_START_YR).
      - A day value of 15 was assigned for calculation purposes. For instances in which a month was missing, a value of '6' was assigned.
    - *Hormone episode end dates* (RF_EST_STOP_DT and RF_PRG_STOP_DT) were created from the cleaned hormone episode end month and year variables (RF_EST_STOP_MO, RF_EST_STOP_YR, RF_PRG_STOP_MO, and RF_PRG_STOP_YR). A day value of 15 was assigned for calculation purposes. For instances in which a month was missing, a value of '6' was assigned.
    - *Hormone date status* variables (RF_EST_DATEFLAG and RF_PRG_DATEFLAG) were created to indicate what information (month and/or year) was supplied for episode start and end dates.
    - *Hormone episode status* variables (RF_EST_EPISODE and RF_PRG_EPISODE) were created to indicate whether or not the date information supplied could be used to create a valid hormone episode duration.
    - *Duration* was calculated using the time difference between the episode start and end dates.
      - All duration variables have been rounded to the nearest whole month because only month and year of hormone use was listed in the questionnaire.

- No duration values were calculated if a year was missing for either the start date or the end date.
- It is common to have a hormone episode that starts and ends on the same month and same year. Because no day values were supplied, the effective duration of these "episodes" is zero.
- Instances exist in which a supplied hormone start date occurs subsequent to a hormone end date, thus resulting in what would be a negative duration. Duration for these episodes has been set to zero. These subjects are flagged as RF_EST_EPISODE = 2 or RF_PRG_EPISODE = 2 depending on the type of hormone.

o The first type of hormone duration variables created is overall duration variables which indicate the entire hormone duration, regardless of other hormone usage.
  - An overall estrogen usage variable (RF_EST_CALC_MO) was calculated from the episode start and end dates to indicate total estrogen usage duration in months, regardless of whether or not progestin usage dates overlapped with the estrogen usage dates.
  - An overall progestin usage variable (RF_PRG_CALC_MO) was calculated from the episode start and end dates to indicate total progestin usage duration in months, regardless of whether or not estrogen usage dates overlapped with the progestin usage dates.

o The second type of hormone duration variables are hormone-specific and were created to indicate the duration during which only one type of hormone was used and duration during which both types of hormones were used.
  - An estrogen-only usage variable (RF_ESTONLY_CALC_MO) was calculated from the episode start and end dates to indicate the duration during which only estrogen was taken.
  - A progestin-only usage variable (RF_PRGONLY_CALC_MO) was calculated from the episode start and end dates to indicate the duration during which only progestin was taken.
  - An estrogen and progestin concurrent usage variable (RF_ESTPRG_CALC_MO) was created to indicate the duration during which both hormones were taken at the same time.

o Hormone-specific duration variables
  - If an episode of zero duration occurred within the middle of a positive duration episode of the other hormone type, the overall duration of the positive duration episode remained unaffected.
  - If an episode of negative duration (set to zero) occurred within the middle of a positive duration episode of the other hormone type, the overall duration of the positive duration episode remained unaffected.

- RF_HORMEVER takes into account both the baseline questionnaire and the RFQ
- Code used to create RF_HORMEVER and RF_HORMTYPE (in box below)
  o It is the updated code from the newest hormone file made on October 20th which incorporates the baseline hormone data into RF_HORMEVER.

```
*************************************************************************
Create a Hormone Ever/Never status variable for subjects who responded to the
Risk Factor Questionnaire*************************************************
*************************************************************************/

  if fl_risk = 1 then do;
    rf_hormever_extra = 0;
    rf_estrogen_extra = 0;
    rf_progestin_extra = 0;
  end;

  if rf_estrogen = 1 or rf_progestin = 1 then rf_hormever_extra = 1;

  if rf_q31yr not in (.,.M) or
     rf_q32_1 in ('1','E') or
```

```
     rf_q32yr not in (.,.M) or
     rf_q33 not in ('','M','N') or
     rf_q34a = '1' or
     rf_q34b = '1' or
     rf_q34c = '1' or
     rf_q34d = '1' or
     rf_q34e = '1' or
     rf_q35 not in ('','M','N') or
     rf_q36 not in ('','M','N') then rf_estrogen_extra = 1;

  if rf_q37yr not in (.,.M) or
     rf_q38_1 in ('1','E') or
     rf_q38yr not in (.,.M) or
     rf_q39 not in ('','M','N') or
     rf_q40a = '1' or
     rf_q40b = '1' or
     rf_q40c = '1' or
     rf_q40d = '1' or
     rf_q41 not in ('','M','N') or
     rf_q42 not in ('','M','N') then rf_progestin_extra = 1;

  if rf_estrogen_extra = 1 or rf_progestin_extra = 1 then rf_hormever_extra =
1;



  ************************************************************************
  ****  RF_HORMEVER - Did participant ever take female hormones pills?  ****
  ************************************************************************
  ****  0: No                                                         ****
  ****  1: Yes                                                        ****
  ****  8: Not Applicable - Other Gender                              ****
  ****  9: Unknown                                                    ****
  ************************************************************************;

  if fl_risk = 1 then do;
    rf_hormever = 0;
    rfonly_hormever = 0;
    if sex = 1 then do;
      if rf_q30a = '1' or rf_estrogen = 1 or rf_estrogen_extra = 1 or
rf_progestin = 1 or
         rf_progestin_extra = 1 then rfonly_hormever = 1;
      else if rf_q30e = '1' and rf_q29 in ('1','2') then rfonly_hormever = 9;
      if hormever = 1 or rfonly_hormever = 1 then rf_hormever = 1;
      else if ((hormever = 9 and rfonly_hormever = 9) or
               (hormever = 9 and rfonly_hormever = 0) or
               (hormever = 0 and rfonly_hormever = 9)) then rf_hormever = 9;
    end;
    else if sex = 0 then do;
      rf_hormever = 8;
      rfonly_hormever = 8;
    end;
  end;
```

```
  ************************************************************************
  ****  RF_HORMTYPE - What type of hormones did participant take?  ****
  ************************************************************************
  ****  0: Never used hormones                                        ****
  ****  1: Used Estrogen only                                         ****
  ****  2: Used Progestin only                                        ****
  ****  3: Used both Estrogen and Progestin                           ****
  ****  4: Hormones used, type unknown                                ****
  ****  8: Not Applicable - Other Gender                              ****
  ****  9: Unknown                                                    ****
  ************************************************************************;

  if fl_risk = 1 then do;
    rf_hormtype = 0;
    if sex = 1 then do;
      if hormever=0 and rf_hormever=0 and rf_estrogen=0 and
rf_estrogen_extra=0 and
         rf_progestin=0 and rf_progestin_extra=0 then rf_hormtype = 0;
      else if (rf_estrogen=1 or rf_estrogen_extra=1) and rf_progestin=0 and
rf_progestin_extra=0
         then rf_hormtype = 1;
      else if (rf_progestin=1 or rf_progestin_extra=1) and rf_estrogen=0 and
rf_estrogen_extra=0
           then rf_hormtype = 2;
      else if (rf_estrogen=1 or rf_estrogen_extra=1) and (rf_progestin=1 or
rf_progestin_extra=1)
           then rf_hormtype = 3;
      else if rf_hormever = 1 then rf_hormtype = 4;
      else rf_hormtype = 9;
    end;
    else if sex = 0 then rf_hormtype = 8;
  end;
```

Self-Reported Family Incidence of Breast Cancer (last updated August 2006, MB)

- A variable (rf_fam_breast) was created to describe breast cancer incidence for participants' mother, sisters, and daughters.
- This variable was created using the raw data questions asking the number of full- or half-sisters diagnosed with breast cancer (rf_Q22_3C), the number of daughters diagnosed with breast cancer, and if the participant's mother has/had ever been diagnosed with breast cancer (rf_Q23_2_1B).
- The baseline variable which is breast cancer in all first-degree female relatives was updated for the creation of this variable.
- The more general question asking if a family member has been diagnosed with breast cancer could not be used because it includes male family members, which are not included in the variable created.
- A unique breast cancer in mother and sister(s) was created only to be used in Gail et al's model (JNCI 1989); this is what the second part of the code does.

```
format rf_fam_breast 1.;
label rf_fam_breast="Breast cancer in mother/sisters/daughters";
if fam_breast eq 1 then rf_fam_breast=1;
if fam_breast in(0,9) then do;
if rf_Q22_3C in('1','2','3','4','5','E') or rf_Q22_3D in('1','2','3','4','5','E') or rf_Q23_2_1B eq '1' then
rf_fam_breast=1;
else if (rf_Q23_2_1B eq '0' or (rf_Q23_2_1B eq 'M' and rf_Q23_1 eq '0'))
and (rf_Q22_3C eq '0' or (rf_Q22_3C eq 'M' and rf_Q21 eq '0')
or rf_Q17 eq '0' or (rf_Q17 eq 'M' and rf_Q16 eq '0'))
and (rf_Q22_3D eq '0' or (rf_Q22_3D eq 'M' and rf_Q21 eq '0')
or rf_Q19 eq '0' or (rf_Q19 eq 'M' and rf_Q16 eq '0')) then rf_fam_breast=0;
else rf_fam_breast=fam_breast;
end;

format nbfam_breast 2. bcfam 1. miss_bcfam 1.;
label nbfam_breast="Number of mother/sisters with breast cancer";
if Q41E1 eq '1' or rf_Q23_2_1B eq '1' then mom=1; else mom=0; *breast cancer in mother;
if rf_Q22_3C in('2','3','4','5') then sis=input(rf_Q22_3C,1.);
else if rf_Q22_3C eq '1' or Q41F1 eq '1' then sis=1;
else sis=0; *number of sister(s) diagnosed with breast cancer;
nbfam_breast=mom+sis; if nbfam_breast ge 5 then nbfam_breast=5;
bcfam=(nbfam_breast ge 1);
miss_bcfam=(rf_fam_breast eq 9);
```

Smoking Variables (last updated August 2006, MB)

- A variable (smk) was made which combined smoking status (smoke_quit) and smoking dose (smoke_dose).
    - This variable shows how long ago a participant quit smoking, or, if the participant still smokes, how heavy a smoker the participant is.
- Additional variables (smk0, smk1, smk2, smk3, smk4, smk5, smk6) were created using the variable smk.
    - If the variable smk equals 0, then the variable smk0 equals 1.
    - If the variable smk equals 1, then the variable smk1 equals 1.
    - If the variable smk equals 2, then the variable smk2 equals 1.
    - If the variable smk equals 3, then the variable smk3 equals 1.
    - If the variable smk equals 4, then the variable smk4 equals 1.
    - If the variable smk equals 5, then the variable smk5 equals 1.
    - If the variable smk equals 6, then the variable smk6 equals 1.

```
                    ********Smoking status and dose combined**********;

if smoke_quit=0                                                  then smk=0;
*never smokers;

if smoke_quit=1                                                  then smk=1;
*quit >10yrs ago;

if smoke_quit=2                                                  then smk=2;
*quit 5-9yrs ago;

if smoke_quit=3                                                  then smk=3;
*quit 1-4yrs ago;

if smoke_quit in (4,5) and smoke_dose in (1,2)                   then smk=4;
*quit <1yr or current smokers <=20 cigs/day;

if smoke_quit in (4,5) and smoke_dose in (3,4,5,6)               then smk=5;
*quit <1yr or current smokers >20 cigs/day;

if smoke_quit in (4,5) and smoke_dose in (9) or smoke_quit = 9   then smk=6;
*missing;


smk1=0; smk2=0; smk3=0; smk4=0; smk5=0; smk6=0;
if smk=0  then smk0=1;
if smk=1  then smk1=1;
if smk=2  then smk2=1;
if smk=3  then smk3=1;
if smk=4  then smk4=1;
if smk=5  then smk5=1;
if smk=6  then smk6=1;
```

- Other smoking variables were generated using the following code

```
*************************************************************************
 ****  Smoking: Check possibility that participant could fill the three Qs (q42-q44) ****
```

```
****  1:  0 Y Y                                                    ****
****  2:  1 Y Y                                                    ****
****  3:  0 N Y                                                    ****
****  4:  1 N Y                                                    ****
****  5:  0 Y N                                                    ****
****  6:  1 Y N                                                    ****
****  7:  0 N N                                                    ****
****  8:  1 N N                                                    ****
****  9:  N N N                                                    ****
****  10: N Y Y                                                    ****
****  11: N N Y                                                    ****
****  12: N Y N                                                    ****
**** First column indicates Q42                                          ****
**** Second column indicates Q43                                            ****
**** Third column indicates Q44                                           ****
**** Y indicates participant has filled out anything except missing or error       ****
**** N indicates missing or error                                        ****
*********************************************************************************************;

if      q42 = '0'       and q43 not in ('E','M') and q44 not in ('E','M') then smoke=1;
else if q42 = '1'       and q43 not in ('E','M') and q44 not in ('E','M') then smoke=2;
else if q42 = '0'       and q43 in ('E','M')     and q44 not in ('E','M') then smoke=3;
else if q42 = '1'       and q43 in ('E','M')     and q44 not in ('E','M') then smoke=4;
else if q42 = '0'       and q43 not in ('E','M') and q44 in ('E','M')     then smoke=5;
else if q42 = '1'       and q43 not in ('E','M') and q44 in ('E','M')     then smoke=6;
else if q42 = '0'       and q43 in ('E','M')     and q44 in ('E','M')     then smoke=7;
else if q42 = '1'       and q43 in ('E','M')     and q44 in ('E','M')     then smoke=8;
else if q42 in ('E','M') and q43 in ('E','M')     and q44 in ('E','M')     then smoke=9;
else if q42 in ('E','M') and q43 not in ('E','M') and q44 not in ('E','M') then smoke=10;
else if q42 in ('E','M') and q43 in ('E','M')     and q44 not in ('E','M') then smoke=11;
else if q42 in ('E','M') and q43 not in ('E','M') and q44 in ('E','M')     then smoke=12;

**** Create smoking ever/never status variable;

*****************************************************
****  SMOKE_EVER - Did participant ever smoke?  ****
*****************************************************
****  0: No                              ****
****  1: Yes                              ****
****  9: Unknown                             ****
*****************************************************;

if      smoke in (2,4,6,8)    then smoke_ever=0;
else if smoke in (1,3,5,7)    then smoke_ever=1;
else if smoke in (9,10,11,12) then smoke_ever=9;

*****************************************
****  SMOKE_FORMER - Smoking status  ****
*****************************************
****  0: Never smoked               ****
****  1: Former smoker               ****
****  2: Current smoker              ****
****  9: Unknown                   ****
```

```
*****************************************;

if      q42 = '1' then smoke_former = 0;
else if q42 = '0' and q43 in ('1','2','3','4') then smoke_former = 1;
else if q42 = '0' and q43 = '0' then smoke_former = 2;
else smoke_former = 9;

*******************************************
****  SMOKE_QUIT - Quit smoking status  ****
*******************************************
****  0: Never smoked                 ****
****  1: Stopped 10 or more years ago   ****
****  2: Stopped 5-9 years ago          ****
****  3: Stopped 1-4 years ago          ****
****  4: Stopped within last year       ****
****  5: Currently smoking              ****
****  9: Unknown                      ****
*******************************************;

if      q42 = '1'               then smoke_quit = 0;
else if q42 = '0' and q43 = '4' then smoke_quit = 1;
else if q42 = '0' and q43 = '3' then smoke_quit = 2;
else if q42 = '0' and q43 = '2' then smoke_quit = 3;
else if q42 = '0' and q43 = '1' then smoke_quit = 4;
else if q42 = '0' and q43 = '0' then smoke_quit = 5;
else smoke_quit = 9;

*****************************************
****  SMOKE_DOSE - Smoking dose       ****
*****************************************
****  0: Never smoked                 ****
****  1: 1-10 cigs a day              ****
****  2: 11-20 cigs a day             ****
****  3: 21-30 cigs a day             ****
****  4: 31-40 cigs a day             ****
****  5: 41-60 cigs a day             ****
****  6: 60 or more cigarettes a day  ****
****  9: Unknown                      ****
*****************************************;

if      q42 = '1'               then smoke_dose = 0;
else if q42 = '0' and q44 = '0' then smoke_dose = 1;
else if q42 = '0' and q44 = '1' then smoke_dose = 2;
else if q42 = '0' and q44 = '2' then smoke_dose = 3;
else if q42 = '0' and q44 = '3' then smoke_dose = 4;
else if q42 = '0' and q44 = '4' then smoke_dose = 5;
else if q42 = '0' and q44 = '5' then smoke_dose = 6;
else smoke_dose = 9;

*****************************************************************
****  SMOKE_QUIT_DOSE - Smoking status and dose combined   ****
*****************************************************************
****  0: Never smoked                           ****
```

```
****  1: Quit, less than 20 cigarettes a day              ****
****  2: Quit, more than 20 cigarettes a day               ****
****  3: Currently smoking, less than 20 cigarettes a day  ****
****  4: Currently smoking, more than 20 cigarettes a day  ****
****  9: Unknown                                          ****
*****************************************************************;

if      q42 = '1' then smoke_quit_dose = 0;
else if q42 = '0' and q43 in ('1','2','3','4') and q44 in ('0','1') then
    smoke_quit_dose = 1;
else if q42 = '0' and q43 in ('1','2','3','4') and q44 in ('2','3','4','5') then
    smoke_quit_dose = 2;
else if q42 = '0' and q43='0' and q44 in ('0','1')        then smoke_quit_dose = 3;
else if q42 = '0' and q43='0' and q44 in ('2','3','4','5') then smoke_quit_dose = 4;
else smoke_quit_dose = 9;
```

SES variables for the 2000 Census - NIH-AARP Geo-coding (last updated August 2006, MB)

Program: *Iprj/dietaarp/post2003/census/prog/aarp.census.allstate.sas*

Input files:

/prj/dietaarp/NewWestatFiles/subjectcensustracts.v8x.gz
/prj/dietaarp/post2003/census/data/censsf3_ca.sas7bdat
/prj/dietaarp/post2003/census/data/censsf3_fl.sas7bdat/
/prj/dietaarp/post2003/census/data/censsf3_ga.sas7bdat
/prj/dietaarp/post2003/census/data/censsf3_la.sas7bdat
/prj/dietaarp/post2003/census/data/censsf3_mi.sas7bdat
/prj/dietaarp/post2003/census/data/censsf3_nj.sas7bdat
/prj/dietaarp/post2003/census/data/censsf3_nc.sas7bdat
/prj/dietaarp/post2003/census/data/censsf3_pa.sas7bdat
/prj/dietaarp/post2003/census/data/ 2000Gini County.txt

Output file:

/prj/dietaarp/post2003/census/data/aarp_census.v8x.gz

Brief Description:
There are 566990 subjects on the file subjectcensustracts.v8x.gz from Westat. 690 of them do not have census track id. The rest of the subjects are among the states CA, FL, GA, LA, MI, NJ, NC, and PA.

Method:
First, take the census track id from subjectcensustracts.v8x.gz.
Second, find them in the file 'Census Summary File 3' at the census track level.
Third, derive all the requested variables from 'Census Summary File 3' variables at the census track level, except the GINI variable which is input from '2000GiniCounty.txt' at the county level.
NOTE: '2000GiniCounty.txt' was generated by the Census Bureau and received via Todd Gibson from the IMS-SEER group.

Variable	conceptual definition	operational definition	STF3 table	table coordinates	New variable
Population	total population	pop of census tract	P1	P001001	census_population
Proportion "hispanic"	hispanic or latino by race	proportion whites who identify as hispanic	P7	P007011/[P007011+P007003]	census_hisp_white
		proportion blacks who identify as hispanic	P7	P007012/[P007012+P007004]	census_hisp_black

		proportion native americans who identify as hispanic	P7	P007013/[P007013+P007005]	census_hisp_na
		proportion asian alone who identify as hispanic	P7	P007014/[P007014+P007006]	census_hisp_asian
		proportion native hawaiian and other pacific islander who identify as hispanic	P7	P007015/[P007015+P007007]	census_hisp_nh
		proportion of other race/ethnicity who identify as hispanic	P7	P007016/[P007016+P007008]	census_hisp_other
		proportion of two or more races who identify as hispanic	P7	P007017/[P007017+P007000]	census_hisp_multi
Race x Sex	self reported race/ethnicity	white women	P145A	P145A026	census_women_white
		black women	P145B	P145B026	census_women_black
		native american women	P145C	P145C026	census_women_na
		asian alone women	P145D	P145D026	census_women_asian
		native hawaiian women	P145E	P145E026	census_women_nh
		other race women	P145F	P145F026	census_women_other
		two or more races women	P145G	P145G026	census_women_multi
		white men	P145A	P145A002	census_men_white
		black men	P145B	P145B002	census_men_black
		native american men	P145C	P145C002	census_men_na
		asian alone	P145D	P145D002	census_men_asia

		men			n
		native hawaiian men	P145E	P145E002	census_men_nh
		other race men	P145F	P145F002	census_men_other
		two or more races men	P145G	P145G002	census_men_multi
Race x Sex x Hispanic	imputed hispanic ethnicity by self reported, sex and ethnicity	white women, hispanic	Imputed from above	hisp_white*women_white	census_hisp_women_white
		black women, hispanic		hisp_black*women_black	census_hisp_women_black
		native american women, hispanic		hisp_na*women_na	census_hisp_women_na
		asian alone women, hispanic		hisp_asian*women_asian	census_hisp_women_asian
		native hawaiian women, hispanic		hisp_nh*women_nh	census_hisp_women_nh
		other race women, hispanic		hisp_other*women_other	census_hisp_women_other
		two or more races women, hispanic		hisp_multi*women_multi	census_hisp_women_multi
		white men, hispanic		hisp_white*men_white	census_hisp_men_white
		black men, hispanic		hisp_black*men_black	census_hisp_men_black
		native american men, hispanic		hisp_na*men_na	census_hisp_men_na
		asian alone men, hispanic		hisp_asian*men_asian	census_hisp_men_asian
		native hawaiian men, hispanic		hisp_nh*men_nh	census_hisp_men_nh
		other race men, hispanic		hisp_other*men_other	census_hisp_men_other

		two or more races men, hispanic		hisp_multi*men_multi	census_hisp_men_multi
Working Class	Non-supervisory employees	% women: service occupations	P50	P050070/P050049	census_women_service
		% men: service occupations	P50	P050023/P050002	census_men_service
		% total: service occupations	P50	[P050070+P050023]/[P050049+P050002]	census_total_service
Unemployment	unemployed people seeking employment	% women unemployed	P43	P043014/P043012	census_women_unemployed
		% men unemployed	P43	P043007/P043005	census_men_unemployed
		% total unemployed	P43	[P043014+P043007]/[P043012+P043005]	census_total_unemployed
median household income	median household income in year prior to the decinnial census		P53	P053001	census_median_household_income
low income		% households with less than <50% of the US median household income (i.e. 20,000 ~median was $40696 http://www.census.gov/hhes/www/income/histinc/h05.html	P52	[P052004+P052003+P052002]/P052001	census_low_income
high income		% households with more than 500%	P52	[P052017]/P052001	census_high_income

		the median income			
GINI coefficient at the census track level		components of the GINI coefficient of inequality at the census tract level	P52, P54, P53	[P052004+P052003+P052002], P054001, P053001	census_P052004 census_P052003 census_P052002 census_P054001 census_P053001
GINI coefficient on the county level		GINI coefficient of inequality at county level	P52, P54, P53	[P052004+P052003+P052002], P054001, P053001	census_GINI_county
below poverty		percent of persons below federal poverty line	P87	P087002/P087001	census_below_poverty
expensive homes		% of owner-occupied homes worth >=500,000$ (400% median value of homes http://www.census.gov/prod/2003pubs/c2kbr-20.pdf)		(H074023+H074024+H074025)/H074001	census_expensive_homes
less than high school		% women with less than high school	P37	(P037020…P037027)/P037019	census_women_less_highschool
		% men with less than high school	P37	(P037003…P037010)/P037002	census_men_less_highschool
		% total with less than high school	P37	((P037003…P037010)+(P037020…P037027))/(P037002+P037019)	census_total_less_highschool
college		% women with a college degree	P37	(P037032…P37035)/(P037019)	census_women_college
		% men with a college degree	P37	(P037015...P037018)/P037002	census_men_college

		% total with a college degree	P37	((P037015...P037018)+(P037032…P37035))/(P037002+P037019)	census_total_college
crowding		% of households with >=1 person per room	P20	((H020005…H0200007)+(H020011…H0200013))/(H020001)	census_pct_crowding

Appendix C

DIET AND HEALTH STUDY
NATIONAL INSTITUTES OF HEALTH AND AARP

Table of Contents

DIET AND HEALTH STUDY
NATIONAL INSTITUTES OF HEALTH AND AARP

DietAARP Program

Updated DietAARP analysis files

April 2006: According to Amy Subar, the old file contained incorrect contributions of fiber from coffee to the NIH-AARP NDS-R fiber values. The correct values were run through DIETAARP and the fiber variables were replaced with the corrected values on the dataset. This impacts the NDS-R fiber values only.

March 2006: Beta-carotene and Vitamin D supplement variables have been updated

Appendix C: Analysis Algorithms

Overview

This appendix describes calculations used by DietAARP to generate the statistics written to the Analysis Results File. Some of the simple statistics written to the Analysis Results File are described in the Analysis Results File codebook in Chapter 5.

The first section of this appendix describes dietary estimates calculated from the food frequencies. The second section describes how each question on the questionnaire is used in DietAARP.

Nutrient Estimates

The Analysis Results File contains a daily estimate for each nutrient in the Nutrient File. Each estimate is the sum of the nutrient contributed by each food eaten by the respondent. DietAARP identifies the database food or foods to be used for each frequency in the food list on pages 2-12 of the questionnaire (see the food question list on page 85). The food or foods used will change from one respondent to another based on the diet-related questions. Food frequencies and serving sizes are determined from diet-related questions for foods used as additives, such as margarine, butter, coffee creamer, etc. The algorithms for determining the food(s) used for each question begin on page 84.

The nutrient per day contributed by each food is calculated using the following formula.

$$\frac{(\textit{Nutrient Content x Weekly Food Frequency x Seasonality Factor})}{7}$$

Nutrient Content is the amount of nutrient for the respondent's sex and the reported serving size. This amount is read from the Nutrient File.

Weekly Food Frequency. The actual frequency values assigned by the DietAARP program to each frequency column on the questionnaire are shown in the table on the next page. These frequencies are converted to a weekly frequency by using the following conversion factors:

Day: 7.0
Week: 1.0
Month: 0.2333
Year: 1/52

Seasonality Factor. Food questions with "IN SUMMER" or "IN WINTER" in the text use the ONE_SEAS factor defined in the INI file. Food questions which have "IN SEASON" in the text printed on the questionnaire use the IN_SEAS factor defined in the INI file. Food questions which have "REST OF YEAR" in the text use either (1 - ONE_SEAS) or (1 - IN_SEAS) as appropriate.

Food Frequencies

The values used in DietAARP for the frequency columns on the questionnaire are shown below.

Juices, Soda, Milk, Alcoholic Beverages (Questionnaire Pages 2-3)	
Column Heading	Frequency Used in Calculations
Never	0.0
1 time per month or less	1 per month
2-3 times per month	2.24 per month
1-2 times per week	1.48 per week
3-4 times per week	3.34 per week
5-6 times per week	5.18 per week
1 time per day	1 per day
2-3 times per day	2.32 per day
4-5 times per day	4.32 per day
6+ times per day	7 per day

Column Heading	Frequency Used in Calculations	
	Foods in bottom section of pg 3 and on pgs 4-11 of questionnaire	Eggs (Page 12 of Questionnaire)
Never	0.0	0.0
1-6 times per year	3.5 per year	3.5 per year
7-11 times per year	10 per year	9 per year
1 time per month	1 per month	1 per month
2-3 times per month	2.19 per month	2.5 per month
1-2 times per week	1.38 per week	1.5 per week
3-4 times per week	3.32 per week	3.5 per week
5-6 times per week	5.15 per week	5.5 per week
1 time per day	1 per day	1 per day
2+ times per day	2 per day	2 per day

Coffee, Hot Tea, and Iced Tea (Page 12 of Questionnaire)	
Column Heading	Frequency Used in Calculations
None	0.0
Less than 1 cup per month	0.5 per month
1-3 cups per month	2 per month
1-2 cups per week	1.5 per week
3-4 cups per week	3.5 per week
5-6 cups per week	5.5 per week
1 cup per day	1 per day
2-3 cups per day	2.5 per day
4-5 cups per day	4.5 per day
6+ cups per day	7 per day

Nutrient Estimates Excluding Alcohol

These estimates are calculated as described on page 79 except that the alcoholic beverages in the foods database are excluded. The alcoholic beverages in the DietAARP foods database are Alc bev, liquor, Beer, and Wine. The calculations exclude the three foods, not just the alcohol they contain.

Percent of Calories from Fat, Protein, etc.

DietAARP calculates the percent of calories from fat, protein, and carbohydrate for all foods and for foods other than alcoholic beverages. In addition, the percent of calories from two food groups, sweets and alcoholic beverages, are calculated.

Percent of Calories from Fat:

$$\left(\frac{\textit{Weekly Estimate of Total Fat } x\ 9}{\textit{Weekly Estimate of Total Calories}} \right) x\ 100$$

Percent of Calories from Protein:

$$\left(\frac{\textit{Weekly Estimate of Total Protein } x\ 4}{\textit{Weekly Estimate of Total Calories}} \right) x\ 100$$

Percent of Calories from Carbohydrate:

$$\left(\frac{\textit{Weekly Estimate of Total Carbohydrate } x\ 4}{\textit{Weekly Estimate of Total Calories}} \right) x\ 100$$

Percent of calories from fat, protein, and carbohydrate will sum to *approximately* 100% *only* for persons who consume no alcoholic beverages. Reasons for these three percents to fail to add up to 100% of calories are as follows: 1) For persons consuming alcohol, the calorie value includes the alcohol calories, which is in addition to the fat, protein and carbohydrate; 2) factors for calculating energy from the component nutrients are rarely exactly 9, 4, and 4, and may differ for each food.

Percent of Calories from Sweets:

Sweets is a required food group. You may define the members of this group in the INI file. If members are not defined, default members will be used (see page 17 for more information).

$$\left(\frac{\textit{Weekly Estimate of Calories from the Sweets Group}}{\textit{Weekly Estimate of Total Calories}} \right) x\ 100$$

Percent of Calories from Alcoholic Beverages:

$$\left(\frac{\textit{Weekly Estimate of Calories from the Alcoholic Beverages}}{\textit{Weekly Estimate of Total Calories}} \right) x\ 100$$

The weekly estimates of total fat, protein, carbohydrate, and total calories are calculated using the formula for Nutrient Estimates on page 79. Calories from sweets is calculated by applying the same formula to only the foods in the sweets food group. Calories from Alcoholic Beverages is calculated using only the three alcoholic beverages in the DietAARP Foods Database.

Fiber Variables

Separate fiber estimates are calculated for three food groups: "Beans for Fiber", "Vegetables and Fruits for Fiber", and "Grains for Fiber". Examinations of these three fiber sources may be useful in attempting to understand the role of different types of fiber, and to disentangle "fiber" effects from the effects of other components of these foods. Daily fiber estimates for these groups are written to the Analysis Results File (see "Fiber Variables" on page 43). Each of these fiber variables is calculated by applying the formula for Nutrient Estimates on page 79 to the foods which are members of that fiber group. The sum of fiber from these three groups should be approximately equal to the total dietary fiber value, if all fiber-containing foods have been included in one of these three groups.

The fiber groups are reserved food groups in DietAARP. Default members are set in DietAARP for the fiber groups. However, you may add or delete members from the groups.

All foods with a non-zero value for fiber in the nutrient file created for the NIH & AARP project, were assigned to one of the fiber groups. It was determined that there are multiple sources for fiber from mixed dishes. Therefore, some foods are included in more than one fiber group. Proportions are hard-coded in the DietAARP program for these foods. These proportions are shown below.

	Grains	Vegetables & Fruits
261.1 Chicken, mixtures	0.50	0.50
380.1 Pies, fruit	0.25	0.75
386.1 Pies, pumpk/swt pot, etc	0.25	0.75
471.1 Lasagna, rav, shells, etc	0.75	0.25
480.1 Pizza	0.75	0.25

Members of the Beans for Fiber Group:

324.1 Soups, bean-type	722.1 Chili with beans
420.1 Nuts/Seeds, whole	1100.1 Candy, chocolate
421.1 Nuts/Seeds, butters	1102.1 Candy, not chocolate
720.1 Beans	

Members of the Grains For Fiber Group:

131.1 Beef, gr, meatballs/loaf	360.2 Cookies, brownies, lowfat
230.1 Liver, liverwurst	370.1 Cakes, regular
250.1 Chicken, fr, light WS	370.2 Cakes, lowfat
250.2 Chicken, fr, light NS	380.1 Pies, fruit
250.3 Chicken, fr, dark WS	384.1 Pies, crm/custrd/othr
250.4 Chicken fr, dark NS	386.1 Pies, pumpk/swt pot, etc
260.1 Chicken/turkey ground	430.1 Pancke, waff, Fr tst
261.1 Chicken, mixtures	440.1 Hot brkfst cereals, NFA
290.1 Fish fried, FA	445.1 RTE cereal, hi-fiber
300.1 Fish, not fried, NFA	445.2 RTE cereal, highly fort
310.5 Eggs, substitutes	445.3 RTE cereal, good fiber
330.1 Eng muf/bagel	445.4 RTE cereal, other
331.1 Breads/rolls, white	460.1 Rice/grains, NFA
331.2 Bread/rolls whole gr	470.1 Pasta, NFA
335.1 Crackers, high fat	471.1 Lasagna, rav, shells, etc
335.2 Crackers, lower fat	473.1 Macaroni and cheese
340.1 Tortillas, flour	480.1 Pizza
345.1 Cornbread/muffins	1051.3 Mayonnaise, nonfat
348.1 Biscuits, all	1052.3 Mayo in salads, nonfat
350.1 Qck brds, donuts,swt rolls	1162.1 Beer
360.1 Cookies, brownies	1172.1 Gravy

Members of the Vegetables and Fruits for Fiber Group:

45.1 Sour cream, reg
45.2 Sour cream, lowfat
124.1 Beef stews/pot pies
261.1 Chicken, mixtures
322.1 Soups, w veggies
326.1 Soups, creamed
380.1 Pies, fruit
386.1 Pies, pumpk/swt pot, etc
390.1 Potato/corn/othr chips
390.2 Potato/corn/othr chips, lowfat
400.1 Popcorn
471.1 Lasagna, rav, shells, etc
480.1 Pizza
540.1 Oranges, tangelo etc
550.1 Grapefruit, all
570.1 Apples
572.1 Applesauce/ckd apples
580.1 Pears
590.1 Peaches/nectarines/plums
605.1 Bananas
610.1 Cantaloupe
615.1 Other melon
625.1 Strawberries
640.1 Grapes, all
680.1 Dried fruit, no apricots
695.1 Other fruits
700.1 Orange/grpfrt jce, all
710.1 Other juice
718.1 Tomato/veg juice, all
730.1 Potatoes, white, NFA
732.1 Potatoes, fried
734.1 Potato salads
740.1 Sweet potatoes, NFA
760.1 Lettuce, NFA
815.1 Raw spinach/greens
820.1 Ckd spinach/greens, NFA
830.1 Broccoli, NFA
840.1 Carrots, NFA
860.1 Tomatoes, raw
861.1 Tomato sauces, no meat
862.1 Tomato sauces, with meat
864.1 Tomato salsa
870.1 String beans, NFA
880.1 Coleslaw
890.1 Peas, NFA
900.1 Corn, NFA
910.1 Caulifl/Br Spr, NFA
940.1 Peppers, NFA
1005.1 Veg med, NFA
1015.1 Other vegetables
1041.2 Salad drsg, lowfat
1041.3 Salad drsg, nearly nonfat
1150.1 Fruit drinks, reg
1150.3 Frt drinks, diet

Algorithms for Questions on the Baseline Questionnaire

The remaining pages of this appendix contain descriptions of the questions on the NIH & AARP Baseline Questionnaire and their function, if any, in the DietAARP analysis of the questionnaire data. The algorithms described were developed in a collaborative effort of NCI and IMS personnel.

Box A:

If the person whose name appears to the left is deceased, please mark this circle...

Coding

0 = Not marked
1 = Marked

Records with a code of '1' (marked) for this field are not processed by DietAARP. The number of records not processed because of Box A is printed in the summary report.

Box B:

Are you the person whose name appears to the left?

Coding

0 = Yes
1 = No
M = Missing
E = Error

The EXCL9 option controls the analysis of this question. If EXCL9 is ON then records with a code of '1' (no) for this field are not processed by DietAARP. If EXCL9 is OFF then the response to Box B is ignored. The number of records excluded because of Box B is printed in the summary report.

Question 1: Today's Date

This question is not used in the DietAARP analysis.

Question 2: Date of Birth

This question is not used in the DietAARP analysis. Age is not calculated. All respondents are considered to be in the same age group. Therefore, the nutrient database contains only one set of age-specific nutrient values.

Question 3: Current Height

This question is not used in the DietAARP analysis.

Question 4: Current Weight

This question is not used in the DietAARP analysis.

Question 5: Food Frequency Questions

The table on the following pages identifies the database foods used for each food question on pages 2-12 of the questionnaire. The frequency calculations are described on pages 79 and 80.

Actual foods used for each food frequency question				
Food Question	**Solid Food**	**Foods Used (n-code and label)**	**Diet-Related Questions**	**Additives to foods**
Tomato juice or vegetable juice	N	718.1 Tomato/veg juice, all		
Orange juice or grapefruit juice	N	700.1 Orange/grpfrt jce, all		
Other fruit juice	N	710.1 Other juice		
Drinks, such as Hi-C, lemonade	N	1150.1 Fruit drinks, reg 1150.3 Frt drinks, diet	Question 6	
Soft drinks, soda, pop (diet or regular)	N	1140.1 Soft drinks, reg, caff 1140.2 Soft drinks, reg, decaf 1140.3 Soft drinks, diet, caff 1140.4 Soft drinks, diet, decaf	Questions 6 & 7	
Whole milk, as a drink	N	10.1 Milk, whole		
1% or 2% fat milk as a drink	N	12.1 Milk, 1-2%		
Skim, non-fat, or 1/2% milk as drink	N	14.1 Milk, nonfat/skim		
Beer (in summer)	N	1162.1 Beer		
Beer (rest of year)	N	1162.1 Beer		
Wine or wine coolers	N	1164.1 Wine		
Liquor or mixed drinks	N	1160.1 Alc bev, liquor		
Cottage cheese	Y	40.1 Cot/ricot cheese, reg 40.2 Cot/ricot cheese, lowfat	Question 9: Cottage Cheese	
Yogurt	Y	30.1 Yogurt, all		
Pancakes	Y	430.1 Pancke, waff, Fr tst		18: Fat - pancakes
Oatmeal (in winter)	Y	440.1 Hot brkfst cereals, NFA		18: Fat - oatmeal
Oatmeal (rest of year)	Y	440.1 Hot brkfst cereals, NFA		18: Fat - oatmeal
Total or Product 19	Y	445.2 RTE cereal, highly fort		
High-Fiber cereals	Y	445.1 RTE cereal, hi-fiber		
Other fiber cereals	Y	445.3 RTE cereal, good fiber		
Any other cold cereal	Y	445.4 RTE cereal, other		
Whole milk (4%) on cereal	N	5.1 Milk, whole in cereal		
1% or 2% fat milk on cereal	N	5.2 Milk, 1-2% in cereal		
Skim, nonfat, or 1/2% milk on cereal	N	5.3 Milk, nonfat/skim in cereal		
Applesauce	Y	572.1 Applesauce/ckd apples		
Apples	Y	570.1 Apples		
Pears (fresh, canned, frozen)	Y	580.1 Pears		
Bananas	Y	605.1 Bananas		
Dried fruit	Y	680.1 Dried fruit, no apricots		
Peaches, nectarines, plums	Y	590.1 Peaches/nectarines/plums		
Cantaloupe (in season)	Y	610.1 Cantaloupe		
Other melon (in season)	Y	615.1 Other melon		
Strawberries (in season)	Y	625.1 Strawberries		
Oranges, tangerines, tangelos	Y	540.1 Oranges, tangelo etc		
Grapefruit	Y	550.1 Grapefruit, all		
Grapes	Y	640.1 Grapes, all		
Cooked greens	Y	820.1 Ckd spinach/greens, NFA		18: cooked vegs
Raw greens	Y	815.1 Raw spinach/greens		
Cole slaw	Y	880.1 Coleslaw/cabbage/srkrt		
Carrots	Y	840.1 Carrots, NFA		18: cooked vegs
String beans	Y	870.1 String beans, NFA		18: cooked vegs

Actual foods used for each food frequency question				
Food Question	**Solid Food**	**Foods Used (n-code and label)**	**Diet-Related Questions**	**Additives to foods**
Peas	Y	890.1 Peas, NFA		18: cooked vegs
Fresh corn (in season)	Y	900.1 Corn, NFA		18: cooked vegs
Corn (rest of the year)	Y	900.1 Corn, NFA		18: cooked vegs
Broccoli (fresh or frozen)	Y	830.1 Broccoli, NFA		18: cooked vegs
Cauliflower or Brussels sprouts	Y	910.1 Caulifl/Br Spr, NFA		18: cooked vegs
Mixed vegetables	Y	1005.1 Veg med, NFA		18: cooked vegs
Tomatoes (in season)	Y	860.1 Tomatoes, raw		
Tomatoes (rest of the year)	Y	860.1 Tomatoes, raw		
Sweet peppers	Y	940.1 Peppers, NFA		
Lettuce salads	Y	760.1 Lettuce, NFA		
Salad dressing for salads/veggies	Y	1041.1 Salad drsg, reg 1041.2 Salad drsg, lowfat 1041.3 Salad drsg, nearly nonfat	Question 9: Salad Dressing	
Sweet potatoes or yams	Y	740.1 Sweet potatoes, NFA		18: Fat - potatoes
French fries	Y	732.1 Potatoes, fried		
Potato Salad	Y	734.1 Potato salads		
Baked, boiled, mashed potatoes	Y	730.1 Potatoes, white, NFA		18: Fat - potatoes
Salsa	N	864.1 Tomato salsa		
Chili	Y	722.1 Chili with beans		
Beans (baked, refried, etc)	Y	720.1 Beans		
Rice	Y	460.1 Rice/grains, NFA		18: Fat - rice
Lasagna	Y	471.1 Lasagna, rav, shells, etc		
Macaroni and cheese	Y	473.1 Macaroni and cheese		
Pasta, spaghetti, or other noodles	Y	470.1 Pasta, NFA		18: Fat - pasta
Tomato sauce WITH meat	Y	862.1 Tomato sauces, with meat		
Tomato sauce WITHOUT meat	Y	861.1 Tomato sauces, no meat		
Bagels	Y	330.1 Eng muf/bagel		
Breads (for sandwiches)	Y	331.1 Breads/rolls, white 331.2 Bread/rolls whole gr	Question 23	
Breads (NOT in sandwiches)	Y	331.1 Breads/rolls, white 331.2 Bread/rolls whole gr	Question 24	
Cream cheese	N	60.1 Cream cheese, reg 60.2 Cream cheese, lowfat 60.3 Cream cheese, nonfat	Question 9: Cream Cheese	
Butter or margarine on bread	N	1023.1 Margarine, stick (bread) 1023.2 Margarine, tub (bread) 1023.3 Margarine, diet (bread) 1023.5 Butter/marg blend (bread) 1023.6 Butter on bread	Questions 19 & 20	
Mayonnaise on bread	N	1051.1 Mayonnaise, reg (sandwich) 1051.2 Mayonnaise, diet (sandwich) 1051.3 Mayo, non-fat (sandwich)	Question 9: Mayo / mayo-type dressing	
Mayonnaise in tuna salad, chicken salad, or other salad	N	1052.1 Mayonnaise, reg (on salad) 1052.2 Mayonnaise, diet (salad) 1052.3 Mayonnaise, non-fat (salad)	Question 9: Mayo / mayo-type dressing	
Turkey or chicken cold cuts	Y	242.1 Poultry cold cuts		
Cold cuts (ham, bologna, etc)	Y	240.1 Cold cuts, regular 240.2 Cold cuts, lowfat	Question 10	

Actual foods used for each food frequency question				
Food Question	**Solid Food**	**Foods Used (n-code and label)**	**Diet-Related Questions**	**Additives to foods**
Tuna	Y	280.1 Tuna oil pack 280.2 Tuna, water pack	Question 15	
Hot dogs	Y	180.1 Hot dogs, regular 180.2 Hot dogs, turky/lowfat	Question 10	
Ground chicken or turkey	Y	260.1 Chicken/turkey ground		
Beef hamburgers	Y	130.1 Beef, burgers, lean 130.2 Beef, burgers , reg	Question 11	
Ground beef	Y	131.1 Beef, gr, meatballs/loaf		
Beef stew	Y	124.1 Beef stews/pot pies		
Roast beef (in sandwiches)	Y	Food created using an average of: 120.2 Beef, steaks, reg 122.2 Beef, roasts, reg 50/50 for all nutrients. **SHOULD Use New N-Code and BE 123.1 for 100% Program is Wrong**	**Not affected by any of the questions.**	
Roast beef (not in sandwiches)	Y	122.1 Beef, roasts, lean 122.2 Beef, roasts, reg	Question 12	
Steak (beef)	Y	120.1 Beef, steaks, lean 120.2 Beef, steaks, reg	Question 12	
Roast turkey	Y	265.1 Turkey		
Fried chicken	Y	250.1 Chicken, fr, light WS 250.2 Chicken, fr, light NS 250.3 Chicken, fr, dark WS 250.4 Chicken fr, dark NS	Questions 13 & 14	
Baked, broiled chicken	Y	252.1 Chicken, light WS 252.2 Chicken, light NS 252.3 Chicken, dark WS 252.4 Chicken, dark NS	Questions 13 & 14	
Chicken - salads, etc	Y	261.1 Chicken, mixtures		
Roast ham or ham steak	Y	140.1 Ham, not luncheon		
Pork	Y	150.1 Pork	**Not affected by any questions as of Beta 7. Beta 1-6 adjusted based on Qst 12.**	
Meat gravy	N	1172.1 Gravy		
Liver	Y	230.1 Liver, liverwurst		
Bacon	Y	160.1 Bacon, regular 160.2 Bacon, lean/Canadian	Question 10	
Sausage	Y	170.1 Sausage, reg 170.2 Sausage, turk/lowfat	Question 10	
Fried fish	Y	290.1 Fish fried, FA		
Other fish	Y	300.1 Fish, not fried, NFA		
Bean-based soups	Y	324.1 Soups, bean-type		
Cream soups	Y	326.1 Soups, creamed		
Tomato or veg soups	Y	322.1 Soups, w veggies		
Pizza	Y	480.1 Pizza		

Actual foods used for each food frequency question				
Food Question	**Solid Food**	**Foods Used (n-code and label)**	**Diet-Related Questions**	**Additives to foods**
Crackers	Y	335.1 Crackers, high fat 335.2 Crackers, lower fat	Question 9: Crackers	
Cornbread	Y	345.1 Cornbread/muffins		
Biscuits	Y	348.1 Biscuits, all		
Flour or corn tortillas	Y	340.1 Tortillas		
Potato chips	Y	390.1 Potato/corn/othr chips 390.2 Potato/corn/othr chips, lowfat	Question 9: Chips	
Popcorn	Y	400.1 Popcorn		
Peanut butter	Y	421.1 Nuts/seeds, butters		
Peanuts, walnuts	Y	420.1 Nuts/seeds, whole		
Sour cream	N	45.1 Sour cream, reg 45.2 Sour cream, lowfat 45.3 Sour cream, nonfat	Question 9: Sour Cream	
Cheese	Y	50.1 Cheese, reg 50.2 Cheese, lowfat 50.3 Cheese, nonfat	Question 9: Other Cheese	
Frozen yogurt	Y	77.1 Froz yog, ice milk		
Regular ice cream	Y	75.1 Ice cream, reg		
Cake	Y	370.1 Cakes, regular 370.2 Cakes, lowfat	Question 9: Cakes	
Cookies/brownies	Y	360.1 Cookies, brownies 360.2 Cookies, brownies, lowfat	Question 9: Cookies	
Doughnuts	Y	350.1 Qck brds, donuts,swt rolls		
Fruit pie	Y	380.1 Pies, fruit		
Cream, custard, or meringue pie	Y	384.1 Pies, crm/custrd/othr		
Pumpkin or sweet potato pie	Y	386.1 Pies, pumpk/swt pot, etc		
Chocolate candy	Y	1100.1 Candy, chocolate		
Other candy	Y	1102.1 Candy, not chocolate		
How many eggs?	Y	310.1 Eggs, plain, NFA 310.2 Eggs, plain, FA 310.4 Eggs, whites only 310.5 Eggs, substitutes	Questions 16 & 17 (17 analyzed as of Beta 7)	
How many cups of coffee?	N	1120.1 Coffee, reg, no cr/sug 1120.3 Coffee, decaf, no cr/sug	Question 7	Q25 (sweetener) Q26 (creamer)
How many cups of HOT tea?	N	1130.1 Tea, reg, no cr/sug 1130.4 Tea, decaf, no cr/sug	Question 7	Q25 (sweetener) Q26 (creamer)
How many cups of ICED tea?	N	1130.1 Tea, reg, no cr/sug 1130.2 Tea, reg preswt 1130.3 Tea, reg, preswt diet 1130.4 Tea, decaf, no cr/sug 1130.5 Tea, decaf preswt 1130.6 Tea, decaf, preswt diet	Questions 6 & 7	

The following foods are in the DietAARP database but are not listed in the tables on the previous pages. These foods will be used if warranted by responses to diet-related questions (see the algorithm for the specific question for more details).

NOTE: Other vegetables and other fruits, which may be added for question 8, are the only foods listed below which are counted as solid foods.

Question 26 (creamer)
15.1 Whole milk in coffee
15.2 1-2% Milk in coffee
15.3 Skim milk in coffee
8.1 Milk, evap/cond
9.1 Cream, reg or 1/2&1/2
6.3 Non-dairy creamer, reg
6.4 Non-dairy creamer, diet

Question 8 (Veg-Adjust & Fruit-Adjust)
1015.1 Other vegetables
695.1 Other fruits

Question 22, part 1
1020.1 Margarine, other uses, stick
1020.2 Margarine, other uses, tub
1020.3 Margarine, other uses, diet
1020.5 Butter/marg blend, other uses
1020.6 Butter, other uses
1060.1 Lard, fatback bacon fat
1060.2 Vegetable shortening

Question 22, part 2
1030.1 Oils, olive
1030.2 Oils, corn
1030.5 Oils, canola/rapeseed
1030.6 Oils, other

Question 25
1081.1 Sugars/honey, all (in coffee or tea)
1176.1 Saccharine (in coffee or tea)
1176.2 Aspartame (in coffee or tea)

Cold Cereal Ratios (Page 4)

The food frequency for cold cereal is followed by the question, "How often is the cold cereal you eat:" "Total or Product 19", "High-fiber cereals", "Other fiber cereals", or "Any other cold cereal".

Coding

One character is coded for each cereal type:

0 = Almost never or never
1 = About 1/4 of the time
2 = About 1/2 of the time
3 = About 3/4 of the time
4 = Almost always or always
M = Missing (no mark)
E = Error (multiple marks)

Analysis Algorithm

1. Each of the four cereal types is assigned the frequency and serving size given for "Cold Cereal".
2. A proportion is assigned to each cereal type. This proportion is zero if "almost never or never" was marked for the cereal. If a ratio was selected, the proportion is 0.25, 0.5, 0.75, or 1.0.
3. If the sum of the four proportions is one, each cereal's frequency is multiplied by its proportion.

Special Cases

1. All four cereal types are coded as missing or error. In this case, the sum of the four proportions is zero. Each cereal is assigned a proportion of 0.25. Therefore, each cereal type will be assigned the same frequency equal to 0.25 * Cold Cereal Freq.
2. The sum of the proportions equals zero but some cereals were explicitly marked as never and others are coded as M or E. The responses explicitly coded as never are believed. These cereals get a zero frequency. The cereals coded as M or E are assigned equal proportions. If three cereals are coded M and one is coded never, the three coded as missing are assigned frequencies of 1/3 * Cold Cereal Freq.
3. The sum of the proportions equals zero and all cereals were explicitly marked as never. In this case, we do not believe the response of never. Each cereal is assigned a proportion of 0.25. Therefore, each cereal is assigned the same frequency equal to 0.25 * Cold Cereal Freq.
4. The sum of the proportions is less than 1.0 and each cereal is coded as never or with a ratio (none coded as M or E). In this case, each proportion is adjusted so that the sum of the proportions equals 1.0 and the distribution is the same as specified by the respondent. For example, if two cereals are coded as never and two are coded as 1/4, the two coded as 1/4 are assigned proportions of 0.5.
5. The sum of the proportions is less than 1.0 and at least one cereal is coded as M or E. The cereal(s) coded as M or E are assigned proportions to make the sum of the proportions equal to 1.0. For example, if one cereal is coded as "about 1/2 of the time" and the other three cereals are left blank, the three left blank are assigned proportions of 1/6. In this case, we are believing that the only information given by the respondent is correct. We are imputing for the missing responses.
6. The sum of the proportions is greater than 1.0. Each proportion is adjusted so that the sum of the proportions equals 1.0 and the distribution is the same as specified by the respondent. For example, if two cereals are coded as 3/4 and two are coded as never, the two coded as 3/4 are adjusted to 1/2.

Note: A flag is written to the Analysis Results File which indicates whether the respondent's reported ratios were adjusted by DietAARP (see page 42).

Milk on Cereal Ratios (Page 4)

The "cold cereal" food frequency is followed by "How often are the following added to your cereal:"

Whole milk (4%)
1% or 2% fat milk
Skim, nonfat, or 1/2% milk

Coding

Two characters are coded for each milk on cereal. The second character for each is for the serving size of milk. The first character for each milk is coded in the following way:

0 = Almost never or never
1 = About 1/4 of the time
2 = About 1/2 of the time
3 = About 3/4 of the time
4 = Almost always or always
M = Missing
E = Error

Analysis Algorithm

1. Each of the three cereal milks is assigned the frequency given for “Cold Cereal”. Each is assigned the serving size specifically coded for the milk.
2. A proportion is assigned to each cereal milk. This proportion equals zero if almost never or never was marked for the milk. If a ratio was selected, the proportion assigned is 0.25, 0.5, 0.75, or 1.0.
3. If the 3 proportions sum to 1.0, the frequency for each cereal milk is multiplied by the proportion.

Special Cases

1. All three cereal milks are left blank (or have multiple marks). In this case, the proportions are imputed such that the proportions sum to 1.0. The milks are assigned the same proportion of whole, 1-2%, or skim as the respondent reported for the beverage milks reported on page 2 of the questionnaire. If the frequencies for the three beverage milks are zero, 1-2% milk is used with a proportion of 1.0.
2. The sum of the proportions equals zero and *all* milks were explicitly marked as never. In this case, we take the respondent's word for it. It is assumed that the respondent always eats cereal dry.
3. All three cereal milks are coded as 1/4. The questionnaire does not provide a means for the respondent to select each cereal milk equally since 1/3 is not a choice. Therefore, if all three cereal milks are coded as 1/4, the milks are adjusted to 1/3 each.
4. The sum of the proportions is less than 1.0 (but not all are 1/4 as described in #3). If any milks are coded as M or E, those milks are assigned proportions so that the sum of the proportions equals 1.0. If no milks are coded as M or E, then no change is made. In the latter case, the respondent marked a valid response for each milk and we assume that the respondent eats dry cereal sometimes.

   So, if the sum of the proportions is zero and some milks are explicitly marked as never but some are coded with M or E, we are assuming that the respondent does not use the type of milk marked as "never" but still adds milk to cereal *all* of the time.
5. The sum of the proportions is greater than 1.0. Each proportion is adjusted so that the sum of the proportions equals 1.0 and the distribution is the same as specified by the respondent. For example, if two milks are coded as "3/4 of the time" and one is coded as never, the two coded as 3/4 are adjusted to 1/2.

Note: A flag is written to the Analysis Results File which indicates whether the respondent's reported ratios were adjusted by DietAARP (see page 42).

Serving Size for the Milks on Cereal

Serving size for the milks on cereal will be handled in the same way as regular food items. If no serving size is indicated for a milk with a non-zero proportion, medium is imputed.

Questions 6 and 7: Sugar & Caffeine in Beverages

Question 6: When you drank the following beverages, please mark whether you usually (more than half the time) drank sugar-free or regular-calorie types. Please answer for all beverages. This question affects foods: "Drinks, such as Hi-C, lemonade, Kool-Aid ", "Soft drinks, soda, pop", and "Iced tea".

Coding: Three characters are coded for each beverage, one character for "Didn't drink", one for "Sugar-free", and one for "Regular". For each character, a 0 indicates "NOT MARKED" and a code of 1 means "MARKED".

Question 7: When you drank the following beverages, please mark whether you usually drank caffeine-free or caffeine-containing types. This question affects foods: "Soft drinks, soda, pop", "Coffee", "Hot tea", and "Iced tea".

Coding: Three characters are coded for each beverage, one character for "Didn't drink", one for "Caffeine-free", and one for "Caffeine-containing". For each character, a 0 indicates "NOT MARKED" and a code of 1 means "MARKED".

Analysis Algorithm

For each food, if the frequency is zero for the relevant food in the food list, the responses to questions 6 and 7 regarding the food are ignored. Also, if "didn't drink this beverage" is marked and one of the other choices is also marked, then the "didn't drink..." is ignored.

By default, if question 6 is skipped, regular (with sugar) is used and if question 7 is skipped, caffeine-containing is used.

Q6: Diet vs Regular	Q7: Caffeine or Decaf	Food used for "Soft drinks, Soda"
Sugar-free	Caffeine-containing or Didn't drink this...	1140.3 Soft drinks, diet, caff
	Caffeine-free	1140.4 Soft drinks, diet, decaf
	Caffeine-free and Caffeine-containing	50% each: 1140.3 Soft drinks, diet, caff 1140.4 Soft drinks, diet, decaf
Regular or Didn't drink this.. or No Response	Caffeine-containing or Didn't drink this...	1140.1 Soft drinks, reg, caff
	Caffeine-free	1140.2 Soft drinks, reg, decaf
	Caffeine-free and Caffeine-containing	50% of each: 1140.1 Soft drinks, reg, caff 1140.2 Soft drinks, reg, decaf
Sugar-free and Regular	Caffeine-containing or Didn't drink this...	50% of each: 1140.1 Soft drinks, reg, caff 1140.3 Soft drinks, diet, caff
	Caffeine-free	50% of each: 1140.2 Soft drinks, reg, decaf 1140.4 Soft drinks, diet, decaf
	Caffeine-free and Caffeine-containing	25% Each: 1140.1 Soft drinks, reg, caff 1140.2 Soft drinks, reg, decaf 1140.3 Soft drinks, diet, caff 1140.4 Soft drinks, diet, decaf

The line in question 6 for tea is "Sweetened Iced Tea". If "didn't drink this beverage" is checked and there is a non-zero frequency for "iced tea", it is assumed that the respondent drinks unsweetened iced tea. However, "didn't drink this beverage" will be ignored if "sugar-free" or "regular" is selected. If question 7 is skipped, caffeine-containing is used by default.

Q6: Diet vs Regular	Q7: Caffeine or Decaf	Food Used for "ICED Tea"
Didn't drink this beverage	Didn't drink this... or Caffeine-containing	1130.1 Tea, reg, no cr/sug
	Caffeine-free	1130.4 Tea, decaf, no cr/sug
	Caffeine-free and Caffeine-containing	50% each: 1130.1 Tea, reg, no cr/sug 1130.4 Tea, decaf, no cr/sug
Sugar-free	Didn't drink this... or Caffeine-containing	1130.3 Tea, reg, preswt diet
	Caffeine-free	1130.6 Tea, decaf, preswt diet
	Caffeine-free and Caffeine-containing	50% each: 1130.3 Tea, reg, preswt diet 1130.6 Tea, decaf, preswt diet
Regular	Didn't drink this... or Caffeine-containing	1130.2 Tea, reg, preswt
	Caffeine-free	1130.5 Tea, decaf, preswt
	Caffeine-free and Caffeine-containing	50% each: 1130.2 Tea, reg preswt 1130.5 Tea, decaf, preswt
Sugar-free and Regular	Didn't drink this... or Caffeine-containing	50% each: 1130.2 Tea, reg, preswt 1130.3 Tea, reg, preswt diet
	Caffeine-free	50% each: 1130.5 Tea, decaf, preswt 1130.6 Tea, decaf, preswt diet
	Caffeine-free and Caffeine-containing	25% Each: 1130.2 Tea, reg, preswt 1130.3 Tea, reg, preswt diet 1130.5 Tea, decaf, preswt 1130.6 Tea, decaf, preswt diet

If question 6 is skipped, regular (with sugar) is used by default.

Food Item	Q6: Diet vs Regular	Database Food Used
Drinks such as Hi-C, lemonade or Kool-aid	Didn't drink this beverage or Regular	1150.1 Fruit drinks, reg
	Sugar-free	1150.3 Fruit drinks, diet
	Sugar-free and Regular	50% of each: 1150.1 Fruit drinks, reg 1150.3 Fruit drinks, diet

If question 7 is skipped, caffeine-containing is used by default.

Food Item	Q7: Caffeine or Decaf	Database Food Used
Coffee	Didn't drink this beverage or Regular	1120.1 Coffee, reg, no cr/sug
	Caffeine-free	1120.3 Coffee, decaf, no cr/sug
	Caffeine-free and Caffeine-containing	50% of each: 1120.1 Coffee, reg, no cr/sug 1120.3 Coffee, decaf, no cr/sug
Hot tea	Didn't drink this beverage or Regular	1130.1 Tea, reg, no cr/sug
	Caffeine-free	1130.4 Tea, decaf, no cr/sug
	Caffeine-free and Caffeine-containing	50% of each: 1130.1 Tea, reg, no cr/sug 1130.4 Tea, decaf, no cr/sug

Question 8: Fruit and Vegetable Adjust

Please record the number of servings of vegetables and fruits you usually (more than half the time) ate per week or per day.

Number of servings of vegetables (not including salad or potatoes)

Number of servings of fruit (not including juices)

Analysis Algorithm for the Adjust Option

FruitAdj and VegAdj are options in DIETSYS that implement the same algorithm on two different groups of foods. These options have been combined into one option in the DietAARP program. The QST8-Adjust option has three settings: OFF, INCREASE ALL, and ADD OTHER.

Extensive frequency-type questionnaires often overestimate vitamin A, C, and fiber, because people often report frequencies of individual fruit (or vegetables) which add up to more fruits (or vegetables) than they actually eat. The QST8 option adjusts for this by adjusting the frequencies of the individual fruit frequencies based on the frequency coded for the fruit summary question, "Number of servings of fruits (not including juices)". It also adjusts the frequencies of the individual vegetable frequencies based on the frequency coded for the vegetable summary question "Number of servings of vegetables (not including salad or potatoes)".

The foods in the Fruits for Adjust Food Group and Vegetables for Adjust Food Group are adjusted by the Adjust option. These Food Groups are required and are set in the INI file. If the Fruits for Adjust Food Group is not defined in the INI file, a group will automatically be defined with the default members shown below. Likewise, if the Vegetable for Adjust Group is not defined in the INI file, the group will be defined with default values. The foods assigned to these groups by default are those recommended by NCI personnel at a DietAARP development meeting involving NCI and IMS staff. If changes to these groups are required, see "[Groups]" on page 17 for instructions to set group information in the INI file. Other Fruits and Other Vegetables should be included in the Adjust Groups if QST8-Adjust = ADD OTHER. Having these two foods in the Adjust Groups will have no affect if QST8-Adjust = INCREASE ALL.

Default Members	
Fruits for Adjust Food Group	**Vegetables for Adjust Food Group**
Applesauce	Cooked greens
Apples	Cole slaw, cabbage, or sauerkraut
Pears	Carrots
Bananas	String beans
Dried Fruit	Peas
Peaches (fresh, canned, frozen)	Corn (fresh, in season)
Cantaloupe (in season)	Corn (canned, rest of year)
Other melon (in season)	Broccoli
Strawberries (in season)	Cauliflower or Brussels sprouts
Oranges, tangerines, tangelos	Mixed vegetables
Grapefruit	Other vegetables
Grapes	
Other fruits	

It was decided at an IMS-NCI meeting that the following foods would not be included in the default Vegetables for Adjust Food Group:

Tomatoes (includes in salads)
Sweet peppers
Salsa
Chili
Beans, such as baked beans, refried beans, pintos, etc.
Tomato sauce with meat
Tomato sauce without meat
Raw Greens
Lettuce Salads
Sweet potatoes or yams
French fries
Potato salad
Baked, boiled, mashed potatoes

Adjust Algorithm

Text Used in Question 8 Frequency Columns	Weekly Frequency Used in Calculations	
	Adjusting Fruits	Adjusting Vegetables
Less than one per week	0.5	0.5
1-2 per week	1.54	1.61
3-4 per week	3.37	3.41
5-6 per week	5.18	5.23
1 per day	7.0	7.0
1 1/2 per day	10.5	10.5
2 per day	14.0	14.0
3 per day	21.0	21.0
4+ per day	28.0	28.0

There are three settings for the QST8-Adjust option: OFF, ADD OTHER, INCREASE ALL. If set to ADD OTHER or INCREASE ALL, the adjust algorithm is applied to fruits and to vegetables. In the description below, Adjust Group refers to Fruits for Adjust Group and Vegetables for Adjust Group.

- If the Adjust Group Frequency is more than 20% greater than the Summary Frequency, DietAARP will reduce the frequency of each member of the Adjust Group. The frequency for each member of the Adjust Group is reduced by the following factor: (Summary Frequency / Adjust Group Frequency). (If Summary Frequency is zero, no change is made.)

- If the Adjust Group Frequency is less than 80% of the Summary Frequency and the QST8-Adjust Option is set to INCREASE ALL, DietAARP will increase the frequency of each member of the Adjust Group by the same factor (Summary Frequency / Adjust Group Frequency). If the Group Frequency is zero, no change is made. This differs from the DIETSYS method for adjusting up.

- If the Adjust Group Frequency is less than 80% of the Summary Frequency and the QST8-Adjust Option is set to ADD OTHER, DietAARP will add the food "Other Fruit" (or "Other Vegetables") to the respondent's analysis. This food will be added with a frequency equal to the difference between the Summary Frequency and the Adjust Group Frequency. This is the DIETSYS method for adjusting up. This method is based on the assumption that the Summary Frequency is greater than the Group Frequency when the respondent eats fruits (or vegetables) not mentioned on the questionnaire.

Question 9: Regular, Low-fat, or Non-fat Foods

Please mark whether you usually ate regular fat, low-fat or non-fat versions of the following foods:
1) Sour cream, 2) Cream cheese, 3) Cottage cheese, 4) Other cheese, 5) Crackers, 6) Chips,
7) Cookies, brownies, 8) Cake, 9) Mayo, 10) Salad dressing.

Coding

Four characters are coded for each food, one for "didn't eat this food", one for "regular fat", one for "low-fat" and one for "non-fat". For each, a 0 indicates "NOT MARKED" and 1 means "MARKED".

Analysis Algorithm:

The database foods shown in the table are used at the frequency specified for the food items. Proportions of the line item frequency are assigned to the regular fat, low-fat, and non-fat foods as described in the analysis options section on the next page. If "didn't eat this food" is marked and one of the other choices is also marked, then the response to "didn't eat..." is ignored.

Response to Question 9	Food Item	Database Food Used
Regular Fat or Didn't eat this food (only) or Option **QST9** = OFF	Sour cream	45.1 Sour cream, reg
	Cream cheese	60.1 Cream cheese, reg
	Cottage cheese	40.1 Cot/ricot cheese, reg
	Other cheese	50.1 Cheese, reg
	Crackers	335.1 Crackers, high fat
	Potato chips...	390.1 Potato/corn/othr chips
	Cookies or brownies	360.1 Cookies, brownies
	Cake	370.1 Cakes, regular
	Mayo for salad	1052.1 Mayonnaise, reg on salad
	Mayo on bread	1051.1 Mayo, reg on sandwich
	Salad dressing	1041.1 Salad drsg, reg
Low-fat	Sour cream	45.2 Sour cream, lowfat
	Cream cheese	60.2 Cream cheese, lowfat
	Cottage cheese	40.2 Cot/ricot cheese, lowfat
	Other cheese	50.2 Cheese, lowfat
	Crackers	335.2 Crackers, lower fat
	Potato chips...	390.2 Potato/corn/othr chips, lowfat
	Cookies or brownies	360.2 Cookies, brownies, lowfat
	Cake	370.2 Cakes, lowfat
	Mayo for salad	1052.2 Mayonnaise, diet on salad
	Mayo on bread	1051.2 Mayo, diet on sandwich
	Salad dressing	1041.2 Salad drsg, lowfat
Non-fat	Sour cream	45.3 Sour cream, nonfat
	Cream cheese	60.3 Cream cheese, nonfat
	Cottage cheese	40.2 Cot/ricot cheese, **lowfat**
	Other cheese	50.3 Cheese, nonfat
	Crackers	335.2 Crackers, **lower** fat
	Potato chips...	390.2 Potato/corn/othr chips, **lowfat**
	Cookies or brownies	360.2 Cookies, brownies, **lowfat**
	Cake	370.2 Cakes, **lowfat**
	Mayo for salad	1052.3 Mayonnaise, nonfat on salad
	Mayo on bread	1051.3 Mayo, nonfat on sandwich
	Salad dressing	1041.3 Salad drsg, nearly nonfat

Analysis Options:

- **QST9 (valid settings = ON and OFF)**
  If a setting for this option is not included in the INI file or if an invalid setting is given, this option will be set to ON by default. If this option is OFF, the regular version of each food is used for the entire food frequency.

- **Q9_REG, Q9_LOW, Q9_NON (valid setting for each = number from 0.0 to 1.0)**
  If "regular fat" is the only selection for a food, the "regular" food is used at the Q9_REG proportion. In this case, the "low-fat" foods are used at a proportion equal to (1 - Q9_REG). If Q9_REG is invalid then it is set to 1.0 by default.

  Likewise, if "low-fat" is the only selection for a food, the foods listed in the low-fat section of the table above are added at the Q9_LOW proportion. In this case, the "regular" foods are used at a proportion equal to (1 - Q9_LOW). If Q9_LOW is invalid then it is set to 0.75 by default.

  If "non-fat" is the only selection for a food, the foods listed in the non-fat section of the table above are added at the Q9_NON proportion. In this case, the "regular" foods are used at a proportion equal to (1 - Q9_NON). If Q9_NON is invalid then it is set to 0.75 by default.

  These proportions are **not** used if more than one fat type is selected. If Regular Fat, Low-Fat, and Non-Fat are **all** selected, the foods shown in the table above will each be used at 1/3 of the reported frequency. Some foods use the same food for lowfat as non-fat. For these, the lowfat food will actually be used at a ratio of 2/3 and the regular fat food will be used at a ratio of 1/3.

  If two of the three fat types are selected, each of the two appropriate foods will be used at 1/2 of the reported frequency. If lowfat and non-fat are both selected (but not regular fat), the foods which do not have a non-fat version will get the lowfat food at 100% of the reported frequency.

Question 10: Regular fat or Low-fat Foods

Please mark whether you usually ate regular fat or low-fat versions of the following foods: hot dogs, cold cuts or luncheon meats (ham, bologna, salami, etc), bacon, sausage.

Coding

Three characters are coded for each food, one character for "didn't eat this food", one for "regular fat", and one for "low-fat". For each character, 0 indicates "NOT MARKED" and 1 means "MARKED".

Analysis Algorithm

Proportions of the line item frequency are assigned to the database foods shown in the table for regular fat and low-fat foods (see analysis options below). If "didn't eat this food" is marked and one of the other choices is also marked, then the response to "didn't eat..." is ignored.

Q10: Regular or Low-fat	**Food Item**	**Database Food Used**
Regular Fat or Didn't eat this food (only) or Option **QST10** = OFF	Hot dogs	180.1 Hot dogs, regular
	Cold cuts...	240.1 Cold cuts, regular
	Bacon	160.1 Bacon, regular
	Sausage	170.1 Sausage, reg
Low-fat	Hot dogs	180.2 Hot dogs, turky/lowfat
	Cold cuts...	240.2 Cold cuts, lowfat
	Bacon	160.2 Bacon, lean/Canadian
	Sausage	170.2 Sausage, turk/lowfat
Regular Fat and Low-fat	Hot dogs	180.1 Hot dogs, regular 180.2 Hot dogs, turky/lowfat
	Cold cuts...	240.1 Cold cuts, regular 240.2 Cold cuts, lowfat
	Bacon	160.1 Bacon, regular 160.2 Bacon, lean/Canadian
	Sausage	170.1 Sausage, reg 170.2 Sausage, turk/lowfat

Analysis Options

- **QST10 (valid settings = ON and OFF)**
  If a setting for this option is not included in the INI file or an invalid setting is given, this option will be ON by default. If this option is OFF, the regular version of each food is used for the entire frequency.

- **Q10_REG and Q10_LOW (valid setting for each = number from 0.0 to 1.0)**
  If "regular fat" is the only selection for a food, the "regular" food is used at the Q10_REG proportion. In this case, the "low-fat" foods are used at a proportion equal to (1 - Q10_REG). If Q10_REG is invalid then it is set to 1.0 by default. If "low-fat" is the only selection for a food, the foods listed in the low-fat section of the table above are added using the Q10_LOW proportion. In this case, the "regular" foods are used at a proportion equal to (1 - Q10_LOW). If Q10_LOW is invalid then it is set to 0.75 by default. These proportions are **not** used if Regular Fat and Low-Fat are **both** selected. In this case, the foods shown in the table above are each used at 1/2 the reported frequency.

Question 11: Lean or Regular Ground Beef

Over the last 12 months, when you ate ground beef (including hamburgers and cheeseburgers) which kind did you usually eat?

This question affects "Beef hamburgers or cheeseburgers". "Ground beef in mixtures, such as tacos, burritos, meat balls, casseroles, chili, meatloaf" is **not** affected by question 11.

Coding

One character is coded for this question with a value of 0-3, "M" if nothing is marked or "E" if more than 1 circle is marked.

Analysis Algorithm

Q11: Type of ground beef.	Food Used for "Beef hamburgers or cheeseburgers"
0 = Didn't eat ground beef 1 = Regular ground beef M = Missing E = Error code	130.2 Beef, burgers , reg
2 = Lean ground beef	130.1 Beef, burgers, lean
3 = Lean & regular about the same amount of time	50% each: 130.2 Beef, burgers , reg 130.1 Beef, burgers, lean

Analysis Options

- **QST11 (valid settings = ON and OFF)**
  If a setting for this option is not included in the INI file or an invalid setting is given, this option is set to ON by default. If this option is OFF, the regular version of each food is used for the entire food frequency.

- **Q11_REG and Q11_LEAN (valid setting for each = number from 0.0 to 1.0)**
  If "regular fat" is the only selection, "beef, burgers, reg" is used at the Q11_REG proportion. In this case, the "beef, burgers, lean" is used at a proportion equal to (1 - Q11_REG). If Q11_REG is invalid then it is set to 1.0 by default.

  If "lean ground beef" is the only selection, "beef, burgers, lean" is added using the Q11_LEAN proportion. In this case, "beef, burgers, reg" is used at a proportion equal to (1 - Q11_LEAN). If Q11_LEAN is invalid then it is set to 0.75 by default.

Question 12: Lean or regular steaks, roasts, chops

When you ate beef steaks, roasts, or chops, which kind did you usually (more than half the time) eat?

This question affects the foods: "Steak (beef)" and "Roast beef, including in mixtures (not in sandwiches)". It does **not** affect "roast beef or steak in sandwiches". It is assumed that most roast beef/steak sandwiches are prepared at restaurants and the respondent does not have control of the leanness of the meat.

Coding

One character is coded for this question with a value of 0-3, "M" if nothing is marked or "E" if more than 1 circle is marked.

Analysis Algorithm

The database foods shown below are used at the frequency specified for the food items.

Q12: Type of steaks, roasts, or chops.	Food Item	Database Food Used
0 = Didn't eat steaks, roasts, or chops 1 = Regular fat cuts M = Missing E = Error code	Steaks (Beef)	120.2 Beef, steaks, reg
	Roast beef, including in mixtures (NOT in sandwiches)	122.2 Beef, roasts, reg
2 = Lean cuts	Steaks (Beef)	120.1 Beef, steaks, lean
	Roast beef, including in mixtures (NOT in sandwiches)	122.1 Beef, roasts, lean
3 = Lean and regular about the same amount of time	Steaks (Beef)	50% each: 120.2 Beef, steaks, reg 120.1 Beef, steaks, lean
	Roast beef, including in mixtures (NOT in sandwiches)	50% each: 122.2 Beef, roasts, reg 122.1 Beef, roasts, lean

Analysis Options

- **QST12 (valid settings = ON and OFF)**
  If a setting for this option is not included in the INI file or an invalid setting is given, this option is set to ON by default. If this option is OFF, the regular version of each food is used for the entire food frequency.

- **Q12_REG and Q12_LEAN (valid setting for each = number from 0.0 to 1.0)**
  If "regular fat cuts" is the only selection, the regular fat food item is used at the Q12_REG proportion. In this case, the lean food item is used at a proportion equal to (1 - Q12_REG). If Q12_REG is invalid then it is set to 1.0 by default.

  If "lean cuts" is the only selection, the lean food item is added using the Q12_LEAN proportion. In this case, the regular fat food item is used at a proportion equal to (1 - Q12_LEAN). If Q12_LEAN is invalid then it is set to 0.75 by default.

Questions 13 and 14: Types of Chicken

Question 13: (with skin vs without skin)

Over the last 12 months, when you ate chicken, how did you usually (more than half the time) eat it?

One character is coded for this question with a value of 0-3, "M" if nothing is marked or "E" if more than 1 circle is marked.

Question 14: (light meat vs dark meat)

When you ate chicken, which kind did you usually eat?

One character is coded for this question with a value of 0-2, "M" if nothing is marked or "E" if more than 1 circle is marked.

Analysis Algorithm

There are two chicken line items affected by these questions: "fried chicken or chicken nuggets" and "baked, broiled, roasted, or stewed chicken". Four database foods are used for each of these chicken line items. Each database food is assigned a proportion (from 0.0 to 1.0) based on the responses to questions 13 and 14, and the values of the proportions set for these questions in the [Analysis Options] section of the INI file.

Analysis Options

- **QST13 and QST14 (valid settings = ON and OFF)**
  If QST13 or QST14 is not included in the INI file or an invalid setting is given, the option is set to ON by default. An option setting of OFF has the same affect as a code of missing.

- **Q13_Skin, Q13_NoSkin and Q14_Light, Q14_Dark (valid setting for each = 0.0 to 1.0)**
  It was determined by the NCI that if a respondent answered "usually eats chicken without skin" that some proportion of this respondent's chicken is probably chicken with skin. The same principle holds true for a response of "light meat". It was felt that the respondent's estimate for fat was underestimated if the respondent was given full credit for these responses. Therefore, options were added to the INI file to give the investigator control of the amount of each chicken type used when the respondent selects one type of chicken in questions 13 or 14. For example, if the respondent selected "with skin", a proportion of the chicken used by DietAARP are "with skin" chicken(s) in the database and "without skin" chicken(s) are used for the remaining proportion.

Q13_Skin, Q13_NoSkin, Q14_Light, and Q14_Dark are proportions set by the user in the [Analysis Options] section of the INI file. The default settings are shown below for each variable. The defaults are used if the variable is not included in the INI file or if it is not set to a valid proportion.

Proportion	Default Setting
Q13_Skin	1.0
Q13_NoSkin	0.75
Q14_Dark	1.0
Q14_Light	0.75

Each chicken item in the database fits into the with skin (WS) or no skin (NS) category; and each chicken fits into the light or dark category. Therefore, the product of two proportions is used for each database item (see tables on the following pages). Proportions shown in the tables as numbers are fixed and cannot be adjusted by the investigator (these are the proportions used when the respondent indicated using both types of chicken equally in either question 13 or 14).

Q13: With or without skin?	Q14: Light or dark meat?	Database Food Used For: Fried chicken or chicken nuggets	
		Food	**Proportion Used**
0 = Didn't eat chicken 1 = With skin M = Missing E = Error code	0 = Light meat	250.1 Chicken, fr, light WS 250.3 Chicken, fr, dark WS 250.2 Chicken, fr, light NS 250.4 Chicken fr, dark NS	Q13_Skin * Q14_Light Q13_Skin * (1 - Q14_Light) (1 - Q13_Skin) * Q14_Light (1 - Q13_Skin) * (1 - Q14_Light)
	1 = Dark meat	250.3 Chicken, fr, dark WS 250.1 Chicken, fr, light WS 250.4 Chicken fr, dark NS 250.2 Chicken, fr, light NS	Q13_Skin * Q14_Dark Q13_Skin * (1 - Q14_Dark) (1 - Q13_Skin) * Q14_Dark (1 - Q13_Skin) * (1 - Q14_Dark)
	2 = Dark/light same M = Missing E = Error code	250.1 Chicken, fr, light WS 250.3 Chicken, fr, dark WS 250.2 Chicken, fr, light NS 250.4 Chicken fr, dark NS	Q13_Skin * 0.50 Q13_Skin * 0.50 (1 - Q13_Skin) * 0.50 (1 - Q13_Skin) * 0.50
2 = Without skin	0 = Light meat	250.2 Chicken, fr, light NS 250.4 Chicken fr, dark NS 250.1 Chicken, fr, light WS 250.3 Chicken, fr, dark WS	Q13_NoSkin * Q14_Light Q13_NoSkin * (1 - Q14_Light) (1 - Q13_NoSkin) * Q14_Light (1 - Q13_NoSkin) * (1 - Q14_Light)
	1 = Dark meat	250.4 Chicken fr, dark NS 250.2 Chicken, fr, light NS 250.3 Chicken, fr, dark WS 250.1 Chicken, fr, light WS	Q13_NoSkin * Q14_Dark Q13_NoSkin * (1 - Q14_Dark) (1 - Q13_NoSkin) * Q14_Dark (1 - Q13_NoSkin) * (1 - Q14_Dark)
	2 = Dark/light same M = Missing E = Error code	250.2 Chicken, fr, light NS 250.4 Chicken fr, dark NS 250.1 Chicken, fr, light WS 250.3 Chicken, fr, dark WS	Q13_NoSkin * 0.50 Q13_NoSkin * 0.50 (1 - Q13_NoSkin) * 0.50 (1 - Q13_NoSkin) * 0.50
3 = With/without same	0 = Light meat	250.1 Chicken, fr, light WS 250.2 Chicken, fr, light NS 250.3 Chicken, fr, dark WS 250.4 Chicken fr, dark NS	0.50 * Q14_Light 0.50 * Q14_Light 0.50 * (1 - Q14_Light) 0.50 * (1 - Q14_Light)
	1 = Dark meat	250.3 Chicken, fr, dark WS 250.4 Chicken fr, dark NS 250.1 Chicken, fr, light WS 250.2 Chicken, fr, light NS	0.50 * Q14_Dark 0.50 * Q14_Dark 0.50 * (1 - Q14_Dark) 0.50 * (1 - Q14_Dark)
	2 = Dark/light same M = Missing E = Error code	250.1 Chicken, fr, light WS 250.2 Chicken, fr, light NS 250.3 Chicken, fr, dark WS 250.4 Chicken fr, dark NS	0.25 0.25 0.25 0.25

Q13: With or without skin?	Q14: Light or dark meat?	Database Food Used For: Baked, broiled, roasted, or stewed chicken	
		Food	**Proportion Used**
0 = Didn't eat chicken 1 = With skin M = Missing E = Error code	0 = Light meat	252.1 Chicken, light WS 252.3 Chicken, dark WS 252.2 Chicken, light NS 252.4 Chicken, dark NS	Q13_Skin * Q14_Light Q13_Skin * (1 - Q14_Light) (1 - Q13_Skin) * Q14_Light (1 - Q13_Skin) * (1 - Q14_Light)
	1 = Dark meat	252.3 Chicken, dark WS 252.1 Chicken, light WS 252.4 Chicken, dark NS 252.2 Chicken, light NS	Q13_Skin * Q14_Dark Q13_Skin * (1 - Q14_Dark) (1 - Q13_Skin) * Q14_Dark (1 - Q13_Skin) * (1 - Q14_Dark)
	2 = Dark/light same M = Missing E = Error code	252.1 Chicken, light WS 252.3 Chicken, dark WS 252.2 Chicken, light NS 252.4 Chicken, dark NS	Q13_Skin * 0.50 Q13_Skin * 0.50 (1 - Q13_Skin) * 0.50 (1 - Q13_Skin) * 0.50
2 = Without skin	0 = Light meat	252.2 Chicken, light NS 252.4 Chicken, dark NS 252.1 Chicken, light WS 252.3 Chicken, dark WS	Q13_NoSkin * Q14_Light Q13_NoSkin * (1 - Q14_Light) (1 - Q13_NoSkin) * Q14_Light (1 - Q13_NoSkin) * (1 - Q14_Light)
	1 = Dark meat	252.4 Chicken, dark NS 252.2 Chicken, light NS 252.3 Chicken, dark WS 252.1 Chicken, light WS	Q13_NoSkin * Q14_Dark Q13_NoSkin * (1 - Q14_Dark) (1 - Q13_NoSkin) * Q14_Dark (1 - Q13_NoSkin) * (1 - Q14_Dark)
	2 = Dark/light same M = Missing E = Error code	252.2 Chicken, light NS 252.4 Chicken, dark NS 252.1 Chicken, light WS 252.3 Chicken, dark WS	Q13_NoSkin * 0.50 Q13_NoSkin * 0.50 (1 - Q13_NoSkin) * 0.50 (1 - Q13_NoSkin) * 0.50
3 = With/without same	0 = Light meat	252.1 Chicken, light WS 252.2 Chicken, light NS 252.3 Chicken, dark WS 252.4 Chicken, dark NS	0.50 * Q14_Light 0.50 * Q14_Light 0.50 * (1 - Q14_Light) 0.50 * (1 - Q14_Light)
	1 = Dark meat	252.3 Chicken, dark WS 252.4 Chicken, dark NS 252.1 Chicken, light WS 252.2 Chicken, light NS	0.50 * Q14_Dark 0.50 * Q14_Dark 0.50 * (1 - Q14_Dark) 0.50 * (1 - Q14_Dark)
	2 = Dark/light same M = Missing E = Error code	252.1 Chicken, light WS 252.2 Chicken, light NS 252.3 Chicken, dark WS 252.4 Chicken, dark NS	0.25 0.25 0.25 0.25

Question 15: Water vs Oil for Canned Tuna

When you ate canned tuna, which kind did you usually eat?

This questions affects the food: "Tuna (canned) including in salads, sandwiches, or casseroles".

Coding

One character is coded for this question with a value of 0-3, "M" if nothing is marked or "E" if more than 1 circle is marked.

Analysis Algorithm

If there is a zero frequency for "Tuna (canned) including in salads, sandwiches, or casseroles" in the food list, question 15 is ignored. If there is a non-zero frequency for this food item in the food list, the following foods will be used at the frequency specified in the food list:

Q15: Type of tuna?	Food Used for "Tuna (canned)..."
0 = Didn't eat canned tuna 1 = Water-packed tuna M = Missing E = Error code	280.2 Tuna, water-packed
2 = Oil-packed tuna	280.1 Tuna ,oil-packed
3 = Oil and water-packed about same amount of time	50% each: 280.2 Tuna, water-packed 280.1 Tuna, oil-packed

Analysis Options

- **QST15 (valid settings = ON and OFF)**
  If a setting for this option is not included in the INI file or an invalid setting is given, this option is set to ON by default. If this option is OFF, water-packed tuna is used for the entire food frequency.

- **Q15_WATER and Q15_OIL (valid setting for each = number from 0.0 to 1.0)**
  If "water-packed tuna" is the only selection, "tuna, water-packed" is used at the Q15_WATER proportion. In this case, "tuna, oil-packed" is used at a proportion equal to (1 - Q15_WATER). If Q15_WATER is invalid then it is set to 1.0 by default.

  If "oil-packed tuna" is the only selection, "tuna, oil-packed" is used at the Q15_OIL proportion. In this case, "tuna, water-packed" is used at a proportion equal to (1 - Q15_OIL). If Q15_OIL is invalid it is set to 1.0 by default.

Questions 16-17: Types of Eggs & Cooking Method

Question 16

Over the last 12 months, when you ate eggs (not including in baked goods and desserts), which kind of eggs did you usually eat?

Four characters are coded, one character for "didn't eat eggs", one for "whole eggs", one for "egg whites", and one for "egg substitutes". For each character, a 0 indicates "NOT MARKED" and 1 means "MARKED".

Question 17

How were your eggs usually cooked?

Six characters are coded, one character for "in oil", one for "in oil spray", one for "in butter", one for "in margarine", one for "poached or boiled", and one for "in non-stick pan". For each character, a 0 indicates "NOT MARKED" and a code of 1 means "MARKED".

Analysis Algorithm

There is an option associated with each question. If the QST16 option is OFF, question 16 is analyzed as if whole eggs was the only item selected. If the QST17 option is OFF or nothing is selected for question 17, "310.2 Eggs, plain, FA" is used for 100% of the frequency attributed to whole eggs.

The table at the bottom of the page shows the database foods used. The "Proportion Used" column gives the proportion of the egg frequency used for each database food. The variables used to express these proportions are defined below:

NUM_Q16
The number of choices marked in question 16 (not including "didn't eat eggs" if an egg type is also selected). If didn't eat eggs is the only choice, NUM_Q16 equals one and "whole eggs" is selected.

NUM_FATS_Q17
There are three fats listed as choices in question 17 ("in oil", "in butter", and "in margarine"). NUM_FATS_Q17 equals the number of these fats selected.

NUM_NONFATS_Q17
There are three choices for the cooking method in question 17 that do not use fat ("in oil spray", "poached or boiled", and "in non-stick pan"). NUM_NONFATS_Q17 equals the number of these choices selected.

TOTAL_Q17
Total number of choices marked in question 17 (NUM_FATS_Q17 + NUM_NONFATS_Q17).

Q16 - Eggs	Food Used for "Eggs"	Proportion Used
Didn't eat eggs	If this is the only selection, whole eggs is selected. If didn't eat eggs is marked but an egg type is also marked - didn't eat eggs is ignored.	
Whole eggs No response	310.1 Eggs, plain, NFA 310.2 Eggs, plain, FA	(1 / NUM_Q16) * (NUM_NONFATS _Q17 / TOTAL_Q17) (1 / NUM_Q16) * (NUM_FATS _Q17 / TOTAL_Q17) If TOTAL_Q17 is 0 or QST17 is OFF then 100% FA is used.
Egg whites	310.4 Eggs, whites only	(1 / NUM_Q16)
Egg substitutes	310.5 Eggs, substitutes	(1 / NUM_Q16)

Question 18: Butter and Margarine Added at the Table

Analysis Algorithm

Step 1: The total frequency for adding butter and/or margarine after cooking is calculated. This equals the sum of the Food Category Frequencies in question 18. The steps to calculate these frequencies are:

1. A proportion is assigned to each food category based on the responses in question 18.

Q18: Added margarine or butter after cooking:	Proportion
1 = MORE than half the time	1.0
2 = Half the time or less	0.5
0 = Didn't eat this food 3 = Almost never or never M = Missing E = Multiple marks for this food group	0.0

2. A Food Category Frequency is calculated for each of the 6 categories in question 18. Food Category Frequency equals the sum of the frequencies of the foods in the category times the proportion assigned in #1 for the category. To avoid counting fat added to vegetables eaten raw, only a proportion of the frequencies for the following foods are used to calculate the cooked vegetables frequency.

   Carrots: 50%
   Broccoli: 80%
   Cauliflower: 70%

   These proportions are based on CSFII 89-91 adult data:

	N's of those eating	
	Raw	Cooked
Carrots	1116	1101
Broccoli	320	1425
Cauliflower/Brussels Sprouts	290	624

Question 18 - Food Category	Food frequencies summed to calculate Food Category Freq
Oatmeal, grits, or other cooked cereals	1. Oatmeal, grits, other cooked cereal (IN WINTER) 2. Oatmeal, grits, other cooked cereal (REST OF THE YEAR)
Pancakes, waffles, or French toast	1. Pancakes, waffles, French toast, or crepes
Baked, boiled, or mashed potatoes	1. Sweet potatoes or yams 2. Baked, boiled, mashed (including instant) potatoes
Rice	1. Rice (all types) or other cooked grains
Pasta	1. Pasta, spaghetti, or other noodles
Cooked vegetables	1. Cooked greens, such as spinach, turnip, collard, mustard, kale 2. 50% of the frequency for "Carrots" 3. String beans, green beans (fresh, canned, or frozen) 4. Peas (fresh, canned, frozen) 5. Fresh corn (IN SEASON) 6. Corn (fresh, canned, frozen) (REST OF THE YEAR) 7. 80% of the frequency for "Broccoli (fresh or frozen)" 8. 70% of the frequency for "Cauliflower or Brussels sprouts" 9. Mixed vegetables

Step 2: The total frequency for adding butter and/or margarine after cooking was calculated in Step 1. Next, the response to questions 19 and 20 are used to determine how much of this frequency should be used for butter and how much should be used for the various margarines (see questions 19 and 20).

Step 3: Foods are added for butter and margarine using the frequencies and database foods calculated in steps 1 and 2. The serving size is set to medium for these foods.

Question 19: Proportions of Butter and Margarine Used

Three pieces of information are required to calculate the nutrient estimates from any food. These are frequency, serving size, and the specific food in the database to be used. Butter and margarine are special foods in that the food frequency data comes from three sources: 1) the food frequency for butter/margarine on bread or rolls, 2) question 18: butter or margarine added after cooking to foods and 3) question 21: the frequency of fats used in cooking.

Questions 19 and 20 combined are used to determine the proportions of butter and margarine to use for 1) the food frequency of butter/margarine on bread or rolls (page 8 of the questionnaire) and 2) the amount of butter or margarine added after cooking to the foods in question 18. Question 19 is **not** used in any way for proportions for butter or margarine used in cooking (question 21).

Note: "No margarine selected" in the table below means that either "didn't use margarine" was the **only** selection in question 20 or question 20 was skipped completely.

Q19: butter or margarine?	Q20: which margarine	Proportion of Frequency
0 = Didn't use butter or margarine	No margarine selected (see note above).	50% Butter 50% Stick Margarine If the respondent gave a non-zero frequency for butter & margarine, this set of responses to 19 & 20 are unreasonable. 50/50 is imputed.
	One or more margarines selected	Each margarine selected gets an equal proportion of the frequency.
1 = Used butter	No margarine selected	100% Butter
	One or more margarines selected	75% Butter Each margarine selected gets an equal proportion of the remaining 25%.
2 = Used margarine	No margarine selected	100% Stick Margarine
	One or more margarines selected	Each margarine selected gets an equal proportion of the frequency.
3 = Used butter and margarine about the same amount of time	No margarine selected	50% Butter 50% Stick Margarine
	One or more margarines selected	50% Butter Each margarine selected gets an equal proportion of the remaining 50%.
M = missing E = error (multiple marks)	Didn't use margarine is the **only** selection.	100% Butter
	Question 20 skipped.	50% Butter 50% Stick Margarine
	One or more margarines selected	Each margarine selected gets an equal proportion of the frequency.

Question 20: Margarine Type

When margarine was used, what kind was usually used? Six characters are used to code the response to this question, one character for "didn't use margarine" and one for each of the five margarine types. For each character, a 0 indicates "NOT MARKED" and 1 means "MARKED".

Response to Question 20	Database Food Used
Didn't use margarine or question 20 is skipped.	The response to "didn't use margarine" is ignored and has no impact on the number of margarines. If a margarine type is required and this is the only choice selected, **"1020.1 Margarine, stick"** is used by default.
Regular stick	1020.1 Margarine, stick
Regular tub	1020.2 Margarine, tub
Diet stick	1020.3 Margarine, diet 1020.1 Margarine, stick (possibly, see Q20_DIET below)
Diet tub	1020.3 Margarine, diet 1020.2 Margarine, tub (possibly, see Q20_DIET below)
Stick or tub margarine/butter blend	1020.5 Butter/marg blend

Analysis Options

- **Q20_DIET**
  If either "diet stick" or "diet tub" is the only selection, the non-diet counterpart will be used for a proportion of the frequency. The Q20_DIET proportion set in the [Analysis Options] section of the INI file will be used to determine the proportion for each (diet and non-diet). Q20_DIET is the proportion used for the diet version. The non-diet version will be used with a proportion equal to (1 - Q20_DIET).

  These proportions are **not** used if more than one margarine is selected.

Questions 20, 21, and 22: Cooking Fats

These questions are used to determine the amount and type of fat used to fry or sauté.

Question 20: Type of margarine (see previous section).

Question 21: How often was oil, butter, or margarine used to fry or sauté the vegetables, eggs, or meat you ate? One character is coded for this question with a value of 0-8, M, or E.

Question 22, part 1: Which of the following fats or oils were regularly used to fry or sauté? Seven characters are used to code the response to this question, one character for "don't know" and one for each of the six types of fat. For each character, a 0 indicates "NOT MARKED" and 1 means "MARKED".

Question 22, part 2: What kinds of oils were regularly used? Seven characters are used to code the response to this question, one character for "don't know" and one for each of the six types of oil. For each character, a 0 indicates "NOT MARKED" and 1 means "MARKED".

Analysis Algorithm

The frequency for cooking fats is calculated based on the response to Question 21.

Q21: How often was oil, butter, or margarine used to	Weekly

fry or sauté the vegetables, eggs, or meat you ate?	Frequency
0 = Never	0.0
1 = Less than once per week	0.5
2 = 1 to 2 times per week	1.5
3 = 3 to 4 times per week	3.5
4 = 5 to 6 times per week	5.5
5 = Once per day	7
6 = 2 times per day	14
7 = 3 times per day	21
8 = 4 or more times per day	28
M = Missing E = Scanning error due to multiple marks	0.0

A frequency is calculated for each fat chosen in question 22, part 1. This frequency equals 1/n * the question 21 frequency (n = number of fats selected in part 1 of question 22, "don't know" does not count). "Oil, liquid" is automatically selected if any oils are selected in question 22, part 2 .

Part 1 of Question 22:	Determining the Database Food to be Used
Don't Know is the **only** response or no response	"Oil, liquid" is automatically selected if an oil is selected in the 2nd part of question 22. "Butter", "margarine", and "oil, liquid" are automatically selected if no oils are selected in part 2. These fats are used at 1/3 the frequency specified in question 21.
Don't Know (and one or more of the fats listed below are selected)	The response to "Don't Know" is ignored and has no impact on the number of fat types.
Margarine	The Margarine Frequency is divided equally among the individual margarines selected in question 20. If no margarines are selected, **1020.1 Margarine, stick** is used by default.
Butter	1022.1 Butter
Lard, fatback, or bacon fat	1060.1 Lard, fatback bacon fat
Vegetable shortening, such as solid Crisco	1060.2 Vegetable shortening
Oil spray like Pam or Others	No nutrient values are associated with this response. However, it is counted as an equal share of the frequency from Q21.
Oil, liquid	The liquid oil frequency is divided among the oils chosen in Q22, part 2. (turned on if any oil is chosen in part 2)

The frequency for liquid oils is divided equally among all answers given in part 2 of question 22 (maximum of 7 answers). A share is assigned to the answer of "don't know". In this algorithm, "1030.6 oils, other" may have up to two shares. In addition, if part 2 is skipped, **"1030.6 Oils, other"** is used by default.

Response to Part 2 of Question 22	Database Food Used
Don't know	1030.6 Oils, other
Corn	1030.2 Oils, corn
Olive	1030.1 Oils, olive
Safflower	1030.3 Oils, safflower
Sunflower	1030.4 Oils, sunflower
Canola	1030.5 Oils, canola/rapeseed
Other	1030.6 Oils, other

Question 23: White or Dark Bread in Sandwiches

When you ate bread in sandwiches, which kind did you usually eat (incl burger and hot dog buns)?

Coding

One character is coded for this question with a value of 0-4, “M” if nothing is marked or “E” if more than 1 circle is marked.

Analysis Algorithm

This question affects the food: "Bread or for sandwiches (including burger or hot dog rolls)". The following database foods are used for this line item at the frequency specified in the food list:

Q23: White vs Dark	Food Used for "Bread for Sandwiches"
0 = Didn’t eat bread 1 = Ate bread, but not in sandwiches 2 = White bread M = Missing E = Error code	331.1 Breads/rolls, white
3 = Dark bread	331.2 Bread/rolls whole gr
4 = White & dark about the same amount of time	50% each: 331.1 Breads/rolls, white 331.2 Bread/rolls whole gr

Question 24: White or Dark Bread not in Sandwiches

Which kind of bread or dinner rolls did you usually eat not in sandwiches?

Coding

One character is coded for this question with a value of 0-3, “M” if nothing is marked or “E” if more than 1 circle is marked.

Analysis Algorithm

This question affects the food: "Bread or dinner rolls, NOT INCLUDING ON SANDWICHES". The following database foods are used for this line item at the frequency specified in the food list:

Q24: White vs Dark	Food Used for "Bread not on Sandwiches"
0 = Ate bread, but only in sandwiches 1 = White bread M = Missing E = Error code	331.1 Breads/rolls, white
2 = Dark bread	331.2 Bread/rolls whole gr
3 = White & dark about the same amount of time	50% each: 331.1 Breads/rolls, white 331.2 Bread/rolls whole gr

Question 25: Sweetener in Coffee/Tea

Over the last 12 months, when you drank coffee or tea, what kind of sweetener did you regularly add?

Coding

Six characters are used to code this question. One character is coded for each item, a 0 indicates "NOT MARKED" and a code of 1 means "MARKED".

Analysis Algorithm

If there is no response for question 25, no foods are added. If any of the sweeteners are marked, one or more foods will be created and added into the calculations of the nutrient estimates. If "didn't add sweetener to coffee or tea" is marked and a sweetener is also selected, it is assumed that the respondent drinks coffee/tea without sweetener sometimes.

The frequency for **each** food created for question 25 will equal:

$$\frac{\text{(Coffee Frequency + Hot Tea Frequency)}}{\text{Number of circles marked (}\textbf{not}\text{ including "didn' t drink coffee or tea")}}$$

The table below shows which food will be added for each marked response, at the frequency calculated above:

Q25: Kind of sweetener	Database Food Used
Didn't drink coffee or tea	If this is the only circle marked, no food is added. If this is marked and "didn't add any sweetener to coffee or tea" is the only other circle marked, no food is added. Otherwise, one or more sweeteners must have been marked. In this case, the value for this circle (didn't drink coffee or tea) is completely ignored.
Didn't add any sweetener to coffee or tea	If this is the only circle marked, no food is added. If one or more of the choices below are marked, the corresponding foods will be added. In this situation, each sweetener will be added in an equal proportion. The respondent will be given credit for drinking coffee/tea without sweetener in that same proportion.
Sugar or honey	1080.1 Sugars/honey, all
Equal or aspartame Saccharin or Sweet-n-Low Other sweetener	1175.1 Artificial sweeteners, all

Question 26: Creamer in Coffee/Tea

Over the last 12 months, when you drank coffee or tea, what kind of milk or creamer did you use?

Coding

Eight characters are used to code this question. One character is coded for each item, a 0 indicates "NOT MARKED" and a code of 1 means "MARKED".

Analysis Algorithm

If there is no response for question 26, no foods are added. However, if a milk or creamer is selected, each food added will be calculated using a frequency equal to the formula shown below. Note: "the number of circles marked for Q26" will include "didn't use milk or creamer" if it is selected.

$$\frac{\text{(Coffee Frequency + Hot Tea Frequency)}}{\text{Number of Circles Marked for Q26}}$$

The following table shows the food added for each marked response, at the frequency calculated above:

Q26: Kind of milk or creamer	Database Food Used
Didn't use milk or creamer	If this is the only circle marked, no food is added. If one or more of the choices below are marked, the corresponding foods will be added. In this situation, each milk/creamer will be added in an equal proportion. The respondent will be given credit for drinking coffee/tea "black" in that same proportion.
Low-fat, non-dairy creamer	18.4 Non-dairy creamer, diet
Regular fat, non-dairy creamer	18.3 Non-dairy creamer, reg
Evaporated or condensed (canned) milk	16.1 Milk, evap/cond
Cream or half-&-half	17.1 Cream, reg or 1/2 & 1/2
Whole (4%) milk	15.1 Whole milk in coffee
1 or 2% fat milk	15.2 1-2% milk in coffee
Skim, non-fat, or 1/2% milk	15.3 Skim milk in coffee

Questions 27 and 29: Vitamin Related Questions

Question 27: Over the last 12 months, did you take any vitamins or minerals?

Question 29: Which of the following vitamins and minerals did you take more than once per month? (Iron, Zinc, Selenium, Folic Acid, None)

Questions 27 and 29 are not used in the DIETSYS algorithm to calculate nutrient estimates from supplements and, therefore, are not used in DietAARP.

Questions 28 and 30: Vitamin Supplement Frequencies

Question 28: How often did you take the following multivitamins? One character is coded for each multivitamin (Stress-tabs type, Therapeutic or Theragran-type, and One-a-day type).

Question 30: How often did you take the following single supplements, and what was the total amount of each single supplement you usually took in one day? Two characters are coded for each single vitamin. The first character is the code for frequency and the second is the code for the amount (IU or mg) per pill. There are five single supplements listed: Vitamin A, Beta-carotene, Vitamin C, Vitamin E, and Calcium.

Nutrient estimates from supplements are calculated separately from nutrient estimates from food. Twenty nutrient estimates are calculated from vitamin and mineral supplements. Five nutrients are always estimated. These are:

Vitamin A
Beta-Carotene
Vitamin C
Vitamin E
Calcium

The other 15 supplemental estimates can be chosen by the investigator and specified in the INI file. Eight user-defined nutrients were defined by NCI investigators during the development of DietAARP and are estimated by default. These are:

Vitamin D
Iron
Zinc
Thiamin
Vitamin B6
Vitamin B12
Folate
Copper

Each of the supplemental nutrient estimates is calculated by adding the daily amount of the nutrient obtained from single-nutrient pills plus the daily amount of nutrient from multiple vitamin pills.

Frequencies are asked for five single-nutrient pills. These are:

Vitamin A
Beta-Carotene
Vitamin C
Vitamin E
Calcium

Frequencies are asked for three multiple vitamins. These are:

Stress-Tabs Type
Theragran Type
One-A-Day Type

The same formula is used for each of the supplemental nutrient estimates. As an example, the equation for Vitamin A is given below. This same equation is then applied to each of the other nineteen. Note that the daily frequency and amount of nutrient obtained from single-nutrient pills will automatically be zero for the fifteen supplements which are not asked as single-nutrient pills. The nutrient estimates from supplements for these fifteen will come exclusively from multiple vitamins.

1

(Daily Frequency of Vitamin A Pills x Amount of Vitamin A Per Pill) +
(Daily Frequency for One - A - Day x Amount of Vitamin A in a One - A - Day) +
(Daily Frequency for Theragran x Amount of Vitamin A in a Theragran) +
(Daily Frequency for Stress - Tabs x Amount of Vitamin A in a Stress - Tab)

Daily Frequency. Each frequency code is assigned a daily frequency as shown below.

Input Code	Questionnaire Text	Daily Frequency
0	Never	0
1	Less than 1 time per week	1 per week
2	1-3 times per week	2 per week
3	4-6 times per week	5 per week
4	Every day	1 per day
M or E	Missing or Error Code	0

Amount of Nutrient Per Pill. The amount of nutrient per pill may be set by the investigator in the INI file. The tables below show the default values which are set in the DietAARP.INI file supplied with the software. These values are also used by the DietAARP program if valid settings are not included in the INI file. The tables show the amount of each nutrient estimated for supplements per single vitamin pills and per multivitamin pills. The respondent reports the pill size for single vitamins in question 30.

Defaults: Amount Per Pill For The Single Vitamins Response to "Total Amount You Usually Took in One Day"					
Single Vitamin	**Code = 0**	**Code = 1**	**Code = 2**	**Code = 3**	**Code = 4, M, E**
Vitamin A (IU)	Less than 8,000 **Value: 5,000**	8,000 to 12,000 **Value: 10,000**	13,000 to 22,000 **Value: 20,000**	23,000 or more **Value: 25,000**	Don't Know, M, E **Value: 10,000**
Beta-Carotene (IU)	Less than 8,000 **Value: 5,000**	8,000 to 12,000 **Value: 10,000**	13,000 to 22,000 **Value: 15,000**	23,000 or more **Value: 25,000**	Don't Know, M, E **Value: 10,000**
Vitamin C (mg)	Less than 400 **Value: 250**	400 to 699 **Value: 500**	700 to 1250 **Value: 1000**	1300 or more **Value: 1,500**	Don't Know, M, E **Value: 500**
Vitamin E (IU)	Less than 100 **Value: 50**	100 to 250 **Value: 200**	300 to 500 **Value: 400**	600 or more **Value: 800**	Don't Know, M, E **Value: 400**
Calcium/Tums (mg)	Less than 400 **Value: 250**	400 to 900 **Value: 500**	901 to 1300 **Value: 1,000**	1301 or more **Value: 1,500**	Don't Know, M, E **Value: 500**

Defaults: Amount of Each Nutrient Per Multivitamin			
Default Nutrients	**Stress-tabs Type**	**Therapeutic/Theragran Type**	**One-A-Day Type**
Vitamin A	0.0 IU	5000.0 IU	5000.0 IU
Beta-carotene	0.0 mcg	2000.0 mcg	1200.0 mcg
Vitamin C	500.0 mg	90.0 mg	60.0 mg
Vitamin E	20.1 a-TE	20.1 a-TE	20.1 a-TE
Calcium	0.0 mg	40.0 mg	130.0 mg
Vitamin D	0.0 IU	400.0 IU	400.0 IU
Iron	0.0 mg	27.0 mg	18.0 mg
Zinc	0.0 mg	15.0 mg	15.0 mg
Thiamin	10.0 mg	3.0 mg	1.5 mg
Vitamin B6	5.0 mg	3.0 mg	2.0 mg
Vitamin B12	12.0 mcg	9.0 mcg	6.0 mcg
Folate	400.0 mcg	400.0 mcg	400.0 mcg

Copper	0.0 mg	2.0 mg	2.0 mg

Questions 31 through 33: Activity Level

These questions are not used in the DietAARP analysis.

Question 34: Marital Status

This question is not used in the DietAARP analysis.

Question 35: Sex

What is your sex?

Coding

0 = Male
1 = Female
M = Missing
E = Error

Analysis Algorithm

The value of this field is used by DietAARP to select the sex-specific data from the Nutrient File. DietAARP uses the INI file settings for "EXCL8 - Missing Gender" and "Sex-Default" to determine how to handle records with a code of missing or error question 35.

EXCL8 = EXCLUDE MISSINGS

If EXCL8 is set to EXCLUDE MISSINGS, all records with a code of missing or error for question 35 are excluded from the analysis. There is no attempt to determine sex using other data fields.

EXCL8 = USE DEFAULT or NO DEFAULT

If "male" or "female" is coded for question 35, DietAARP uses that sex and does not check any other field. DietAARP will not identify or resolve conflicts in the data regarding sex. If question 35 is coded as missing or error, DietAARP will attempt to determine sex from responses to the questions on page 16. If "male" or "female" is imputed based on the responses to page 16, DietAARP uses that sex and does not check other fields. If it is not possible to determine sex from page 16, then the code for sex in column 522 is used, if possible. If column 522 is missing and EXCL8 is set to NO DEFAULT, the record is excluded from the analysis. If column 522 is missing and EXCL8 is set to USE DEFAULT, the sex set for "Sex Default" is used. "Sex Default" equals male when the "Sex Default" line is omitted from the INI file.

The number of records not processed because of unknown sex is printed in the summary report.

Determination of Sex from Page 16 of the Baseline Questionnaire

Sex cannot be determined from page 16 if all questions 39-56 are all skipped, that is, coded as missing. Otherwise, sex is determined as shown below.

The respondent is considered to be male if either 1 or 2 below is true.

1. If questions 46-53 are skipped but there is at least one answer in the other questions on page 16 (39-45 or 54-56).
2. The only non-missing responses in questions 46-53 are never or none for 47-49, 52-53. "Never" or "none" for these answers could be logically given by a male who did not see the instructions to skip questions 46-56.

The respondent is considered to be female if either 1 or 2 below is true.

1. If a non-missing response is given to questions 46, 50, or 51.
2. If a response other than missing, none, or never is given to questions 47-49, 52-53.

NOTE: Questions 54-56 are ignored completely since males could have a breast biopsy (54), and males can take replacement hormones (eg, testosterone for autoimmune diseases).

Questions 36 through 38: Demographics

Questions 36 (race), 37 (education), and 38 (SSN) are not used in the DietAARP analysis.

Question 39: General Health

Would you say your health in general is:

Coding

0 = Excellent
1 = Very good
2 = Good
3 = Fair
4 = Poor
M = Missing
E = Error

Analysis Algorithm

The EXCL1 option controls the analysis of this question. If EXCL1 is set to ON then records coded as "poor health" are not processed by DietAARP. If EXCL1 is OFF then question 39 is ignored by DietAARP and is not used as one of the exclusion tests. The number of records not processed because of poor health is printed in the summary report.

Question 40: History of Disease

Have you ever been told by a doctor that you had any of the following conditions?

Coding

10 characters are coded for question 40. One character is coded for each condition listed, in the order shown below. For each condition, '0' indicates that the condition was not marked and '1' indicates that the condition was marked by the respondent. The conditions listed are:

Gallbladder stone or disease
Diabetes
Heart disease
Emphysema
Osteoporosis
Bone fracture after age 45
Polyps of colon or rectum
End-stage renal disease
Stroke
No

Analysis Algorithm

The EXCL2 option controls the analysis of this question. If EXCL2 is set to ON then records with a code of '1' (marked) for end-stage renal disease are not processed by DietAARP. If EXCL2 is OFF then question 40 is ignored by DietAARP and is not used as one of the exclusion tests. The number of records excluded based on this response is printed in the summary report.

Question 41: History of Cancer

Have you or any blood relatives in your immediate family (that includes your parents, full or half-brothers or sisters, and children) ever been diagnosed as having any type of cancer, except for basal-cell skin cancer? If yes, please specify the types of cancer in the table below.

Coding

The first character for question 41 is a code for yes or no to the opening question. This is followed by 22 characters to code the cancers listed in question 41. Four characters are used to code the 4 cancers which the respondent might currently have or have had in the past. Three characters are used to code the 3 cancers (some of which are sex-specific) which the family members may have or have had in the past. The cancers listed are prostate cancer, breast cancer, colon cancer, and other cancer(s).

Analysis Algorithm

The EXCL3, EXCL4, and EXCL5 options control the analysis of the responses to Prostate, Breast, and Colon cancers, respectively. When these options are OFF, the code for the corresponding cancer is ignored by DietAARP. If the appropriate option is ON then respondents who report having been diagnosed with the specific cancer are excluded from the analysis. The "other cancer(s)" field for the respondent and all cancers among family members are always ignored. The number of records excluded based on each of the cancers is printed in the summary report.

Appendix D: Questionnaire Codebook

Codebook

The DietAARP program requires that the data files containing the coded responses to the NIH and AARP Baseline Questionnaire are coded *exactly* as shown on the following pages. This codebook was provided to NCS in 1995 when the scanner used in the AARP project was configured.

This codebook describes the coding of every individual oval on the questionnaire. Typically, each oval is coded in a one character field. However, some ovals are coded with multiple characters. For example, the respondent fills in one oval for the month segment of each date field but the scanner writes two digits to the Questionnaire Data File. DietAARP variables and READRES.SAS variables will often consist of more than one character from the Questionnaire Data File. For example, weight is broken into three parts in the codebook but should be used as one field consisting of 3 digits.

Coding Manual for the NIH & AARP Diet and Health Study - Baseline Questionnaire				
Location on Questionnaire	**File Location**	**Field**	**Coding Scheme - Baseline**	**Coding Scheme - Short Questionnaire**
Scanner Header	1-8	Respondent ID	To be specified by Westat	Same as Baseline
Scanner Header	9-16	Bar Code (Booklet Number)		
Scanner Header	17-21	Batch Number		
Scanner Header	22-23	Stack Number		
Scanner Header	24-28	Sequence Number (Within Batch)		
Scanner Header	29-34	Date of Scanning		
Scanner Header	35-40	Unspecified		
Box A	41	If the person whose name appears to left is deceased, please mark this circle.	0 = Not Marked 1 = Marked	**FIXED: 0 (zero)**
Box B	42	Are you the person whose name appears to left?	0 = Yes 1 = No M = Missing E = Error	**FIXED: M**
Question 1	43-44	Today's Date: Month	01 = Jan 02 = Feb 03 = Mar 04 = Apr 05 = May 06 = Jun 07 = Jul 08 = Aug 09 = Sep 10 = Oct 11 = Nov 12 = Dec MM = Missing EE = Error	Same as Baseline
Question 1	45	Today's Date: Day (1st Digit)	0 - 3 M = Missing E = Error	0 - 3 M = Missing E = Error
Question 1	46	Today's Date: Day (2nd Digit)	0 - 9 M = Missing E = Error	0 - 9 M = Missing E = Error

Question 1	47-48	Today's Date: Year	95 96 97 MM = Missing EE = Error	95 96 97 MM = Missing EE = Error
Question 2	49-50	Date of Birth: Month	01 = Jan 02 = Feb 03 = Mar 04 = Apr 05 = May 06 = Jun 07 = Jul 08 = Aug 09 = Sep 10 = Oct 11 = Nov 12 = Dec MM = Missing EE = Error	**FIXED: MM**
Question 2	51	Date of Birth: Day (1st Digit)	0 - 3 M = Missing E = Error	**FIXED: M**
Question 2	52	Date of Birth: Day (2nd Digit)	0 - 9 M = Missing E = Error	**FIXED: M**
Question 2	53	Date of Birth: Year (1st Digit)	0 - 9 M = Missing E = Error	**FIXED: M**
Question 2	54	Date of Birth: Year (2nd Digit)	0 - 9 M = Missing E = Error	**FIXED: M**
Question 3	55	Your Current Height: Feet	4-7 M = Missing E = Error	**FIXED: M**
Question 3	56-57	Your Current Height: Inches	00 - 11 MM = Missing EE = Error	**FIXED: MM**
Question 4	58	Your Current Weight (1st Digit)	0 - 9 M = Missing E = Error	**FIXED: M**

Question 4	59	Your Current Weight (2nd Digit)	0 - 9 M = Missing E = Error	**FIXED: M**
Question 4	60	Your Current Weight (3rd Digit)	0 - 9 M = Missing E = Error	**FIXED: M**
Page 2	61	Frequency: Tomato juice or vegetable juice	0 = Never 1 = 1 time per month or less 2 = 2-3 times per month 3 = 1-2 times per week 4 = 3-4 times per week 5 = 5-6 times per week 6 = 1 time per day 7 = 2-3 times per day 8 = 4-5 times per day 9 = 6+ times per day M = Missing E = Error	Same as Baseline
Page 2	62	Portion Size: Tomato juice or vegetable juice	0 = Top Portion Size Listed 1 = Middle Portion Size Listed 2 = Bottom Portion Size M = Missing E = Error	Same as Baseline
Page 2	63	Frequency: Orange juice or grapefruit juice	Same as Column 61	Same as Column 61
Page 2	64	Portion Size: Orange juice or grapefruit juice	Same as Column 62	Same as Column 62
Page 2	65	Frequency: Other fruit juice	Same as Column 61	Same as Column 61
Page 2	66	Portion Size: Other fruit juice	Same as Column 62	Same as Column 62
Page 2	67	Frequency: Drinks, such as Hi-C, lemonade	Same as Column 61	Same as Column 61
Page 2	68	Portion Size: Drinks, such as Hi-C, lemonade	Same as Column 62	Same as Column 62
Page 2	69	Frequency: Soft drinks, soda, pop (diet or regular)	Same as Column 61	Same as Column 61
Page 2	70	Portion Size: Soft drinks, soda, pop (diet or regular)	Same as Column 62	Same as Column 62
Page 2	71	Frequency: Whole milk, as a drink	Same as Column 61	Same as Column 61
Page 2	72	Portion Size: Whole milk, as a drink	Same as Column 62	Same as Column 62

Page 2	73	Frequency: 1% or 2% fat milk as a drink	Same as Column 61	Same as Column 61
Page 2	74	Portion Size: 1% or 2% fat milk as a drink	Same as Column 62	Same as Column 62
Page 3	75	Frequency: Skim, non-fat, or 1/2% milk as drink	Same as Column 61	Same as Column 61
Page 3	76	Portion Size: Skim, non-fat, or 1/2% milk as drink	Same as Column 62	Same as Column 62
Page 3	77	Frequency: Beer (summer)	Same as Column 61	Same as Column 61
Page 3	78	Portion Size: Beer (summer)	Same as Column 62	Same as Column 62
Page 3	79	Frequency: Beer (rest of year)	Same as Column 61	Same as Column 61
Page 3	80	Portion Size: Beer (rest of year)	Same as Column 62	Same as Column 62
Page 3	81	Frequency: Wine or wine coolers	Same as Column 61	Same as Column 61
Page 3	82	Portion Size: Wine or wine coolers	Same as Column 62	Same as Column 62
Page 3	83	Frequency: Liquor or mixed drinks	Same as Column 61	Same as Column 61
Page 3	84	Portion Size: Liquor or mixed drinks	Same as Column 62	Same as Column 62
Page 3	85	Frequency: Cottage cheese	0 = Never 1 = 1-6 times per year 2 = 7-11 times per year 3 = 1 time per month 4 = 2-3 times per month 5 = 1-2 times per week 6 = 3-4 times per week 7 = 5-6 times per week 8 = 1 time per day 9 = 2+ times per day M = Missing E = Error	Same as Baseline
Page 3	86	Portion Size: Cottage cheese	Same as Column 62	Same as Column 62
Page 3	87	Frequency: Yogurt	Same as Column 85	Same as Column 85
Page 3	88	Portion Size: Yogurt	Same as Column 62	Same as Column 62
Page 3	89	Frequency: Pancakes	Same as Column 85	Same as Column 85
Page 3	90	Portion Size: Pancakes	Same as Column 62	Same as Column 62
Page 3	91	Frequency: Oatmeal (in winter)	Same as Column 85	Same as Column 85
Page 3	92	Portion Size: Oatmeal (in winter)	Same as Column 62	Same as Column 62
Page 3	93	Frequency: Oatmeal (rest of year)	Same as Column 85	Same as Column 85
Page 3	94	Portion Size: Oatmeal (rest of year)	Same as Column 62	Same as Column 62
Page 4	95	Frequency: Cold cereal	Same as Column 85	Same as Column 85
Page 4	96	Portion Size: Cold cereal	Same as Column 62	Same as Column 62

Page 4	97	Ratio: Total or Product 19	0 = Almost Never or Never 1 = About 1/4 of the time 2 = About 1/2 of the time 3 = About 3/4 of the time 4 = Almost always or always M = Missing E = Error	Same as Baseline
Page 4	98	Ratio: High-Fiber cereals	Same as Column 97	Same as Column 97
Page 4	99	Ratio: Other fiber cereals	Same as Column 97	Same as Column 97
Page 4	100	Ratio: Any other cold cereal	Same as Column 97	Same as Column 97
Page 4	101	Ratio: Whole milk (4%)	Same as Column 97	Same as Column 97
Page 4	102	Portion Size: Whole milk	0 = Less than 1/4 cup 1 = 1/4 to 1 cup 2 = More than 1 cup M = Missing E = Error	Same as Baseline
Page 4	103	Ratio: 1% or 2% fat milk	Same as Column 97	Same as Column 97
Page 4	104	Portion Size: 1% or 2% fat milk	Same as Column 102	Same as Column 102
Page 4	105	Ratio: Skim, nonfat, or 1/2% milk	Same as Column 97	Same as Column 97
Page 4	106	Portion Size: Skim, nonfat, or 1/2% milk	Same as Column 102	Same as Column 102
Page 4	107	Frequency: Applesauce	Same as Column 85	Same as Column 85
Page 4	108	Portion Size: Applesauce	Same as Column 62	Same as Column 62
Page 4	109	Frequency: Apples	Same as Column 85	Same as Column 85
Page 4	110	Portion Size: Apples	Same as Column 62	Same as Column 62
Page 4	111	Frequency: Pears (fresh, canned, frozen)	Same as Column 85	Same as Column 85
Page 4	112	Portion Size: Pears (fresh, canned, frozen)	Same as Column 62	Same as Column 62
Page 4	113	Frequency: Bananas	Same as Column 85	Same as Column 85
Page 4	114	Portion Size: Bananas	Same as Column 62	Same as Column 62
Page 5	115	Frequency: Dried fruit	Same as Column 85	Same as Column 85
Page 5	116	Portion Size: Dried fruit	Same as Column 62	Same as Column 62
Page 5	117	Frequency: Peaches, nectarines, plums	Same as Column 85	Same as Column 85
Page 5	118	Portion Size: Peaches, nectarines, plums	Same as Column 62	Same as Column 62
Page 5	119	Frequency: Cantaloupe (in season)	Same as Column 85	Same as Column 85
Page 5	120	Portion Size: Cantaloupe (in season)	Same as Column 62	Same as Column 62
Page 5	121	Frequency: Other melon (in season)	Same as Column 85	Same as Column 85
Page 5	122	Portion Size: Other melon (in season)	Same as Column 62	Same as Column 62

Page 5	123	Frequency: Strawberries (in season)	Same as Column 85	Same as Column 85
Page 5	124	Portion Size: Strawberries (in season)	Same as Column 62	Same as Column 62
Page 5	125	Frequency: Oranges, tangerines, tangelos	Same as Column 85	Same as Column 85
Page 5	126	Portion Size: Oranges, tangerines, tangelos	Same as Column 62	Same as Column 62
Page 5	127	Frequency: Grapefruit	Same as Column 85	Same as Column 85
Page 5	128	Portion Size: Grapefruit	Same as Column 62	Same as Column 62
Page 5	129	Frequency: Grapes	Same as Column 85	Same as Column 85
Page 5	130	Portion Size: Grapes	Same as Column 62	Same as Column 62
Page 5	131	Frequency: Cooked greens	Same as Column 85	Same as Column 85
Page 5	132	Portion Size: Cooked greens	Same as Column 62	Same as Column 62
Page 5	133	Frequency: Raw greens	Same as Column 85	Same as Column 85
Page 5	134	Portion Size: Raw greens	Same as Column 62	Same as Column 62
Page 5	135	Frequency: Cole slaw	Same as Column 85	Same as Column 85
Page 5	136	Portion Size: Cole slaw	Same as Column 62	Same as Column 62
Page 5	137	Frequency: Carrots	Same as Column 85	Same as Column 85
Page 5	138	Portion Size: Carrots	Same as Column 62	Same as Column 62
Page 5	139	Frequency: String beans	Same as Column 85	Same as Column 85
Page 5	140	Portion Size: String beans	Same as Column 62	Same as Column 62
Page 6	141	Frequency: Peas	Same as Column 85	Same as Column 85
Page 6	142	Portion Size: Peas	Same as Column 62	Same as Column 62
Page 6	143	Frequency: Fresh corn (in season)	Same as Column 85	Same as Column 85
Page 6	144	Portion Size: Fresh corn (in season)	Same as Column 62	Same as Column 62
Page 6	145	Frequency: Corn (rest of the year)	Same as Column 85	Same as Column 85
Page 6	146	Portion Size: Corn (rest of the year)	Same as Column 62	Same as Column 62
Page 6	147	Frequency: Broccoli (fresh or frozen)	Same as Column 85	Same as Column 85
Page 6	148	Portion Size: Broccoli (fresh or frozen)	Same as Column 62	Same as Column 62
Page 6	149	Frequency: Cauliflower or Brussels sprouts	Same as Column 85	Same as Column 85
Page 6	150	Portion Size: Cauliflower or Brussels sprouts	Same as Column 62	Same as Column 62
Page 6	151	Frequency: Mixed vegetables	Same as Column 85	Same as Column 85
Page 6	152	Portion Size: Mixed vegetables	Same as Column 62	Same as Column 62
Page 6	153	Frequency: Tomatoes (in season)	Same as Column 85	Same as Column 85
Page 6	154	Portion Size: Tomatoes (in season)	Same as Column 62	Same as Column 62
Page 6	155	Frequency: Tomatoes (rest of the year)	Same as Column 85	Same as Column 85
Page 6	156	Portion Size: Tomatoes (rest of the year)	Same as Column 62	Same as Column 62

Page 6	157	Frequency: Sweet peppers	Same as Column 85	Same as Column 85
Page 6	158	Portion Size: Sweet peppers	Same as Column 62	Same as Column 62
Page 6	159	Frequency: Lettuce salads	Same as Column 85	Same as Column 85
Page 6	160	Portion Size: Lettuce salads	Same as Column 62	Same as Column 62
Page 6	161	Frequency: Salad dressing for salads/veggies	Same as Column 85	Same as Column 85
Page 6	162	Portion Size: Salad dressing for salads/veggies	Same as Column 62	Same as Column 62
Page 6	163	Frequency: Sweet potatoes or yams	Same as Column 85	Same as Column 85
Page 6	164	Portion Size: Sweet potatoes or yams	Same as Column 62	Same as Column 62
Page 6	165	Frequency: French fries	Same as Column 85	Same as Column 85
Page 6	166	Portion Size: French fries	Same as Column 62	Same as Column 62
Page 7	167	Frequency: Potato Salad	Same as Column 85	Same as Column 85
Page 7	168	Portion Size: Potato Salad	Same as Column 62	Same as Column 62
Page 7	169	Frequency: Baked, boiled, mashed potatoes	Same as Column 85	Same as Column 85
Page 7	170	Portion Size: Baked, boiled, mashed potatoes	Same as Column 62	Same as Column 62
Page 7	171	Frequency: Salsa	Same as Column 85	Same as Column 85
Page 7	172	Portion Size: Salsa	Same as Column 62	Same as Column 62
Page 7	173	Frequency: Chili	Same as Column 85	Same as Column 85
Page 7	174	Portion Size: Chili	Same as Column 62	Same as Column 62
Page 7	175	Frequency: Beans (baked, refried, etc)	Same as Column 85	Same as Column 85
Page 7	176	Portion Size: Beans (baked, refried, etc)	Same as Column 62	Same as Column 62
Page 7	177	Frequency: Rice	Same as Column 85	Same as Column 85
Page 7	178	Portion Size: Rice	Same as Column 62	Same as Column 62
Page 7	179	Frequency: Lasagna	Same as Column 85	Same as Column 85
Page 7	180	Portion Size: Lasagna	Same as Column 62	Same as Column 62
Page 7	181	Frequency: Macaroni and cheese	Same as Column 85	Same as Column 85
Page 7	182	Portion Size: Macaroni and cheese	Same as Column 62	Same as Column 62
Page 7	183	Frequency: Pasta, spaghetti, or other noodles	Same as Column 85	Same as Column 85
Page 7	184	Portion Size: Pasta, spaghetti, or other noodles	Same as Column 62	Same as Column 62
Page 7	185	Frequency: Tomato sauce WITH meat	Same as Column 85	Same as Column 85
Page 7	186	Portion Size: Tomato sauce WITH meat	Same as Column 62	Same as Column 62

Page 7	187	Frequency: Tomato sauce WITHOUT meat	Same as Column 85	Same as Column 85
Page 7	188	Portion Size: Tomato sauce WITHOUT meat	Same as Column 62	Same as Column 62
Page 7	189	Frequency: Bagels	Same as Column 85	Same as Column 85
Page 7	190	Portion Size: Bagels	Same as Column 62	Same as Column 62
Page 7	191	Frequency: Breads (for sandwiches)	Same as Column 85	Same as Column 85
Page 7	192	Portion Size: Breads (for sandwiches)	Same as Column 62	Same as Column 62
Page 8	193	Frequency: Breads (NOT on sandwiches)	Same as Column 85	Same as Column 85
Page 8	194	Portion Size: Breads (NOT on sandwiches)	Same as Column 62	Same as Column 62
Page 8	195	Frequency: Cream cheese	Same as Column 85	Same as Column 85
Page 8	196	Portion Size: Cream cheese	Same as Column 62	Same as Column 62
Page 8	197	Frequency: Butter or margarine on bread	Same as Column 85	Same as Column 85
Page 8	198	Portion Size: Butter or margarine on bread	Same as Column 62	Same as Column 62
Page 8	199	Frequency: Mayonnaise on bread	Same as Column 85	Same as Column 85
Page 8	200	Portion Size: Mayonnaise on bread	Same as Column 62	Same as Column 62
Page 8	201	Frequency: Mayonnaise in salad	Same as Column 85	Same as Column 85
Page 8	202	Portion Size: Mayonnaise in salad	Same as Column 62	Same as Column 62
Page 8	203	Frequency: Turkey or chicken cold cuts	Same as Column 85	Same as Column 85
Page 8	204	Portion Size: Turkey or chicken cold cuts	Same as Column 62	Same as Column 62
Page 8	205	Frequency: Cold cuts (ham, bologna, etc)	Same as Column 85	Same as Column 85
Page 8	206	Portion Size: Cold cuts (ham, bologna, etc)	Same as Column 62	Same as Column 62
Page 8	207	Frequency: Tuna	Same as Column 85	Same as Column 85
Page 8	208	Portion Size: Tuna	Same as Column 62	Same as Column 62
Page 8	209	Frequency: Hot dogs	Same as Column 85	Same as Column 85
Page 8	210	Portion Size: Hot dogs	Same as Column 62	Same as Column 62
Page 8	211	Frequency: Ground chicken or turkey	Same as Column 85	Same as Column 85
Page 8	212	Portion Size: Ground chicken or turkey	Same as Column 62	Same as Column 62
Page 8	213	Frequency: Beef hamburgers	Same as Column 85	Same as Column 85
Page 8	214	Portion Size: Beef hamburgers	Same as Column 62	Same as Column 62
Page 8	215	Frequency: Ground beef	Same as Column 85	Same as Column 85

Page 8	216	Portion Size: Ground beef	Same as Column 62	Same as Column 62
Page 8	217	Frequency: Beef stew	Same as Column 85	Same as Column 85
Page 8	218	Portion Size: Beef stew	Same as Column 62	Same as Column 62
Page 9	219	Frequency: Roast beef (sandwiches)	Same as Column 85	Same as Column 85
Page 9	220	Portion Size: Roast beef (sandwiches)	Same as Column 62	Same as Column 62
Page 9	221	Frequency: Roast beef (not in sandwiches)	Same as Column 85	Same as Column 85
Page 9	222	Portion Size: Roast beef (not in sandwiches)	Same as Column 62	Same as Column 62
Page 9	223	Frequency: Steak (beef)	Same as Column 85	Same as Column 85
Page 9	224	Portion Size: Steak (beef)	Same as Column 62	Same as Column 62
Page 9	225	Frequency: Roast turkey	Same as Column 85	Same as Column 85
Page 9	226	Portion Size: Roast turkey	Same as Column 62	Same as Column 62
Page 9	227	Frequency: Fried chicken	Same as Column 85	Same as Column 85
Page 9	228	Portion Size: Fried chicken	Same as Column 62	Same as Column 62
Page 9	229	Frequency: Baked, broiled chicken	Same as Column 85	Same as Column 85
Page 9	230	Portion Size: Baked, broiled chicken	Same as Column 62	Same as Column 62
Page 9	231	Frequency: Chicken - salads, etc	Same as Column 85	Same as Column 85
Page 9	232	Portion Size: Chicken - salads, etc	Same as Column 62	Same as Column 62
Page 9	233	Frequency: Roast ham or ham steak	Same as Column 85	Same as Column 85
Page 9	234	Portion Size: Roast ham or ham steak	Same as Column 62	Same as Column 62
Page 9	235	Frequency: Pork	Same as Column 85	Same as Column 85
Page 9	236	Portion Size: Pork	Same as Column 62	Same as Column 62
Page 9	237	Frequency: Meat gravy	Same as Column 85	Same as Column 85
Page 9	238	Portion Size: Meat gravy	Same as Column 62	Same as Column 62
Page 9	239	Frequency: Liver	Same as Column 85	Same as Column 85
Page 9	240	Portion Size: Liver	Same as Column 62	Same as Column 62
Page 9	241	Frequency: Bacon	Same as Column 85	Same as Column 85
Page 9	242	Portion Size: Bacon	Same as Column 62	Same as Column 62
Page 9	243	Frequency: Sausage	Same as Column 85	Same as Column 85
Page 9	244	Portion Size: Sausage	Same as Column 62	Same as Column 62
Page 10	245	Frequency: Fried fish	Same as Column 85	Same as Column 85
Page 10	246	Portion Size: Fried fish	Same as Column 62	Same as Column 62
Page 10	247	Frequency: Other fish	Same as Column 85	Same as Column 85
Page 10	248	Portion Size: Other fish	Same as Column 62	Same as Column 62
Page 10	249	Frequency: Bean-based soups	Same as Column 85	Same as Column 85
Page 10	250	Portion Size: Bean-based soups	Same as Column 62	Same as Column 62
Page 10	251	Frequency: Cream soups	Same as Column 85	Same as Column 85
Page 10	252	Portion Size: Cream soups	Same as Column 62	Same as Column 62

Page 10	253	Frequency: Tomato or veg soups	Same as Column 85	Same as Column 85
Page 10	254	Portion Size: Tomato or veg soups	Same as Column 62	Same as Column 62
Page 10	255	Frequency: Pizza	Same as Column 85	Same as Column 85
Page 10	256	Portion Size: Pizza	Same as Column 62	Same as Column 62
Page 10	257	Frequency: Crackers	Same as Column 85	Same as Column 85
Page 10	258	Portion Size: Crackers	Same as Column 62	Same as Column 62
Page 10	259	Frequency: Cornbread	Same as Column 85	Same as Column 85
Page 10	260	Portion Size: Cornbread	Same as Column 62	Same as Column 62
Page 10	261	Frequency: Biscuits	Same as Column 85	Same as Column 85
Page 10	262	Portion Size: Biscuits	Same as Column 62	Same as Column 62
Page 10	263	Frequency: Flour or corn tortillas	Same as Column 85	Same as Column 85
Page 10	264	Portion Size: Flour or corn tortillas	Same as Column 62	Same as Column 62
Page 10	265	Frequency: Potato chips	Same as Column 85	Same as Column 85
Page 10	266	Portion Size: Potato chips	Same as Column 62	Same as Column 62
Page 10	267	Frequency: Popcorn	Same as Column 85	Same as Column 85
Page 10	268	Portion Size: Popcorn	Same as Column 62	Same as Column 62
Page 10	269	Frequency: Peanut butter	Same as Column 85	Same as Column 85
Page 10	270	Portion Size: Peanut butter	Same as Column 62	Same as Column 62
Page 11	271	Frequency: Peanuts, walnuts	Same as Column 85	Same as Column 85
Page 11	272	Portion Size: Peanuts, walnuts	Same as Column 62	Same as Column 62
Page 11	273	Frequency: Sour cream	Same as Column 85	Same as Column 85
Page 11	274	Portion Size: Sour cream	Same as Column 62	Same as Column 62
Page 11	275	Frequency: Cheese	Same as Column 85	Same as Column 85
Page 11	276	Portion Size: Cheese	Same as Column 62	Same as Column 62
Page 11	277	Frequency: Frozen yogurt	Same as Column 85	Same as Column 85
Page 11	278	Portion Size: Frozen yogurt	Same as Column 62	Same as Column 62
Page 11	279	Frequency: Regular ice cream	Same as Column 85	Same as Column 85
Page 11	280	Portion Size: Regular ice cream	Same as Column 62	Same as Column 62
Page 11	281	Frequency: Cake	Same as Column 85	Same as Column 85
Page 11	282	Portion Size: Cake	Same as Column 62	Same as Column 62
Page 11	283	Frequency: Cookies/brownies	Same as Column 85	Same as Column 85
Page 11	284	Portion Size: Cookies/brownies	Same as Column 62	Same as Column 62
Page 11	285	Frequency: Doughnuts	Same as Column 85	Same as Column 85
Page 11	286	Portion Size: Doughnuts	Same as Column 62	Same as Column 62
Page 11	287	Frequency: Fruit pie	Same as Column 85	Same as Column 85
Page 11	288	Portion Size: Fruit pie	Same as Column 62	Same as Column 62
Page 11	289	Frequency: Cream, custard, or meringue pie	Same as Column 85	Same as Column 85

Page 11	290	Portion Size: Cream, custard, or meringue pie	Same as Column 62	Same as Column 62
Page 11	291	Frequency: Pumpkin or sweet potato pie	Same as Column 85	Same as Column 85
Page 11	292	Portion Size: Pumpkin or sweet potato pie	Same as Column 62	Same as Column 62
Page 11	293	Frequency: Chocolate candy	Same as Column 85	Same as Column 85
Page 11	294	Portion Size: Chocolate candy	Same as Column 62	Same as Column 62
Page 11	295	Frequency: Other candy	Same as Column 85	Same as Column 85
Page 11	296	Portion Size: Other candy	Same as Column 62	Same as Column 62
Page 12	297	How many eggs?	0 = None 1 = 1-6 Eggs per Year 2 = 7-11 Eggs per Year 3 = 1 Egg per Month 4 = 2-3 Eggs per Month 5 = 1-2 Eggs per Week 6 = 3-4 Eggs per Week 7 = 5-6 Eggs per Week 8 = 1 Egg per Day 9 = 2+ Eggs per Day M = Missing E = Error	Same as Baseline
Page 12	298	How many cups of coffee?	0 = None 1 = Less than 1 cup per Month 2 = 1-3 cups per Month 3 = 1-2 cups per Week 4 = 3-4 cups per Week 5 = 5-6 cups per Week 6 = 1 cup per Day 7 = 2-3 cups per Day 8 = 4-5 cups per Day 9 = 6+ cups per Day M = Missing E = Error	Same as Baseline
Page 12	299	How many cups of HOT tea?	Same as Column 298	Same as Column 298
Page 12	300	How many cups of ICED tea?	Same as Column 298	Same as Column 298
Question 6	301	Soft drinks: Didn't Drink this Beverage	0 = Not Marked 1 = Marked	Same as Baseline
Question 6	302	Soft drinks: Sugar-Free	0 = Not Marked 1 = Marked	Same as Baseline

Question 6	303	Soft drinks: Regular	0 = Not Marked 1 = Marked	Same as Baseline
Question 6	304	Hi-C, lemonade, Kool-aid: Didn't Drink this Beverage	0 = Not Marked 1 = Marked	Same as Baseline
Question 6	305	Hi-C, lemonade, Kool-aid: Sugar-Free	0 = Not Marked 1 = Marked	Same as Baseline
Question 6	306	Hi-C, lemonade, Kool-aid: Regular	0 = Not Marked 1 = Marked	Same as Baseline
Question 6	307	Sweetened iced tea: Didn't Drink this Beverage	0 = Not Marked 1 = Marked	Same as Baseline
Question 6	308	Sweetened iced tea: Sugar-Free	0 = Not Marked 1 = Marked	Same as Baseline
Question 6	309	Sweetened iced tea: Regular	0 = Not Marked 1 = Marked	Same as Baseline
Question 7	310	Soft drinks: Didn't drink this beverage	0 = Not Marked 1 = Marked	Same as Baseline
Question 7	311	Soft drinks: Caffeine-free	0 = Not Marked 1 = Marked	Same as Baseline
Question 7	312	Soft drinks: Caffeine-containing	0 = Not Marked 1 = Marked	Same as Baseline
Question 7	313	Coffee: Didn't drink this beverage	0 = Not Marked 1 = Marked	Same as Baseline
Question 7	314	Coffee: Caffeine-free	0 = Not Marked 1 = Marked	Same as Baseline
Question 7	315	Coffee: Caffeine-containing	0 = Not Marked 1 = Marked	Same as Baseline
Question 7	316	Hot tea: Didn't drink this beverage	0 = Not Marked 1 = Marked	Same as Baseline
Question 7	317	Hot tea: Caffeine-free	0 = Not Marked 1 = Marked	Same as Baseline
Question 7	318	Hot tea: Caffeine-containing	0 = Not Marked 1 = Marked	Same as Baseline
Question 7	319	Iced tea: Didn't drink this beverage	0 = Not Marked 1 = Marked	Same as Baseline
Question 7	320	Iced tea: Caffeine-free	0 = Not Marked 1 = Marked	Same as Baseline
Question 7	321	Iced tea: Caffeine-containing	0 = Not Marked 1 = Marked	Same as Baseline

Question 8	322	Per week or day: Number of servings of vegetables	0 = Less than one per week 1 = 1-2 per week 2 = 3-4 per week 3 = 5-6 per week 4 = 1 per day 5 = 1.5 per day 6 = 2 per day 7 = 3 per day 8 = 4+ per day M = Missing E = Error	Same as Baseline
Question 8	323	Per week or day: Number of servings of fruit	Same as Column 322	Same as Column 322
Question 9	324	Sour Cream: Didn't eat this food	0 = Not marked 1 = Marked	Same as Baseline
Question 9	325	Sour Cream: Regular Fat	0 = Not marked 1 = Marked	Same as Baseline
Question 9	326	Sour Cream: Low-Fat	0 = Not marked 1 = Marked	Same as Baseline
Question 9	327	Sour Cream: Non-Fat	0 = Not marked 1 = Marked	Same as Baseline
Question 9	328	Cream Cheese: Didn't eat this food	0 = Not marked 1 = Marked	Same as Baseline
Question 9	329	Cream Cheese: Regular Fat	0 = Not marked 1 = Marked	Same as Baseline
Question 9	330	Cream Cheese: Low-Fat	0 = Not marked 1 = Marked	Same as Baseline
Question 9	331	Cream Cheese: Non-Fat	0 = Not marked 1 = Marked	Same as Baseline
Question 9	332	Cottage Cheese: Didn't eat this food	0 = Not marked 1 = Marked	Same as Baseline
Question 9	333	Cottage Cheese: Regular Fat	0 = Not marked 1 = Marked	Same as Baseline
Question 9	334	Cottage Cheese: Low-Fat	0 = Not marked 1 = Marked	Same as Baseline
Question 9	335	Cottage Cheese: Non-Fat	0 = Not marked 1 = Marked	Same as Baseline
Question 9	336	Other Cheese: Didn't eat this food	0 = Not marked 1 = Marked	Same as Baseline

Question 9	337	Other Cheese: Regular Fat	0 = Not marked 1 = Marked	Same as Baseline
Question 9	338	Other Cheese: Low-Fat	0 = Not marked 1 = Marked	Same as Baseline
Question 9	339	Other Cheese: Non-Fat	0 = Not marked 1 = Marked	Same as Baseline
Question 9	340	Crackers: Didn't eat this food	0 = Not marked 1 = Marked	Same as Baseline
Question 9	341	Crackers: Regular Fat	0 = Not marked 1 = Marked	Same as Baseline
Question 9	342	Crackers: Low-Fat	0 = Not marked 1 = Marked	Same as Baseline
Question 9	343	Crackers: Non-Fat	0 = Not marked 1 = Marked	Same as Baseline
Question 9	344	Potato chips, etc: Didn't eat this food	0 = Not marked 1 = Marked	Same as Baseline
Question 9	345	Potato chips, etc: Regular Fat	0 = Not marked 1 = Marked	Same as Baseline
Question 9	346	Potato chips, etc: Low-Fat	0 = Not marked 1 = Marked	Same as Baseline
Question 9	347	Potato chips, etc: Non-Fat	0 = Not marked 1 = Marked	Same as Baseline
Question 9	348	Cookies or brownies: Didn't eat this food	0 = Not marked 1 = Marked	Same as Baseline
Question 9	349	Cookies or brownies: Regular Fat	0 = Not marked 1 = Marked	Same as Baseline
Question 9	350	Cookies or brownies: Low-Fat	0 = Not marked 1 = Marked	Same as Baseline
Question 9	351	Cookies or brownies: Non-Fat	0 = Not marked 1 = Marked	Same as Baseline
Question 9	352	Cake: Didn't eat this food	0 = Not marked 1 = Marked	Same as Baseline
Question 9	353	Cake: Regular Fat	0 = Not marked 1 = Marked	Same as Baseline
Question 9	354	Cake: Low-Fat	0 = Not marked 1 = Marked	Same as Baseline
Question 9	355	Cake: Non-Fat	0 = Not marked 1 = Marked	Same as Baseline
Question 9	356	Mayonnaise or mayonnaise-type dressing: Didn't eat this food	0 = Not marked 1 = Marked	Same as Baseline

Question 9	357	Mayonnaise or mayonnaise-type dressing: Regular Fat	0 = Not marked 1 = Marked	Same as Baseline
Question 9	358	Mayonnaise or mayonnaise-type dressing: Low-Fat	0 = Not marked 1 = Marked	Same as Baseline
Question 9	359	Mayonnaise or mayonnaise-type dressing: Non-Fat	0 = Not marked 1 = Marked	Same as Baseline
Question 9	360	Salad dressing: Didn't eat this food	0 = Not marked 1 = Marked	Same as Baseline
Question 9	361	Salad dressing: Regular Fat	0 = Not marked 1 = Marked	Same as Baseline
Question 9	362	Salad dressing: Low-Fat	0 = Not marked 1 = Marked	Same as Baseline
Question 9	363	Salad dressing: Non-Fat	0 = Not marked 1 = Marked	Same as Baseline
Question 10	364	Hot dogs: Didn't eat this food	0 = Not marked 1 = Marked	Same as Baseline
Question 10	365	Hot dogs: Regular Fat	0 = Not marked 1 = Marked	Same as Baseline
Question 10	366	Hot dogs: Low-Fat	0 = Not marked 1 = Marked	Same as Baseline
Question 10	367	Cold cuts: Didn't eat this food	0 = Not marked 1 = Marked	Same as Baseline
Question 10	368	Cold cuts: Regular Fat	0 = Not marked 1 = Marked	Same as Baseline
Question 10	369	Cold cuts: Low-Fat	0 = Not marked 1 = Marked	Same as Baseline
Question 10	370	Bacon: Didn't eat this food	0 = Not marked 1 = Marked	Same as Baseline
Question 10	371	Bacon: Regular Fat	0 = Not marked 1 = Marked	Same as Baseline
Question 10	372	Bacon: Low-Fat	0 = Not marked 1 = Marked	Same as Baseline
Question 10	373	Sausage: Didn't eat this food	0 = Not marked 1 = Marked	Same as Baseline
Question 10	374	Sausage: Regular Fat	0 = Not marked 1 = Marked	Same as Baseline
Question 10	375	Sausage: Low-Fat	0 = Not marked 1 = Marked	Same as Baseline

Question 11	376	Over the last 12 months, when you ate ground beef which kind did you usually eat?	0 = Didn't eat ground beef 1 = Regular ground beef 2 = Lean ground beef 3 = Lean and regular about same M = Missing E = Error	Same as Baseline
Question 12	377	When you ate beef steaks, roasts, or chops, which did you usually eat?	0 = Didn't eat steaks, roasts, or chops 1 = Regular fat cuts 2 = Lean cuts 3 = Lean and regular about same M = Missing E = Error	Same as Baseline
Question 13	378	Over the last 12 months, when you ate chicken, how did you usually eat it?	0 = Didn't eat chicken 1 = With skin 2 = Without skin 3 = With and without skin about same M = Missing E = Error	Same as Baseline
Question 14	379	When you ate chicken, which kind did you usually eat:	0 = Light meat 1 = Dark meat 2 = Dark and light about same M = Missing E = Error	Same as Baseline
Question 15	380	When you ate canned tuna, which kind did you usually eat?	0 = Didn't eat canned tuna 1 = Water-packed tuna 2 = Oil-packed tuna 3 = Oil- and water- packed about same M = Missing E = Error	Same as Baseline
Question 16	381	Type of Eggs: Didn't eat eggs	0 = Not Marked 1 = Marked	Same as Baseline
Question 16	382	Type of Eggs: Whole eggs	0 = Not Marked 1 = Marked	Same as Baseline
Question 16	383	Type of Eggs: Egg whites	0 = Not Marked 1 = Marked	Same as Baseline
Question 16	384	Type of Eggs: Egg substitutes	0 = Not Marked 1 = Marked	Same as Baseline

Question 17	385	Eggs cooked: In oil	0 = Not Marked 1 = Marked	Same as Baseline
Question 17	386	Eggs cooked: In oil spray	0 = Not Marked 1 = Marked	Same as Baseline
Question 17	387	Eggs cooked: In butter	0 = Not Marked 1 = Marked	Same as Baseline
Question 17	388	Eggs cooked: In margarine	0 = Not Marked 1 = Marked	Same as Baseline
Question 17	389	Eggs cooked: Poached or boiled	0 = Not Marked 1 = Marked	Same as Baseline
Question 17	390	Eggs cooked: In non-stick pan, no oil, butter, or margarine	0 = Not Marked 1 = Marked	Same as Baseline
Question 18	391	How often used butter or margarine: Oatmeal	0 = Didn't eat this food 1 = More than half the time 2 = Half the time or less 3 = Almost never or never M = Missing E = Error	Same as Baseline
Question 18	392	How often used butter or margarine: Pancakes	Same as Column 391	Same as Column 391
Question 18	393	How often used butter or margarine: Baked potatoes	Same as Column 391	Same as Column 391
Question 18	394	How often used butter or margarine: Rice	Same as Column 391	Same as Column 391
Question 18	395	How often used butter or margarine: Pasta	Same as Column 391	Same as Column 391
Question 18	396	How often used butter or margarine: Cooked vegetables	Same as Column 391	Same as Column 391
Question 19	397	Which was usually used in cooking or on your foods, butter or margarine	0 = Didn't use 1 = Used butter 2 = Used margarine 3 = Used butter & margarine same M = Missing E = Error	Same as Baseline
Question 20	398	What kind of margarine: Didn't use margarine	0 = Not Marked 1 = Marked	Same as Baseline
Question 20	399	What kind of margarine: Regular Stick	0 = Not Marked 1 = Marked	Same as Baseline
Question 20	400	What kind of margarine: Regular tub	0 = Not Marked 1 = Marked	Same as Baseline

Question 20	401	What kind of margarine: Diet stick	0 = Not Marked 1 = Marked	Same as Baseline
Question 20	402	What kind of margarine: Diet tub	0 = Not Marked 1 = Marked	Same as Baseline
Question 20	403	What kind of margarine: Stick or tub blend	0 = Not Marked 1 = Marked	Same as Baseline
Question 21	404	How often was oil, butter, or margarine used (cooking)	0 = Never 1 = less than 1 time per week 2 = 1 to 2 times per week 3 = 3 to 4 times per week 4 = 5 to 6 times per week 5 = once per day 6 = 2 times per day 7 = 3 times per day 8 = 4 or more times per day M = Missing E = Error	Same as Baseline
Question 22a	405	Which fat or oils: Don't know	0 = Not Marked 1 = Marked	Same as Baseline
Question 22a	406	Which fat or oils: Margarine	0 = Not Marked 1 = Marked	Same as Baseline
Question 22a	407	Which fat or oils: Butter	0 = Not Marked 1 = Marked	Same as Baseline
Question 22a	408	Which fat or oils: Lard, fatback, or bacon fat	0 = Not Marked 1 = Marked	Same as Baseline
Question 22a	409	Which fat or oils: Vegetable shortening	0 = Not Marked 1 = Marked	Same as Baseline
Question 22a	410	Which fat or oils: Oil spray like Pam or others	0 = Not Marked 1 = Marked	Same as Baseline
Question 22a	411	Which fat or oils: Oil, liquid	0 = Not Marked 1 = Marked	Same as Baseline
Question 22b	412	Kind of oils: Don't know	0 = Not Marked 1 = Marked	Same as Baseline
Question 22b	413	Kind of oils: Corn	0 = Not Marked 1 = Marked	Same as Baseline
Question 22b	414	Kind of oils: Olive	0 = Not Marked 1 = Marked	Same as Baseline
Question 22b	415	Kind of oils: Safflower	0 = Not Marked 1 = Marked	Same as Baseline

Question 22b	416	Kind of oils: Sunflower	0 = Not Marked 1 = Marked	Same as Baseline
Question 22b	417	Kind of oils: Canola	0 = Not Marked 1 = Marked	Same as Baseline
Question 22b	418	Kind of oils: Other	0 = Not Marked 1 = Marked	Same as Baseline
Question 23	419	When you ate bread IN SANDWICHES, which kind of bread did you usually eat?	0 = Didn't eat bread 1 = Ate bread, but not in sandwiches 2 = White bread 3 = Dark bread 4 = White & dark bread same amount M = Missing E = Error	Same as Baseline
Question 24	420	Which kind of bread/dinner rolls did you usually eat not in sandwiches?	0 = Only eat bread in sandwiches 1 = White bread 2 = Dark bread 3 = White & dark bread same amount M = Missing E = Error	Same as Baseline
Question 25	421	What kind of sweetener: Didn't drink coffee/tea	0 = Not Marked 1 = Marked	Same as Baseline
Question 25	422	What kind of sweetener: Didn't add sweetener	0 = Not Marked 1 = Marked	Same as Baseline
Question 25	423	What kind of sweetener: Sugar or honey	0 = Not Marked 1 = Marked	Same as Baseline
Question 25	424	What kind of sweetener: Equal or aspartame	0 = Not Marked 1 = Marked	Same as Baseline
Question 25	425	What kind of sweetener: Saccharin or sweet-n-low	0 = Not Marked 1 = Marked	Same as Baseline
Question 25	426	What kind of sweetener: Other	0 = Not Marked 1 = Marked	Same as Baseline
Question 26	427	What kind of milk/creamer: Didn't use milk/creamer	0 = Not Marked 1 = Marked	Same as Baseline
Question 26	428	What kind of milk/creamer: Low-Fat, non-dairy	0 = Not Marked 1 = Marked	Same as Baseline
Question 26	429	What kind of milk/creamer: Regular Fat, non-dairy	0 = Not Marked 1 = Marked	Same as Baseline

Question 26	430	What kind of milk/creamer: Evaporated or condensed	0 = Not Marked 1 = Marked	Same as Baseline
Question 26	431	What kind of milk/creamer: Cream or half-n-half	0 = Not Marked 1 = Marked	Same as Baseline
Question 26	432	What kind of milk/creamer: Whole	0 = Not Marked 1 = Marked	Same as Baseline
Question 26	433	What kind of milk/creamer: 1 or 2%	0 = Not Marked 1 = Marked	Same as Baseline
Question 26	434	What kind of milk/creamer: Skim	0 = Not Marked 1 = Marked	Same as Baseline
Question 27	435	Did you take any vitamins or minerals?	0 = No 1 = Yes, < once per month 2 = Yes, once per month or more M = Missing E = Error	Same as Baseline
Question 28	436	How often: Stress-tabs type	0 = Never 1 = Less than 1 time per week 2 = 1-3 times per week 3 = 4-6 times per week 4 = Every day M = Missing E = Error	Same as Baseline
Question 28	437	How often: Therapeutic or Theragran	Same as Column 436	Same as Column 436
Question 28	438	How often: One-a-day type	Same as Column 436	Same as Column 436
Question 29	439	Single supplements: Iron	0 = Not Marked 1 = Marked	Same as Baseline
Question 29	440	Single supplements: Zinc	0 = Not Marked 1 = Marked	Same as Baseline
Question 29	441	Single supplements: Selenium	0 = Not Marked 1 = Marked	Same as Baseline
Question 29	442	Single supplements: Folic Acid	0 = Not Marked 1 = Marked	Same as Baseline
Question 29	443	Single supplements: None	0 = Not Marked 1 = Marked	Same as Baseline

Question 30	444	How often: Vitamin A	0 = Never 1 = Less than 1 time per week 2 = 1-3 times per week 3 = 4-6 times per week 4 = Every Day M = Missing E = Error	Same as Baseline
Question 30	445	Amount: Vitamin A	0 = Less than 8,000 IU 1 = 8,000 to 12,000 IU 2 = 13,000 to 22,000 IU 3 = 23,000 IU or more 4 = Don't know M = Missing E = Error	Same as Baseline
Question 30	446	How often: Beta-carotene	Same as Column 444	Same as Column 444
Question 30	447	Amount: Beta-carotene	0 = Less than 8,000 IU 1 = 8,000 to 12,000 IU 2 = 13,000 to 22,000 IU 3 = 23,000 IU or more 4 = Don't know M = Missing E = Error	Same as Baseline
Question 30	448	How often: Vitamin C	Same as Column 444	Same as Column 444
Question 30	449	Amount: Vitamin C	0 = Less than 400 mg 1 = 400 to 699 mg 2 = 700 to 1250 mg 3 = 1300 mg or more 4 = Don't know M = Missing E = Error	Same as Baseline
Question 30	450	How often: Vitamin E	Same as Column 444	Same as Column 444
Question 30	451	Amount: Vitamin E	0 = Less than 100 IU 1 = 100 to 250 IU 2 = 300 to 500 IU 3 = 600 IU or more 4 = Don't know M = Missing E = Error	Same as Baseline
Question 30	452	How often: Calcium	Same as Column 444	Same as Column 444

Question 30	453	Amount: Calcium	0 = Less than 400 mg 1 = 400 to 900 mg 2 = 901 to 1300 3 = 1301 mg or more 4 = Don't know M = Missing E = Error	Same as Baseline
Question 31	454	Which best describes you daily routine at work?	0 = Sit during day/ not much walking 1 = Sit much of day/ walk a fair amt 2 = Stand/walk a lot - no lifting 3 = Lift/carry light loads, stairs, hills 4 = You do heavy work/carry loads M = Missing E = Error	**FIXED: M**
Question 32	455	How often did you participate in physical activities?	0 = Never 1 = Rarely 2 = 1 to 3 times per month 3 = 1 to 2 times per week 4 = 3 to 4 times per week 5 = 5 or more times per week M = Missing E = Error	**FIXED: M**
Question 33	456	Around ages 15 to 18, how often did you participate in physical activities?	0 = Never 1 = Rarely 2 = 1 to 3 times per month 3 = 1 to 2 times per week 4 = 3 to 4 times per week 5 = 5 or more times per week M = Missing E = Error	**FIXED: M**
Question 34	457	What is your current marital status?	0 = Married 1 = Widowed 2 = Divorced 3 = Separated 4 = Never married M = Missing E = Error	**FIXED: M**

Question 35	458	What is your sex?	0 = Male 1 = Female M = Missing E = Error	**FIXED: M**
Question 36	459	Which best describes your race?	0 = White, not Hispanic 1 = Black, not Hispanic 2 = Hispanic 3 = Asian 4 = Pacific Islander 5 = American Indian/Alaskan Native M = Missing E = Error	**FIXED: M**
Question 37	460	Highest grade or level of schooling?	0 = Less than 8 years 1 = 8 through 11 years 2 = 12 years or completed high school 3 = post-high school training 4 = some college 5 = college graduate 6 = postgraduate M = Missing E = Error	**FIXED: M**
Question 38	461	Social Security Number: 1st digit	0 - 9 M = Missing E = Error	**FIXED: M**
Question 38	462	Social Security Number: 2nd digit	0 - 9 M = Missing E = Error	**FIXED: M**
Question 38	463	Social Security Number: 3rd digit	0 - 9 M = Missing E = Error	**FIXED: M**
Question 38	464	Social Security Number: 4th digit	0 - 9 M = Missing E = Error	**FIXED: M**
Question 38	465	Social Security Number: 5th digit	0 - 9 M = Missing E = Error	**FIXED: M**
Question 38	466	Social Security Number: 6th digit	0 - 9 M = Missing E = Error	**FIXED: M**

Question 38	467	Social Security Number: 7th digit	0 - 9 M = Missing E = Error	**FIXED: M**
Question 38	468	Social Security Number: 8th digit	0 - 9 M = Missing E = Error	**FIXED: M**
Question 38	469	Social Security Number: 9th digit	0 - 9 M = Missing E = Error	**FIXED: M**
Question 39	470	Would you say your general health is:	0 = Excellent 1 = Very good 2 = Good 3 = Fair 4 = Poor M = Missing E = Error	**FIXED: M**
Question 40	471	Ever been told you had: Gallbladder stone or disease	0 = Unmarked 1 = Marked	**FIXED: 0 (zero)**
Question 40	472	Ever been told you had: Diabetes	0 = Unmarked 1 = Marked	**FIXED: 0 (zero)**
Question 40	473	Ever been told you had: Heart disease	0 = Unmarked 1 = Marked	**FIXED: 0 (zero)**
Question 40	474	Ever been told you had: Emphysema	0 = Unmarked 1 = Marked	**FIXED: 0 (zero)**
Question 40	475	Ever been told you had: Osteoporosis	0 = Unmarked 1 = Marked	**FIXED: 0 (zero)**
Question 40	476	Ever been told you had: Bone fracture after age 45	0 = Unmarked 1 = Marked	**FIXED: 0 (zero)**
Question 40	477	Ever been told you had: Polyps of colon or rectum	0 = Unmarked 1 = Marked	**FIXED: 0 (zero)**
Question 40	478	Ever been told you had: End-stage renal disease	0 = Unmarked 1 = Marked	**FIXED: 0 (zero)**
Question 40	479	Ever been told you had: Stroke	0 = Unmarked 1 = Marked	**FIXED: 0 (zero)**
Question 40	480	Ever been told you had: No	0 = Unmarked 1 = Marked	**FIXED: 0 (zero)**
Question 41	481	Have you or relatives been diagnosed with any type of cancer?	0 = No 1 = Yes M = Missing E = Error	**FIXED: M**

Question 41	482	You: Prostate Cancer	0 = Unmarked 1 = Marked	**FIXED: 0 (zero)**
Question 41	483	You: Breast Cancer	0 = Unmarked 1 = Marked	**FIXED: 0 (zero)**
Question 41	484	You: Colon Cancer	0 = Unmarked 1 = Marked	**FIXED: 0 (zero)**
Question 41	485	You: Other Cancer	0 = Unmarked 1 = Marked	**FIXED: 0 (zero)**
Question 41	486	Father: Prostate Cancer	0 = Unmarked 1 = Marked	**FIXED: 0 (zero)**
Question 41	487	Father: Colon Cancer	0 = Unmarked 1 = Marked	**FIXED: 0 (zero)**
Question 41	488	Father: Other Cancer	0 = Unmarked 1 = Marked	**FIXED: 0 (zero)**
Question 41	489	Brother: Prostate Cancer	0 = Unmarked 1 = Marked	**FIXED: 0 (zero)**
Question 41	490	Brother: Colon Cancer	0 = Unmarked 1 = Marked	**FIXED: 0 (zero)**
Question 41	491	Brother: Other Cancer	0 = Unmarked 1 = Marked	**FIXED: 0 (zero)**
Question 41	492	Son: Prostate Cancer	0 = Unmarked 1 = Marked	**FIXED: 0 (zero)**
Question 41	493	Son: Colon Cancer	0 = Unmarked 1 = Marked	**FIXED: 0 (zero)**
Question 41	494	Son: Other Cancer	0 = Unmarked 1 = Marked	**FIXED: 0 (zero)**
Question 41	495	Mother: Breast Cancer	0 = Unmarked 1 = Marked	**FIXED: 0 (zero)**
Question 41	496	Mother: Colon Cancer	0 = Unmarked 1 = Marked	**FIXED: 0 (zero)**
Question 41	497	Mother: Other Cancer	0 = Unmarked 1 = Marked	**FIXED: 0 (zero)**
Question 41	498	Sister: Breast Cancer	0 = Unmarked 1 = Marked	**FIXED: 0 (zero)**
Question 41	499	Sister: Colon Cancer	0 = Unmarked 1 = Marked	**FIXED: 0 (zero)**
Question 41	500	Sister: Other Cancer	0 = Unmarked 1 = Marked	**FIXED: 0 (zero)**
Question 41	501	Daughter: Breast Cancer	0 = Unmarked 1 = Marked	**FIXED: 0 (zero)**

Question 41	502	Daughter: Colon Cancer	0 = Unmarked 1 = Marked	**FIXED: 0 (zero)**
Question 41	503	Daughter: Other Cancer	0 = Unmarked 1 = Marked	**FIXED: 0 (zero)**
Question 42	504	Have you smoked 100 or more cigarettes?	0 = Yes 1 = No M = Missing E = Error	**FIXED: M**
Question 43	505	Do you currently smoke cigarettes or have you stopped?	0 = Currently smoke 1 = Stopped within last year 2 = Stopped 1 to 4 years ago 3 = Stopped 5 to 9 years ago 4 = Stopped 10 or more years ago M = Missing E = Error	**FIXED: M**
Question 44	506	How many cigarettes per day do or did you usually smoke?	0 = 1 to 10 1 = 11 to 20 2 = 21 to 30 3 = 31 to 40 4 = 41 to 60 5 = 61 or more M = Missing E = Error	**FIXED: M**
Question 45	507	Did you ever smoke pipes or cigars regularly?	0 = No 1 = Yes, pipes & cigars 2 = Yes, pipes only 3 = Yes, cigars only M = Missing E = Error	**FIXED: M**

Question 46	508	How old were you when you had your first menstrual period?	0 = 10 or younger 1 = 11 to 12 2 = 13 to 14 3 = 15 or older M = Missing E = Error	**FIXED: M**
Question 47	509	How many years did you take oral contraceptives?	0 = Never (or less than 1 year) 1 = 1 to 4 years 2 = 5 to 9 years 3 = 10 or more years M = Missing E = Error	**FIXED: M**
Question 48	510	How many live-born children have you had?	0 = None 1 = 1 2 = 2 3 = 3 to 4 4 = 5 to 9 5 = 10 or more M = Missing E = Error	**FIXED: M**
Question 49	511	How old were you when you gave birth to your first child?	0 = Never gave birth 1 = Less than 16 2 = 16 to 19 3 = 20 to 24 4 = 25 to 29 5 = 30 to 34 6 = 35 to 39 7 = 40 or older M = Missing E = Error	**FIXED: M**
Question 50	512	How old were you when you had your last menstrual period?	0 = Less than 40 1 = 40 to 44 2 = 45 to 49 3 = 50 to 54 4 = 55 or older 5 = Still menstruating M = Missing E = Error	**FIXED: M**
Question 51	513	Why did your periods stop: Periods did not stop	0 = Unmarked 1 = Marked	**FIXED: 0 (zero)**

Question 51	514	Why did your periods stop: Natural menopause	0 = Unmarked 1 = Marked	**FIXED: 0 (zero)**
Question 51	515	Why did your periods stop: Surgery	0 = Unmarked 1 = Marked	**FIXED: 0 (zero)**
Question 51	516	Why did your periods stop: Radiation or chemotherapy	0 = Unmarked 1 = Marked	**FIXED: 0 (zero)**
Question 52	517	Have you had a hysterectomy (to remove uterus)?	0 = No 1 = Yes M = Missing E = Error	**FIXED: M**

Question 53	518	Have you had surgery to your ovaries?	0 = No 1 = Yes, both ovaries removed 2 = Yes, other surgery to ovaries M = Missing E = Error	**FIXED: M**
Question 54	519	How many times have you had a biopsy of the breast?	0 = None 1 = 1 2 = 2 3 = 3 or more M = Missing E = Error	**FIXED: M**
Question 55	520	Are you currently taking replacement hormones?	0 = No 1 = Yes M = Missing E = Error	**FIXED: M**
Question 56	521	How many years have you taken replacement hormones?	0 = Never 1 = Less than 5 years 2 = 5 to 9 years 3 = 10 or more years M = Missing E = Error	**FIXED: M**

The data file created by the scanner contains 521 characters. However, prior to analysis using DietAARP, the following data fields must be appended to the records in the file. Baseline questionnaire data files must have 532 characters per record.

File Location	**Field**	**Coding Scheme - Baseline**	**Coding Scheme - Short Questionnaire**
522	Sex as coded in AARP demographic data other than the baseline questionnaire	M = Male F = Female Blank = missing	Same as Baseline
523-524	State	Standard abbreviation (char)	Same as Baseline
525	Mailing Wave	As defined by Westat	Same as Baseline
526-531	Date of Birth	YYMMDD	Same as Baseline
532	Calibration Flag	Blank = 0 = 1 =	

Columns 533 and 534 do not exist in baseline questionnaire data files. These are required in short questionnaire data files since sex is required for analysis but is not asked on the short questionnaire.

File Location	Field	Coding Scheme - Short Questionnaire
533	Sex - Value of sex determined by DietAARP In analysis of Baseline questionnaire for same respondent.	0 = Male 1 = Female
534	SexVar - Value of SexVar given by DietAARP in analysis of Baseline questionnaire for same respondent.	0 = Question 35 on Baseline Questionnaire 1 = Sex determined from sex-specific questions on pg 16 2 = The code for sex from the AARP demographic data (col 522) was used 3 = Sex-Default setting in INI file was assigned