A Heartfelt Thanks

Dear Participant,

Eight years ago, we asked you to volunteer in a study that looks at the relationship between diet, lifestyle, and cancer. We’re grateful that you agreed to participate. More than half a million men and women from six states and two metropolitan areas returned our 16-page questionnaire. The overwhelming response has made the NIH-AARP Diet and Health Study the largest in-depth study of diet and cancer ever conducted. Together, we could make major contributions to health research. We’re sending this newsletter to update you on the study’s progress and to tell you what we hope to accomplish next with the study. We also want to thank you for your willingness to volunteer. The National Institutes of Health (NIH) and the National Cancer Institute can make substantial progress only because you and many others like you selflessly donate your time. We hope that you will continue to be a part of this study. What we learn today will help future generations stay healthier.

Arthur Schatzkin, M.D., Dr.P.H.
NIH-AARP Diet & Health Study

Unraveling the Diet Mystery:

Looking to Answer Age-Old Question

Every day, someone makes a claim on television, in the newspapers or on the radio about the power of certain foods to prevent cancer. In reality, no one is certain about the connection between diet and cancer. For that reason, the National Cancer Institute (NCI) began the NIH-AARP Diet and Health Study in 1995.

The study team, led by Dr. Arthur Schatzkin, Chief of NCI’s Nutritional Epidemiology Branch, designed the long-term study to look at the dietary habits of men and women age 50 and older. By comparing the diets of participants who later develop cancer with those who do not, the research team will be able to point to which dietary factors relate to specific types of cancer.

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Unraveling the Diet Mystery
(Continued from front page)

AARP Members Answer Our Call to Action

To carry out the study, the team asked AARP (formerly known as the American Association of Retired Persons), for help in reaching potential study participants. NIH mailed 3.5 million questionnaires to AARP members living in California, Florida, Louisiana, New Jersey, North Carolina and Pennsylvania and in the cities of Atlanta, Georgia, and Detroit, Michigan.

The response was gratifying. Of those who received the questionnaire, 567,169 men and women returned it. Better yet, the participants reported eating a wide variety of foods. This gave the research team many types of diets to study in relation to cancer.

More Than 500,000 Join the Study

Responses to the initial 16-page diet questionnaire showed some interesting facts about participants in the Diet and Health Study:

- Participants consume less fat and red meat, and more fruits, vegetables and fiber, on average, than do adults of the same age in the general U.S. population. Nevertheless, people in the study still show a great deal of variety in their diets, with some eating a lot and some eating very little of these foods.

- For men and women combined, more than half smoked at one time. Slightly more than 10 percent of the men and 14 percent of women still smoke — percentages that are somewhat lower than the national average.

- More than half of the men and women attended college, which is above the national average.

For more information about the study, see “Design and Serendipity in Establishing a Large Cohort with Wide Dietary Intake Distributions,” American Journal of Epidemiology (2001 issue), Volume 154, Number 12, Page 1119-25.

Join the Study Listserv

We encourage you to join the study listserv for periodic e-mail updates:

- To join, send an email to: listserv@list.nih.gov
- Be sure to include this text in the body of your message: Subscribe NIH-AARP-study
- After the word "study," type your name and study number as they appear on the newsletter envelope.

NIH-AARP Diet and Health Study*:

WHO ARE YOU?

<table>
<thead>
<tr>
<th>VITAL STATISTICS</th>
<th>MEN</th>
<th>WOMEN</th>
</tr>
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<tbody>
<tr>
<td>Number of Participants</td>
<td>340,148</td>
<td>227,021</td>
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<tr>
<td>Average Age</td>
<td>62</td>
<td>62</td>
</tr>
<tr>
<td>Average Height (inches)</td>
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<td>5'3&quot;</td>
</tr>
<tr>
<td>Average Weight (lbs.)</td>
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<td>158</td>
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<tr>
<td>Education (%)</td>
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<td>Less than 11 years</td>
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<td>7</td>
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<tr>
<td>High School</td>
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<td>12-16 Years</td>
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<td>52</td>
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<td>Postgraduate</td>
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<td>15</td>
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<tr>
<td>Smoking (%)</td>
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<td>14</td>
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<tr>
<td>Former Smoker</td>
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</table>

* As of 1995-1996
The Next Phase: Stay With Us

Focusing on Heredity, Diet and Health

Since its start 13 years ago, the U.S. Human Genome Project has made remarkable progress identifying the 30,000 genes that make up human DNA. This has allowed scientists to discover different forms of inherited traits that could contribute to disease.

This knowledge is causing a revolution in medical research. It has even opened new possibilities for the NIH-AARP Diet and Health Study.

As a result, the study team is expanding the study to look at heredity and how it relates to diet and cancer. To study inherited traits, the team plans to examine cells from a person’s cheek, which shed naturally from the inside of the mouth into saliva.

How You Can Participate

If you wish to take part in this effort, you may do so by giving us a sample of your saliva. In the future, watch your mail for a saliva-collection kit. It will contain a consent form and all the materials you need to provide the sample and return it by mail. This is voluntary, and providing a sample takes only a few minutes.

As with all information you provide, the saliva data is kept strictly confidential. You may withdraw your consent at any time.

Watch Your Mail

Sometime within the next one to two years, some participants may receive a saliva-collection kit by mail. If you wish to provide a saliva sample for the next phase of the NIH-AARP Diet and Health Study, follow the instructions on the kit and mail your sample to us.

Long-Term Studies Help Cancer Research

The Diet and Health Study team hopes you will continue sharing information about your health and diet in the coming years.

Long-term studies like this are known as “prospective” or “longitudinal” studies in research jargon. They require large numbers of participants and several years to complete, but they give researchers the best opportunity to understand how diet and other lifestyle factors affect the risk of cancer.

Other Long-Term Studies

Although the NIH-AARP Diet and Health Study is one of the biggest prospective studies ever conducted, it isn’t the first. One well-known prospective study is the National Heart, Lung and Blood Institute’s “Framingham Heart Study,” now in its fifth decade. The research pointed to high blood pressure, high blood cholesterol, smoking, obesity, diabetes and physical inactivity as the leading causes of heart disease.

Another famous study currently underway is Harvard University’s “Nurses’ Health Study,” which is looking at the long-term consequences of diet and different lifestyle choices. The study has helped researchers understand the causes of major chronic diseases and how to prevent them.

Upcoming Events

- You’ll be asked over the next several months to complete a follow-up questionnaire to update the research team on your current lifestyle and health status.
- Within the next one or two years, some participants will receive by mail a saliva-collection kit to complete and return to us by mail.
- Over the next year, you’ll receive additional newsletters to stay updated on the study. The media also may cover the study’s initial results.
Early Study Results Expected This Year

The NIH-AARP Diet and Health Study team expects to report early study results later this year. The findings will be reported in future newsletters to you and to the mass media. In the meantime, you will receive a follow-up questionnaire in the mail. Among other things, you will be asked whether you’ve been diagnosed with cancer or other conditions since you filled out the first questionnaire in the mid-1990s. We encourage you to complete the follow-up survey. It shouldn’t take long to complete. This information, along with other data, will put researchers that much closer to understanding cancer and how diet could prevent the disease from developing.

Did You Know?

- More than 1.33 million people in the U.S. will be diagnosed with cancer this year. This is an increase over last year’s total of 1.28 million.
- About 76 percent of all cancers are diagnosed at ages 55 and older.

Meet the Study Team

Epidemiology is the study of how frequently and why disease occurs in different groups of people. In addition to epidemiologists, the NIH-AARP Diet and Health Study team is made up of dietitians, statisticians and medical technicians.

Arthur Schatzkin, M.D., Dr.P.H., heads the National Cancer Institute’s (NCI) Nutritional Epidemiology Branch in the Division of Cancer Epidemiology and Genetics. He is the principal investigator on the NIH-AARP Diet and Health Study. He has devoted more than 20 years to studying diet and disease.

Linda Harlan, Ph.D., is an epidemiologist with NCI’s Division of Cancer Control and Population Sciences. She focuses her research on the treatment of people with cancer and the different levels of care.

Sigurd W. Hermansen, M.A., designs, builds, manages and analyzes databases for health research studies at Westat, an employee-owned research corporation under contract to assist with the research effort.

Albert R. Hollenbeck, Ph.D., is a research psychologist at AARP. He is trained in lifespan development and currently works on AARP organizational research issues. He has been the primary AARP liaison on this study for more than a decade.

Paul Hurwitz, M.P.H., is an epidemiologist at Westat and has worked as the project director for the study since 1994. His primary research focus has been the causes of cancer.

Victor Kipnis, Ph.D., is a statistician with the Biometry Branch of NCI’s Division of Cancer Prevention. For the past 10 years, he has worked on mathematical techniques used to determine the relationship between diet and cancer.

Michael Leitzmann, M.D., Dr.P.H., is an investigator with NCI’s Nutritional Epidemiology Branch within the Division of Cancer Epidemiology and Genetics. He is primarily interested in studying physical activity and obesity and their effect on health.

Douglas Midthune, M.S., is a statistician in the Biometry Research Group of NCI’s Division of Cancer Prevention.

Xenia Montenegro, Ph.D., works with several agencies in her role as AARP’s liaison for external research projects.

Shereen Remez, Ph.D., is AARP’s Director of Knowledge Management and has lead management responsibility for the NIH-AARP Diet and Health Study.

Amy Subar, Ph.D., is a nutritionist in the Applied Research Program of the Division of Cancer Control and Population Sciences. She is a 15-year veteran of NCI and primarily researches areas related to dietary assessment and nutritional epidemiology.

Frances Thompson, Ph.D., is an epidemiologist with the Applied Research Program of NCI’s Division of Cancer Control and Population Sciences. She is particularly interested in improving dietary questionnaires.

Richard Troiano, Ph.D., is an epidemiologist in the Applied Research Program of NCI’s Division of Cancer Control and Population Sciences. His work focuses on improving the collection of information on body weight and physical activity.

Jason Williams, B.S., M.T. (ASCP), a Westat study manager, is a certified medical technician, with more than 10 years experience in hematology and clinical chemistry.

To learn more about the NIH-AARP Diet and Health Study, visit www.dietandhealth.cancer.gov