Dear Friends:

The Cardiovascular Health Study has been a great success. It is one of the most important projects at the National Heart, Lung and Blood Institute. Your support and active participation have made it possible for us to accomplish many important goals.

The National Heart, Lung and Blood Institute will provide funding for our study for at least another five years. We received one of the highest priorities of all proposals evaluated by them.

Why another five years? First, we need to evaluate the possible changes in some of the measurements that we have done. Second, we will be able to determine the importance of many of the tests over time. Third, we will be able to evaluate several new methods that were not available at the beginning of the study.

The primary goal of the project is to improve ways of understanding and treating blood vessel disease in order to prevent heart attacks, strokes and vascular disease. During the first four years of the study, we have successfully evaluated methods to measure the amount of disease in the blood vessels of your neck and legs. These methods can now be used to identify people at very high risk of heart attack and stroke.

We have also developed a method for finding aneurysms in the large artery (aorta) in your abdomen, and hope that this application will prevent rupture of the aneurysm. We are currently doing a large study of magnetic imaging of the brain (MRI) in order to determine the frequency of possible undetected "strokes" that may be a warning sign of future strokes.

The questionnaires that many of you are completing about memory and thinking are providing the first good information about the changes in memory that occur as one gets older. Many of you wore heart monitors at home that have provided information about the frequency of various changes in heart rhythm during the day among normal older individuals.

Our laboratory is evaluating the factors that may measure the risk of thrombosis, blood clotting which is the major cause of stroke and heart attack. These tests will provide new approaches to preventing thrombosis. We are also beginning to evaluate the association of inflammation, heart attack and stroke.

We are learning a great deal about factors that lead to heart attack, stroke, or other conditions from participants who have experienced these illnesses during the study.

There are many other important tests that are included in the study. Each provides new and important information that will improve the prevention and treatment of diseases. The results of the tests have already been very beneficial and important to many of you individually. Their value to the community in the immediate future will be very substantial.

The Cardiovascular Health Study has an excellent staff. They will continue to provide to you the best possible services. We have a lot of information about each of you and are always willing to provide the results of your tests to you or your physician.

The success of CHS depends on your cooperation. We appreciate the time and effort you have committed to the study. Together, we can continue to make the study one of the "stars" of the National Research Program. Thank you for your continued support.

Sincerely yours,

Lewis H. Kuller, MD, DrPH
Principal Investigator, CHS
Professor and Chairperson
Department of Epidemiology
University of Pittsburgh
On Saturday morning in the middle of the recent East Coast blizzard, former Senator Mike Mansfield showed up at his Washington, D.C. office to put in his routine day of work. According to a story in The Washington Post, Mansfield, who celebrated his 90th birthday a few days later, was astonished to find he was the only person on the floor.

Mansfield served as US Representative and then Senator from Montana from 1943 to 1976, and succeeded Lyndon Johnson as Senate majority leader in 1961. He then served 11 years as US ambassador to Japan. For the last four years, he has been active as a corporate speaker, and visits his office every day.

Mansfield walks six or seven miles a day, and weighs the same 170 pounds he weighed when he began his political career, the Post reports. He reads seven daily newspapers, loves detective stories, and still likes talking politics.

When asked if he had any "laws of life," Mansfield had these words of advice: "You should never take yourself too seriously."

Are sleep problems making you a grouchy? One third of the women in the CHS study report trouble falling asleep (insomnia), but only half as many men. Two thirds of men and women wake up several times during the night, sometimes with pain or shortness of breath, sometimes just to go to the bathroom, and sometimes for no apparent reason. Twice as many men as women snore loudly. Problems with sleep make some of you feel groggy and unrefreshed in the morning - and you've probably noticed that poor sleep also makes some people grumpy, at least until they've had some coffee.

Many people report feeling sleepy all day and unable to get anything done after they've had a restless night, and sleeping pills sometimes do more harm than good. Some medical investigators worry that poor sleep has more serious long-term effects than just how you feel the next day. We know that a few seriously overweight people repeatedly stop breathing for a minute or two during the night, a condition known as sleep apnea. The low oxygen levels occurring in their blood when they stop breathing may be harmful to their hearts - but we're not sure. Weight loss or a special low pressure mask (CPAP) worn over the nose at night eliminates daytime sleepiness for most people with sleep apnea.

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Send your letters to: Heartbeat, CHS Coordinating Center, 1501 Fourth Avenue, Suite 2025, Seattle, Washington 98101.
Could it be asthma

Paul Enright, M.D.
Consultant
Respiratory Sciences Center
University of Arizona

Two common myths about asthma are that it mainly affects children and that it is always due to allergies. During the first CHS exam, 8% of you reported a diagnosis of asthma; and for many, the first episode occurred after age 50, often with no history of allergies. Many more of you were troubled by attacks of wheezing and shortness of breath, often occurring in the middle of the night or early morning.

These attacks may be caused by either heart or lung problems. Doctors sometimes have trouble telling them apart, and although the symptoms and names may be similar, the treatment for angina and asthma are completely different. To complicate the situation, older persons are much more likely than young adults to have both heart and lung problems. For these reasons, with your help we’d like to study asthma more carefully during the next CHS exam.

The hallmark of asthma is a large variation from time to time throughout the day or from day to day in how fast a person can blow out air. When exposed to heavily polluted air, smoke, dust, cold air, or fumes, people with asthma often start to wheeze, then slowly get better when they leave the area or the exposure subsides. The wheezing is caused by irritated, inflamed bronchial tubes which narrow down in places and make noises like little whistles when the person breathes. Narrowed bronchial tubes also limit the ability to blow out air quickly.

During your next visit to the CHS clinic, after spirometry testing, we are going to ask some of you to take home a peak flow meter to blow into several times a day for two weeks. The peak flow meter is not much larger than a party favor whistle, and you blow into it just the same way. It is lightweight and easily fits in a shirt pocket or purse. The meters cost only about ten dollars, but they accurately indicate how fast you can blow out air. We’ll provide a two-page diary with instructions for you to mark your peak flow reading (from 200 to 700) up to four times a day. Our analysis of the patterns will reveal a lot about asthma.

Last winter, over one thousand retired people in California used the peak flow meter to measure the effects of smog on their lungs. As in the CHS study, using the meters at home was optional, but almost everyone tried it. Nine out of ten participants completed and returned the diaries, and many said that it was kind of fun.

Blowing into a peak flow meter is a lot like blowing into a party horn.

- Continued from page 2 –

We’d like to study sleep patterns in about one third of CHS participants during the next year or two. Since the health of your heart and lungs is measured more thoroughly in CHS than in any other study, adding measurements of your sleep will help us determine the long-term effects of sleep disorders on the heart and lungs.

If selected for the sleep study, you’ll be asked to wear a small battery-powered monitor (about the size of a TV remote control) for a couple of hours during one day at home, and when you go to bed that night. It will painlessly monitor the amount of oxygen in your blood and your pulse rate by shining a small red light on your finger, and will also measure your breathing pattern. A research assistant will pick up the monitor the next day, and we’ll analyze the patterns.
What happens where

It takes participants, investigators and staff at twelve different sites to make CHS work. These are the sites and the activities each is responsible for:

Site 1:  **Coordinating Center, University of Washington, Seattle**
Coordinates the activities of all other sites; manages and analyzes the data that is collected. This is the "switchboard" of the study.

Site 2:  **Project Office, National Heart, Lung, and Blood Institute, Bethesda, Maryland**
Oversees project, monitors progress, and provides funding.

Site 3:  **Bowman Gray Field Center, Bowman Gray School of Medicine, Winston-Salem, North Carolina**

Site 4:  **Sacramento Field Center, University of California at Davis**

Site 5:  **Hagerstown Field Center, The Johns Hopkins University, Hagerstown, Maryland**

Site 6:  **Pittsburgh Field Center, University of Pittsburgh**
The field centers collect data from participants and forward them to the Coordinating Center or to the appropriate reading center.

Site 7:  **Echocardiography Reading Center, UC Irvine Medical Center, Orange, California**
Reads the echocardiographs obtained from participants during examinations at the field centers.

Site 8:  **Ultrasound Laboratory, Geisinger Medical Center, Danville, Pennsylvania**
Reads the ultrasound examinations obtained at the field centers.

Site 9:  **Blood Laboratory, University of Vermont, Colchester**
Analyzes blood samples from the field centers.

Site 10:  **MRI Reading Center, The Johns Hopkins Hospital, Baltimore**
Interprets the MRI brain scans obtained at the field centers.

Site 31:  **Respiratory Sciences Center, University of Arizona, Tucson**
Interprets spirometry and oximetry data and consults on respiratory studies involving the lungs.

Site 51:  **EPICORE, University of Alberta, Edmonton, Alberta, Canada**
Interprets results of yearly clinic ECG's
Advisory Council goes to work

The newly-formed Advisory Council of Washington County Field Center volunteers, which was established to provide CHS investigators and staff with ideas for ways to bring Washington County CHS participants together and keep them active in CHS, held its first meeting January 15. The Council would like to see the development of the theme "We Are Family" and has come up with some specific suggestions for increasing volunteer interaction with participants. These include development of:

A network of volunteers working with the CHS staff to provide support visits for participants who are housebound or ill.

A working relationship between CHS and the Commission on Aging in Washington County.

A support system for participants who provide care for a spouse, child, or other person living in their home.

The Council is planning an open house for CHS participants to be held this spring in Funkstown. They hope that this event will give them a chance to talk with participants and get a better idea of what kinds of events you would like to see planned for the future.

Members of the Advisory Council are Pam Boyer, John Doarnberger, Vineta Dye, Edward Grout, Ed Prince and Rosella Stinebaugh. Staff personnel who provide support for the Council are Tammy Ward, Pat Crowley, Joyce Chabot and Joel Hill.

Pam Boyer is the youngest member of the Council. She is self-employed as a caretaker of the elderly. She currently cares for two CHS participants and enjoys working with them very much. Because of her concern and care for older individuals, Pam believes strongly about her work with the Council. She thinks that CHS staff and volunteers can provide the necessary family network that many older persons lose when their children move away or their spouses die.

A regular CHS volunteer and a participant himself, John Doarnberger provides transportation for participants who do not drive. He has transported people to the clinic and to the MRI van at the Washington County Health Department. John is retired and believes strongly in the volunteer "work ethic." He believes that the more we can do to provide a social environment for you, our participants, the more likely we are to keep you coming back.

Vineta Dye is a CHS participant who also contributes many hours of volunteer work through her involvement with Eastern Star and as a volunteer driver for CHS. When she is not busy with volunteer activities, she enjoys motorcycling, dancing and camping. Vineta is retired from the Mays Optical Company. She enjoys the work of the Council and supports it because she believes in the value of CHS.

Active in her church, Rosella Stinebaugh is also a CHS participant. She is a volunteer at Washington County Hospital, Western Maryland Hospital, and various Elks lodges throughout the county. When she is not volunteering, she enjoys playing cards with her friends. She knows many people in the county and is a good resource person when the Advisory Council is looking for entertainment for events. She worked for People's Drug Store as a sales clerk before her retirement.

Edward Grout is a retired public relations person. He has been very helpful to the Advisory Council and the CHS staff in advising about ways
To our CHS participants

Joel Hill
Study Coordinator,
Washington County Field Center

You read on page A about our newly-formed Advisory Council for CHS. The Council are working to generate new ideas about future programs for you, the participants of CHS. In an attempt to build a "family of CHSers," we are hoping to see you at some or all of these affairs.

The staff of CHS believe that you are the most important part of this study. Without you we would not have a study, so we want to create these programs for you as a way of saying "thank you."

During the next 12 months, we will be calling some of you who participated in the Memory Study to ask you to come back for another interview. John Grissinger did the first interviews, and he will be back to persuade you once again to participate. We hope that you will be able and willing to do so.

The other ancillary study that is in progress at the moment is a study of people who provide care to a spouse. The Caregiver's Study is a series of events and is being conducted in participants' homes. You do not have to come to us for this one - we will come to YOU! If you are called, we hope you will say "yes."

Remember, any time you have a question, concern or idea about this study, you can call us at (301) 733-8860 and we will try to see that you receive answers. In the meantime, we look forward to seeing you sometime this spring or summer.

What can help keep you exercising?

- Choose activities that you enjoy.
- Make exercise part of a daily routine.
- Exercise with a group for social interaction as well as physical fitness.
  - Keep a written record of your progress.
  - Set realistic goals for what you want to accomplish.

- Select loose, comfortable clothes. Dress for warmth in the winter and coolness in the summer.
- Wear properly fitted shoes with firm soles and good arch support.
- Pay attention to your body. Forget the adage, "No pain, no gain." That is crazy advice.
- Exercise indoors when temperatures outside are extremely hot or cold.
To our CHS participants

Peg Meyer, RN, MEd
Coordinator of Clinical Studies
Department of Epidemiology
University of Pittsburgh

As we prepare to begin the extension of CHS I want to share with you my feelings of appreciation and gratitude for your continued support and participation in the study.

I hope that none of you think of yourselves as "guinea pigs." We view each of you as a valued volunteer. CHS is an observational study only, and none of the testing that we do is "experimental." What is new is the opportunity to test a group of 5,800 older adults using standardized techniques, which has never been done before. This study provides the opportunity to evaluate risk factors and indicators of disease. Each of you is a "point of light" in increasing knowledge that will most definitely affect the health of your children and grandchildren as well as that of many more generations to come.

Participants sometimes ask, "Why not get someone else for the rest of the study?" What is very important to the study is to follow the health of participants over a fairly long period of time. We can't do that if we recruit new participants on a regular basis. What is important to us is your health and how it changes or stays the same over time.

I also want to take a moment to discuss the report that many of you have already received from your fourth visit to CHS. Sometimes we hear that the reports are not easy to understand. Because medicine is not an exact science, it is sometimes difficult to say if a test result is "normal," "borderline," or "abnormal." If you have any questions about the report, please call us. We will go over the report line by line and answer your questions as best we can. When we don't know the significance of a particular test report in relation to your complete medical history, we will tell you so and refer you to your physician. He or she has received the same report that you have received. Because we try to stay out of the business of diagnosis and treatment and instead provide information only to you and your doctor, discussing your results with your physician is always a good choice.

As we ask you to continue your participation, please know that we are committed to continuing our willingness to do whatever we can to make your participation possible and enjoyable. Never hesitate to contact me personally if you have a concern or question. Bobbie Moyer, CHS Clinic Coordinator, and the rest of our staff are also willing to assist you in any way they can.

We all look forward to seeing you over the next several years. Again, thank you for your contribution to the health of older individuals everywhere.

This recipe is intended to be part of an overall healthful eating plan. Total fat intake should be less than 30 percent of your total calories for a day - not for each food or recipe.

Sloppy Joes

1 pound lean ground beef
1 onion, diced
1/2 cup ketchup
2 tablespoons chili sauce
1 teaspoon cider vinegar
1 teaspoon sugar
6 whole-wheat hamburger buns
1 teaspoon prepared mustard

Brown meat and onions in a large skillet over medium-high heat. Pour off fat. Add all other ingredients except buns, mixing well. Reduce heat and simmer 20 to 30 minutes, uncovered.

Spoon onto hamburger buns and serve immediately. Serves 6.

Nutrient Analysis per Serving

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From the American Heart Association Cookbook, Fifth Edition, American Heart Association. Published by Times Books, A Division of Random House, Inc.
Note of interest...

Recently, a Seattle-area clothing retailer published a catalog that shows models of all ages and sizes modelling clothes for the general public. The models included a woman in a wheelchair and a woman using a walker.

It's good to see advertisements that use real people to sell products rather than the young, slender models with the straight white teeth that we usually see.

*US News and World Report* recently published an article on aging and what can be done to slow the process. Most of the information in the article wasn't new - we've read before that to stay healthy in later years we should reduce calories, exercise, be sure we're getting enough vitamins and minerals, and stay mentally and socially active. Still, it never hurts to be reminded that so much of our health and well-being is within our control and we can take relatively simple action to improve our chances of staying healthy longer.

What can help keep you exercising?

- Choose activities that you enjoy.
- Make exercise part of a daily routine.
- Exercise with a group for social interaction as well as physical fitness.
  - Keep a written record of your progress.
  - Set realistic goals for what you want to accomplish.
- Select loose, comfortable clothes. Dress for warmth in the winter and coolness in the summer.
- Wear properly fitted shoes with firm soles and good arch support.
- Pay attention to your body. Forget the adage, "No pain, no gain." That is crazy advice.
- Exercise indoors when temperatures outside are extremely hot or cold.

CHS Publications

Below is a list of CHS papers that have been published in professional journals. If you are interested in receiving reprints of any of these papers, please call Amy Horner at 624-3579. (Papers marked with an asterisk are not yet available.)

Lipoprotein Lipids in Older People: Results From the Cardiovascular Health Study; *Circulation*, 1992.
Distribution and Correlates of Sonographically Detected Carotid Artery Disease in the Cardiovascular Health Study; *STROKE*, 1992.
* Cardiovascular Diseases Among Older Adults: The Cardiovascular Health Study; *American Journal of Epidemiology*, 1993.
* Spirometry Reference Values for Women and Men Over 65 Years Old: Results From 5000 Participants in the Cardiovascular Health Study; *American Review of Respiratory Disease*, 1993.
Orthostatic Hypotension in Older Adults; *Hypertension*, 1992.
Isolated Systolic Hypertension and Subclinical Cardiovascular Disease in the Elderly; *Journal of the American Medical Association*, 1992.