



HEARTBEAT

Newsletter of the Cardiovascular Health Study ~ Fall 2007

CHS All Stars Redefine the Frontier of Old Age

By Anne B. Newman, MD, MPH, University of Pitts-

Did you know that the most rapidly growing age group in the United States is made up of folks age 80 and older? Almost all of the original members in CHS are now past 80 years. Thus, as a participant in the CHS study, you are leading the way in redefining what old age means. The number of men and women living past the age of 80 is unprecedented. Your life experiences will be very important in understanding the health of future generations. As you know, CHS is considered to be a "National Treasure" of information about cardiovascular disease and aging. Starting in 2005, we conducted follow-up interviews of men and women over 80 in CHS, called the **CHS All Stars Study**. Here are some key findings from recent reports.

The range of people's abilities after age 80 varies widely. From interviews conducted in 2005-2006, we see that more people report problems with their ability to "get around," yet there is a wide range in walking ability from person to person. Among participants over age 80, about one-third report difficulty walking in the community, one-third report no difficulty, and about one-third remain very active and report walking in the community is easy.



Almost all CHS participants have experienced some loss of strength, speed, and activity as they have gotten older. However, the amount of decline has been fairly small, and these types of decline do not always mean that disability is inevitable. A major factor in remaining independent is minimizing these losses. Staying active and controlling blood pressure, cholesterol, and diabetes have all been shown to slow these declines. Another important factor is having a large reserve of function. This reserve allows many individuals to age gracefully, in spite of declines. In other words, we have found that those of you who were most highly functional 15 years ago are more likely to remain independently functioning in old age. This is important information for adults who are in their 60s now.

We have increasing evidence that measures of vascular (blood vessel) disease are related to both physical and cognitive functioning, and that it is critical to continue to try to maintain healthy blood pressure, blood sugar, and cholesterol levels to prevent both vascular disease and disability.

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Vascular Aging

By Anne B. Newman, MD, MPH, University of Pitts-

CHS has clearly shown that vascular (blood vessel) damage is strongly linked with getting older. Tests show that most adults have some signs of vascular damage by the age of 80. There are a lucky few, however, who do not show any significant signs of vascular disease. We see this when examining the results of tests you have had over the years, such as the carotid artery ultrasound or the ankle arm index. What's even more remarkable is that a large number of CHS participants have substantial vascular disease that has virtually no apparent effect on their physical functioning or well being. Thus, while a few individuals can escape vascular disease, many more seem to be able to adapt and continue to function fairly well in spite of it.

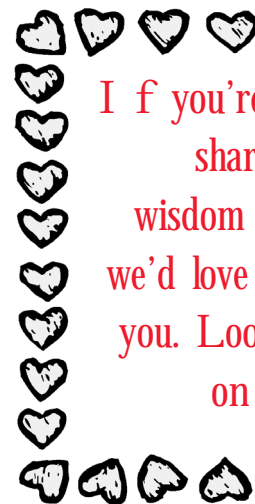
We are continuing to work to identify factors that keep you functional in spite of vascular disease. Perhaps not surprisingly, your level of physical activity reported over 15 years ago is one of the major factors resulting in good function now. It is unlikely that we can ever completely stop the onset of vascular damage

with aging, but we are exploring several important research directions.

First, we need to know more about the few individuals who develop only small vascular changes as they age. We soon hope to embark on a major effort to explore the entire genome (the full set of human genes) with a technique called a whole genome scan that measures thousands of variations in genes in all of the chromosomes. We hope to discover new genetic markers that can explain why these unusual men and women do not seem to have vascular aging.

Second, we will be able to examine factors that allow the blood vessels to change their structure to compensate for the presence of vascular disease. Such work is now only possible because we have been able to follow you for so many years and to such a fine old age. We simply cannot thank you

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Weight Changes and Your Health

By Alice Arnold, PhD, University of Washington

With the growing obesity epidemic, we hear constant reminders of the importance of maintaining a healthy weight. Older adults may wonder, "What does this mean for me?" Some have "battled the bulge" for many years, others have carried their weight without any apparent harm, and still others have developed diabetes. CHS has helped older adults and health care professionals understand how to think about weight in late life. One of the key

observations is that stability is the most important feature of a healthy weight. In other words, regardless of your weight 15 year ago, holding your weight steady was the best predictor of longevity and continued good physical health. Weight seems to come off more easily when health begins to decline, so it's important to monitor your weight and let your doctor

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know if it is slipping. Another important question is whether it is helpful to lose weight if you are overweight or obese later in life. This remains very controversial, because weight loss can result in loss of muscle and bone. On the other hand, too much weight is very hard on the knees and hips, which can



really slow you down. If you are currently concerned about being overweight, it is probably most important to avoid gaining any more weight and do whatever you can to stay as active as possible.

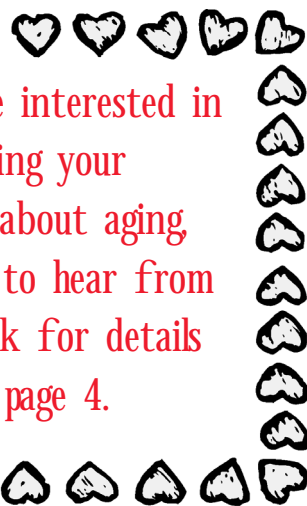


Blood Pressure after Age 80

By Paulo Chaves, MD, PhD, Johns Hopkins University

Here’s a question that’s on a lot of people’s minds: Is there a need to continue to maintain a healthy blood pressure in old age? To address this question, we have studied blood pressure patterns over many years in CHS. We have found that participants whose blood pressure stayed high over many years were more likely to become disabled as they aged. This was also true for people whose blood pressure over the years was just a little higher than normal. Even when it’s not dramatically high, high blood pres-

sure takes a toll over many years. Several blood pressure changes can indicate specific problems. For example, a large gap between the diastolic (bottom number) and systolic (top number) indicates that the blood vessels are becoming very stiff. For this reason, there is more and more focus on the systolic pressure. Another finding is that, in some older adults, blood pressure may go down not just as a result of treatment with antihypertensive medications, but also because of increasing frailty. Also, we have found evidence that too much fluctuation in blood pressure levels over the years was associated with worse functioning. In conclusion, the answer to the question above is “yes”! As with weight, a steady and



Making Your Visits Easier

By Elsa Strotmeyer, PhD, University of Pittsburgh

Our recent CHS All Stars exam showed that it is difficult for some people to have a clinic exam as they get older. We have tried to help by sending clinic staffers to people’s homes. About 40% of people that participated in our last in-person exam did so in their homes. We

know that you have made a long-term commitment to our study and how important it is to continue your in-person exam, even if you are not able to visit the clinic. Many thanks to all of you for helping to keep CHS going strong!



Keys to Successful Aging

By You, Longtime CHS Participant

For years we have been telling you what we've learned about "successful aging." Now it's your turn. Many of you have told us that you would like to have more opportunities to share your wisdom and experience about achieving a long life and about your experiences as octogenarians or nonagenarians. We would like to hear from you. Write down your thoughts, and we will publish some of them in an upcoming newsletter. What you write can be any length, and you can send them by regular mail or email. If you would like to contribute your ideas on how to age successfully, or what life looks like after 80, please send them to:



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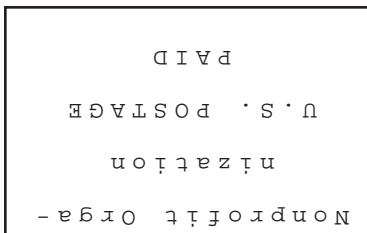
~ OR ~

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Please include your name and phone number so we can contact you about printing excerpts of what you have written. We are looking forward to hearing from you!

These essays will not be part of the research database for CHS.

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