

Women's Health Study

Update

News from the Women's Health Study

Physical activity continues to make headlines and the Women's Health Study (WHS), now in its 25th year, continues to make an impact in preventive medicine and women's health.

Cancer prevention and physical activity

The 2008 publication of the "Physical Activity Guidelines for Americans" (<https://health.gov/paguidelines>), reported that even a modest amount of physical activity is associated with health benefits. The guidelines recommended 150 minutes of moderate-intensity physical activity per week. The panel of experts reviewing the scientific data cited the many preventive effects of physical activity, including lowering the risk of chronic diseases such as type 2 diabetes and osteoporosis. The panel also noted a reduced risk for colon and breast cancers, another important finding. Outcomes for other cancers, particularly uncommon ones, were less clear.

In May of 2016, new findings were published from a large investigational study on cancer prevention and physical activity. The study received a fair amount of media attention. You may have read reports in the newspaper or on the internet. This new study pooled data from twelve cohort studies in the U.S. and Europe – including the Women's Health Study. In total, the study included more than 1.4 million adults who were followed for an average of 11 years. Because of the large sample size, the study was able to examine a broad range of cancers, including those less common.

The study found that higher amounts of leisure-time physical activity

(compared to lower amounts of leisure-time physical activity) were associated with a 10 - 42% risk reduction for several types of cancers. It reconfirmed the risk reduction for colon and breast cancers and also found a reduced risk for endometrial cancer. Additionally, it showed that physical activity was associated with a lower risk for ten other cancers. The greatest risk reductions were observed in kidney cancer, liver cancer, esophageal adenocarcinoma, cancer of the gastric cardia and myeloid leukemia. Head and neck cancers, myeloma, rectal and bladder cancers all showed some reduced risk, though not as strong.¹

These data add to the already compelling evidence as to why we should get off the couch and go for a walk! Which leads us to our next report:

Patterns of movement in the WHS

Between 2011 and 2015, many of you agreed to wear a device called an accelerometer which was worn around the waist during waking hours, for seven days. The monitor recorded body movements and provided detailed information on how much time was spent being physically active and how much time was spent being sedentary. (Please remember, the accelerometer does not capture all types of activity, e.g., water aerobics, as it is not waterproof.)

One of our objectives in the study was to better understand patterns of sedentary behavior in women. Using data from the first group of women (n=>8000; average age=71), we found that participants wore the accelerometer for 14.8 hours per day and were

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sedentary for about two-thirds of that time. On average, these sedentary episodes tended to last for short periods of time (e.g., two-thirds of the sedentary episodes lasted less than thirty minutes), prior to women getting up and moving about.²

In our more recent accelerometer study findings, preliminary data has shown us that study participants spend about six hours a day in light-intensity physical activity (e.g., washing dishes or a leisurely walk) and about 35 minutes a day in moderate-intensity physical activity (e.g., gardening or bowling).

In future studies, we will examine how these patterns of behavior relate to health outcomes. Understanding movement patterns—both active and sedentary—will help us learn more about what role our daily physical activity may have on health. We expect these findings to play a crucial role in the 2018 update of the "Physical Activity Guidelines for Americans." Thanks to you and your dedication, the Women's Health Study continues to make a difference.

1. Moore SC, Lee I-M, Weiderpass E, et al. Association of leisure-time physical activity with risk of 26 types of cancer in 1.44 million adults. *JAMA Int Med* 2016;176:816-25.

2. Shiroma EJ, Freedson PS, Trost SG, Lee I-M. Patterns of accelerometer-assessed sedentary behavior in older women. *JAMA* 2013;310:2662-3

WHS – Snapshots and Stories



Nancy M., of Marsing, Idaho, lives with her husband on a hay farm in the “banana belt,” known for its milder temperatures and diversity of crops. She was an endurance horse racer in her younger days. She says her horses now enjoy retirement on the farm. Here she is with her mare, Gypsy Rose. Please note the blue ribbon and the helmet!



Susan J., of Fairfax, Virginia, rediscovered skiing a few years ago. With her new ski pals from southern Pennsylvania, she travels to ski areas that offer a mid-week senior pass. Here she is on the slopes of Okemo Mountain in Vermont. Susan adds, “I also rejoined Weight Watchers (lost 20 pounds so far) and hired a personal trainer to get in shape and stay in shape for skiing.”



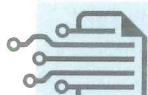
Kate S., of Orono, Maine writes, “The photograph is neither very far from home nor very aerobic, but I started playing this instrument in my early sixties. Her name is Morigan and she is a thirty-four string Celtic harp. If a musical challenge prevents dementia, I’m safe at age sixty-eight!”



Mary B., of Melbourne, Florida, has found life in retirement as rewarding as her career as an epilepsy specialist. Mary and her husband spent three years in Egypt and she enjoyed every day there. She is an avid scuba diver and trekker. She climbed an unrestored section of the Great Wall and then adventured on to Mongolia and Russia via the Trans-Mongolian Railway and the Trans-Siberian Railway. The long way home!



Phyllis B., of Underwood, Washington, writes that at ninety, she is going strong and life is still good. “I talked my daughter and son-in-law into taking me on my first camping trip this past summer. We toured through Alaska in a camper van for six weeks. Here I am with Hastings, one of my three traveling companions.”



Electronic Forms Are Here!

WHS now has an on-line option for the annual health survey. If we have your email address, we will email you the e-form in April. If you do not use the e-form option, we will mail you the survey via the USPS as usual. Remember to visit the WHS website for featured publications. <http://whs.bwh.harvard.edu>

A call for photos

We welcome your photos and stories. We cannot publish all photos, but please send an electronic photo or high-quality film with a brief note to: Women’s Health Study 900 Commonwealth Avenue Boston MA 02215 or whs@partners.org

