

## Too Much Sitting after 60 May Lead to Disability, Study Says

By: Kathleen Doheny, HealthDay Reporter

Too much sitting has been linked to increased risk for health problems such as heart failure and earlier death. Now, a new study finds older adults who sit too much are more likely to be disabled -- regardless of their exercise habits.

"Sedentary behavior is its own separate risk factor [for disability]," said study researcher Dorothy Dunlop, a professor of medicine at the Northwestern University's Feinberg School of Medicine. She evaluated the exercise habits of more than 2,000 men and women, aged 60 and above, and their ability to perform normal everyday activities.

"Regardless of how much time they spent in moderate physical activity, the more time they spent being sedentary, the more likely they were to be disabled," Dunlop said.

However, another expert wonders if the relationship may occur in the opposite way -- that the more disabled people are, the more sedentary they are due to inability to exercise.

The study was supported in part by the U.S. National Institute for Arthritis and Musculoskeletal Diseases. It was published online Feb. 19 in the *Journal of Physical Activity & Health*.

Dunlop and her colleagues evaluated responses given to the U.S. National Health and Nutrition Examination Survey. The men and women answering the survey wore accelerometer devices to measure their activity on at least four different days between 2002 and 2005.

Few met the guidelines of getting moderate activity for 2.5 hours a week, Dunlop said. Only about 6 percent met that goal, and the other 94 percent did not, the study found.

On average, the men and women spent nine hours a day being sedentary during waking hours. About 4 percent reported being disabled. Disability was defined as having much difficulty (or inability) in performing activities of daily living, such as getting out of bed, dressing and walking.

For each additional daily hour of being sedentary, the odds of disability rose about 50 percent, Dunlop said. For instance, a woman aged 65 who was sedentary for 13 hours a day was 50 percent more likely to be disabled than a woman who was sedentary for 12 hours, she explained.

What is it about sitting? Dunlop can't say for sure, but said experts think that sitting for an extended period causes muscles to burn less fat and blood to flow more sluggishly. Idle muscles and sluggish blood flow can contribute to high blood pressure, heart disease, swollen ankles and diabetes.

Dunlop's study found a link, not a cause-and-effect relationship.

The connection may actually go the other way, said Andrea LaCroix, a professor of epidemiology in family and preventive medicine and director of the Women's Health Center of Excellence at the University of California, San Diego School of Medicine. She recently found a link in her own study between higher amounts of sedentary time and higher risk of death in older women.

In the new study, however, the disability may be driving the inactivity, she said. "The more disabled people are, the more sedentary, because they are unable to exercise," LaCroix said.

Among the study's limitations, she noted, was that it looks only at a snapshot in time -- four days of tracking over a few years. A better approach would be to follow people over time and see if being sedentary leads to disability, said LaCroix, who is also an affiliate investigator at the Fred Hutchinson Cancer Research Center, in Seattle.

The take-home message, study author Dunlop said, is that older adults, regardless of how much they exercise, should decrease their sedentary behaviors. So, she's still encouraging exercise. But if that's difficult, decreasing sitting time is another goal.

How to do that? Stand up when you talk on the phone, she suggested. Park in a far-away space at the mall or market when you shop. At work or home, walk around a bit when you get up for coffee or water, she advised. Walk to nearby errands instead of taking the car. If you're able, take stairs, not elevators. You can use a pedometer to track your activity.

### **More information**

To learn more about exercising safely, visit the U.S. National Institute on Aging.

**SOURCES:** Dorothy Dunlop, Ph.D., professor of medicine, Northwestern University Feinberg School of Medicine, Chicago; Andrea LaCroix, Ph.D., professor of epidemiology in family and preventive medicine, and director, Women's Health Center of Excellence, University of California, San Diego School of Medicine, and affiliate investigator, Fred Hutchinson Cancer Research Center, Seattle; Feb. 19, 2014, *Journal of Physical Activity & Health*, online