

Regardless of exercise, too much sedentary time is linked to major disability after 60

19 February 2014

If you're 60 and older, every additional hour a day you spend sitting is linked to doubling the risk of being disabled—regardless of how much moderate exercise you get, reports a new Northwestern Medicine study.

The study is the first to show sedentary behavior is its own risk factor for disability, separate from lack of moderate vigorous [physical activity](#). In fact, sedentary behavior is almost as strong a risk factor for disability as lack of [moderate exercise](#).

If there are two 65-year-old women, one sedentary for 12 hours a day and another sedentary for 13 hours a day, the second one is 50 percent more likely to be disabled, the study found.

"This is the first time we've shown sedentary behavior was related to increased disability regardless of the amount of moderate exercise," said Dorothy Dunlop, professor of medicine at Northwestern University Feinberg School of Medicine and lead author of the study. "Being sedentary is not just a synonym for inadequate physical activity."

Disability affects more than 56 million Americans. It's defined by limitations in being able to do basic activities such as eating, dressing or bathing oneself, getting in and out of bed and walking across a room. Disability increases the risk of hospitalization and institutionalization and is a leading source of [health care costs](#), accounting for \$1 in \$4 spent.

The study will be published February 19 in the *Journal of Physical Activity & Health*.

The finding—that being sedentary was almost as strong a risk factor for disability as lack of moderate vigorous activity—surprised Dunlop.

"It means older adults need to reduce the amount of time they spend sitting, whether in front of the

TV or at the computer, regardless of their participation in moderate or vigorous activity," she said.

The study focused on a sample of 2,286 adults aged 60 and older from the National Health and Nutrition Examination Survey. It compared people in similar health with the same amount of moderate vigorous activity. Moderate activity is walking briskly, as if you are late to an appointment.

The participants wore accelerometers from 2002 to 2005 to measure their sedentary time and moderate [vigorous physical activity](#). The accelerometer monitoring is significant because it is objective. The older and heavier people are, the more they tend to overestimate their physical activity. Previous research indicated a relationship between sedentary behavior and disability but it was based on self-reports and, thus, couldn't be verified.

Because the study examines data at one point in time, it doesn't definitively determine sedentary behavior causes disability. "It draws attention to the fact that this is a potential problem," said Dunlop, who is doing a longitudinal study on [sedentary behavior](#) and disability risk.

Studies with animals have shown immobility is a separate risk factor for negative effects on health. "This is the first piece of objective evidence that corroborates the animal data," Dunlop said.

To cut down on sitting time, Dunlop has the following suggestions:

1. Stand up when you talk on the phone or during a work meeting.
2. When you go to grocery store or mall, park in a space farthest away.
3. When you get up to have glass of water, walk around the house or office.
4. Walk for short errands instead of taking the

car.

5. Take the stairs instead of the elevator, if you are able.

Dunlop wears a device on her wrist that tracks her steps and is synced to her smartphone and computer. She's created a social circle with her friends and family, so they can keep track of each other's progress.

"It's great reinforcement to keep moving," Dunlop said.

Rowland Chang, M.D., senior associate dean for public health at Feinberg, is a coauthor on the paper.

Provided by Northwestern University

APA citation: Regardless of exercise, too much sedentary time is linked to major disability after 60 (2014, February 19) retrieved 1 May 2021 from <https://medicalxpress.com/news/2014-02-sedentary-linked-major-disability.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.