
More Sedentary Time, Higher Risk of Heart Failure in Women



Even with regular physical activity, older women (ages 50-79) who spend more waking hours in sedentary behaviors, such as sitting or lying down, have an increased risk of heart failure serious enough to require hospitalisation, according to new research.

To determine if increased sedentary time raised the risk of increased heart failure in older women, researchers examined the records of almost 81,000 postmenopausal women (average age of 63 years) from the Women's Health Initiative (Women's Health Initiative Observational Study). Women participating self-reported the amount of time spent daily, while awake, either sitting, lying down or being physically active.

Researchers divided participants by the total daily sedentary time (sitting and lying down combined): 6.5 hours or less; 6.6-9.5 hours; and more than 9.5 hours. Total number of daily hours spent sitting for each participant was also itemised: 4.5 hours or less; 4.6-8.5 hours; and more than 8.5 hours. None of the participants had been diagnosed with heart failure when the study began, and all were able to walk the distance of at least one block without any assistance.

During an average of 9 years of follow-up, 1,402 women were hospitalised due to heart failure. Compared with women who reported spending less than 6.5 hours per day sitting or lying down, the risk of heart failure hospitalisation was:

- 15% higher in women reporting 6.6-9.5 hours daily spent sitting or lying down; and
- 42% higher in women reporting more than 9.5 hours daily spent sitting or lying down.

Compared with women who reported sitting less than 4.5 hours a day, the risk of heart failure hospitalisation was:

- 14% higher in women who sat between 4.6 and 8.5 hours each day; and
- 54% higher in women who sat more than 8.5 hours a day.

The association between sedentary time and heart failure hospitalisation risk remained after accounting for known heart failure risk factors such as high blood pressure, diabetes, obesity and previous heart attack. An important finding in this study was that the association between more sedentary time and a higher risk of heart failure hospitalisation was found even in the subgroup of women who were the most physically active and meeting recommended activity levels.

"Our message is simple: sit less and move more. Historically, we have emphasised promoting a physically active lifestyle for heart health - and we should continue to do so! However, our study clearly shows that we also need to increase efforts to reduce daily sedentary time and encourage adults to frequently interrupt their sedentary time. This does not necessarily require an extended bout of physical activity; it might simply be standing up for 5 minutes or standing and moving one's feet in place. We do not have sufficient evidence on the best approach to recommend for interrupting sedentary time. However, accumulating data suggest that habitual activities such as steps taken during household and other activities of daily living are an important aspect of cardiovascular disease prevention and healthy ageing," said Michael J. LaMonte, PhD, MPH, lead author of the study and research associate professor of epidemiology in the School of Public Health and Health Professions at the University at Buffalo in Buffalo, New York.

Source: [AHA](#)

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