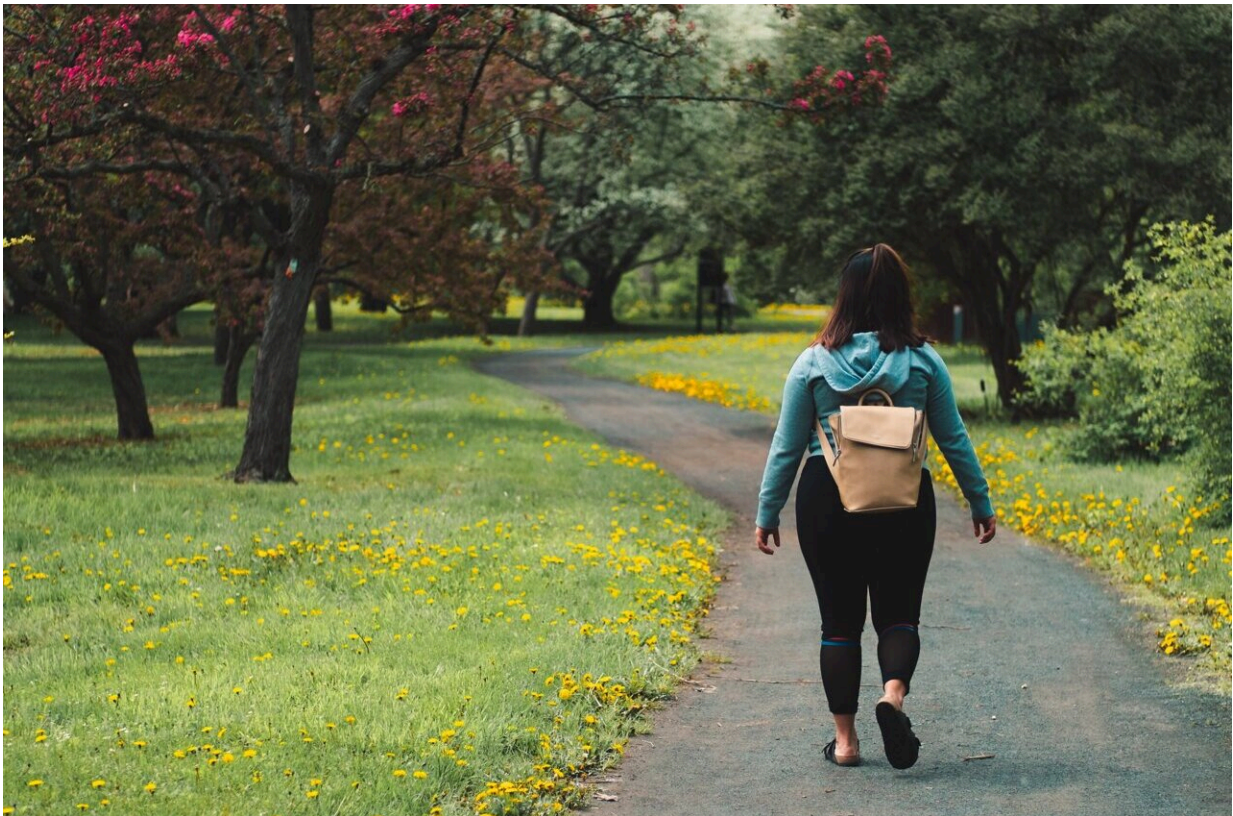


For older adults, every 500 additional steps taken daily associated with lower heart risk

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A new study found that walking an additional 500 steps, or about one-quarter of a mile, per day was associated with a 14% lower risk of heart disease, stroke or heart failure, according to preliminary research to be

presented at the American Heart Association's Epidemiology, Prevention, Lifestyle & Cardiometabolic Health Scientific Sessions 2023. The meeting will be held in Boston, February 28-March 3, 2023, and offers the latest science on population-based health and wellness and implications for lifestyle and cardiometabolic health.

"Steps are an easy way to measure [physical activity](#), and more daily [steps](#) were associated with a lower risk of having a cardiovascular disease-related event in [older adults](#)," said Erin E. Dooley, Ph.D., an assistant professor of epidemiology at the University of Alabama at Birmingham School of Public Health and lead researcher of the study. "However, most studies have focused on early-to-midlife adults with daily goals of 10,000 or more steps, which may not be attainable for older individuals."

Participants in the current analysis were part of a larger study group of 15,792 adults originally recruited for the ongoing Atherosclerosis Risk in Communities (ARIC) study. The present study evaluated health data collected from ARIC study visit 6 (2016-17) to evaluate the potential association between daily step counts and cardiovascular disease.

Researchers analyzed health data for 452 participants who used an accelerometer device similar to a pedometer, worn at the hip, that measured their daily steps. Participants were an average age of 78 years old; 59% were women; and 20% of participants self-identified as Black adults (70% of whom were women, and 30% of whom were men).

The devices were worn for three or more days, for ten or more hours, and the average step count was about 3,500 steps per day. Over the 3.5-year follow-up period, 7.5% of the participants experienced a cardiovascular disease event, such as coronary [heart](#) disease, stroke or heart failure.

The analysis found:

- Compared to adults who took less than 2,000 steps per day, adults who took approximately 4,500 steps per day had a 77% lower observed risk of experiencing a [cardiovascular event](#).
- Nearly 12% of older adults with less than 2,000 steps per day had a cardiovascular event, compared to 3.5% of the participants who walked about 4,500 steps per day.
- Every additional 500 steps taken per day was incrementally associated with a 14% lower risk of cardiovascular disease.

"It's important to maintain physical activity as we age, however, daily step goals should also be attainable. We were surprised to find that every additional quarter of a mile, or 500 steps, of walking had such a strong benefit to heart health," Dooley said. "While we do not want to diminish the importance of higher intensity physical activity, encouraging small increases in the number of daily steps also has significant cardiovascular benefits. If you are an older adult over the age of 70, start with trying to get 500 more steps per day."

Additional research is needed to determine if meeting a higher daily count of steps prevents or delays cardiovascular disease, or if lower step counts may be an indicator of underlying disease.

Everyone can improve their cardiovascular health by following the American Heart Association's Life's Essential 8: eating [healthy food](#), being physically active, not smoking, getting enough sleep, maintaining a healthy weight, and controlling cholesterol, blood sugar and blood pressure levels. Cardiovascular disease claims more lives each year in the U.S. than all forms of cancer and chronic lower respiratory disease combined, according to the American Heart Association.

The study had limitations. Participants had to enroll in the accelerometer device study, and hip-worn accelerometers are limited in capturing other activity behaviors that may also be important to heart [health](#), such as

bicycling and swimming. Study participants were more likely to have had at least some college or above education compared to the overall ARIC sample, and primarily self-identified as white and female, which may limit the study's generalizability. Additionally, steps were only measured at one single point in time, and the researchers were unable to examine if changes in steps over time impacted CVD event risk.

More information: Conference:
professional.heart.org/en/meetings/epi-lifestyle

Provided by American Heart Association

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