

Middle-aged adults help their hearts with regular leisure-time physical activities

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Middle-aged adults who regularly engage in leisure-time physical activity for more than a decade may enhance their heart health, according to new research in the American Heart Association's journal *Circulation*.

In a new study, more than 4,200 participants (average age 49) reported the duration and frequency of their leisure-time physical activities such as brisk walking, vigorous gardening, cycling, sports, housework and home maintenance.

"It's not just <u>vigorous exercise</u> and sports that are important," said Mark Hamer, Ph.D., study lead author and associate professor of epidemiology and public health at University College in London, U.K. "These leisure-time activities represent moderate <u>intensity exercise</u> that is important to health. It is especially important for older people to be physically active because it contributes to successful aging."

At the baseline assessment in 1991-1993, researchers analyzed two key inflammatory markers, C-reactive protein (CRP) and interleukin-6 (IL-6). Researchers again assessed physical activity and inflammatory markers in 1997-99 and about 11 years later.

Physically active participants at baseline had lower CRP and IL6 levels. The difference remained stable over time compared to participants that rarely adhered to physical activity guidelines during 10-year follow-up.

"Inflammatory markers are important because we have shown they are a



key mechanism explaining the link between physical activity and the lower risk of heart disease." Hamer said. "The people who benefited the most from this study were the ones that remained physically active."

Overall, 49.1 percent of the participants met the standard physical activity recommendations for <u>cardiovascular health</u> (2.5 hours per week of moderate to <u>vigorous physical activity</u>). The rate reached 83 percent in subsequent phases of the study.

"The percentage of exercising participants jumped quite a bit because they were entering their retirement during the last phase of the study," Hamer said. "We have shown that retirement seems to have a beneficial effect on physical activity levels."

Those who changed from inactive to active exercisers achieved lower inflammatory markers at follow-up.

"Previous studies have looked at the association between physical activity and <u>inflammatory markers</u> in cross-sectional and short-term studies, but none have done this using longitudinal data," Hamer said. "Our data is much stronger than the previous shorter or cross-sectional studies, adds to prior evidence and confirms the importance of physical activity for its anti-inflammatory effects."

The participants were part of the ongoing Whitehall II study, which included more than 10,000 British civil service participants in 1985 to investigate social and occupational influences on cardiovascular risk.

Provided by American Heart Association



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