Exercise just once a month could help your brain decades later

February 23 2023, by Cara Murez

Regular exercise at some point in life is a key to better cognitive health

in old age, researchers say. Starting sooner is better and sustaining it longer are, too.

A new British study has found that exercising at least once a month at any time in adulthood is linked to better thinking and memory function in later life.

People who reported being physically active at least one to four times per month in separate surveys at the ages of 36, 43, 53, 60 to 64, and 69 had the biggest benefit.

The effect was greater than for those who said they exercised frequently (more than five times a month) during at least one of the study periods but who didn't necessarily keep it up across several surveys.

"Our study suggests that engaging in any leisure-time physical activity, at any point in adult life, has a positive effect on cognition. This seems to be the case even at light levels of activity, between once to four times a month," said Sarah-Naomi James of the MRC Unit for Lifelong Health & Aging at University College London. "What's more, people who have never been active before, and then start to be active in their 60s, also appear to have better cognitive function than those who were never active."

The biggest benefit for thinking and memory function was seen for folks who were physically active throughout their lives.

"The effect is accumulative, so the longer an individual is active, the more likely they are to have higher later-life cognitive function," James said in a university news release.

Researchers used data from a British database of 1,417 people born in the same week in 1946 whose health has been tracked throughout their

lives.

Participants filled out surveys about leisure-time physical activity such as jogging, dancing, gardening, hiking and sports over three decades.

They took cognitive tests at age 69 along with a test that challenged them to recall as many words as possible from a list of 15. In a visual processing speed test, they were asked to cross out all instances of a particular letter in a page of text.

Researchers had expected to learn whether being physically active during a particular period was most important. Instead, they concluded that starting some form of exercise and maintaining it over a long period may be more important than the timing of the activity.

The exact link between exercise and cognitive functioning is unclear.

Education level, childhood cognition and economic background can explain some of the link, researchers found. Participants who were more physically active were also more likely to have gone to a university, have parents from a more privileged background and have higher test scores at age 8.

One limitation of the study is that all participants are white. Those who were socially disadvantaged and less healthy were more likely to leave the study. The long follow-up is considered a strength.

Study findings were published Feb. 21 in the *Journal of Neurology, Neurosurgery, and Psychiatry*.

More information: Sarah-Naomi James et al, Timing of physical activity across adulthood on later-life cognition: 30 years follow-up in the 1946 British birth cohort, *Journal of Neurology, Neurosurgery &*

Psychiatry (2023). DOI: 10.1136/jnnp-2022-329955