

# All exercise intensities benefit older brains

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Older adults who engage in short bursts of physical activity can experience a boost in brain health even if the activity is carried out at a reasonably low intensity, according to a new Western study.

Researchers from School of Kinesiology and Graduate Program in Neuroscience have demonstrated that bouts of aerobic exercise, as brief as 10 minutes, enhances cognitive function of older adults. They also found that these benefits could be realized by those previously encouraged not to exercise.

The study, which included 17 [older adults](#) with an average age of 73, put participants through aerobic tests at moderate, heavy and very heavy levels of exercise intensity, and had them complete a pre- and post-exercise task to measure [executive function](#).

The key finding of the study was that the boost in executive function was experienced by subjects at a variety of levels of exercise intensity.

"These results suggest that people limited to moderate levels of exercise intensity may experience similar cognitive benefits by simply

being active for as little as 10 minutes," said Kinesiology professor Matthew Heath, the study's senior author.

The study also identified that the post-exercise boost to cognitive function was not limited to participants with high levels of cardiorespiratory fitness.

"Discovering that the executive benefit of exercise can be experienced across the spectrum of exercise intensity, and also by people of all fitness levels, showcases how impactful exercise can be," said Heath, a member of Western's Brain and Mind Institute. "And the fact that the cognitive benefits of exercise can be realized almost immediately could increase the likelihood of people engaging in physical activity."

The study, "Older [adults](#) elicit a single-bout post-[exercise](#) executive benefit across a continuum of aerobically supported metabolic intensities," was published in the June 2019 edition of the journal *Brain Research*.

**More information:** Andrea F.M. Petrella et al. Older adults elicit a single-bout post-exercise executive benefit across a continuum of aerobically supported metabolic intensities, *Brain Research* (2019). [DOI: 10.1016/j.brainres.2019.02.009](https://doi.org/10.1016/j.brainres.2019.02.009)

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