

One year of aerobic exercise training may reduce risk of Alzheimer's in older adults

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New research suggests one year of moderate-to-vigorous intensity aerobic exercise training improved cardiorespiratory fitness, cerebral blood flow regulation, memory and executive function in people with mild cognitive impairment. The data suggest improvement in cerebrovascular function from exercise training also has the potential to

reduce the risk of Alzheimer's disease in older adults, according to the research team at the University of Texas Southwestern Medical Center. The research paper is published in the *Journal of Applied Physiology*.

Alzheimer's disease is the most common cause of dementia, accounting for 60–80% of dementia cases, according to the Alzheimer's Association. The group estimates more than 6 million people living in the U.S. with Alzheimer's.

More facts from the Alzheimer's Association:

- Alzheimer's kills more people than [breast cancer](#) and prostate cancer combined.
- Alzheimer's deaths have increased by 16% during the COVID-19 pandemic.
- In 2021, Alzheimer's is projected to cost the nation \$355 billion.

In this new study, the research team observed 37 people with [mild cognitive impairment](#), which is a precursor stage of Alzheimer's disease. At the beginning of the study, the subjects participated in three exercise sessions per week that consisted of brisk walking for 25–30 minutes. By week 11, they exercised four times a week, walking briskly uphill for 30–35 minutes per session. After week 26, exercise sessions increased to four to five times per week for 30–40 minutes.

Using these findings as a building block, a new two-year study is underway to determine the long-term impact of aerobic exercise on Alzheimer's disease, according to Tsubasa Tomoto, Ph.D., a member of the research team. The researchers' goal is to turn the findings of both studies into more practical ways to mitigate the risk of the disease.

More information: Tsubasa Tomoto et al, One-year Aerobic Exercise Altered Cerebral Vasomotor Reactivity in Mild Cognitive Impairment,

Journal of Applied Physiology (2021). [DOI: 10.1152/jappphysiol.00158.2021](https://doi.org/10.1152/jappphysiol.00158.2021)

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