

Exercise results in larger brain size and lowered dementia risk

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Using the landmark Framingham Heart Study to assess how physical activity affects the size of the brain and one's risk for developing dementia, UCLA researchers found an association between low physical activity and a higher risk for dementia in older individuals. This suggests that regular physical activity for older adults could lead to higher brain volumes and a reduced risk for developing dementia.

The researchers found that [physical activity](#) particularly affected the size of the hippocampus, which is the part of the brain controlling short-term memory. Also, the protective effect of [regular physical activity](#) against dementia was strongest in people age 75 and older.

Though some previous studies have found an inverse relationship between levels of physical activity and cognitive decline, dementia and Alzheimer's disease, others have failed to find such an association. The Framingham study was begun in 1948 primarily as a way to trace factors and characteristics leading to cardiovascular disease, but also examining dementia and other

physiological conditions. For this study, the UCLA researchers followed an older, community-based cohort from the Framingham study for more than a decade to examine the association between physical activity and the risk for incident dementia and subclinical brain MRI markers of dementia.

The researchers assessed the physical activity indices for both the original Framingham cohort and their offspring who were age 60 and older. They examined the association between physical activity and risk of any form of dementia (regardless of the cause) and Alzheimer's disease for 3,700 participants from both cohorts who were cognitively intact. They also examined the association between physical activity and brain MRI in about 2,000 participants from the offspring cohort.

What this all means: one is never too old to exercise for [brain](#) health and to stave off the risk for developing [dementia](#).

The study appears in the *Journals of Gerontology Series A: Biological Sciences and Medical Sciences*.

Provided by University of California, Los Angeles

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