

## Exercise in People Age 65 Years and Older Is Associated with Lower Risk for Dementia

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The full report is titled “Exercise Associated with Reduced Risk for Incident Dementia among Persons 65 Years of Age and Older.” It is in the 17 January 2006 issue of *Annals of Internal Medicine* (volume 144, pages 73-81). The authors are E.B. Larson, L. Wang, J.D. Bowen, W.C. McCormick, L. Teri, P. Crane, and W. Kukull.

### What is the problem and what is known about it so far?

Dementia is a condition that affects memory and thinking enough to interfere with normal daily activities. About 1 of every 10 Americans older than 65 years of age has some degree of dementia. Poor memory alone is not dementia, and some declines in short-term memory are normal as people age. Several diseases can cause dementia, but the 2 most common are Alzheimer disease and vascular dementia. In Alzheimer disease, the buildup of abnormal proteins damages brain cells. In vascular dementia, low blood flow to the brain damages brain cells. There is no cure for dementia, so strategies for preventing it are of great interest.

Previous studies suggest that older people who exercise regularly have better mental function and a lower chance of developing dementia than do older people who do not exercise. However, it is difficult to determine whether this relationship is because exercise actually prevents dementia or because people with early dementia become less active.

### Why did the researchers do this particular study?

To see whether people 65 years of age and older who had normal mental function and reported exercising regularly were less likely to develop dementia over coming years than those who reported being physically inactive.

### Who was studied?

1740 people 65 years of age and older who were members of Group Health Cooperative in Seattle, Washington. To be in the study, a person had to have normal mental function on a screening examination.

### How was the study done?

The researchers collected information about study participants' mental function, health, exercise, and lifestyle at the beginning of the study. The researchers asked participants to report the number of days per week during the past year that they did each of the following activities for at least 15 minutes: walking, hiking, aerobics or calisthenics, swimming, water aerobics, weight training, stretching, or other exercise. The researchers defined “regular exercisers” as those who reported exercising at least 3 days per week. They then evaluated participants every 2 years to determine if they had developed dementia by using a standard set of examinations done by physicians, nurses, and a neuropsychologist.

### What did the researchers find?

The researchers followed participants for an average of 6 years. During this time, 158 of the 1740 participants developed dementia. People who exercised at least 3 times per week were less likely to develop dementia than those who were less active.

### What were the limitations of the study?

Exercise was self-reported and was only reported at the beginning of the study. The study sample was mostly white and well educated, and all had health insurance. The association between exercise and dementia might be different in less advantaged populations. In addition, the study suggests but cannot prove that exercising delays the onset of dementia.

### What are the implications of the study?

Preventing dementia may be another benefit of exercise in people older than age 65 years.

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