

Daily Multivitamin May Enhance Memory in Older Adults

A large clinical trial found that daily multivitamins led to modest improvements in memory over a three-year period.

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Memory and thinking skills tend to decline as we get older. Certain lifestyle factors—such as a healthy diet, physical activity, and social interactions—might help to protect cognitive health as we age.

Some studies have suggested that taking multivitamins or other dietary supplements may help protect thinking and memory. But few large-scale studies have directly examined how dietary supplements affect cognitive health in older adults. Clinical trials to date have shown mixed results.

A research team led by Dr. Adam M. Brickman of Columbia University set out to test the idea. Their study included more than 3,500 volunteers, ages 60 and older. Most were white (94%), and more than half had a college degree (56%). Participants were randomly assigned to receive either a daily multivitamin or a placebo pill. Neither they nor the researchers knew which type of pills they were given.

When the study began, the participants took a series of web-based online tests to assess their cognitive abilities. The tests were then repeated annually for three years. Results appeared in the [American Journal of Clinical Nutrition](#) on May 24, 2023.

At the end of the first year, people taking the daily multivitamin had significantly higher scores on a test of immediate recall compared to the placebo group. The test involved viewing a series of 20 words, one at a time, for three seconds each. Immediately afterward, people were asked to key in as many words as they could remember.

In the multivitamin group, scores improved from an average of about 7.1 recalled words to 7.8 words after the first year. For comparison, scores changed from about 7.2 words to about 7.6 words in the placebo group. The improved scores in the multivitamin group continued but did not significantly increase over that of the placebo group into the second and third years of the study. Other types of cognitive tests showed no significant differences between the groups.

Notably, participants with a history of cardiovascular disease had lower immediate-recall scores at the start of the study compared to those without such history. But after one year of taking multivitamins, the scores of those with cardiovascular disease improved significantly, becoming comparable to those without the disease.

These results refine the findings of a [related NIH-supported study](#) published last year. That study of more than 2,200 people ages 65 and older found that a daily multivitamin improved a broad measure of cognitive function. Improvements were likewise more prominent in those with a history of cardiovascular disease.

“There is evidence that people with cardiovascular disease may have lower micronutrient levels that multivitamins may correct, but we don’t really know right now why the effect is stronger in this group,” explains Brickman.

“Cognitive aging is a top health concern for older adults, and this study suggests that there may be a simple, inexpensive way to help older adults slow down memory decline,” he adds.

Further research is needed to study more diverse populations and pinpoint which nutrients might play a role in protecting memory.

This [research summary](#) was published by the National Institutes of Health on June 13, 2023.