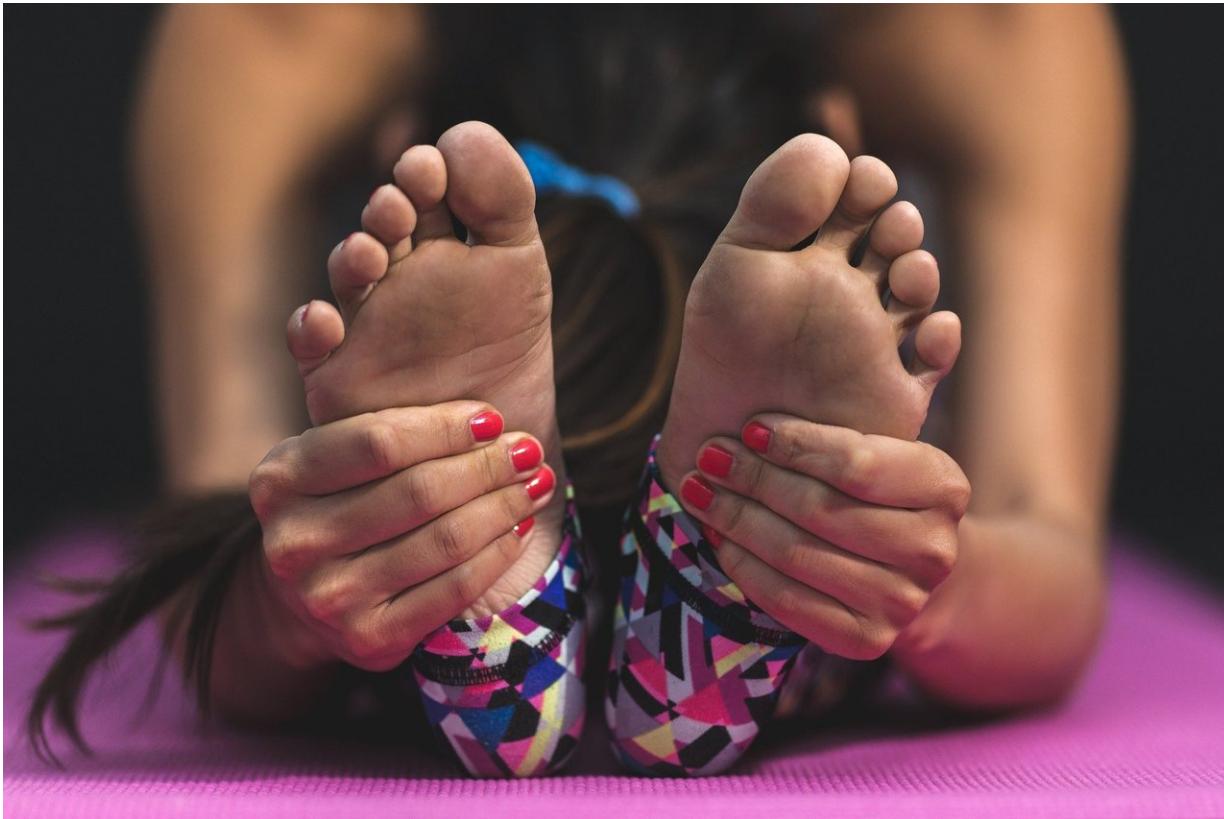


Does exercise stave off Alzheimer's? Even stretching and balance movements can help, study says

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For older adults at risk of dementia, regular exercise from light stretching to rigorous aerobics can help slow memory and thinking

decline, a new study shows.

Alzheimer's researchers said the findings are from a late-stage trial measuring exercise as a potential remedy for people with mild cognitive decline. And they described it as a new avenue to attack a neurodegenerative disease that for decades has stymied researchers and pharmaceutical companies.

Drug companies have focused on a theory that Alzheimer's is triggered by [amyloid beta plaques](#) in patients' brains, but drugs targeting amyloid have failed to slow the mind-robbing disease that afflicts 5.8 million Americans.

Maria Carrillo, chief science officer of the Alzheimer's Association, said the exercise study fits a broader, multifaceted strategy to attack the disease with both drugs and behavioral changes.

"There's just more understanding of the underlying biology and what potential treatments can impact the disease, which actually includes exercise," said Carrillo.

A research team from Wake Forest School of Medicine recruited people who lived sedentary lifestyles and assigned them to two groups. One group regularly engaged in moderate to high-intensity [aerobic exercise](#) while a second group did less rigorous exercises.

Laura Baker, a Wake Forest University School of Medicine professor of gerontology and geriatric medicine, said she's encouraged by her study's findings that exercise benefitted both groups—older adults who did more rigorous aerobics and those who did less strenuous exercise. The study's results were presented earlier this month at the Alzheimer's Association International Conference.

"The results are exciting to me," Baker said. "If it was only the high-intensity exercise that was protective it would be very difficult to roll out and make it sustainable. It's just too hard."

What did the study results show?

The Wake Forest team recruited 296 people with memory problems who lived [sedentary lifestyles](#) and randomly assigned them to two groups. One group regularly exercised with moderate to high-intensity aerobics. A second group completed less rigorous stretching, balance and range-of-motion exercises. Study participants were paired with YMCA trainers.

All participants had [mild cognitive impairment](#), which is when memory and thinking worsen beyond normal aging but not enough to be diagnosed with dementia.

Participants exercised four days each week for 30 minutes or more. They were evaluated using a cognitive test store at the beginning of the study, at six months and at 12 months.

Participants' memory and thinking scores, as measured by a cognitive test, did not slip over the 12 months. Baker expected the more rigorous aerobic group would perform better, but the test scores showed both groups maintained similar levels over the year.

"We really did expect the high-intensity group to have more protection," she said.

The study did not include a placebo group because researchers thought it would be unethical to withhold something potentially beneficial, Baker said. Instead, researchers found a comparable group from another study called the Alzheimer's Disease Neuroimaging Initiative. The comparison group, which included people of similar age, education and genetic risk,

showed a significant cognitive decline over 12 months, Baker said.

Baker's conclusion: Sedentary adults at risk of dementia can prevent or slow cognitive decline if they exercise regularly with supervised support. Having someone to help older adults exercise—or just providing social interaction—is critically important, Baker said.

"If that [exercise](#) does not include regular support, I have no confidence that they're going to see (cognitive) protection," Baker said.

She said there are caveats to the study. It did not answer whether [regular exercise](#) helps all [older adults](#) prevent or delay cognitive decline expected with normal aging. Nor did it evaluate whether regular movement can help those diagnosed with dementia.

How does it aid other Alzheimer's treatments?

While high-profile studies of drugs targeting amyloid beta protein that builds up in the brains of Alzheimer's patients have commanded most of the headlines, experts are studying other targets for the neurodegenerative disease.

In an article published this week in the medical journal *JAMA*, a National Institute on Aging official said only 13 of 61 early- or midstage clinical trials funded by the agency involve therapies that target amyloid.

Another target is the protein tau, which forms tangles in the brains of Alzheimer's patients. Researchers at Washington University are studying a combination of drugs targeting both tau and amyloid.

Other potential targets focus on inflammation, vascular and microglia, immune cells of the central nervous system that might perform a protective role.

Dr. John Hardy, a London geneticist who first described the amyloid cascade hypothesis three decades ago, said he still believes an amyloid-targeting drug will show a clear clinical benefit. But he's also interested in the role of microglia, which may play a role in clearing amyloid.

"I'm optimistic an amyloid drug will be the first out of the box," Hardy said. "And then we'll be looking at other types of drugs, which, for example, go for tau or go for the microglia and inflammation. We're going to be adding those to the cocktail."

Federal agencies and [pharmaceutical companies](#) have invested hundreds of millions in amyloid drugs. Only one amyloid-targeting drug, Biogen's Aduhelm, has gained Food and Drug Administration approval for people with mild forms of the disease.

The FDA's outside expert advisers recommended against approval of the drug, which was based on two studies that were ended early and yielded mixed results. The Centers for Medicare and Medicaid Services limited coverage to people enrolled in clinical trials, and the drug has been prescribed sparingly.

Three other anti-amyloid drugs—lecanemab, donanemab and gantenerumab—are in late-stage [clinical trials](#) with results expected this year and next year.

Last month, researchers in Colombia and Phoenix-based Banner Alzheimer's Institute reported the drug crenezumab failed to slow or prevent cognitive decline in a study of Colombian families who carry a genetic mutation that virtually guarantees they will be the disease.

Earlier this month at the Alzheimer's conference, Banner scientists provided more detailed information on the trial. People who took the drug had a small benefit over a [placebo group](#), but it was not enough to

be statistically significant, said Eric Reiman, executive director at Banner Alzheimer's Institute.

Carrillo, of the Alzheimer's Association, said that while the amyloid drug may play an important role, other treatments and behavior modifications will be necessary too.

"We are making progress toward understanding that so many other contributors are involved," she said.

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