

# Fish oil supplements reduce incidence of cognitive decline, may improve memory function

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Rhode Island Hospital researchers have completed a study that found regular use of fish oil supplements (FOS) was associated with a significant reduction in cognitive decline and brain atrophy in older adults. The study examined the relationship between FOS use during the Alzheimer's Disease Neuroimaging Initiative (ADNI) and indicators of cognitive decline. The findings are published online in advance of print in the journal *Alzheimer's & Dementia*.

"At least one person is diagnosed every minute with Alzheimer's disease (AD) and despite best efforts, we have not yet found a cure for this pervasive and debilitating disease," said principal investigator Lori Daiello, PharmD, of the Alzheimer's Disease and Memory Disorders Center at Rhode Island Hospital. "The field is currently engaged in numerous studies to find better treatments for people suffering with AD; however, researching ways to prevent AD or slow [cognitive decline](#) in normal aging is of utmost importance."

In this retrospective study, older adults involved in the ADNI study were assessed with neuropsychological tests and brain magnetic resonance imaging (MRI) every six months. The group included 229 [older adults](#) who were cognitively normal; 397 who were diagnosed with mild cognitive impairment; and 193 with AD.

The study found that [fish oil](#) supplement use during the study was

associated with significantly lower rates of cognitive decline as measured by the Alzheimer's Disease Assessment Scale (ADAS-cog), and the Mini Mental State Exam (MMSE), but this benefit was observed only for the group of participants without dementia at the time of enrollment.

"Additionally, serial brain imaging conducted during this study showed that the participants with normal cognition who reported taking [fish oil supplements](#) demonstrated less brain shrinkage in key neurological areas, compared to those who did not use the supplements," Daiello said.

"Also, the positive findings on cognitive testing and brain MRI were only observed in persons who did not carry the best-studied genetic risk factor for AD, APOE-4. More research is needed, but these findings are promising and highlight the need for future studies to expand the current knowledge of the effects of FOS use on cognitive aging and AD."

It is estimated that more than 5 million people in the U.S. have Alzheimer's disease. It is the most common form of dementia and is the sixth leading cause of death in the U.S.

Provided by Lifespan

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