

Omega-3 fatty acids shown to exert a positive effect on the aging brain

March 15 2016

Researchers from Charité - Universitätsmedizin Berlin were able to show that omega-3 fatty acid supplementation improves memory function in humans. They studied the effects of supplementation with natural omega-3 fatty acids in healthy older adults over a period of six months. Results from the study, which show that supplementation leads to significant improvements in memory function, have been published in the current issue of the *Journal of Alzheimer's Disease*.

Changes in cognitive function and memory decline form a normal part of aging. However, in neurodegenerative diseases such as Alzheimer's disease or [mild cognitive impairment](#) (the pre-dementia phase of Alzheimer's disease), these changes occur more quickly. There are currently no effective treatments for these diseases. Physicians and researchers are constantly looking for new treatment methods that will maintain their patients' cognitive performance and independence for as long as possible. Targeted prevention is another essential component when trying to preserve cognitive function for as long as possible.

"Ideally, any measures used should be aimed at long-term prevention. This means that measures must be suitable for use in healthy older adults, and should be easy to integrate into day-to-day life," says Dr. Nadine Külzow, a researcher at Charité's Department of Neurology. Nutritional supplements represent one such option. "A number of different dietary components, including omega-3 [fatty acids](#), are currently thought to have a direct effect on [nerve cell function](#). This is why we decided to study the effects on [memory function](#) of a daily dose

of 2,200 milligrams taken for a duration of six months," says Dr. Külzow.

Study participants who received omega-3 fatty acids showed greater improvements on an object location memory task than participants who received a placebo containing sunflower oil. However, there was no evidence of improved performance on a verbal learning test. "Results from this study suggest that a long-term approach to prevention is particularly effective in preserving cognitive function in older individuals. A targeted approach involving dietary supplements can play a central role in this regard," concluded the researchers. Whether or not the improvements recorded can make a noticeable difference in day-to-day life will need to be investigated as part of a larger clinical study. As a next step, however, the researchers are planning to test the effect of supplementation with a combination of omega-3 fatty acids and vitamin B. According to research conducted at Oxford, this combination may be associated with synergistic effects.

More information: Nadine Külzow, Veronica Witte, Lucia Kerti, Ulrike Grittner, Jan Philipp Schuchardt, Andreas Hahn and Agnes Flöel. Impact of Omega-3 Fatty Acid Supplementation on Memory Functions in Healthy Older Adults. *Journ. Alzheimers Dis.* 2016 Feb 10. [DOI: 10.3233/JAD-150886](https://doi.org/10.3233/JAD-150886).

Provided by Charité - Universitätsmedizin Berlin

Citation: Omega-3 fatty acids shown to exert a positive effect on the aging brain (2016, March 15) retrieved 27 April 2024 from <https://medicalxpress.com/news/2016-03-omega-fatty-acids-shown-exert.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private

study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.