

# Fiber supplements could improve brain function in seniors, study says

March 23 2024, by Ebony Williams, The Atlanta Journal-Constitution

---



Credit: Wikimedia Commons

Fiber is essential for the digestive system. It helps maintain a healthy weight and lowers the risk of diabetes, heart disease and certain cancers. Getting the right amount of fiber, whether through food or drinks, is a great way to relieve constipation.

In addition to all that, fiber supplements could improve [brain function](#) in [older adults](#), according to a new study.

The study, published in *Nature Communications*, followed individuals over the age of 60 for a 12-week period. Results found those who took prebiotic [fiber supplements](#) showed a "significant improvement in memory."

The study evaluated the gut microbiome and its correlation with both cognitive and physical function in the aging process. Age increases the resilience of the [gut microbiome](#) and reduces it, making it more vulnerable to disease and medications.

After the individuals were given either a placebo or fiber supplement, they underwent a series of visual memory tests from the Paired Associates Learning test.

"This particular cognitive test has clinical significance, having been identified as an early identifier of Alzheimer's dementia," the study said. By inducing gut microbiota, the researchers saw changes that may alter "both muscle physiology and cognitive behavior."

Although the study demonstrated an impressive change in memory, experts say there isn't much to go on, given that only 72 of the 626 individuals assessed were able to participate.

Thomas R. Vidic, MD, a fellow of the American Academy of Neurology in Elkhart, Indiana, told Health the findings were "fascinating," but the study of the gut-brain connection is new. "We are just in the infancy of this knowledge," he said.

"The study shows an association between the fiber supplement and better cognition rather than a direct causal effect," Amy Reichelt, Ph.D., a

nutrition and neuroscience researcher from the University of Adelaide in South Australia, told Health.

Although the discovery between fiber, gut microbiomes and [cognitive health](#) continues to be evaluated, a 2023 study found a connection between gut microbiota and anxiety, depression and other [mental disorders](#)—revealing that certain gut microbiota do have an effect on mood.

**More information:** Mary Ni Lochlainn et al, Effect of gut microbiome modulation on muscle function and cognition: the PROMOTe randomised controlled trial, *Nature Communications* (2024). [DOI: 10.1038/s41467-024-46116-y](https://doi.org/10.1038/s41467-024-46116-y)

2024 The Atlanta Journal-Constitution. Distributed by Tribune Content Agency, LLC.

Citation: Fiber supplements could improve brain function in seniors, study says (2024, March 23) retrieved 27 April 2024 from <https://medicalxpress.com/news/2024-03-fiber-supplements-brain-function-seniors.html>

<p>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.</p>
--