

SCIENCE alert



Wasabi Boosts Cognitive Ability in Older People, Study Shows

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(Aksana Ban/Moment/Getty Images)

A new study shows that the traditional Japanese spice <u>wasabi</u> can improve some types of cognitive function in those aged over 60, offering a straightforward and rather tasty way of looking after our brains as we get older.

Key to the association is the wasabi ingredient 6 methylsulfinyl hexyl isothiocyanate (6-MSITC), a bioactive compound that has previously been linked to antioxidant and anti-inflammatory effects that slow down damage to cells and protect them.

While a small number of studies have shown 6-MSITC <u>having a beneficial effect</u> on cognition, this hasn't yet been tested with older adults – the people who are most at risk of cognitive decline and related problems like dementia.

"Previous studies suggested that antioxidants and anti-inflammatories have an important role in cognitive health in older adults." write the researchers in their



The team ran a trial involving 72 adults aged over 60 across the course of 12 weeks. The participants were split randomly and unknowingly into two groups: the first group took a wasabi tablet once a day, while the second group took a placebo tablet.

At the end of the experiment, those who had ingested wasabi tablets showed significantly better performance in their episodic memory (recalling events from the past) and working memory (holding information temporarily) based on a series of cognitive tests.

However, no significant differences were found in other areas of cognitive performance, including reasoning, attention, and processing speed. The team thinks the wasabi, and 6-MSITC, might be particularly affecting the hippocampus part of the brain, which is particularly important for memory function.

"These findings suggest that the 12 weeks' 6-MSITC intake selectively enhances working and episodic memory functions in healthy older adults," write the researchers.

The team now wants to look in more detail at what might be happening on the biological and molecular level. In this particular study, no antioxidant or anti-inflammatory
biomarkers were measured, so it's only possible to hypothesize about the effect the wasabi is having and why it's having that effect.

Even with those limitations though, the study shows a clear link between the 6-MSITC-containing wasabi and better memory function. When it comes to maintaining healthy brains into old age, picking foods that are particularly good for us and avoiding those that aren't can be a simple, relatively easy-to-follow strategy.

"Older adults with lower cognitive performances feel difficulties in daily behaviors such as shopping, banking, and cooking," write the researchers.

"Therefore, it is important to improve cognitive functions in older adults."

The research has been published in *Nutrients*.