

Citrus consumption could lower onset of dementia

September 7 2017



Daily intake of citrus fruits, such as oranges, grapefruits, lemons or limes, could reduce the risk of dementia. Credit: Scott Bauer, USDA via Wikipedia

Tohoku University researchers have found some evidence to suggest that daily intake of citrus fruits, such as oranges, grapefruits, lemons or limes, could reduce the risk of dementia developing among older adults

by almost 15 percent.

As dementia continues to affect more people around the world - countries like Japan with ageing populations are especially vulnerable - it is hoped that this new dietary approach could be both a simple and effective solution.

The edible parts of citrus are rich in citrus flavonoids. Some cell and animal experiments have shown that citrus flavonoids can cross the blood-brain barrier and play a part in antioxidant and anti-inflammatory actions. This, according to previous studies, could reverse and repair some forms of cellular damage.

Until now, only one cross-sectional study had been done, and the results suggest that high intake of citrus is positively associated with better cognitive function. To further investigate the relationship between citrus [consumption](#) and incidence of dementia, the Tohoku University team performed statistical analysis using data from the Ohsaki Cohort 2006 Study .

The Ohsaki Cohort 2006 study is composed of Japanese people aged 65 years and older, who were living in Ohsaki City, northeastern Japan, on December 1, 2006. A baseline survey was conducted to collect information on the frequency of citrus consumption in the community. Researchers then followed up with 13,373 responders in 2012 to see how many in the cohort had developed dementia over that period of about six years.

The survey included a variety of questions about dietary and lifestyle habits, and responses related to the consumption of citrus were broadly classified into three groups: those consuming citrus ≤ 2 times/week, 3-4 times/week and almost every day.

The researchers also characterized the baseline of other factors that may be related to dementia, such as psychological distress, motor functions and cognitive functions. The primary outcome was the onset of dementia as defined by the Long-term Care Insurance system, a mandatory form of national social insurance, used in Japan.

The research team, led by Tohoku University lecturer Yasutake Tomata and Professor Ichiro Tsuji, also did analyses to assess whether their finding was an artifact of reverse causality. For example, was it possible that individuals with lower cognitive scores consumed less citrus?

By looking at respondents with only high cognitive scores, the inverse relationship between citrus consumption and incident dementia did not change significantly.

While the researchers were encouraged by the results of their study, they cautioned that more factors need to be considered before a definitive conclusion about citrus consumption and dementia can be reached. Some of the factors include the causes of [dementia](#), as well as demographics and location of the study group.

More information: Shu Zhang et al. Citrus consumption and incident dementia in elderly Japanese: the Ohsaki Cohort 2006 Study, *British Journal of Nutrition* (2017). [DOI: 10.1017/S000711451700109X](https://doi.org/10.1017/S000711451700109X)

Provided by Tohoku University

Citation: Citrus consumption could lower onset of dementia (2017, September 7) retrieved 2 May 2024 from <https://medicalxpress.com/news/2017-09-citrus-consumption-onset-dementia.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.