# Olive oil use associated with lower risk of dying from dementia

An observational study has found that regular olive oil consumption may have cognitive health benefits.



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Regular olive oil consumption may have cognitive health benefits, a study has found. (iStock)

Is olive oil really a health boon? Or is it just a sign of healthy eating habits? A <u>study</u> published in JAMA Network Open on Monday rekindles that debate. The observational study led by researchers at the Harvard T.H. Chan School of Public Health examined two groups of U.S. health professionals and found daily olive oil consumption is associated with a lower risk of dying from dementia.

### The facts

 The study found that consuming at least a half tablespoon of olive oil every day was associated with a 28 percent lower risk of dying from dementia, as compared with those who never or rarely consumed olive oil.  Participants who reported more olive oil consumption had a lower risk of dying from dementia, regardless of the quality of their diet or their adherence to the <u>Mediterranean diet</u>, which consists of plenty of fresh fruit, vegetables, whole grains, nuts and moderate amounts of fish and poultry.

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 Researchers found replacing about one teaspoon of margarine and mayonnaise with the equivalent amount of olive oil was associated with an 8 to 14 percent lower risk of dying from dementia.

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• The study observed two cohorts of more than 92,000 male and female U.S. health professionals over 28 years. Roughly 65 percent of the participants were women. And 4,751 of the participants died of dementia during the study period.

# Background

Olive oil use has been associated with a <u>reduced risk</u> of <u>cardiovascular disease</u>. The oil is a fixture of the Mediterranean diet. One <u>study</u>published in 2014 found extra virgin olive oil, specifically, to be associated with lower cardiovascular risk in older adults.

A 2022 <u>examination</u> of the same two cohorts in the study published Monday found higher olive oil consumption was associated with a roughly 19 percent lower risk of dying from cardiovascular disease, as compared with those who never or rarely consumed olive oil.

And olive oil, when used in the Mediterranean diet, "appears to have a beneficial effect against cognitive decline," said <u>Marta Guasch-Ferré</u>, an adjunct associate professor in nutrition at the Harvard T.H. Chan School of Public Health and a co-author of both studies of the two cohorts.

A 2015 <u>randomized clinical trial</u> in Barcelona found a Mediterranean diet with olive oil "may counteract age-related cognitive decline" in older adults. "Olive oil is rich in monounsaturated fats and contains compounds with antioxidant activity that may play a protective role for the brain," Guasch-Ferré said in an email.

Olive oil "may directly benefit the brain by crossing the blood-brain barrier" and may indirectly support the brain by having positive effects on a person's heart health as well, said <u>Anne-Julie Tessier</u>, a research associate in nutrition at the Harvard T.H. Chan School of Public Health and the lead author of the study published Monday.

## How the study was conducted

The more than 92,000 participants in the two cohorts studied were asked how frequently they consumed different foods every four years for 28 years, starting in 1990. The respondents recorded how frequently they used olive oil in salad dressing, in food or bread, and in baking or frying at home.

A physician reviewed the death certificates of the participants who died during the study period to determine whether dementia was the cause of death, Tessier said. It was determined that 4,751 of the participants died of dementia.

### What we don't know

The observational study found an association between the consumption of olive oil and a comparatively lower risk of dying from dementia. The researchers did not find a causal relationship.

Guasch-Ferré said in an email that "intervention studies are needed to confirm causal associations and optimal quantity of olive oil intake." Future studies could try to determine "the mechanisms" by which olive oil intake is associated with a lower risk of dying from dementia, she said.

The study also observed the diets of health professionals, which means the results may not be generalizable to a broader, more diverse population. And the researchers say they couldn't differentiate between the use of different varieties of olive oil, such as virgin or extra virgin, which have "higher bioactive compounds and antioxidants," Guasch-Ferré said.

### What other experts say

<u>David Knopman</u>, a professor of neurology at Mayo Clinic in Rochester, Minn., said the observational study is "very nice" research but those who consumed more olive oil may just be "more health conscious than their peers." "That limitation is one of the really serious problems with interpreting diet data," Knopman said. The results fit "with our preconceived notions of a health

diet," he said. But there are a number of lifestyle factors that affect cardiovascular health and, in turn, cognitive health — including exercise, diet, sleep and whether someone smokes. Those factors tend to correlate with each other, he said.

"The only way to establish causality of a treatment intervention is with a randomized trial," Knopman said. But he said he's "really skeptical" one nutrient is the key to better health.

"Suddenly switching from steak and mashed potatoes and butter to bean sprouts and broccoli probably isn't going to have a huge effect unless you lose a lot of weight, if you are overweight," he said.

<u>Vasilis Vasiliou</u>, a professor and the chair of the department of environmental health sciences at Yale School of Public Health, said the Harvard study "has been done very carefully," and there is a broader effort to try to "find a mechanism" as to why olive oil, or other parts of the plant, could be beneficial to cardiovascular or cognitive health.

"We don't believe it's one compound or two. The olive oil has the phenolic antioxidants, which are very important for protecting against oxidative stress," Vasiliou said. "But there is a lot of other stuff that's going on there."

### What you can do about it

Guasch-Ferré said "opting for olive oil" rather than processed fats, such as margarine and mayonnaise, "is a safe choice and may reduce the risk of fatal dementia."

Choose vegetable oils, particularly olive oil or extra virgin olive oil, if you can afford it, Tessier said.

"Extra virgin olive oil is actually higher in polyphenols," she said. "These are the compounds that may be beneficial for brain health, over more processed fats."

Vasiliou said he drinks two tablespoons of olive oil high in polyphenol content every morning, in addition to cooking with olive oil on a daily basis. "You're going to be laughing but sometimes I even put it on the top of my ice cream," he said.

https://www.washingtonpost.com/wellness/2024/05/07/olive-oil-dementia-lower-risk/