



# Alzheimer's and Diet: Good for Heart May Be Good for Brain

## Mediterranean-Like Diet May Lower Dementia Risk, Researchers Find

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A diet rich in fruits and vegetables as well as omega-3 fatty acids may not only be good for your heart -- it may also reduce the risk of developing [Alzheimer's disease](#).

Looking at more than 2,000 dementia-free adults ages 65 and older, researchers revealed that persons who consumed a Mediterranean-type diet regularly were 38 percent less likely to develop Alzheimer's disease over the next four years, according to Dr. Nikolaos Scarmeas of Columbia University in New York and colleagues.

The findings were published online in the journal Archives of Neurology.

The dietary pattern is characterized by eating more salad dressing, nuts, tomatoes, fish, poultry, cruciferous vegetables, fruits, and dark and green leafy vegetables and lesser quantities of red meat, organ meat, butter, and high-fat dairy products.

"Our findings provide support for further exploration of food combination-based dietary behavior for the prevention of this important public health problem," Scarmeas and colleagues wrote.

A Mediterranean-style diet has already been linked to improved cardiovascular health, and this latest study joins a growing literature linking diet and Alzheimer's disease, according to the researchers.

Scarmeas and his colleagues reported in 2006 that the Mediterranean diet, characterized by high intakes of fruits, vegetables, and cereals and low intakes of meat and dairy products, lowered Alzheimer's disease risk in participants in the Washington Heights-Inwood Columbia Aging Project (WHICAP).

Commenting on the study, Dr. David Knopman of the Mayo Clinic questioned whether it added much to previous analyses by Scarmeas' group, pointing out that the current study used the same data set in the same population.

"What's really needed are more instances of validation in independent populations," he told MedPage Today.

In an e-mail, Dr. Samuel Gandy of Mount Sinai School of Medicine in New York said what the diet identified in this study shares with other diets linked to decreased Alzheimer's disease risk is that it is heart healthy.

"This may explain their apparent ability to reduce the risk of Alzheimer's, since heart disease increases the risk for

Alzheimer's disease," he said.

"In any event, the diets do no harm and may have some benefits, hence their frequent recommendation by physicians," he wrote, noting that proof of which foods and the appropriate quantities have effects on disease risk remain to be clarified.

In the current study, the researchers further explored dietary patterns in this cohort of Medicare beneficiaries living in northern Manhattan.

They asked 2,148 dementia-free individuals 65 and older to provide dietary information at baseline. Cognitive testing was performed about every 1.5 years.

Seven different dietary patterns emerged based on their ability to explain the variation in seven nutrients most often reported in previous studies to be related either positively or inversely to Alzheimer's disease risk.

The nutrients were saturated fatty acids, monounsaturated fatty acids, omega-3 polyunsaturated fatty acids, omega-6 polyunsaturated fatty acids, vitamin E, vitamin B12, and folate.

Through an average follow-up of nearly four years, 253 of the participants developed Alzheimer's disease.

Only one of the dietary patterns evaluated was associated with Alzheimer's disease risk, after adjustment for demographic factors, smoking, body mass index, caloric intake, comorbidities and genetic risk factors.

The diet, which was rich in omega-3 and omega-6 polyunsaturated fatty acids, vitamin E, and folate but poor in saturated fatty acids and vitamin B12, was similar to the Mediterranean diet.

Although the study could not prove a causal relationship, Scarmeas and his colleagues said that there are several ways the diet could protect against Alzheimer's disease.

Folate reduces circulating homocysteine levels, vitamin E has a strong antioxidant effect, and "fatty acids may be related to dementia and cognitive function through atherosclerosis, thrombosis, or inflammation via an effect on brain development and membrane functioning or via accumulation of beta-amyloid," they wrote.

The diet "may have the protective effect on Alzheimer's disease involving all these pathways," they wrote.

Researchers contacted by MedPage Today and ABCNews.com noted that the findings could not prove causation.

"It may also be that eating healthy is a marker for other factors such as education, intellect, and income, which may be protective," said Dr. George Grossberg of St. Louis University.

Dr. Steven DeKosky, vice president and dean of the University of Virginia School of Medicine in Charlottesville, said there are several unknowns regarding the relationship between diet and Alzheimer's disease risk.

"At an individual level, we don't know how powerful an effect the foods might have on suppressing expression of Alzheimer's disease, or how long you would have to eat them to have an effect, or what interactions of nutrition or individuals' genes may occur and affect risk," DeKosky said.

