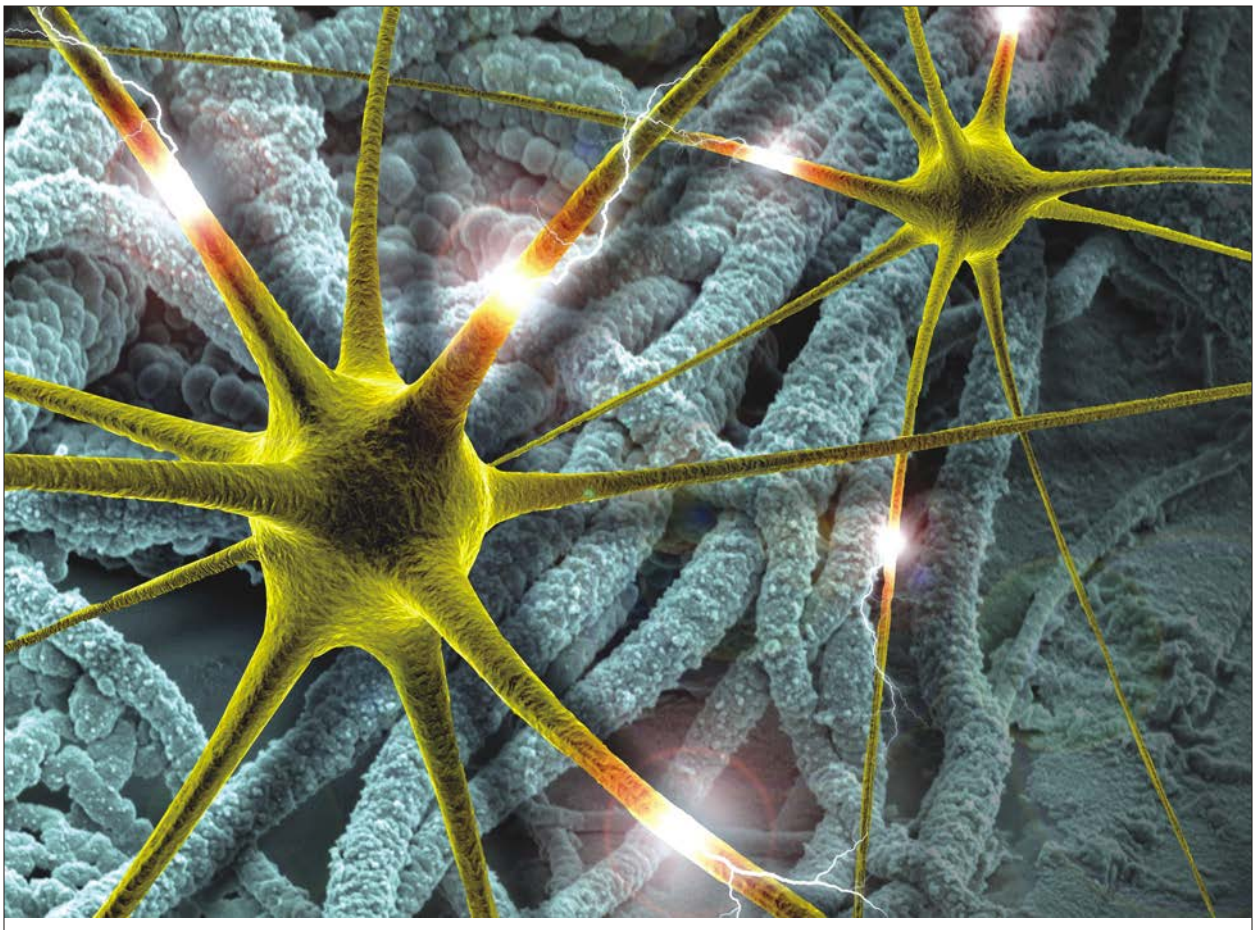

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High Levels of 'Good' Cholesterol May Be Associated With Lower Risk of Alzheimer's Disease

High levels of High-density Lipoprotein (HDL), also known as "good" cholesterol, appear to be associated with a reduced risk for Alzheimer's disease in older adults, according to a report in the December issue of Archives of Neurology, one of the JAMA/Archives journals.

"Dyslipidemia [high total cholesterol and triglycerides] and late-onset Alzheimer's disease are highly frequent in western societies," the authors write as background information in the article. "More than 50 percent of the U.S. adult population has high cholesterol. About 1 percent of people age 65 to 69 years develop Alzheimer's disease, and the prevalence increases to more than 60 percent for people older than 95 years."

Christiane Reitz, M.D., Ph.D., and colleagues at Columbia University's Taub Institute, New York, studied 1,130 older adults to examine the association of blood lipid (fat) levels with Alzheimer's disease. The study included a random sampling of Medicare recipients 65 or older residing in northern Manhattan, with no history of dementia or cognitive impairment. The researchers defined higher levels of HDL cholesterol as 55 milligrams per deciliter or more.

To determine this association, data were collected from medical, neurological and neuropsychological evaluations. Additionally, the authors assigned a diagnosis of "probable" Alzheimer's disease when onset of dementia could not be explained by any other disorder. A diagnosis of "possible" Alzheimer's disease was made when the most likely cause of dementia was Alzheimer's disease but there were other disorders that could contribute to the dementia, such as stroke or Parkinson disease.

During the course of follow-up, there were 101 new cases of Alzheimer's disease, of which 89 were probable and 12 were possible. The mean (average) age of individuals at the onset of probable and possible Alzheimer's disease was 83 years, and compared with people, who were not diagnosed with incident Alzheimer's disease, those who did develop dementia were more often Hispanic and had a higher prevalence of diabetes at the start of the study. Higher plasma levels of HDL cholesterol were associated with a decreased risk of both probable and possible Alzheimer's disease, even after adjusting for vascular risk factors and lipid-lowering treatments. Although higher plasma total cholesterol, non-HDL cholesterol and LDL cholesterol levels also were associated with decreased risks of probable and possible Alzheimer's disease, these associations became non-significant after adjusting for vascular risk factors and lipid-lowering treatments.

"In this study, higher levels of HDL cholesterol were associated with a decreased risk of both probable and possible Alzheimer's disease," the authors conclude. "An important consideration in the interpretation of the results is that it was conducted in an urban multiethnic elderly community with a high prevalence of risk factors for mortality and dementia. Thus, our results may not be generalizeable to cohorts with younger individuals or to cohorts with participants with a lower morbidity [disease] burden."

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Christiane Reitz et al. Association of Higher Levels of High-Density Lipoprotein Cholesterol in Elderly Individuals and Lower Risk of Late-Onset Alzheimer Disease. Arch Neurol., 2010;67(12):1491-1497 DOI: 10.1001/archneurol.2010.297