

New biomarker in the blood may help predict Alzheimer's disease

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Higher levels of a certain fat in the blood called ceramides may increase a person's risk of developing Alzheimer's disease, according to a study published in the July 18, 2012, online issue of *Neurology*.

"Our study identifies this biomarker as a potential new target for treating or preventing [Alzheimer's disease](#)," said study author Michelle M. Mielke, PhD, an [epidemiologist](#) with the [Mayo Clinic](#) in Rochester, Minn. Mielke was with Johns Hopkins University at the time of the research.

For the study, 99 women between the ages of 70 and 79 and free of dementia in the Women's Health and Aging Study II had their blood tested for [levels](#) of serum ceramides, a fatty compound found throughout the body that is associated with inflammation and [cell death](#). The participants were placed into three groups: high, middle and low levels of ceramides. They were then followed for up to nine years. Of the 99 participants, 27 developed dementia and 18 of those were diagnosed with probable Alzheimer's disease.

The study found that women who had the highest levels of the biomarker were 10 times more likely to develop Alzheimer's disease than women with the lowest levels. Those with middle levels of the biomarker were nearly eight times more likely to develop the disease than those with the lowest levels.

"These findings are important because identifying an accurate [biomarker](#)

for early Alzheimer's that requires little cost and inconvenience to a patient could help change our focus from treating the disease to preventing or delaying it," said Valory Pavlik, PhD, with the Alzheimer's Disease and Memory Disorders Center of Baylor College of Medicine in Houston and a member of the American Academy of Neurology, in an accompanying editorial.

According to Pavlik, "While a larger, more diverse study is needed to confirm these findings, projections that the global prevalence of Alzheimer's disease will double every 20 years for the foreseeable future have certainly increased the sense of urgency among researchers and health care agencies to identify more effective screening, prevention and treatment strategies."

Provided by American Academy of Neurology

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