# Evidence of a lipid link in the inherited form of Alzheimer's disease

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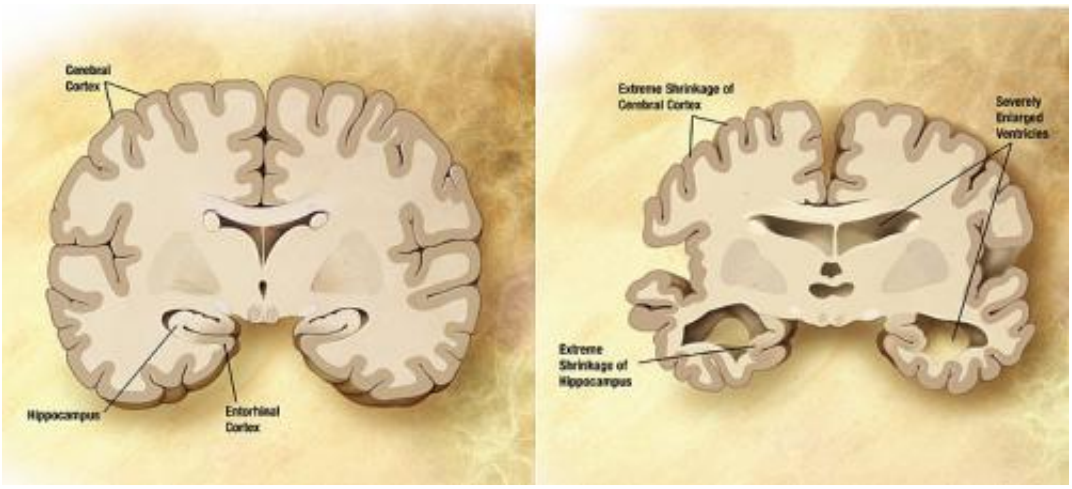


Diagram of the brain of a person with Alzheimer's Disease. Credit: Wikipedia/public domain.

Australian researchers have found biochemical changes occurring in the blood, in the rare inherited form of Alzheimer's disease. Changes in these fat-like substances, may suggest a method to diagnose all forms of Alzheimer's disease before significant damage to the brain occurs.

In an article published today in the *Journal of Alzheimer's disease*, the Australian team led by Professor Ralph Martins from the CRC for Mental Health and Edith Cowan University, examined the lipid profiles of 20 people who carry a mutation responsible for the rare inherited form of Alzheimer's, known as familial Alzheimer's disease.

Using samples from the Dominantly Inherited Alzheimer Network (DIAN) study, the researchers found that people who carried the mutation responsible for this form of Alzheimer's also had altered levels of specific lipids in their blood plasma compared to the control group. This pilot study, combined with previously published studies on lipids in the most common form of Alzheimer's disease, suggests that that specific changes in lipid metabolism may be used as a predictive test for Alzheimer's disease.

At present, the most common, sporadic form of Alzheimer's disease is difficult to diagnose until symptoms are readily apparent and significant damage to the brain has occurred; findings from this study may provide clues to suitable diagnostic markers. While the results are exciting, the researchers involved urge caution due to the pilot nature of the study.

**More information:** Plasma Phospholipid and Sphingolipid Alterations in Presenilin1 Mutation Carriers: A Pilot Study. J Alzheimers Dis. 2016 Jan 21. [Epub ahead of print]. www.ncbi.nlm.nih.gov/pubmed/26836186

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