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## NUTRIENT LEVELS LINKED TO MEMORY, THINKING, AND BRAIN VOLUME

A study published in the December issue of *Neurology* has found that certain nutrients work together synergistically to promote brain health. The study looked at the effects of diet and nutrient intake in seniors on memory, thinking and brain volume. The researchers recruited 104 individuals (average age 87) and measured blood levels of certain nutrients, as well as memory, and thinking in all study participants. They also analyzed MRI scans to determine the brain volume of 42 of the subjects.

Overall, participants in this study were healthy nonsmokers with relatively few chronic diseases and free of memory and thinking problems. Most had generally healthy diets, but there were some with deficiencies of certain nutrients. This created enough variation to determine that nutrient status does play a significant role in memory, thinking, and brain volume. It was determined that nutrient levels accounted for 17% of the variation found in memory and thinking, and for the 37% of the variation in brain volume.

With this data the researchers came to three conclusions. The first conclusion is that individuals with diets high in omega-3 fatty acids, vitamins C, D, E, and B were more likely to score better on memory and thinking tests. Those with diets high in trans-fat were more likely to both score poorly on memory and thinking tests, and to have brain shrinkage. Finally, individuals with low omega-3 fatty acid intake and other nutrient intake are more likely to have lower brain volume.

Getting adequate nutrients through a balanced diet and supplements may be an important overall approach to maintaining good brain health and thinking ability as we age.

*Bowman GL, Silbert LC, Howieson D, Dodge HH, Traber MG, Frei B, Kaye JA, Shannon J, Quinn JF. Nutrient biomarker patterns, cognitive function, and MRI measures of brain aging. Neurology 2012 Jan 24;78(4):241-9. Epub 2011 Dec 28.*