

Mediterranean Diet Supports Healthy Brain Aging

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The Mediterranean diet is associated with less brain atrophy among older adults, with an effect similar to five years of aging, according to a new cross-sectional study (*Neurology*. Oct. 21, 2015). Furthermore, higher fish and lower meat intake might be the two key food elements that contribute to the benefits of Mediterranean diet on brain structure.

High-resolution structural MRI was collected on 674 elderly (mean age 80.1 years) adults without dementia who participated in a community-based, multiethnic cohort. Dietary information was collected via a food frequency questionnaire. Total brain volume (TBV), total gray matter volume (TGMV), total white matter volume (TWMV), mean cortical thickness (mCT), and regional volume or CT were derived from MRI scans using FreeSurfer program. We examined the association of MeDi (scored as 0–9) and individual food groups with brain volume and thickness using regression models adjusted for age, sex, ethnicity, education, body mass index, diabetes, and cognition.

Compared to lower Mediterranean diet adherence (0–4), higher adherence (5–9) was associated with 13.11, 5 and 6.41 milliliter larger TBV, TGMV and TWMV, respectively. Higher fish and lower meat intakes were associated with larger TGMV. Lower meat intake was also associated with larger TBV. Higher fish intake was associated with 0.019 mm larger mCT. Volumes of cingulate cortex, parietal lobe, temporal lobe and hippocampus and CT of the superior-frontal region were associated with the dietary factors.