

AAN 70th ANNUAL MEETING ABSTRACT

Media Contacts:

Renee Tessman, rtessman@aan.com, (612) 928-6137

Michelle Uher, muher@aan.com, (612) 928-6120

EMBARGOED FOR RELEASE UNTIL 4 P.M. ET, SUNDAY, FEBRUARY 25, 2018

Abstract Title: Dietary Approaches to Stop Hypertension (DASH) Diet Associated with Lower Rates of Depression

Press Release Title: Diet Shown to Reduce Stroke Risk May Also Reduce Risk of Depression

Objective: To examine the role of diet on depression in older adults

Authors: Laurel Cherian, Yamin Wang, Thomas Holland, Puja Agarwal, Neelum Aggarwal, Martha Clare Morris

Background: Depression is common in older adults and more prevalent in those with cognitive impairment, vascular risk factors, or a history of stroke. Non-pharmacologic strategies to reduce depression, such as diet, may be effective, however, few studies have investigated the relation.

Design/Methods: A total of 964 participants (25.21% men, mean age 81.32, SD 7.23) from an observational prospective cohort study were assessed annually for an average of 6.53 years of follow-up. Participants with missing or invalid baseline dietary evaluations or fewer than two depression assessments were excluded. Depressive symptoms were assessed with a 10-item version of the Center for Epidemiologic Studies Depression scale. Depression was defined as the presence of four or more depressive symptoms. Diet scores were computed using a validated food frequency questionnaire for the Dietary Approaches to Stop Hypertension (DASH) diet, Mediterranean diet, Mediterranean-DASH Intervention for Neurodegenerative Delay (MIND) diet, prudent, and Western diets. Diet scores were modeled in tertiles. A generalized estimating equation (GEE) model was performed for the longitudinal analysis of depression as a binary outcome.

Results: Participants in the 2nd ($\beta = -0.0786$, SE= 0.0366, $p = 0.0319$) and 3rd ($\beta = -0.1109$, SE= 0.0405, $p = 0.0061$) tertiles of the DASH diet had lower rates of depression over time when compared to those in first tertile, p -trend ($\beta = -0.03$, SE= 0.01, $p = 0.004$). Conversely, the Western diet was positively associated with depression over time ($\beta = 0.0195$, SE=0.0092, $p = 0.0346$).

Conclusions: Dietary modification may be effective in preventing late onset depression. A diet intervention trial may be needed to determine the optimal nutritional components for prevention of late onset depression and optimization of brain health.