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

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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 (β= -0.0786, SE= 0.0366, p= 0.0319) and 3rd (β= -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 (β= -0.03, SE= 0.01, p= 0.004). Conversely, the Western diet was positively associated with depression over time (β= 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.