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INTERNATIONAL STROKE CONFERENCE 2023 ORAL ABSTRACTS

SESSION TITLE: RISK FACTORS AND PREVENTION ORAL ABSTRACTS III

Abstract 145: Dietary Intake And Quality Among Stroke Survivors Compared To Matched Controls Who Participated In The National Health And Nutrition Examination Survey: 1999 - 2018

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Abstract

Introduction: Nutrition is an important modifiable risk factor for the prevention and treatment of stroke. However, the examination of nutrient intake and diet quality in stroke survivors is limited. The purpose of this study was to estimate usual nutrient intake and diet quality in a nationally representative sample of US adults who have a history of stroke and compare to controls.

Methods: National Health and Nutrition Examination Survey 1999-2018 data were used to examine 1,626 stroke survivors matched for age, gender, and survey cycle to their respective controls (n=1,621), with no history of stroke. Data were collected on demographics and dietary intake and quality (assessed by Healthy Eating Index [HEI] 2015) from at least one reliable 24-h dietary recall. Estimates were reported as mean[SE]. Differences in continuous and categorical variables were assessed using independent-samples t-tests and Rao-Scott Chi-Squared tests, respectively.

Results: In comparison to controls, stroke survivors were more likely to report excessive (% > Acceptable Macronutrient Distribution Range) intake for total fat (50.9%[2.7] vs. 40.4%[2.2], $p < .001$), and inadequate intake (% < Estimated Average Requirement) for calcium (54.6%[1.8] vs. 43.5%[2.4], $p = .001$) and magnesium (66%[1.8] vs. 53.6%[1.8], $p < .001$). In addition, stroke survivors were less likely to report adequate intakes (% > Adequate Intake) for fiber (6.8%[0.9] vs. 11.0%[0.9], $p < .001$) and potassium (0.8%[0.3] vs. 1.0%[0.4]) ($p < .001$, all comparisons). Finally, stroke survivors had lower HEI scores than controls (49.8 vs. 51.9, $p < .001$) which indicates lower diet quality, are more likely to be food insecure, and report physical and mental limitations including difficulty preparing and eating meals compared to controls ($p < .001$, all comparisons).

Conclusions: Stroke survivors had lower overall diet quality and greater prevalence of inadequate nutrient intake profiles typically associated with increased risk of cardiovascular diseases including higher total fat intake and lower intake of key micronutrients and fiber compared to matched controls. Stroke survivors were also more likely to experience food insecurity and have physical and mental limitations that may directly impact dietary intake.



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