

**Title:** Dietary Habits on CVD risks among African American and Caucasian residents of Charleston: The Charleston Metro Study

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The purpose of this study was to measure dietary habits of Charlestonians as a function of cardiovascular disease risk (CVD) and race. This cross-sectional design allowed for comparison of diet intake between of 66 Caucasians and 34 African Americans between the ages of 33-83. Both racial groups were further broken into cases (those who have been diagnosed with CVD or had another disease linked to CVD) and controls (those who have no health conditions and maintain a healthy BMI). All subjects completed a semi-quantitative food frequency questionnaire to assess a number of nutritional intake variables. Glycemic index, glycemic load, Health Eating index, dairy intake, grain intake, and fruit intake were among variables chosen for comparison due to their less-studied influence on CVD risk. Using a two-tailed student t-test, our results showed few differences among cases versus controls, nor between African Americans and Caucasians. However, we did find that Caucasian controls significantly consumed more dairy products on average than African American controls (1.53 servings/day whites vs. 0.85 servings/day;  $p < 0.5$ ). Furthermore, Caucasian cases significantly consumed more grains than African American cases (4.9 servings/day vs. 2.2 servings/day;  $p < 0.05$ ). Assuming both groups accurately reported their diet intakes, we conclude that Charleston Caucasians may be consuming more heart-healthy foods such as dairy and grains than their African American counterparts. Such a disparity in dietary practices may partially explain why African Americans have higher CVD prevalence rates in the state. Additional research is needed to better measure, understand, and correlate dietary practices and its influence on health disparities in SC.