Manuscript #260

1. Title:
Dietary intakes and plaque

2. Writing Group (list individual with lead responsibility first):
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3. Timeline:
3/94 - Begin analyses
10/94 - Prepare manuscript
1/95 - Finalize manuscript, submit to public committee

4. Rationale:
While the work conducted (AWG 185) on food consumption and mean intima media wall thickness findings suggested that there was no strong association with individual foods, an atherogenic score summarizing frequencies of consumption of foods considered atherogenic was associated with wall thickness in Caucasians, but not African Americans. It is possible that food and dietary nutrient intakes are more strongly associated with plaque and/or plaque with shadowing lesions than with thickened walls (>90th percentile of the mean wall thickness). Furthermore, diets low in antioxidant containing foods may be inversely associated with plaque and plaque with shadowing lesions. Therefore, we propose examining the associations between nutrient intakes, food consumption, and a derived atherogenic score and thickened walls, plaque and plaque with shadowing lesions by race and sex. The associations of dietary variables with plaque will be compared in a similar analysis with the associations of the same dietary variables with carotid wall thickness and the comparison reported.

5. Main Hypothesis:
The presence of carotid artery plaques and plaque with shadowing lesions are associated with high intakes of atherogenic nutrients, atherogenic foods and to a derived atherogenic index variable.

6. Data (variables, time window, source, inclusions/exclusions):
Visit 1 food frequency questionnaire dat, and nutrients, age, sex, race, cigarette smoking, exercise, plaque, shadowing, carotid wall thickness at all locations. Exclusions: missing race group data, race group neither black nor white, invalid ultrasound, missing total calories, missing more than 10 dietary answers, about the 99th or below the 1st percentile of calorie intake.