Manuscript #461

1. Full Title: Relationship Between Dietary Protein Intake and Blood Pressure in Middle-age Adults
   Abbreviated Title (length 26): Protein Intake and BP

2. Writing Group (list individual with lead responsibility first):
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3. Timeline:
   December 1996

4. Rationale:
   Animal and some recent observational human studies suggest that variation in dietary protein intakes may influence blood pressure and subsequent cardiovascular risk. However, the specific nature and causality of this relationship is not understood. The ARIC study provides an opportunity to investigate further this relationship in a prospective setting with a large population-based sample, and to address whether different sources of dietary protein, as well as amino acids influence blood pressure and cardiovascular risk.

5. Main Hypothesis:
   Baseline protein intake will be negatively associated with blood pressure level and changes in blood pressure throughout the course of follow-up. Protein intakes also will affect the associations between blood pressure and the incidence of cardiovascular disease and between variation in blood pressure and other cardiovascular risk factors.

6. Data (variables, time window, source, inclusions/exclusions):
   Baseline (1986-1989) and the first two three-year follow-ups (1989-1992 and 1992-1995) data will be used. Variables of interest include food frequency data, blood pressure, sex, age, race, SES, alcohol, smoking, blood lipids and chemistries, medical history, use of special diet, ultrasound data, and cardiovascular events.