1. **Title (length 26):** Serum vitamins correlates

2. **Writing Group (individual with lead responsibility first):** (lead) Carlos Iribarren, David Jacobs, Aaron Folsom, Myron Gross, and John Eckfeldt

3. **Timeline:**
   - Data analysis: 3/96
   - Manuscript Preparation: 4/96
   - Circulate to co-authors: 5/96
   - Submission to ARIC Publication Committee/NHLBI: 6/96

4. **Rationale:** Epidemiologic studies indicate that high antioxidant status may be associated with lower risk of cardiovascular disease (CVD). It is, however, important to elucidate whether this association is causal in nature, or is attributable to confounding factors. Thus, this study will examine the determinants of several serum antioxidants in the ARIC case-control subsample (1990-92).

5. **Main Hypothesis:** Antioxidant levels will be significantly associated with lifestyle factors (vitamin supplement use, smoking) and with physiological factors (lipid levels). No other as priori hypotheses are made.

6. **Data (variables, time window, source, inclusions/exclusions):** Exclusions: Symptomatic CVD at Visit 2. Stratify by case-control status. Visit 2 variables: case-control status, gender, age, sex, ARIC field center, vitamin supplement use, serum vitamin A, E, B-carotene, total carotenoids, educational attainment, smoking status, alcohol intake, estrogen use, body mass index, waist-to-hip ratio, systolic and diastolic blood pressure, PEV1, white blood cell count, total cholesterol, LDL, HDL, triglycerides, glucose, insulin, sialic acid, total caloric intake, total fat intake, saturated fat intake, monosaturated fat intake, polyunsaturated fat intake, cholesterol intake, fiber intake; dietary vitamin A, E, and carotenoids. Visit 1: sports index, fibrinogen.