

ARIC MANUSCRIPT PROPOSAL FORM

Manuscript #058

1. Title (length 26):

ANTHROPOMETRY RELIABILITY

2. Writing Group (list individual with lead responsibility first):

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3. Timeline:

Could be started now. All repeated anthropometry already collected and keyed. (Note: a 10% sample of all visit one participants had a selection of the study measurements repeated on the day of interview)

4. Rationale:

The emphasis of this paper will be on the reliability (both intra- and interobserver) of waist and hip girth measurements which will be compared with the reliability of other anthropometric measures. There has been increasing interest in body fat distribution (usually approximated by the ratio of waist to hip girth in recent epidemiologic studies) as a risk factor for cardiovascular disease and many major cardiovascular risk factors. It is therefore timely to examine the reliability of measures of fat distribution. Although some previous studies exist, the size of the ARIC data set will enable more comprehensive analyses than were previously possible.

5. Main Hypothesis:

This is the first of several papers examining the relationship between anthropometric variables and various blood and physiological parameters examined in visit 1.

The purpose of the first paper is to investigate the reliability of various measures of body fat composition and distribution, particularly waist/hip girth. Difference by age, race, sex, and scale effects will be examined and coefficients to correct for measurement error in later risk factor correlation analyses will be developed.

6. Data (variables, time window, source, inclusions/exclusions):

Visit one data for participants with repeat anthropometry -anthropometry data, age, sex, race, and field center.