ARIC ANTHROPOMETRY FORM

ID NUMBER: ☐☐☐☐☐☐☐   FORM CODE: A N T

ADMINISTRATIVE INFORMATION

0a. Completion Date: ☐☐ / ☐☐ / ☐☐☐☐   0b. Staff ID: ☐☐☐

Month   Day   Year

Instructions: *In order to measure bioimpedance, the participant must be barefoot. Set the Tanita analyzer to report metric units (cm/kg).*

A. DETERMINATION OF ABILITY TO STAND

1. Assessment of ability to stand (choose one):.......................... ☐

   Can stand erectly on both feet. ....A → **GO TO ITEM 3**

   Can stand on both feet, but posture not erect. ....B → **GO TO ITEM 3**

   Cannot stand on both feet. C

B. SELF REPORT

2. a) Self-reported weight (to the nearest lb or kg): .... ☐☐☐

   b) Units (check one): .... ☐ lb   ☐ kg → **GO TO END**

C. MEASURED HEIGHT, WEIGHT, and BIOIMPEDANCE

3. Standing height (round to nearest cm):.................................. ☐☐☐ cm

4. Weight: .... ☐☐☐.☐ kg

5. Fat (%): .... ☐☐.☐ %

6. Impedance: .... ☐☐☐ Ohms

7. Fat mass: .... ☐☐☐.☐ kg

8. Lean body mass (FFM): .... ☐☐☐.☐ kg

9. Total body water (TBW): .... ☐☐☐.☐ kg

D. BODY SIZE

10. Girth (round to nearest cm)

    a) Waist: .... ☐☐☐ cm

    b) Hip: .... ☐☐☐ cm

11. Selected for Anthropometry QC _____

I. General Instructions

The Anthropometry form is completed during the participant's clinic or home visit to record the results of that procedure. The technician must be certified to perform each of the anthropometric measurements and should have a working knowledge of the anthropometry procedures documented in Manual 2, Field Center Procedures.

For quality control purposes, five percent of the participants examined at the field center will be randomly selected to have their anthropometric measurements repeated by a different technician. The instructions on how to select the participant for repeat measurements are described in the Quality Assurance and Quality Control Manual of Operations (MOP 12). The technician performing the initial measurements should not be aware that a repeat is to be done until after the initial measurement is complete. The technician who repeats the measurements completes a new or second occurrence of the ANT form, without looking at the measurement determined by the first technician. Instructions on completing a second occurrence of the ANT form is located on the ARIC website under 'Training.'

II. Detailed Instructions for Each Item– Clinic Exam

Anthropometry is performed before the clinic snack and after offering the participant an opportunity to empty his or her bladder.

0a.   Enter the date on which the participant was seen in the clinic.
0b.   Enter the staff ID for the person who completed this form.

A. DETERMINATION OF ABILITY TO STAND

1.   Determination of ability to stand

As described in Section 9 of Manual 2, measurements of weight, waist, and hip circumferences are made while the participant is standing erectly. Thus, prior to beginning the anthropometry sequence it is important to determine the participant's ability to do so. The following prototype script can be used to make this assessment.

"The weight and circumference measures that we'll be taking are all done with you standing. Do you have any conditions that will prevent you from standing while we take these measurements?"

If NO and the participant can stand erectly, enter A as the response for item# 1 and proceed with the measurements. While doing so, evaluate his or her standing posture. If the participant is not able to stand straight, change the response for item #1 to B <can stand on both feet, but posture, not erect> and proceed with the measurements.

If YES, enter the appropriate response in CDART on item #1, as follows. If the participant can stand on both feet but is unable to stand erect – such as due to a severe kyphosis or requires a walker or other support to stand – enter B on item #1 and proceed to section C, recording weight and other items from the Tanita scale. Record the weight in item 4 of section C, and set all other items in section C to permanently missing (Fat%, Impedance, Fat mass, Lean body mass, and Total body water).

If standing on a balance scale is uncomfortable to the participant or poses a safety risk, do not weigh the participant; instead, ask for a self-reported weight, enter the value in Item B.2, change the response to Item A.1 to C, and proceed to close and save the form.

If the participant cannot stand on both feet, enter C in item A.1 and then go to item #2 (self-reported weight).

B. SELF REPORT

2. Self-reported weight is recorded only when the participant is unable to stand on both feet (Question 1 = "C").

C. MEASURED HEIGHT, WEIGHT, AND BIOIMPEDANCE

3. Height is not measured at Visit 6, and the height measurement from a previous visit will be used for any Visit 6 calculations. The height field has been disabled in CDART. The height measurement from a previous visit is available in the Snapshot Report in CDART.

   If the height on the Snapshot report clearly looks incorrect, please measure the participant's height and use that value for the Tanita scale. Record the ID and measured height in a spreadsheet and report the discrepancy to the Coordinating Center.

4. Weight is taken with minimal clothing (gown/scrubs, etc.). Record weight to the tenths place (one decimal). The Tanita scale provides the weight in kilograms in this format.

5-9. Bioimpedance should **not** be performed on participants with pacemakers, implanted defibrillators, or other internal medical devices. In this case, "weight only" mode on the Tanita scale should be used and record the measurement in Item C.4, and set each of % fat, impedance, fat mass, lean body mass, and total body water to permanently missing. If any technical problems occur during the bioimpedance procedure, record them in a notelog for Q6. .
    If a back-up is needed, weigh the participant on the balance scale.

D. BODY SIZE

10. Girth measurements are taken against the skin or over lightweight non-constricting underwear at the discretion of the field center.

10a. (Waist) Ask the participant to stand with his/her feet apart and weight equally distributed while the waist is measured. Raise or lower any clothing that might interfere with the measurement. Stand or sit behind and to the right of the participant. Being at eye level with the Gulick II tape is essential to keeping the tape level for an accurate measurement. The measurement is taken at the point where the horizontal line just above the uppermost lateral border of the right ilium intersects with the mid-axillary line of the body. Palpate the hip area to locate the right ilium (see Figure 3 in MOP 2). Draw a horizontal line just above the uppermost lateral border of the right ilium and then cross the line to indicate the mid-axillary line of the body. Standing on the participant's right side, place the measuring tape around the trunk in a horizontal plane at the level marked on the right side of the trunk. Hold the zero end below the measurement value. Make the reading when the first red ball of the Gulick II tape appears in the window. Record the measurement to the nearest whole centimeter, rounding down if the tenths place of the measurement is exactly 0.5.

10b. (Hip) The objective here is to measure the maximal circumference of the gluteal (hip) muscles. The measuring tape must be kept horizontal throughout this procedure. Record the

measurement to the nearest whole centimeter, rounding down if the tenths place of the measurement is exactly 0.5.

11. Selected for Anthropometry QC, this is a system generated item and will be populated by CDART. If "Selected for ANT QC" then a repeat anthropometry measurement must be performed. When more than one trained technician is available, the repeat measurements should be assignment randomly to one of the certified technicians, say, by coin toss. The technician who repeats the measurements completes a new or second occurrence of the Anthropometry form, without looking at the measurement determined by the first technician.

B. Detailed instructions for each item – Home Exam or Long Term Care Facility Exam

Complete the date, staff code and item 1, as described above. If the participant is able to stand, record weight in item 4, set items 5 – 9 to permanently missing, and record body size measurements in items 10 and 10b. If the participant is not able to stand (item 1 = 'C'), record self-reported weight in item 2 and save the form.