



INSTRUCTIONS FOR THE ANTHROPOMETRY (ANT) FORM



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 ACHIEVE Manual 27 Appendix D and ARIC Manual 2, Field Center Procedures.

The instructions in this QxQ also apply for the ARIC Generation 2 Study. However, the ANT information will not be used in a Participant Visit Snapshot Report for that study since that report is not used for ARIC Generation 2.

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. Beginning at Visit 6, height is no longer measured, and the height measurement from a previous visit will be used for any calculations. The height field has been disabled in CDART. The height measurement from a previous visit is available in the ACHIEVE Participant 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

Body size (10a. Waist and 10b. Hip) measurements are not being completed in ARIC Visit 9, but are collected in ACHIEVE and ACHIEVE ANX. These items have been disabled in CDART for ARIC V9 / NCS.

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. Beginning at Visit 7 ANT QC was no longer collected; therefore, this field always displays "QC not applicable at this time".

E. 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.