



INSTRUCTIONS FOR ANTHROPOMETRY FORM ANT, VERSION 1.0 (QxQ)

I. GENERAL INSTRUCTIONS

The Anthropometry Form is filled out by the study coordinator at the baseline visit.

Header Information: The header information consists of key fields which uniquely identify each recorded instance of a form.

FORM DATE: Record date this is being completed. Select the date from the pop up calendar or type in the date in the space provided. Dates should be entered in the mm/dd/yyyy format.

INITIALS: Record the staff code of the person entering the data on this form. This code is assigned to each person at each site by the GIC. If you do not have a staff code and are collecting SPIROMICS data please contact the GIC in order to receive your own individual staff code.

II. DETAILED INSTRUCTIONS FOR EACH ITEM

- Item 1. Select the description that best details the participant's ability to stand. If 'Cannot stand on both feet' standing height will not be measured, however 'Arm Span' and 'Girth' measurements should still be collected and recorded in items 5 and 6.
- Item 2. **Standing height.** Have the participant stand flat footed with his/her chin parallel to the floor and back straight. Record the participant's height to the nearest centimeter.
- Item 3. **Weight.** Record the participant's weight in kilograms to the nearest tenth.
- Item 4. **BMI.** The data management system will automatically calculate the participant's body mass index based on the values entered in item 2 and item 3.

Arm span and girth measurements are taken with a Gulick II measuring device.

- Item 5. **Arm Span.** Have the participant hold his/her arms straight out from his/her torso. Measure from the middle finger tip on the right hand to the middle finger tip on the left hand, across the back. Record the value, rounding to the nearest centimeter.

If the participant's arm span is longer than the tape measure, measure to the end of the tape measure and place a mark on the participant's finger tip to identify the end point. Record this partial measurement on paper; and then measure from the mark on the finger tip where the tape measure ended to the end of the finger tip. Add the two measurements together for the complete arm span.

- Item 6. **Girth.**

Waist. To define the level at which the waist of abdominal circumference is measured, you must first locate and mark a bony landmark, the lateral border of the ilium. Have the participant stand and hold their t-shirt above the waist. Lower the pants and underclothing of the participant slightly, and standing behind and to the right of the participant, palpate the hip area to locate the right ilium.

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. Use the mirror on the wall to ensure correct horizontal alignment of the measuring tape. This is especially useful when measuring overweight participants or women with hourglass-shaped torsos. The recorder (if available) makes sure that the tape is parallel to the floor and that the tape is snug, without compressing the skin. Measurements are made at the end of a normal expiration and reported to the recorder to the nearest centimeter.

Hip. Instruct the participant to stand erect but relaxed, with weight distributed equally over both feet. The hip girth is measured at the level of maximal protrusion of the gluteal muscles (hips). Verify this position by passing the tape above and below the observed maximum. Keep the anthropometric tape horizontal at this level and record the measurement to the nearest centimeter. The tape should be snug, but not tight enough to compress tissue. The measurement should be made from the participant's right side. Only one measurement is made.

The greatest source of error for this measurement is due to not having the tape horizontal. Before making the measurement the observer verifies the position of the tape from both the front and back to assure its correct position and that the tape is horizontal. In the absence of a recorder the technician uses the wall mirror to confirm that the tape is horizontal.

Neck. Neck measurements should be taken between the midcervical spine and midanterior neck using a study provided plastic tape. In participants with a laryngeal prominence (Adam's apple) measure just below the prominence. Take the measurements while the participant is standing with the shoulders relaxed

Save and close the form.