

## Anthropometric Procedures Video: Circumferences

Music

Arm circumference is measured with the subject standing and with the right arm hanging loosely and relaxed.

It's important to be certain that the muscle of the arm is not flexed or tightened which could yield a larger and inaccurate reading.

The technician stands to the right side of the subject and places a steel measuring tape around the upper arm perpendicular to the long axis of the arm at the marked point.

This mark was made previously when the upper arm length was recorded.

The measuring tape is held gently on the skin surface.

The two ends of the overlapping tape are pulled together using care not to compress the skin and the underlying subcutaneous tissue.

The arm's circumference is recorded from the measuring tape on the lateral aspect of the arm to the nearest millimeter.

Music

To define the level at which the waist or abdominal circumference is measured a bony landmark is first located and marked.

The subject stands and the technician positioned to the right of the subject palpates the upper hip bone to locate the right ilium.

Just above the uppermost lateral border of the right ilium, a horizontal mark is drawn and then crossed with a vertical mark on the midaxillary line.

The technician places the measuring tape around the trunk at the level of the mark on the right side.

The technician then inspects all sides to make sure the measuring tape is in a level horizontal plane.

Mirrors on the wall are used to assure correct horizontal alignment of the steel measuring tape.

This is especially helpful for women with hourglass shaped torsos and for overweight subjects.

The tape is then tightened slightly, without compressing the skin and underlying subcutaneous tissues, the measure is recorded in centimeters to the nearest millimeter.

Music

The subject is instructed to stand upright with feet together and weight evenly distributed.

The buttocks or hip circumference is the only measure that is not taken directly on the skin.

The assistant technician stands in front of the subject and gathers the fabric of the pants.

The thumbs and index fingers hold the folded sides of the pants snugly.

This minimizes the amount of material included in the measurement and helps to define the maximum protuberance of the buttocks when viewed in profile.

The technician is positioned on the right side with eye level at the hip region of the subject.

The steel measuring tape is placed around the hips and anchored at the maximum protuberance of the buttocks.

The assistant then releases the folds of the pants and helps to adjust the tape so it is in a horizontal plane.

The measuring tape is held snugly, but not pulled tight.

The measure is recorded in centimeters to the nearest millimeter.

Music

For thigh circumference, a standardized position is required.

The technician best explains it to the subject through combined demonstration and instruction. The subject is instructed to step back with the left foot.

This shifts the body weight to the left leg.

The right leg is in front and bent slightly at the knee.

The soles of both feet are flat on the floor. The right forward foot is used mainly to assist with balance but should not bear the weight of the body.

The technician positioned to the right of the subject places the measuring tape around the thigh at the midpoint previously marked for upper leg length.

The measuring tape is positioned on the skin perpendicular to the long axis of the thigh.

The two ends of the overlapping tape are pulled together, using care not to compress the skin and the underlying subcutaneous tissue.

The thigh circumference measurement is recorded in centimeters to the nearest millimeter.

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