

Waist Circumference

What is waist circumference?

Circumference is the perimeter of or the distance around a circle. This means that waist circumference is a measure of the distance around the abdomen.

Why is waist circumference measured?

Waist circumference is one of the most practical tools to assess abdominal fat for chronic disease risk and during weight loss treatment. A high waist circumference or a greater level of abdominal fat is associated with an increased risk for type 2 diabetes, high cholesterol, high blood pressure and heart disease.

According to the United States Department of Health and Human Services (HHS) the following individuals are at increased risk for developing chronic diseases:

- Women with a waist circumference of more than 35 inches.
- Men with a waist circumference of more than 40 inches.

However, lower thresholds for waist circumference have been recommended for Asian populations by the World Health Organization due to recent research findings. Therefore, those at increased risk for developing chronic disease include:

- Asian women with a waist circumference of more than 31 inches.
- Asian men with a waist circumference of more than 35 inches.

How is waist circumference measured?

To measure waist circumference locate the top of the hip bone. Place the tape measure evenly around the bare abdomen at the level of this bone. Read the tape measure and record the waist circumference in inches.

Tips for accurately measuring waist circumference

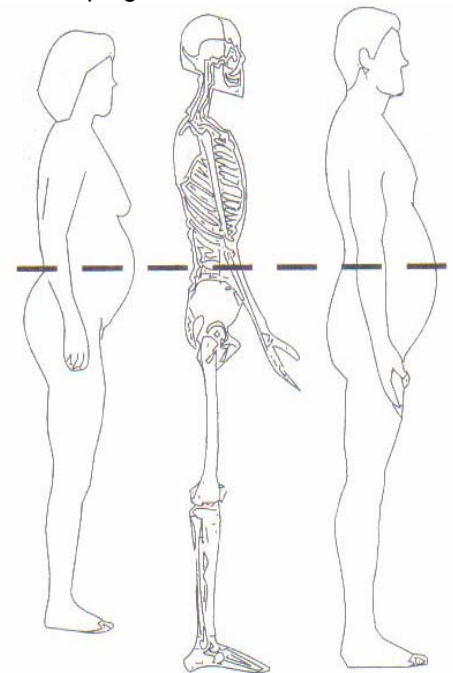
- Ensure that the tape is snug but does not push tightly into the skin.
- Measure waist circumference after breathing out normally; do not "suck in" the stomach.

Are waist circumference measurements better at assessing risk than BMI?

The most commonly used method for classifying an individual as overweight or obese is the BMI (Body Mass Index) which is based on body weight and height. BMI may be calculated using weight in kilograms over height in meters squared. However, the BMI has limitations and can lead to the misclassification of certain individuals such as those with increased muscle mass or the elderly. Waist circumference may be a better indicator of health risk than BMI alone, especially when used in combination with BMI. Waist circumference is particularly useful for individuals with a BMI of 25-34. For individuals with a BMI less than 35, waist circumference adds little predictive power on the disease risk classification of BMI.

References

Clinical Guidelines on the Identification, Evaluation, and Treatment of Overweight and Obesity in Adults: Evidence Report. National Heart, Lung, and Blood Institute Web site: <http://www.nhlbi.nih.gov>



Measuring-Tape Position for Waist (Abdominal) Circumference in Adults

Photo courtesy of the National Heart, Lung, and Blood Institute

If you are a registered University of Illinois student and you have questions or concerns, or need to make an appointment, please call: **Dial-A-Nurse at 333-2700**

If you are concerned about any difference in your treatment plan and the information in this handout, you are advised to contact your health care provider.

Visit the McKinley Health Center Web site at: <http://www.mckinley.illinois.edu>