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 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.

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 25-34.9. For individuals with a BMI > than 35, waist circumference adds little predictive power on the disease risk classification of BMI.