Assessing Weight

This handout provides several different methods to assess body weight using either the body mass index (BMI), the waist-to-hip ratio, or the quick estimate method. The methods below might be used as a tool to help assess current health related to body weight and/or for setting health goals.

Body Mass Index (BMI)

The body mass index uses your height and weight to determine your weight classification—underweight, normal weight, overweight, or obese. BMI is calculated the same way for both adults and children. See the two methods to choose from below using either the metric or the US imperial system.

Kilograms and Meters (or Centimeters) Formula:

Divide weight in kilograms (kg) by height in meters (m) squared.

To obtain the height in meters, divide the height in centimeters by 100.

- **Example**: Weight = 70 kg, Height = 160 cm (1.60 m)
- **Calculation**: $70 \div (1.60)^2 = 27.34$ BMI

Pounds and Inches Formula:

Divide weight in pounds (lbs.) by height in inches (in.) squared, then multiply by a conversion factor of 703.

- **Example**: Weight = 154 lbs., Height = 5'3" (63")
- **Calculation**: $[154 \div (63)^2] \times 703 = 27.28$ BMI

BMI Classifications	
18.5 or less	Underweight
18.5 to 24.99	Normal Weight
25 to 29.99	Overweight
30 to 34.99	Obesity (Class 1)
35 to 39.99	Obesity (Class 2)
40 or greater	Morbid Obesity

Waist-to-Hip Ratio (WHR)

Waist-to-hip ratio is a measurement that compares the size of your waist to the size of your hips in inches to assess your health risk. Measure the circumference just above your belly button or at your lowest width, and across the widest part of your hips. Divide the waist measurement by the hip measurement.

- **Example**: Waist = 26in., Hips = 38 in.
- **Calculation**: 26 ÷ 38 = 0.68 WHR

Waist-to-Hip Ratio		
Male	**Female**	**Health Risk**
0.95 or below	0.80 or below	Low risk
0.96 to 1.0	0.81 to 0.85	Moderate risk
1.0+	0.85+	High risk

Quick Estimate Method

A quick way to estimate your weight is to use your median weight for your height. First you will calculate your median weight:

- **Example—Men**: 106 pounds for 5 feet, plus 6 pounds per inch over 5 feet, or minus 6 pounds per inch under 5 feet.
- **Calculation—Male**: Height = 5'9"; Median Weight = 160 pounds
  [106 + (6x9) = 160]
- **Example—Women**: 100 pounds for 5 feet, plus 5 pounds per inch over 5 feet, or minus 5 pounds per inch under 5 feet.
- **Calculation—Female**: Height = 5'4"; Median Weight = 120 pounds
  [100 + (5x4) = 120]

Next you will calculate your healthy weight range by subtracting and adding 10% to your median weight:

- **Example—Men**: Height = 5'9"; Median Weight = 160 pounds
- **Calculation**: 10% of 160 pounds = 16 pounds
  160 – 16 = 144 pounds
  160 + 16 = 176 pounds
  The healthy weight for a 5'9" man is between 144 and 176 pounds.
- **Example—Women**: Height = 5'4"; Median Weight = 120 pounds
- **Calculation**: 10% of 120 pounds = 12 pounds

120 – 12 = 108 pounds

120 + 12 = 132 pounds

The healthy weight for a 5'4" man is between 108 and 132 pounds.

Resources

- [Body Mass Index (BMI)](#)
- [Waist-to-Hip Ratio (WHR)](#)
- [Quick Estimate Method](#)