



WELLPATH'S HEALTHY BACK CHALLENGE

Body Composition Self-Assessment

Body Mass Index (BMI):

BMI is a useful measure of overweight and obesity. It is calculated from your height and weight. BMI is a simple and acceptable gauge of your risk for many conditions and diseases. An abnormal BMI (high or low), is associated with a higher risk for certain conditions and diseases such as heart disease, high blood pressure, type 2 diabetes, gallstones, breathing problems, and certain cancers.

BMI is a good measure when assessing a large group of people or doing a quick and simple assessment of an individual, although BMI does have some limitations:

- BMI is a height and weight measure and is not sensitive to individual's variance in muscle and body fat.
- It may over predict risk in heavily-muscled individuals.
- BMI is not sensitive to different types of body fat and not all fat confers the same risk to one's health.
- BMI is not sensitive to how an individual stores their body fat. Body fat in the trunk, and around organs carries a greater risk than stored on the extremities.

To consider fully an individual's body fat-related risk for health conditions and diseases BMI should only be part of the assessment.

https://www.nhlbi.nih.gov/health/educational/lose_wt/BMI/bmicalc.htm

Source: Adapted from Clinical Guidelines on the Identification, Evaluation, and Treatment of Overweight and Obesity in Adults: The Evidence Report.

Classifications for BMI	
	BMI
Underweight	<18.5 kg/m ²
Normal weight	18.5–24.9 kg/m ²
Overweight	25–29.9 kg/m ²
Obesity (Class 1)	30–34.9 kg/m ²
Obesity (Class 2)	35–39.9 kg/m ²
Extreme obesity (Class 3)	≥40 kg/m ²

Waist Circumference:

Measuring waist circumference helps screen for possible health risks that come with overweight and obesity. If most of your fat is around your waist rather than at your hips, you're at a higher risk for heart disease and type 2 diabetes. **This risk goes up with a waist size that is greater than 35 inches for women or greater than 40 inches for men.** To correctly measure your waist, stand, with your arms at your sides, feet together, and abdomen relaxed. Have a partner take a horizontal measure at the narrowest part of your torso above the umbilicus (belly button) and below the xiphoid process (bottom notch of your chest bone).

Record your Waist Circumference Measurement: _____ inches.

The table below will use your BMI and waist circumference together to assess the risk to your health that is related to your body fat. Using the table below locate the BMI column and find the line that corresponds with your BMI. Then follow that line over to the columns with the waist measurements and locate the column that corresponds to your waist size. The intersection between your BMI and your waist measurement in the waist column indicates your health risk based on the BMI and waist circumference together.

Classification of Overweight and Obesity by BMI, Waist Circumference, and Associated Disease Risk*				
	BMI (kg/m ²)	Obesity Class	Disease Risk* (Relative to Normal Weight and Waist Circumference)	
			Men ≤40 in (≤ 102 cm) Women ≤ 35 in (≤ 88 cm)	> 40 in (> 102 cm) > 35 in (> 88 cm)
Underweight	< 18.5		-	-
Normal†	18.5–24.9		-	-
Overweight	25.0–29.9		Increased	High
Obesity	30.0–34.9	I	High	Very High
	35.0–39.9	II	Very High	Very High
Extreme Obesity	≥ 40	III	Extremely High	Extremely High

* Disease risk for type 2 diabetes, hypertension, and CVD.
† Increased waist circumference can also be a marker for increased risk even in persons of normal weight.
Adapted from "Preventing and Managing the Global Epidemic of Obesity. Report of the World Health Organization Consultation of Obesity." WHO, Geneva, June 1997.*

Your Associated Disease Risk using BMI & Waist Circumference together: (circle)

No Increased Risk
Increased Risk
High Risk
Very High Risk
Extremely High

BMI is a height/weight correlation to health risk and waist circumference adds a factor related to where you store your body fat to give a more meaningful interpretation of your health risk related to body fat.

Obesity-related conditions:

Another very important factor to consider when trying to assess your health risk related to body fat, is the presence or absence of health conditions that are caused, or are related to, increased body fat. Correlating your BMI and waist measures to obesity-caused conditions/diseases may actually be the best assessment possible.

Circle any of the conditions below that are caused, or related to obesity.

Obesity caused Conditions & Diseases:

Sleep Apnea
Hypertension
Lower-extremity joint pain/disorder
Diabetes (Type II)
Exercise intolerance
Osteoarthritis

Obesity Related Conditions & Diseases

Heart disease	Vascular disease
High/abnormal cholesterol	Back pain
Impotency	Breathing problems
Stroke	Cancers (certain)
Gallbladder disease	Metabolic syndrome
Liver disease	

If: 1) your BMI is high, 2) your waist circumference is high, 3) your combined BMI/waist risk is high and 4) you have one or more of the conditions in the left column or two or more of the conditions in the right columns you very likely have **high-risk** related to the amount of body fat you are carrying. If you lower the amount of body fat you are carrying you should absolutely improve the conditions in the left column and likely improve the conditions in the right columns. The presence of obesity caused, or related diseases and conditions in individuals with high-risk as determined by BMI and waist circumference is arguably the most accurate assessment of health risk related to body fat attainable.

Other methods:

Anthropometry: Skinfolds and circumferences measured with a Gulic Tape or inelastic tape.

Bioimpedance: Using electrical current to assess bod composition

Underwater weighing: Measuring bodyweight under water and correcting for air in lungs

Air Plethysmography: Measuring air displacement, (similar to underwater weighing)

Ultrasound: Using ultrasound imagery to assess body composition

DEXA: Using x-ray technology to assess body composition (DEXA is considered by most to be the “gold-standard method for assessing body composition). For more information visit <http://www.wellpath.info/bodycomp>.