

BMI ... does a pretty good job when studying the whole population.

## How do you measure obesity?

How do we know if one is overweight or obese. There are several methods but the one most frequently used by researchers and physicians is the Body Mass Index or BMI. The BMI is a mathematical formula involving dividing one's weight (in kilograms) by one's height in meters squared. The resulting number is one's BMI. Thanks to the Internet, there are now a lot of calculators to do the math for us. This is just one of them.

[Calculate your BMI - Standard BMI Calculator.](#)

As you can see from the formula, the BMI is not adjusted for age, gender or other health status. It is meant to be a proxy for excess adipose tissue in the body. It does a pretty good job of that when studying a whole population or a subgroup. At the personal level, it may not be as good an indicator of excess adipose tissue. Waist circumference is sometimes used as an additional assessment of risk because it measures central adiposity, which is more likely to predict the risk for co-morbid conditions. (Generally, one BMI unit is equal to about 5 pounds.)

More sophisticated tools are sometimes used including hydrostatic weighing and DEXA which uses bioelectrical impedance to determine body composition.

The other problem with the BMI has to do with the cut-off points. In other words, what is the range for normal, overweight, obese and morbid obesity. Much research goes into evaluating what are the appropriate cutoffs. The studies are not always very clear...except for the fact that, at some point, increasing weight by any measurement means increased risk for comorbid conditions (See [Health Effects](#)) of mortality (See [Obesity A to Z](#)). A discussion of the needs for changes in BMI usage in the elderly is reported at An evidence-based assessment of federal guidelines... [\[Arch Intern Med. 2001\] - PubMed Result](#)

BMI may tell us a lot about populations but you might be interested in how your weight compares with others your age, race or gender. See: [Average height and weight charts, men and women.](#)

For many years, Americans were familiar with the [Metropolitan Life Insurance Weight tables Height & Weight Tables](#). These tables are often used with patients considering bariatric surgery. Many surgeons discuss weight loss not in terms of BMI units but in terms of Excess Weight or one's current weight minus the Metropolitan Life 'ideal weight.' Excess Weight Loss or EWL, then, becomes the standard to look at weight loss following bariatric surgery.

[ASMBS - Rationale for Surgery](#)