



Important health checks – body mass index

Body Mass Index (BMI)

The BMI has long been used to measure a population's health or body fat, however isn't actually not as accurate for the individual. It doesn't consider:

- that your muscle weighs more than body fat, some muscular people can have a high BMI even if they don't have a lot of fat on their body
- the location of your body fat
- your status eg. pregnant

BMI can over estimate the amount of body fat for pregnant women and under estimate the amount of body fat for the elderly as well as being imprecise guide for people with eating disorders like anorexia nervosa or people with extreme obesity.

BMI is not the best measure of an individual's fatness or health risk. It simply measures your weight for your height, but can't tell you as much about your health risk as your waist circumference. Even if your BMI is normal, if you have a waist measurement above 94cm for men and 80cm for women you may be at risk of serious chronic disease. So we often use them together to get a good overall picture of both your body fat and health risk.

So how do I measure my BMI?

This is very simple and is probably the reason why it has been used for so long. Simply weight yourself in kilograms and take your height in meters.

Then divide your weight by your height squared – like this:

Weight = 70kg

Height = 1.6mts (squared is $1.6 \times 1.6 = 2.56$)

Now divide your weight by 2.56 = to get your BMI

$70 / 2.56 = 27.3$

This falls in the overweight category.

Classification of Body Mass Index

| BMI | Classification | Risk of co-morbidities or disease |
|---------------|-------------------------------|--|
| <18.50 | Underweight | Low (but possibly increased risk of other clinical problems) |
| 18.50 - 24.99 | Normal range (Healthy Weight) | Average |
| 25.00 - 29.99 | Overweight | Increased |
| 30.00 - 34.99 | Obese class 1 | Moderate |
| 35.00 - 39.99 | Obese class 2 | Severe |
| >40.00 | Obese class 3 | Very severe |

Reproduced from: Obesity: Preventing and Managing the Global Epidemic, 2000, WHO, Geneva.

No matter what your BMI, you need to really consider your waist circumference as a better measure of your risk of disease. Even if your BMI is normal, if your waist circumference is high – you are most definitely still at risk of chronic disease.