# Is BMI Useful or Useless?

Body Mass Index (BMI) is a number that shows if someone is underweight, normal weight, overweight, or obese. It was created in the 1800s to measure obesity in a region or country[1].

In the 1960s, doctors realized that obesity can lead to health problems like heart disease, high blood pressure, and diabetes[2]. Since BMI is easy to calculate from height and weight, many studies have used it to look at disease risks.

When your BMI is below 18 or above 25, your risk of dying early goes up a lot. At a BMI of 35, your risk is 180% higher than at 25. At a BMI over 40, your risk is 225% higher!
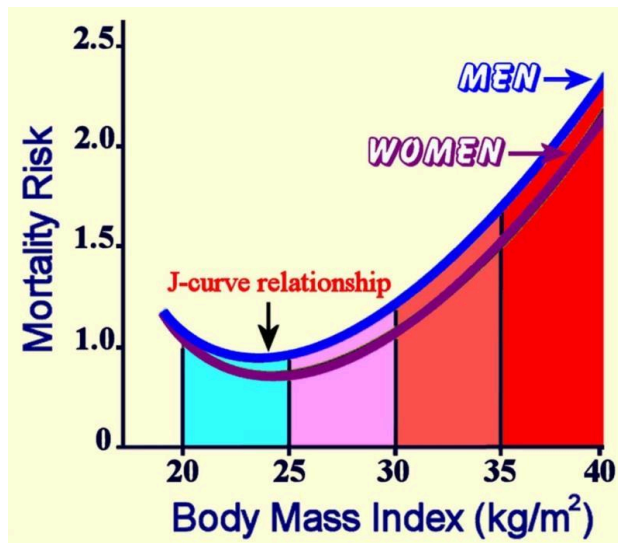
The graphs below[3] show that as BMI increases from 25 to over 40, the chances of getting diabetes increase.

Risk of getting Diabetes based on BMI
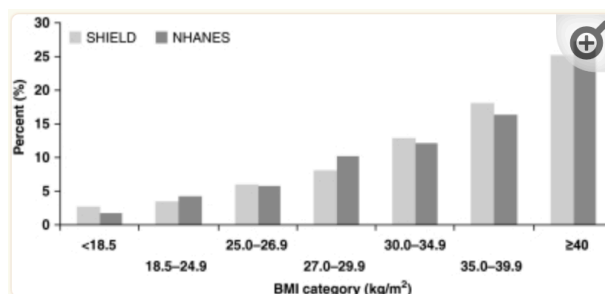
BMI isn't perfect though. Some very muscular athletes may have a high BMI but aren't really obese. But for most people, BMI is a useful way to estimate health risks from being underweight or overweight.

In the future, we may have better ways to measure body fat on a large scale. But for now, BMI helps doctors decide if someone needs to make changes to their weight.

1. Henry Blackburn* and David Jacobs Jr†
   International Journal of Epidemiology, 2014, 665–669 doi: 10.1093/ije/dyu061
   Advance Access Publication Date: 1 April 2014
   https://academic.oup.com/ije/article/43/3/665/2949550

2. Indices of relative weight and obesity* :Ancel Keys, Flaminio Fidanza, Martti J Karvonen, Noburu Kimura, Henry L Taylor. International Journal of Epidemiology, Volume 43, Issue 3, June 2014, Pages 655–665, https://doi.org/10.1093/ije/dyu058

3. The relationship of body mass index to diabetes mellitus, hypertension and dyslipidaemia: comparison of data from two national surveys. H E Bays, et al. Int J Clin Pract. 2007 May1; 61(5): 737-747 https://pubmed.ncbi.nlm.nih.gov/17493087/