

92 October 22, 2022 – Body Mass Index

We are accustomed to eating three meals per day and even having snacks in between as well as drinking beverages containing sugar and other health depriving ingredients. Weight gain is a result for most people evidenced now by a society predominated by obesity. Current statistics in 2022 for the United States indicates that nearly 40% of adults aged 20 and over are obese and 71.6% of the same age group are overweight including obesity. The United States ranks fourteenth in all the countries of the world as having the worse obesity ranking. Countries with the least obesity are Japan and Korea. To understand the true impact of the American obesity epidemic, we first need to understand what it really means to be overweight. Generally, doctors and nutritionists classify people as either underweight, healthy weight or normal, overweight, or obese. These different classifications are determined by body mass index (BMI), or a measure of body fat based on your height and weight. The Centers for Disease Control (CDC) recommends the following guidelines for the United States for determining Adult BMI Categories:

CDC Adult BMI Categories

BMI Status
≤ 18.4
Underweight
18.5 - 24.9
Normal
25.0 - 39.9
Overweight
≥ 40.0
Obese

The equivalent chart used Worldwide by the World Health Organization (WHO) is noted as follows:

WHO Adult BMI Categories

BMI Category
< 16.0
Severely Underweight
16.0 - 18.4
Underweight
18.5 - 24.9
Normal
25.0 - 29.9
Overweight
30.0 - 34.9
Moderately Obese
35.0 - 39.9
Severely Obese
> 40.0
Morbidly Obese

The tricky part for those of us outside the medical field is using the formulae for calculating BMI which is based on the metric system. The formula is expressed as follows using weight in kilograms (kg) and height

in meters (M) with the height squared (the quantity times itself): **BMI = weight divided by height squared**. To use the formulae in English units there has to include a multiplier of 703 or then the formulae in US or English units becomes: **BMI = weight (pounds) divided by height squared (inches) times 703**. An example of an adult weighing 167 pounds and 5 feet 8 inches tall, or 68 inches tall would be:

$$\text{BMI} = 167 \text{ (weight in pounds) divided by } 68 \text{ times } 68 \text{ (inches squared) times } 703 = \text{(equal) } 25.39$$

Looking at the table above 25.39 equates to **overweight** in the range of 25.0 – 39.9 for the CDC.

Obesity in the United States is a major health issue associated with numerous diseases, specifically increased risk of certain types of cancer, coronary artery disease, type 2 diabetes, stroke, cardiovascular disease, as well as significant increases in early mortality and economic costs. Many factors influence body weight: genes, though the effect is small, and heredity is not destiny; prenatal and early life influences; poor diets; too much television watching; too little physical activity; too little sleep; and our food and physical activity environment.

Next week the Post will be on **Eating 1 Meal Daily** which could be a solution for weight control for some people recognizing that there has to be safeguards introduced as supplements such as vitamins and minerals, or otherwise nutrients. And of course there has to be physical activity which most sources recommend a minimum of 30 minutes per day at 5 days per week.