Body Composition (Body Fat vs. Weight)

- Body Composition is the term used to describe the different components that, when taken together, make up a person's body weight. The human body is composed of a variety of different tissue types. The so-called 'lean' tissues, such as muscle, bone, and organs are metabolically active, while adipose (fat) tissue is not.

- Standard scales can tell you a total weight, but cannot determine the lean-to-fat ratio of that weight. By the old height-weight charts, an athlete can be "over-weight" and not "over-fat." A bodybuilder, for example, may be 8% body fat, yet at 250 pounds may be considered "over-weight" by a typical weight chart.

- There are several different methods of assessing the percent of fat and lean mass of an individual. These methods are referred to as Body Composition Analysis.

- There are a variety of Body Composition and Body Fat Analyzers and Scales available for home use that provide more than just total weight measurements. These devices determine total weight, the percent and amount of body fat, muscle mass, water, and even bone mass. https://www.verywellfit.com/best-body-fat-analyzer-3120631

- **What should your body fat percent be?**
  Your ideal weight and fat-lean ratio varies considerably for men and women and by age, but the minimum percent body fat considered safe for good health is 5% for males and 12% for females. The average adult body fat is closer to 15%-18% for men and 22%-25% for women.

- **Can I Change My Body Composition?**
  Yes. To increase or decrease your percent of body fat you need to create the right balance between the calories in and calories out. The best way to do this is to decrease daily calories by about 500 and increase your exercise. Aerobic exercise along with strength training is ideal. If you are beginning a new exercise program, you are advised first to consult your physician.
Body Mass Index (BMI)

Are you in shape, or could you lose a few pounds? Find out where you stand by calculating your Body Mass Index.

What is Body Mass Index?

- Body mass index, or BMI, is a guideline used to judge whether you are at risk for health problems associated with your weight. Weight-related health risks include heart disease, diabetes and cancer.

  Your BMI is calculated using this formula:

  \[ \text{BMI} = \frac{\text{weight}}{(\text{height})^2} \]

What does your BMI say about your health?

- Are you within the healthy weight range? Use a BMI calculator to find out!
- Rather than relying simply on the bathroom scale, experts urge people to know their BMI, a figure that takes into account not just weight but height to indicate body fat.

The goal for most people: a BMI that is over 18 and under 25.

Use an on-line calculator: [https://www.nhlbi.nih.gov/health/educational/lose_wt/BMI/bmicalc.htm](https://www.nhlbi.nih.gov/health/educational/lose_wt/BMI/bmicalc.htm)

<table>
<thead>
<tr>
<th>BMI</th>
<th>Waist less than or equal to 40 in. (men) or 35 in. (women)</th>
<th>Waist greater than 40 in. (men) or 35 in. (women)</th>
</tr>
</thead>
<tbody>
<tr>
<td>18.5 or less</td>
<td>Underweight</td>
<td>--</td>
</tr>
<tr>
<td>18.5 - 24.9</td>
<td>Normal</td>
<td>--</td>
</tr>
<tr>
<td>25.0 - 29.9</td>
<td>Overweight</td>
<td>Increased</td>
</tr>
<tr>
<td>30.0 - 34.9</td>
<td>Obese</td>
<td>High</td>
</tr>
<tr>
<td>35.0 - 39.9</td>
<td>Obese</td>
<td>Very High</td>
</tr>
<tr>
<td>40 or greater</td>
<td>Extremely Obese</td>
<td>Extremely High</td>
</tr>
</tbody>
</table>

Risk of Associated Disease According to BMI and Waist Size

Keep in mind

- BMI does not measure your body composition - how much fat and muscle you have. So a person who has a lot of muscle, like a professional bodybuilder, may be "overweight" by BMI standards but not at risk for weight-related health problems.