

Fitness Focus

Body Composition

Body composition is the ratio of fat to non-fat tissue in the body. Non-fat tissue includes: muscle, bones, cartilage, skin, nerves, and internal organs. Body composition is usually expressed in terms of a percentage of fat. Maintaining a healthy level of body fat is critical for a lifetime of good health because fat plays a critical role in our health.

The **healthy level for females is 17-32%** and **10-25% body fat for males**. Maintaining those healthy levels is important because of the critical roles fat plays in our health. First, fat insulates the body and helps keep it at approximately 98.6 degrees. Second, it is used as a source of energy and storage for energy. Finally, it protects and cushions vital organs. Having **too much or too little body fat** can lead to **serious health problems**. Too much body fat puts a person at a higher risk for stroke, heart attacks, diabetes, and high blood pressure. Too little body fat prevents fat from providing its life sustaining roles to the body.

There are a few ways to determine your percentage of body fat. The scale isn't one of them. Scales give total weight, and can't determine if that is a healthy for you.

Consider this... Two girls weigh 100 lbs. each, are they both healthy?

Do you need more information? One has 25% body fat, the other 39%.

Two guys weigh 300 lbs. each, are they both healthy?

One has 12% body fat and the other has 35%.

Does a scale help any of these people determine if they are healthy?

Do healthy people come in many different shapes and sizes?

The most accurate way to determine body fat is **underwater weighing**. Calipers, taking **skin fold measurements**, provides another accurate way to determine body fat. **Near-infrared light** technology also provides an accurate way to measure. Hand held devices and scales designed to measure body fat, currently have a much larger margin of error.

Part of achieving or maintaining a healthy level of body fat is determined by how much cardiovascular activity, muscle strength, and muscle endurance activity a person gets. Cardiovascular activity burns calories, which changes body composition. Muscle strength and endurance activities build or tone muscles, which changes body composition.

Lesson Review

1. Describe body composition and how it is expressed.
2. What are the healthy levels of body fat for males and females?
3. Describe the three critical roles fat plays in our health.

(over)

4. Discuss the problems with having too much or too little body fat.
5. Describe the methods available to determine body fat, the accurate and not so accurate.
6. Describe the 3 health areas of fitness that can help a person achieve or maintain a healthy body composition.