

## **Understanding Body Fat Measurements**

Many Americans stand on their scale in the morning and are unaware of its limitations. The scale merely tells us what our weight is. What it fails to reveal is how much of that weight is muscle, fat, water, or bone density. Without understanding this we are only getting half the picture when we step on the scale.

When we exercise our goal is to lose body fat. Losing water and muscle mass are counterproductive to being healthy. So how do we determine what's fat and what's not? The best way is to get your body fat evaluated is by a fitness professional. There are several methods available and we'll discuss the pros and cons of the most available ones.

According to the American Council on Exercise, the average woman should hover between 21% and 31% body fat whereas an average male should be somewhere in the zone of 14% and 25%. These ranges vary for the athletic. Athletic women could be between 14% and 20% and an athletic man can be between 6% and 13%. These ranges vary depending on what methods are employed to determine your body fat.

### **Underwater or Hydrostatic Weighing**

Considered the gold standard, this method involves the use of a tank of water, a pipe to blow in, and a team of trained professionals. This method can be found in Universities and is usually used for evaluating professional athletes and for scientific studies. Because it is labor intensive, not easy to find, and rather expensive, from \$300.00 to \$500.00 most every day people will not seek this method out.

### **Skin Fold**

This method is found in most reputable fitness facilities and has only a mere plus or minus 3 to 5 % difference from underwater weighing. It requires a skilled practitioner and a set of calipers. The trainer will pinch anywhere from 3 to 7 sites in the body and determine the percent of body fat based on the sum. It is reliable, quick, and inexpensive.

### **Bioelectrical impedance**

These are the space age looking machines that require an electrode taped to your body. The machine sends pulses through the body and based on how quickly these pulses travel determines the amount of body fat. The margin of error from underwater weighing is much greater and conditions such as dehydration and menstruation can alter your final number.

### **BMI**

Somewhat controversial in nature, the BMI or Body Mass Index attempts to determine your body fat based only on your height and weight. This method falls short, as it does not discriminate muscle weight from body fat. Therefore a well-

trained athlete whose weight is constituted of mostly muscle may appear overweight on this scale.

### **Waist to Hip Ratio**

This method determines the difference between the circumference of your waist and hip and tells you if you are an apple or pear shaped person. Those who carry more weight in the mid section tend to be more prone to obesity related conditions than those who carry the weight below the upper body. This test is good for getting a quick snapshot of your health in terms of weight distribution and is enhanced when used in conjunction with skin fold measurements or electrical impedance.

### **Belt Size**

Still the simplest method is to determine whether or not your waistline is shrinking. Keep in mind it is quite conceivable to be gaining weight in muscle while losing a whole belt size. This is why the scale gives you an incomplete picture. In addition to exercising, eating a well balanced diet low in saturated fats and drinking lots of water throughout the day also contribute to your weight management goals.