



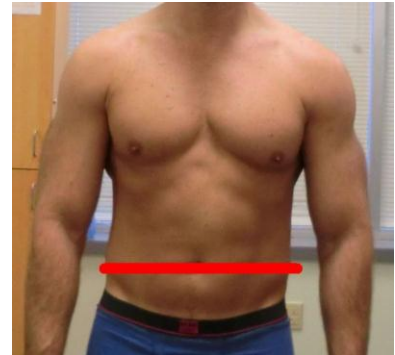
Start **S.M.A.R.T** Benchmarking: Body Composition

It's tempting to start the new year off by just monitoring scale weight. But scale weight doesn't account for your body composition, how much of your weight is body fat and how much is lean body mass (Muscle).

In order for you to experience real body change, you have to monitor more than just the number on the scale. I perform one of two methods: Circumference Measures and the 3 Site Caliper test, on all my clients at the beginning of their personal training journey with me.

Estimating Body Composition by Circumference Measures

WAIST: Men & Women – Measure around the torso at the belly button level. In the fitness world this is your actual “Waist” measurement, but as you’ve probably noticed, it is a little higher than your jeans waist measurement.



The majority of fat cells reside in the waist area, so a decreasing waist size is normally correlated with a decrease in body fat percentage. An increase usually means an increase in body fat percentage. It is important to measure this area at the same time of day under the same conditions each time as some body types are prone to bloating which may give a false reading.

HIPS: Women – Measure around the largest protrusion of the buttocks. Women may carry the bulk of their fat in the hip and thigh region, rather than the waist like men. Consequently, a reduction in circumference of the hip and thigh is usually correlated with a reduction in body fat. That doesn't mean you shouldn't be trying to strengthen and develop the muscles of the thigh and gluteus (Butt). Compound moves that train the thigh and butt burn a lot of calories and help fight fat. *And if you do build muscle, it will take up less space than the fat, as muscle fibers are more dense than fatty tissue.*



WRIST: Men – around the lower right arm, below the wrist bone and where the hand attaches. While admittedly, there are minimal fat cells on the wrist when compared to the waist, hips and thighs, the wrist gives men insight into their frame size and is part of the circumference body composition equation.



BODY WEIGHT – Men & Women – Body weight is needed as a cross reference for the men’s circumference measures, and as a total measure for both men and women so we have a basis for separating the amount of weight that is body fat (Body Fat Percentage) and the amount that is Lean Body Mass (LBM).

HEIGHT – Women. The equation we use for women’s circumference measures also includes a variable for height.



Estimating Body Composition by 3 Site Caliper test

The Caliper is a pinching device that measures the thickness of a skinfold as it pulled away from the muscle.

On men the three sites are:

The **Chest**



The **Abdomen**
And



The **Thigh**



On women the three sites are:

The **Tricep**
(Back of the Upper Arm)



The **Suprailiac**



And
The **Thigh**



The three site caliper measures are then entered into the body composition calculator on www.exrx.net along with the client’s sex, age and weight to obtain a result.

Body Composition

ExRx.net > Fitness Testing > Calculator

3 Site # of Sites	<input type="text"/> Triceps	1.0652920 Density
Male Sex	11 <input type="text"/> Pectoral	168.11717 Lean Weight
42 Age	<input type="text"/> Midaxilla	28.882824 Fat Weight
197 Weight	<input type="text"/> Subscapula	14.661332 % Fat
<input type="button" value="Calculate"/> <input type="button" value="Reset"/>	15 <input type="text"/> Abdomen	19.275 Population Average
	<input type="text"/> Suprailiac	78 Score
	18 <input type="text"/> Quadriceps	Good Rating

Either method is suitable for benchmarking, however one method should be performed every 3 to 4 weeks to get consistent readings and have comparable results.