

WHAT ARE YOU MADE OF?!?

Body Composition Testing at Genesys Athletic Club

Description

Body composition refers to the relative percentages of fat and nonfat tissues in the body. Find out what your body fat percentage is and what it means for your health.

For best results, do not work out the day of the test and get 6-8 hours of sleep the night prior.

Registration Fee

\$20 GAC members

\$30 Non-members

FREE to current personal training clients.

Please ask your personal trainer to perform these measurements.



Body Composition Measurements:

Both measurements will be completed unless otherwise noted

Skinfolds: Please wear shorts and a t-shirt and do not exercise before testing.

Bioelectrical Impedance (scale)*:

Please stay hydrated, avoid food, tobacco, alcohol, and caffeine for 3 hours before testing, and do not exercise before the test.

*Unable to perform on persons with heart palpitations and/ or pacemakers. Descriptions of Skinfolds and Bioelectrical Impedance are located on the back.

How to Register

Body composition testing is available through an appointment with our personal training staff. Please contact Jen Colombo @ 810-606-7526 to schedule an appointment with one of our certified personal trainers.

Understanding Body Composition

Body composition can be divided into two components: *lean (fat-free) mass and fat mass*. Lean body mass represents the weight of your muscles, bones, ligaments, tendons and internal organs and is more dense than fat. Body fat consists of essential fat and storage fat. Essential fat is necessary for normal bodily functioning and is naturally higher in women. Storage fat is located around internal organs and directly beneath the skin (subcutaneous). It provides bodily protection and serves as an insulator to conserve body heat.

Measuring Body Fat and Lean Mass

Several methods of measuring body composition have been developed. At GAC you will have two methods administered to ensure accuracy: skinfold testing and bio-electrical impedance analysis (BIA).

The skinfold method uses calipers to measure the thickness of skinfolds, giving a measurement of fat stored just under the skin. Usually 4 specific sites are measured and the combined sum of the sites is put into an equation to give an estimated body fat percentage. For best results, skin should be dry and free of any oils or lotions. In addition, measurements should not be done immediately after exercise as this increases water to the skin and can influence the results.

The BIA (bio-electrical impedance analysis) method is an easier and faster method of measuring body fat. A safe, low-level electrical signal is sent through the body. The signal travels quickly through water in the muscle and other lean tissues, but slows down through fat. The difficulty with which this signal flows is called impedance, and it is this rate that the BIA machine measures. The impedance number is then put into a formula that estimates body fat percentage. Since water levels in the body change throughout the day, and this may affect body fat readings, it is best to take BIA body composition readings at a consistent time of day and under similar conditions each time.

The Importance of Monitoring Body Fat

Standing on the scale or simply looking in a mirror is not the best way to judge body fat. Nor is either method a reliable way to rate the effectiveness of lifestyle changes if you are trying to lose weight. For example, someone on a weight loss program may step on the scale and see that she has gained two pounds in six weeks. Imagine the disappointment this would cause. But, after having a body composition test done, assuming one was done at the start of her program, she may find that her body fat has gone down 6 pounds while her lean body mass has gone up 8 pounds. The scale reflects an increase in weight, but more importantly, body fat decreased! Let's say another person has been told by her doctor to lose weight, so she drastically cuts calories and in 6 weeks, she has lost 8 pounds. She thinks she's on the right track, but when she goes back in to see her doctor, she's told that she lost 10 pounds of muscle and gained 2 pounds of fat! According to the scale, she lost "weight" but in reality she gained fat! Clearly, the scale is not the best predictor of body composition. Similarly, a large-boned, muscular person may have a *lower* body fat percentage than a thin, small-boned person even though by looking at them you'd think the opposite was true. By regularly monitoring body fat using either the skinfold or BIA