

Bioelectrical impedance analysis (BIA) is a commonly used method for estimating body composition

BIA actually determines the electrical impedance, or opposition to the flow of an electric current through body tissues which can then be used to calculate an estimate of total body water (TBW). TBW can be used to estimate fat-free body mass and, by difference with body weight, body fat.

In regard to overall health, weight is not nearly as important as the composition of that weight. More important, rather than tracking weight, we should be aware of our body composition. Stepping on a weight scale simply tells us the combined weight of all our body's tissues. That weight may fluctuate throughout the day depending on the time of day, hydration status or what we are wearing. In contrast, body composition reveals the relative proportions of fat and lean mass in the body. Fat mass consist of two types of fat: essential and nonessential fat. The second component of body composition, lean mass, refers to bones, tissues, organs and muscle.

What can you do with your results? The results from your body composition assessment can be used to identify risks, personalize your exercise program or evaluate how well your current exercise and nutrition program is working for you. Changes in body composition take time and a dedicated effort, but the positive impact on health and quality of life is worth the effort. Participation in regular exercise and physical activity along with a healthy balanced diet are the key to reaching and maintaining a healthy body composition.



<http://www.akern.com/en/products/bia-101.html>