

Interpreting the results of your Bodycomp scan

Congratulations on completing your whole body DXA scan. Body composition is a better indicator of your health and fitness status than body weight, as it looks at how much muscle and fat you have, not just what they weigh together. While it is interesting to see how your values compare against the normal population, try to focus on the changes that you can achieve with your own values. Percent body fat does not necessarily tell you how healthy or fit you are, but is one of the better figures to use in tracking your personal progress.

Terminology of the Bodycomp printout

DXA - dual energy x-ray absorptiometry – the process that allows our images and data to be produced. Refers to passing a small amount of x-rays of two energy levels through the body and measuring how well they transmit through tissue.

Lean mass - the sum of all muscle and soft organ tissue as seen by the DXA scanner.

Fat mass - this value includes all of the fatty tissue in the body, including the fatty tissue found within the organs of the body as well as the subcutaneous fat found under the skin.

BMC - bone mineral content – the sum of all skeletal tissue within the body.

Lean+BMC - the sum of lean and BMC mass - a quick assessment of change over time, as the bone mineral content is relatively constant over time. This presents the data as a two compartment model, allowing quick comparisons to be made between scans.

BMD - bone mineral density – the amount of bone mineral content within a certain area.

Percent fat - the ratio of fatty tissue to total body tissue. This value is calculated as follows:

$$\% \text{ fat} = \frac{\text{Fat (g)}}{\text{Total mass (g)}} \times 100$$

Region - an area that is defined by the technologist. This allows us to produce values for individual regions, such as a left arm or leg, in addition to the whole body results.

Three compartment model - this describes how DXA differentiates the body into three sub-types of tissue. They are bone, lean and fat mass. Most methods of body composition analysis such as BIA and underwater weighing use a two compartment model that only classifies the body as having fat mass and fat-free mass (FFM).

Artifact - a structure or feature not normally present but visible within the image, due to either physical objects or client motion.