

Glossary of Terms

The terms below, as well as the graphical representation at the right, will help describe the general breakdown of the composition of the body.

Height – in inches (in) or centimeters (cm)

Weight – in pounds (lbs) or kilograms (kg).

Resistance – the opposition to the flow of an electrical current. Higher TBW and LDM yield a lower Resistance, and higher Fat and dehydration yield a higher Resistance.

Reactance – measures the body's opposition to changes in the flow of an electrical current. Reactance is related to the capacitance of the cell membranes, and reflects integrity, function, and composition.

Phase Angle (PA) – PA reflects the relative contributions of fluid (resistance), and cellular membranes (capacitive reactive). It is calculated as the arc-tangent of Reactance over resistance, measured in degrees. Typical Phase Angles (NHANES human data) range between 4-9.

Fat – provides insulation, warmth, and energy storage, and is necessary for the absorption of many vitamins.

Fat Free Mass (FFM) – is also called Lean Body Mass, and is everything in your body, except Fat.

Lean Dry Mass (LDM) – is what is left after subtracting all of the water from your Fat Free Mass.

Total Body Water (TBW) – is all of the water throughout your body, both inside and outside of your cells.

Intra-Cellular Water (ICW) – represents the amount of water inside your cells.

Extra-Cellular Water (ECW) – represents the amount of water outside of your cells.

Total Body Weight					
Fat	Fat Free Mass				
	Lean Dry Mass		Total Body Water		
	Bone Mineral Content	Non-BMC LDM	Intra-Cellular Water	Extra-Cellular Water	
		Lean Soft Tissue			
		Skeletal	Muscle Mass	Non- SMM LST	

Bone Mineral Content (BMC) – Bones are dynamic organs that include cells, blood vessels, collagen and mineral deposits. BMC is only an estimate of the minerals in the bones and does not represent the total weight of the skeleton. It is part of Fat-Free Mass.

Lean Soft Tissue (LST) – In the same way that LDM is the result of removing all water from Fat-Free Mass, Lean Soft Tissue is the result of subtracting Bone Mineral Content from Fat-Free mass. This includes your organs, muscles, connective and supportive tissues, as well as all of Total Body Water.

Skeletal Muscle Mass (SMM) – SMM are the muscles responsible for posture and movement.

Basal Metabolic Rate (BMR) – The caloric energy required to sustain life in a sedentary state for 24 hours.

Daily Energy Expenditure (DEE) – DEE adjusts the BMR valued based on the selected activity level. The caloric energy required to sustain life, plus daily activities.

Body Mass Index (BMI) – BMI is derived by dividing total weight (kg) by height (m), squared. BMI is a general measure typically used to determine if someone is overweight, but knowing actual body composition is much more accurate.

Fat Mass Index (FMI) – FMI relates fat mass to height in the same way that BMI relates total weight to height. Because it takes into account only the fat mass, it is a superior indicator of obesity compared to BMI.

Fat Free Mass Index (FFMI) – FFMI relates fat-free mass to height in the same way that FMI does to fat. Fat+ FFM – Weight, FMI +FFMI = BMI.