Know Body Fat 101 part 2



Summary:

Being over weight as a child makes it harder to lose weight as an adult: Children who are obese by the age of eight will find it much harder to lose weight than their peers. Around 55% of obese children go on to be obese in adolescence, around 80% of obese adolescents will still be obese in adulthood and around 70% will be obese over age 30 (research). So it is a good idea to have a child adopt a healthy habits when young.

Lean and fat tissue are metabolically different: Common gym lore says that 1 pound of resting muscle will burn 30 to 50 calories daily compared to fat, which burns much less calories. The facts is that muscle tissue — at rest — will burn approximately 4.5 to 7.0 calorie per pound of body weight per day, while fat burns 1 to 3 calories daily per pound. Muscle tissue contributes approximately 20% to total daily energy expenditure versus 1-5% for fat tissue (for individuals with about 20% body fat). So if you build more muscle you burn more calories at rest, but not as much as what they said in the past

Body weight does not give the complete picture: Weighing yourself is a way to partially measure your body composition, but it is not complete. Body weight cannot tell how much of your weight is comprised of fat and lean tissue. There are other ways to measure body composition such as circumferential measures using a tape measure. One of the reason for testing is that there are many people with healthy weights with high body body fat (skinny fat) while there are many that might be considered overweight because of a large amount of muscle tissue (mesomorphs). That is why body weight the scale is incomplete. Therefore have your measures done.

Factors affecting body composition: Body composition is highly influenced by diet and activity level, but it can also be influenced by other factors especially Age and Hormones. Fat storage and breakdown are strictly regulated by certain hormones in the body. Hormones also influence energy expenditure, or the number of calories your body burns on a daily basis. Altered levels of thyroid hormones, insulin, cortisol, and other hormones may influence body weight and fat distribution. See how hormones affect weight. As you get older you lose muscle mass which affects metabolism. So gaining a little weight as you age is natural and may not be a bad thing, but excessive weight gain is not.

Fat contains a high energy content: It is a myth that just eating 500 fewer calories per day (3,500 per week) causes weight loss of one pound. This may work in the short term, but the body will soon adapt by making you burn fewer calories. When you reduce calorie intake your body responds by making you burn fewer calories. You start moving around less, and the body becomes more efficient. It does the same amount of work, but it uses fewer calories than before.

Know Body Fat Part 2

Being over weight as a child makes it harder to lose weight as an adult: Children who are obese by the age of eight will find it much harder to lose weight than their peers. Researchers found that those who became overweight as young children actually ate fewer calories in their teenage years than their slim peers (research). Around 55% of obese children go on to be obese in adolescence, around 80% of obese adolescents will still be obese in adulthood and around 70% will be obese over age 30 (research). So it is a good idea to have a child adopt a healthy weight at a young age.

Lean and fat tissue are metabolically different: Non-fat mass includes bone, water, muscle, organs, and tissues. Some call it lean tissue. The great thing about lean tissue, especially muscle, it is metabolically active, meaning it helps burn calories. Unfortunately visceral fat is inflammatory and causes a whole host of problems. There is some suggestion that it is linked to Covid 19 related deaths. Common gym lore says that 1 pound of resting muscle will burn 30 to 50 calories daily compared to fat, which burns much less calories. Muscle tissue — at rest — will burn approximately 4.5 to 7.0 calorie per pound of body weight per day, while fat burns 1 to 3 calories daily per pound. Muscle tissue contributes approximately 20% to total daily energy expenditure versus 5% for fat tissue (for individuals with about 20% body fat).

Body weight does not give the complete picture: Weighing yourself is a way to partially measure your body composition, but it is not complete. Body weight cannot tell how much of your weight is comprised of fat and lean tissue. There are other ways to measure body composition that can give you a better idea of where you stand, such as body fat testing with a skinfold caliper or circumferential measures using a tape measure. One of the reason for testing is that there are many people with healthy weights with high body body fat (skinny fat) while there are many that might be considered overweight because of a large amount of muscle tissue (mesomorphs).

Factors affecting body composition: Body composition is influenced by diet and activity level, but it can also be influenced by other factors such as Age and Hormones: Many hormones impact metabolism and water retention especially as one ages. Age: People lose muscle mass as they age especially if they are not active. Genes: Our genes impacts us in many ways including weight and how we store it fat. Gender: Women have more body fat, which is related to bearing children and nursing.

Fat contains a high energy content: Pure fat has a very high energy content of about 9 calories per gram. This is about 4,100 calories per pound of pure fat, while a pound of body fat may contain anywhere from 3,436 to 3,752 calories because of some water content. A pound of body fat therefore roughly contains about 3500 calories. It is a myth that just eating 500 fewer calories per day (3,500 per week) causes weight loss of one pound. This may work in the short term, but the body will soon adapt by making you burn fewer calories. What this myth does not account for is the body's response to the changes in body composition and diet. When you reduce calorie intake your body responds by making you burn fewer calories. You start moving around less, and the body becomes more efficient. It does the same amount of work, but it uses fewer calories than before.

Location

- Subcutaneous You can pinch this layer of fat that sits directly underneath the skin's surface, cushioning the bones and joints. It's the body's most abundant type of fat and tends to accumulate around the waist, hips, upper back, buttocks, and thighs. Very high amounts of subcutaneous fat can increase the risk of disease, though not as significantly as visceral fat.
- Visceral An excess of this type of white fat is sometimes referred to as "belly fat" or "central obesity," as it accumulates deep in the abdominal cavity, wrapping around digestive organs like the pancreas, intestines, and liver but also the heart. Having a lot of visceral fat is linked with a higher risk of cardiovascular disease, diabetes, and certain cancers. It may secrete inflammatory chemicals called cytokines that promote insulin resistance.

