

Even if you only gain 5 lbs a year, (50 excess calories a day), that adds up very quickly and the next thing you know you are carrying around extra fat with high triglycerides, etc.

The following list is not all inclusive, but provides some interesting tidbits about fat fighting strategies:

1. **You do not spot-store and cannot spot reduce fat.** That is, crunches will not cause you to lose the subcutaneous fat covering your abs. Creating a calorie deficit each day through diet and exercise will slowly melt your fat stores.
2. **Excess daily calories can either be used to build muscle, store as glycogen in liver cells for energy or stores as fat in adipose tissue, sometimes all of the above.**
3. **The body stores fat in adipose tissue, either subcutaneously under the skin or viscerally (internally), in the abdomen around the organs.** Fat can also be stored within our muscles and as fatty acids in our livers, for more immediate energy.
4. **Insulin is a transport hormone that shuttles glucose and nutrients to the cells for energy and for growth and repair.** Insulin still store excess glucose as fat. In insulin-resistant, pre-diabetic folks, the cells do not respond well to insulin and blood sugar stays elevated.
5. **When extra energy is needed your body accesses fatty acids from your liver first, then from visceral (internal belly) fat through the portal vein.** Then subcutaneous fat and intra-muscular fat is accessed.
6. **Reducing visceral fat is how you reduce belly size.** Reducing subcutaneous fat is how you look more defined, toned and vascular.
7. **You cannot burn purely fat for fuel, ever,** even when you are in an emergency energy metabolism state called *ketosis*, because even in this condition you are also breaking down muscle tissue for protein as an energy source. In normal aerobic energy production, the body always requires some form of carbohydrate from glucose or stored glycogen to burn fat, known as the *Krebs cycle*.
8. **Fat cells, called adipocytes, enlarge as you store more fat, but they never divide into more fat cells.** Your set number of fat cells is established during adolescence, so if you are overweight as a kid then you probably carry more fat cells.
9. **Men generally store more fat in their upper body adipose tissue while women store more in their lower body adipose tissue.** The adipocyte cells located in the mid-torso have the potential to super-enlarge.
10. **Adipose tissue produces satiety (fullness), hormone known as *Leptin* in proportion to how much body fat you have.** Obese people become insensitive to Leptin hormone.
11. **Fat/adipose tissue is not an inert storage organ, but rather an important metabolically active endocrine organ** that is vital for good health and releases a long list of hormones, enzymes, cytokines, molecules, and other factors involved in body metabolism.
12. **Adipose tissue produces an enzyme known as *aromatase* that converts testosterone into estrogen.** There for men – the more body fat you have the higher your estrogen levels – and lower your testosterone levels. This is why obese men develop *gynomastia (man boobs)* . This is also why some women become “estrogen dominant” – Don’t forget that testosterone builds muscle, drives libido and increases lean body mass. Women, you need to maintain your

HEALTHY SUPPLEMENTS TO BOOST WEIGHT LOSS AND METABOLISM:

- 1. 7 Keto:** A derivative of DHEA – gives you the benefits without converting into sex hormones such as testosterone or estrogen. It safely lowers body weight and body fat, promotes lean muscle tissue by reducing levels of cortisol, the body's primary stress hormone. 7 Keto has been shown to promote thermogenic (fat burning) activity by increasing the T3 thyroid hormone responsible for increasing basal metabolism. 7-Keto acts as a modulator of the body's weight "set point" also known as the "adipostat". NSP# - 2922-4
- 2. CLA:** Conjugated Linoleic Acid – occurs naturally in polyunsaturated fats – has body fat lowering effects. It also reduces cholesterol. **It also has strong anticancer and antimetastatic activity against breast, colorectal, lung, prostate, skin and stomach cancers.** It has been shown to reduce body fat and increase lean body mass. Increases feelings of satiety and fullness, decreased feelings of hunger, Reduced fat deposition and increased lipolysis (breakdown of fat) in adipocytes (fat cells). CLA appears to decrease the ability of fat cells to take up fats from the bloodstream, inhibit the formation of new fat cells and helps cells to burn fat at a higher rate. Promotes the use of stored fat for energy. NSP# - 3010-1
- 3. Nature's Cortisol:** Cortisol is a stress protection hormone secreted by the adrenal glands. High cortisol levels have been linked to obesity – and high amounts of belly fat. Prolonged high levels of cortisol increases the risk of cardiovascular disease, insulin resistance and diabetes, bone loss and muscle wasting. This is a combination formula to help reduce stress eating, improve insulin function, balance blood sugar levels and enhance weight loss efforts without the use of stimulants. It contains 9 different natural remedies designed to work synergistically to increase thermogenesis and reduce fat. NSP#3209-4
- 4. Nature's Hoodia Formula:** designed to help reduce appetite and calorie intake while promoting a feeling of fullness. Inhibits the production of body fat, lower cholesterol and triglyceride levels and promotes balanced blood sugar levels. Contains no caffeine or stimulants. NSP# 3009-8
- 5. Flax Seed Oil:** an excellent source of EFAs – essential fatty acids. – a good fat needed by the body to regulate all cellular processes, brain function, everything related to the cardiovascular system, skin, nerves, lowers inflammation, lowers homocysteine levels, cholesterol, triglycerides, can reduce cancerous tumors and provide anti cancer effects,
- 6. Super Omega Fish Oil:** (good fat) excellent source of Omega 3 fatty acid – Both Fish oil and Flax increase the activity of the amino acid L-carnitine to help your body burn fat better. The younger a child is fed EFAs it can help prevent the development of excessive numbers of fat cells. These fats can help stimulate your thyroid gland thus raising metabolism and activating your brown adipose tissues (BAT) to burn fat rather than storing it in the white adipose tissue. Brown adipose tissue is a high energy fat. Its only job is to burn calories for heat. Overweight people tend to have more sluggish brown fat . Omega 3 fats are burned off more quickly than other fatty acids so if

