

Weight Training and Fat Burning

Incorporating weight training into your regular exercise program can help burn unwanted fat pounds for two reasons. One reason is the muscle fiber and the second reason is an increase in your metabolic rate. Weight training, or as some refer to as strength training, should be performed a least 3 times per week. Although a personal trainer can help prescribe the best program for you, as a general rule it is recommended that a minimum of one set per exercise for each major muscle group is performed. The major muscle groups are quadriceps, hamstrings, low back, upper back, abdominals, chest, biceps, triceps, shoulders and neck. Each exercise should consist of 8-12 repetitions, done in a slow, controlled manner. The resistance should fatigue the muscle group by the end of the set.



Muscle fiber is the basic element of the muscle. These are the three types of muscle fiber: slow twitch (slow oxidating (SO) or type I), fast twitch (Fast oxidative - glycolyme (FOG) or type IIA) and pure fast twitch (FT or Type IIB). Slow twitch fibers get most of their energy from fat burning, a process that requires oxygen. This is also fueled by the fibers' ample supply of blood vessels, glycogen, mitochondria (cellular furnaces where fat and nutrients are burned), and the blood fats inside of various related cells. Pure fast twitch fibers are different in that they contract rapidly and fatigue easier. These fibers get their energy from burning glycogen. There are fewer mitochondria in the cells that makeup fast twitch fiber; therefore, these fibers burn less fat than slow twitch fibers.

The fast twitch fibers also contract quickly, but sustain more endurance. This may be because they have more mitochondria than the pure fast twitch but less than the slow twitch fiber. The most interesting benefit of high intensity weight training (or long duration aerobics) is that you can change pure fast twitch fibers into regular fast twitch oxidative fibers. This type of high intensity weight training activity increases the amount of mitochondria in the fast twitch fibers to levels higher than those found in the slow twitch fibers. With more mitochondria present in the muscle cells, more fat is burned.

Metabolism and the rate at which it functions represents the amount of energy you need on a daily basis to sustain your life. Even when resting or sleeping, muscle tissue is very active and requires up to 45 calories per pound per day. Consequently, losing muscle (muscle atrophy) results in a reduction of your metabolic rate. With less muscle, your body requires lower energy. Food once used as energy is now stored as fat. A sensible, long term and regular weight training program is the best in avoiding a decrease in lean muscle mass and metabolic rate.

Beginning a regular weight training program can take some effort. No matter what your age, weight training will fuel a lasting lifestyle and add longevity & functionality to your life.