

# Balance is Key

By Elliott Moffat, SRC Personal Trainer

A regular moderate workout regiment and healthy diet can improve general appearance markers of good health such as muscle tone, healthy skin, hair and nails, while minimizing age or lifestyle-related reductions in health. Physical exercise is an important complement to dieting in securing weight loss. Aerobic exercise is also an important part of maintaining normal good health, especially the muscular strength of the heart. To be useful, aerobic exercise requires maintaining a target heart rate of above 50 percent of one's resting heart rate for 30 minutes, at least 3 times a week. Brisk walking can accomplish this.

## Fats are not the enemy

Naturally you might think you want to avoid fats altogether, but the reality is that there are different types of fats some that you want and some you should avoid. Trans fats or hydrogenated oils are things you want to avoid, but saturated fats you need as well as unsaturated fats. Other good fats that you want are the fats and fatty acids in fish (omega 3 and 6 fatty acids)

## Proper nutrition

“Dieting is the practice of eating (and drinking) in a regulated fashion to achieve a particular, short-term objective” ([www.sciencedaily.com](http://www.sciencedaily.com)). Food provides nutrients from six broad classes: proteins, fats, carbohydrates, vitamins, dietary minerals, and water. Carbohydrates are metabolized to provide energy. Proteins provide amino acids, which are required for cell, especially muscle construction. Essential fatty acids are required for brain and cell membrane construction. Vitamins and trace minerals help maintain proper electrolyte balance and are required for many metabolic processes.

Any diet that fails to meet minimum nutritional requirements can threaten general health (and physical fitness in particular). If a person is not well enough to be active, weight loss and good quality of life will be unlikely. A multivitamin taken once a day will suffice for the majority of the population. A sensible weight-loss diet is a normal balanced diet; it just comes with smaller portions and perhaps some substitutions (e.g. low-fat milk or less salad dressing). Extreme diets may lead to malnutrition, and are less likely to be effective at long-term weight loss in any event.

Most states set guidelines for a healthy diet - these usually vary slightly from country to country based upon demographics. These guidelines do however usually share the same recommendations of eating less fried or fatty foods to reduce cholesterol. Many guidelines suggest replacing certain foods with healthier alternatives that supply an abundance of nutrients, for instance using legumes or beans within a salad or pasta.

## How the body gets rid of fat

All body processes require energy to run properly. When the body is expending more energy than it is taking in (e.g. when exercising), the body's cells rely on internally stored energy sources, like complex carbohydrates and fats, for energy. The first source the body turns to is glycogen, which is a complex carbohydrate stored in the liver, created from the excess which is ingested. When that source is nearly depleted, the body begins lipolysis, the mobilization and catabolism of fat stores for energy. In this process, fats, obtained from adipose tissue, or fat cells, are broken down into glycerol and fatty acids, which can be used to make energy.

### **Fat loss versus muscle loss**

Weight loss typically involves the loss of fat, water and muscle. A dieter can lose weight without losing much fat. Ideally, overweight people should seek to lose fat and preserve muscle, since muscle burns more calories than fat. Generally, the more muscle mass one has, the higher one's metabolism is, resulting in more calories being burned; 14 calories burned per pound of muscle at rest. Since muscles are denser than fat, muscle loss results in little loss of physical bulk compared with fat loss. To determine whether weight loss is due to fat, various methods of measuring body fat percentage have been developed.

Muscle loss during weight loss can be restricted by regularly lifting weights (or doing push-ups and other strength-oriented calisthenics) and by maintaining sufficient protein intake. According to the National Academy of Sciences, the Dietary Reference Intake for protein is "0.8 grams per kilogram of body weight for adults." Those on low-carbohydrate diets, and those doing particularly strenuous exercise, may wish to increase their protein intake which is necessary.

For more information about what your body might need check out [www.Mypyramid.gov](http://www.Mypyramid.gov)