

A calorie is a measure of energy. 3500 calories = 1 pound.

Your body uses about 10 calories per pound per day to maintain your basic metabolic rate or BMR. For example, a 150 pound person would have a BMR of approximately 1500 calories per day (150 pounds x 10 calories per pound). BMR is the energy necessary to keep your organs and cells functioning if you were lying in bed sleeping all day. In addition to the calories for BMR, your body uses approximately 300-500 calories per day to carry out your daily activities. If you exercise (in addition to your normal daily activity) those calories should also be considered in your daily energy expenditure or calories burned in a day.

While trying to lose weight you want to take in significantly fewer calories than your daily energy requirements so that your body will burn it's energy stores (FAT!) For every 500 calorie/day deficit sustained over one week's time, you should lose one pound. 500 calories x 7 days = 3500 calories = one pound. One to two pounds per week is a healthy and realistic goal for weight loss.

Additionally, our body's muscle tissue burns more calories per pound than fat tissue. Muscle burns 35-50 calories per pound per day while body fat uses only approximately 6 calories per pound per day. Men, by nature, have a higher muscle mass than women, hence they normally have higher energy (calorie) requirements. (They often also lose weight more quickly-no fair for us women!)

Our Tanita Body Mass scale calculates a Basic Metabolic Rate (BMR) specifically for your body. If you are overweight or obese (i.e. BMR > 25) Your daily calorie intake for healthy weight loss should be about 300-500 calories less than the recommended daily intake of calories. For women, this number is often 1200-1500 calories; for men, it is often 1500-1800 calories. We will determine your individual requirements at your initial consultation with a Weight Wise physician.

While losing weight you will typically lose some fatty tissue and some lean body tissue which includes muscle. An acceptable ratio is for every 3 pounds of fatty tissue lost, you want to lose more no more than 1 pound of lean body tissue. We will track your results using the Tanita Body Mass scale. Weekly weigh-ins will help us make this assessment.

***Steps that can be taken to minimize muscle loss include the following:***

- 1. EAT! No crash dieting or skipping meals and snacks***
- 2. EXERCISE! Specifically use resistance like weights or bands to build and/or retain muscle mass.***
- 3. Eat plenty of protein! Protein is metabolized to amino acids which are the building blocks for muscle. Normal daily recommendations are between 46-120 grams of protein per day. We recommend staying at the higher end of this range.***

While we are on the subject of protein consumption, there are a few other interesting facts to share. Energy is required to process the protein you consume; you use approximately 30% of the calories from protein to metabolize it to useable amino acids. So protein has a bonus effect; if you consume 1000 calories of protein, you effectively net only 700 calories!

Another fact you must know about protein is that it is only available to your body for use (by way of amino acids) for muscle repair and rebuilding for about 3 hours after the time of consumption. This is why a high protein breakfast is so critical to muscle maintenance. By the time morning arrives, you will have been robbing from your body's own muscle tissue for 5-8 hours to meet your body's amino acid needs. You definitely need to reverse this process within an hour of awakening by eating a high protein breakfast.

Once you have reached your weight loss goals, your protein consumption can decrease slightly. You will no longer be in a negative energy balance (i.e. on a low calorie diet) to risk losing muscle mass. On maintenance you will transition to the lower range of the recommended daily allowance from protein consumption.

Besides eating foods high in protein to retain muscle mass, you will want to eat foods low in carbohydrates to keep from storing more fat (this is especially true if you are 30 pounds or more overweight). All foods (proteins, fats, and carbs) when eaten in excess can cause you to gain weight, but only if the hormone insulin is present in your bloodstream. What you must understand for weight management is that carbohydrates and only carbohydrates drive the secretion of insulin from your pancreas and the higher level of insulin present in the bloodstream, the more predisposed you are to accumulating fat. Reducing carbohydrate intake to about 25-30% of your diet significantly improves weight loss results. The more overweight you are, the more insulin resistance develops. This means that your pancreas churns out even more insulin to handle dietary carbohydrates and even more fat can be stored. It can become a very vicious cycle until you manage the substrate, i.e. carbohydrates.

If your BMI is less than 30 strive to keep your grams of carbohydrates below 100 per day. If, however, you have more than thirty pounds to lose (or have a BMI greater than 30) you should consider reducing even more. Keep carbohydrates to 60-80 grams per day.

In regard to the intake of fats, we recommend patients limit saturated fat to the recommended daily allowance of 20 grams per day (or 180 calories) and consume zero trans fats. On a reduced carbohydrate diet you will probably consume more fats to account for the reduction of calories from carbs. Instead of choosing saturated fats why not add tasty and nutritious unsaturated fats like those in olive oil, avocados, nuts, and fish as opposed to increasing meat and dairy fats? So, consume the leanest meats available and remove all visible meat fats including the skin off poultry. Reduce dairy fats to 2% or less in most products.

If you have special health concerns, you must let your Weight Wise physician know. Dietary changes can be made to address your special needs. Certain severe kidney diseases require a decreased protein intake. Diabetic patients will want to discuss adapting their medications to compensate for a reduced carbohydrate load. Patients with high blood pressure or congestive heart failure must reduce sodium intake to below 1000mg/day (The typical dietary guideline is 2200mg/day). Patients with elevated lipids will want to minimize their intake of saturated fats and trans fats to decrease their LDL cholesterol.

Please take a multivitamin daily as minimum supplementation. While you are on a reduced calorie regimen, you may also need to supplement.