

Exercise Tip # 1

Math is hard! But difficult or not, there are some common numbers and calculations that everyone should be aware of since they can greatly affect your waistline. Before diving into the numbers, it's important to understand the concept of metabolism first.

You've probably heard the term basal metabolism. Basal metabolism is the number of calories (amount of energy) your body requires to function on a daily basis if you did absolutely no movement whatsoever. If all you did was lay in bed, your body would still have an energy requirement to allow organs to function and tissues to live. That is the basal metabolism. As you may be able to guess, it is fairly minimal.

Resting metabolism (for our purposes) is the body's energy requirement to do normal, daily functions such as eating and getting dressed. It does not take into account exercise or extraneous work that you may do for a job.

Weight maintenance occurs when you consume roughly the same number of calories as your resting metabolism requires. Calories in = calories out = weight maintenance.

Weight gain occurs when you consume more calories than your resting metabolism requires and obviously, weight loss occurs when you consume fewer calories than you need.

Now the math. Did you know that one pound of body fat is equal to 3500 calories? So to lose one pound you have to create a 3500 calorie deficit. Here is an example:

A woman's resting metabolic rate is 1500 calories/day. She consumes 1850 calories/day. She has a 350 calorie surplus in one day. If she continues like this she will gain one pound every 10 days. This sounds extreme so let's spread it out a little more.

The same woman changes her ways, cuts back and now consumes 1600 calories/day. Much better. However, the 100 excess calories per day over the course of 365 days equals an approximate weight gain of 10 pounds per year.

To lose weight the woman needs to create a caloric deficit rather than a surplus. Remember it takes a 3500 calorie deficit to equal one pound of weight loss. The deficit can be created by diet, exercise or most ideally, a combination of the two. If the woman cuts back on her consumption another 100 calories, she will be in caloric balance (consuming the same number she burns each day). If she adds some calorie-burning exercise like stationary cycling for 30 minutes per day (a 150 lb woman burns about 200 calories in 30 mins. of stationary cycling) she now has created a 200 calorie deficit each day. Over the course of a year, she will lose 20 lbs!

$200 \text{ calories} \times 365 \text{ days} = 73,000 \text{ calories} / 3500 \text{ calories} = 20.85 \text{ lbs}$