

# How Does Strength Training Actually Help Me Burn Fat?

**Q) I've heard that strength training increases my metabolism. How does it do that and will that help me lose weight?**

A) Strength training, which involves using weights, bands, kettlebells or other forms of resistance that challenge your body to work harder than it does in everyday life, definitely does increase your metabolic rate. However, so does endurance exercise (such as running). The difference is how long and how much these activities boost your metabolism that really has an impact on your overall ability to lose body fat and/or decrease your weight.

Just so we're all on the same page, let's talk about the components of our metabolism:

First we have our resting metabolic rate, or RMR. This is the energy needed (quantified in calories) to keep our bodies alive – our heart beating, our lungs breathing, etc. Your RMR makes up about 60 to 80 percent of our total metabolic rate. The variation in RMR is due to individual differences among people, the foods we consume, and the activity we engage in which can directly change RMR.

Second we have the Thermic Effect of Activity, or TEA. The more active you are, the more your total metabolic rate will be increased. TEA includes all activity from mowing your lawn (with a push mower, that is), to playing basketball, to walking across the room. It's not just structured activity, but also the activities that we engage in every day to live our lives.

Third, we have the Thermic Effect of Feeding, or TEF. This is the amount of energy expended to eat and digest food and use those nutrients to create more energy.

So our metabolism, known as total energy expenditure (TEE) = RMR + TEA + TEF. Each component is different for each person, resulting in unique metabolic rates.

Strength training increases our TEE by elevating the amount of calories expended in activity (TEA). The harder you strength train, the greater the amount of calories you burn through exercise. In turn, if your food intake does not highly exceed your needs and consists of quality choices, you will lose weight and body fat.

Interestingly, strength training also increases the amount of calories expended in your RMR. The reason it does this is by increasing the amount of lean muscle mass you carry, which requires more energy to maintain and repair than fat tissue.

Both strength training and endurance exercise will increase your energy expenditure at the time of activity, and for a few hours afterwards, when they are conducted at the same intensity (you all have experienced that increase in hunger after a good workout, whether it be strength or cardio work).

However, strength training is unique in that if you perform multiple sets of a challenging weight to failure, scientists have shown that the energy expended afterwards, known as EPOC (excess post-exercise oxygen consumption) can be elevated for 24-36 hours. Some people call this the "Afterburn" effect of serious strength training.

Overall, strength training can boost your metabolism, but it has to be more challenging than activities you do every day. You can't expect 3lb dumbbells to make much difference to your metabolic rate if your children (that you carry around) weigh more, or your grocery bags are heavier. Your body needs to remember that strength training requires "strength" so you have to load your exercises accordingly. Otherwise your body won't get the challenge it needs to build muscle, lose fat and look better in your clothes – and that's what we're all looking for, right?