

**Q.** I just made the decision to change my life by embracing a healthier lifestyle, including eating 6 small meals a day and getting 30 minutes of physical activity daily. Will this help increase my metabolism?

**A.** Congratulations on making a change to improve your health and, I'm assuming, lose some weight in the process. In regard to your question, there are two primary things that increase metabolism. The first is eating – especially protein foods. After eating, the digestive system becomes active, secreting enzymes and digesting food. This takes a certain amount of work (energy) thus the metabolism goes up a little. This is part of the philosophy of 6 small meals a day. Obviously, you can't get thin by eating, but small regular meals do help the metabolism stay active and helps prevent hunger for many people.

The second way and the best way to increase metabolism is to be active. Any activity you do takes work or energy, so the metabolism goes up. As the work becomes more vigorous, such as in fast walking, climbing hills, running, et cetera, the body produces heat from the work of the muscles and you begin to sweat. Working up a sweat is a good indication that your metabolism is high. When you stop exercising, the metabolism starts to drop and after 15-30 minutes or so it is back to the resting state. The longer you exercise and the more vigorous you exercise, the higher your metabolism gets, and the longer it takes to get back to normal. Some research shows that exercise helps maintain metabolism on a weight loss program where it would normally drop because you are eating less.

Metabolism is measured in terms of METs or multiples of resting metabolism. One MET is defined as your resting metabolism (1 cal/kg body weight/hour) or the number of calories your body burns per hour when at complete rest. The table shows the MET level of common activities.

Notice that any activity you do increases the metabolism quite significantly so that when you are walking briskly,



you are burning 3-5 times as many calories as when sitting. Even when doing house work or yard work, your metabolism is 3-4 times higher than sitting. When working hard (climbing hills or running) your metabolism is very high – 7-10 times higher, or more – and most people will be sweating hard with these activities.

Your metabolism is controlled primarily by the thyroid hormone (if low your doctor can help you here) and the amount of lean body mass (muscle) you have on your body. Fat tissue is not very metabolically active – doesn't burn calories. It just stores calories. Muscles do the work and burn most of the calories in the body. The bigger muscle mass you have, the more calories you burn all day long, even when resting or sleeping. To maintain a high metabolism you need to exercise regularly to maintain muscle mass and strength. As most people get older, they lose muscle mass and that's why their metabolism or calorie needs go down. Weight lifting or strength building exercises are best for increasing muscle mass.

**The bottom line for metabolism is this.**

1. Don't skip meals.
2. Don't sit too much – that's when your metabolism is at its lowest.
3. Be as active as you can throughout the day.
4. Have a regular exercise program. Aim for at least 30 minutes of moderate to vigorous exercise daily. For even better health and fitness results, slowly work up to an hour of aerobic activity daily. It can be broken into 10- to 15-minute sessions if this fits into your schedule better.
5. Do strength building exercises at least 2 times per week to build muscle mass.
6. If you feel tired and out of energy most of the time, check with your doctor to make sure your thyroid gland is working properly.

Activity	METs	Activity	METs
Bicycling, 12-13 mph	8.0	Swimming laps	7.0
Weight lifting	3.0	Walking, 3.5 mph	3.8
Dancing, aerobic to music	6.5	Walking, 4 mph	5.0
Running, 10 min/mile	10.0	Canoeing	7.0
Climbing hills with backpack	7.5	Vacuuming/cleaning	3.0
Sitting quietly	1.0	Yard work, raking leaves	4.3

*Source: The Compendium of Physical Activities, University of South Carolina.*

