

Your body's power plant

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We hear a lot about metabolism—and often blame our “slow metabolism” for our inability to keep our weight under control. But what is metabolism, exactly? And is there anything we can do to change our metabolic rate?

Metabolism basically refers to all the chemical processes that take place in the body in order to sustain life—allowing you to breathe, pump blood, keep your brain functioning and extract energy from your food. When you hear the term metabolic rate—more accurately called basal (or resting) metabolic rate—that refers to the number of calories your body at rest uses each day, just to keep all your vital organs functioning. You burn additional calories through your daily activities and formal exercise, but by far, the majority of the calories that you burn each day are your basal calories.

The number of calories that you burn every day is directly related to your body composition. Think of your body as divided into two compartments. In one compartment is all the body fat; in the other compartment is everything that isn't fat (e.g., bone, fluid, tissue, muscle)—that's the fat-free compartment. The size of your fat-free compartment determines your metabolic rate, with every pound of fat-free mass burning about 14 calories per day.

If you weigh 150 pounds and 50 pounds of you is fat and 100 pounds is fat-free, then you would burn about 1,400 calories per day at rest. If you don't get much activity, you won't burn much more than this throughout the day. But if you weigh 150 pounds and 25 pounds of you is fat, and 125 pounds of you is fat free, then you burn 1,750 calories per day at rest. And if you get some regular exercise and burn a few hundred calories more per day, your total calorie burn for the day might be 2,000 calories!

Since the fat-free compartment contains muscle tissue, one of the best things you can do to boost your metabolic rate is to strength-train to increase your muscle mass. If you build up 10 pounds of lean body mass, that's another 140 extra calories that you burn per day—not to mention the calories that you burn through exercise.