

Beef Up Your Metabolism

Eating breakfast, getting ample rest, regular exercise and eating lean beef are key ingredients to having more energy and keeping extra pounds at bay.

by Kindra Gordon

It seems to be a fact of life that as we age, our metabolism slows down — and weight gain is the inevitable result. But it doesn't have to be that way. Understanding the factors that influence your metabolism can be a great tool for burning more calories, keeping the weight off, and giving yourself more energy — and beef's protein-rich properties can be an important ally toward your efforts.

What is metabolism?

By definition, metabolism refers to the body's ability to burn calories. It involves a complex network of hormones and enzymes that not only convert food into fuel but also affect how efficiently you burn that fuel.

Your metabolism is influenced by your age (metabolism naturally slows about 5% per decade after age 40); your sex (men generally burn more calories at rest than women); and proportion of lean body mass (the more muscle you have, the higher your metabolic rate tends to be). Heredity can also be a factor.

For most of us, our metabolism slows down as we age due to a sedentary lifestyle and poor eating habits. But the good news is that with a few healthy habits a sluggish metabolism can be sped up.

Protein power

For starters, protein, such as lean beef, can be an important tool in keeping your metabolism revved up and weight off. The key is that protein will help you feel full longer.

As one example of this, a study among overweight women found that those who ate two scrambled eggs (with two slices of toast and a low-calorie spread) consumed less for the next 36 hours than women who had a bagel breakfast of equal calories. Additional research has shown that protein may also prevent spikes in blood sugar, which can lead to food cravings.

In regard to beef, Karen Hanson, director of nutrition with the Kansas Beef Council, says research has shown that high-quality protein — that which contains all the essential amino acids, such as in beef — increases thermogenesis (metabolism) and energy expenditure.

Additionally, Hanson says recent protein research has found elevated protein intake, combined with controlled energy intake, to be an effective and practical weight-loss strategy. The research report attributed protein's effect on weight loss to increased satiety (feeling of fullness), increased thermogenesis (metabolism), increased or maintained fat-free body mass, and enhanced glycemic control.

"With the overweight/obesity epidemic growing, this benefit of high-quality protein has never been more critical," Hanson concludes. She notes that another important factor is that these studies have shown higher-protein diets also limit weight regain after weight loss.

Likewise, Kaiti Roeder, director of nutrition and education with the Nebraska Beef Council, also shares a study from the August 2005 *Journal of Nutrition* that found that a diet rich in high-quality protein (like beef), coupled with a moderate exercise program, helped people improve body composition by losing significantly more fat and maintaining muscle mass.

"This study adds to the growing body of evidence supporting protein's beneficial role in weight management," Roeder adds.

Additionally, she says more research is beginning to suggest that muscle metabolism is important because it may

also play a role in the prevention of many chronic diseases, such as Type-2 diabetes and osteoporosis.

Roeder shares that a September 2006 edition of the *American Journal of Clinical Nutrition* contains a thought-provoking review by Robert Wolfe of the University of Arkansas. His research explores the growing body of evidence suggesting lean muscle mass not only builds strength, but also promotes active daily life and may ultimately improve overall health.

"From a nutrition perspective, the review indicated that increasing daily high-quality protein intake may optimize muscle strength and metabolism and ultimately improve overall health," Roeder says. "Dr. Wolfe contends that at least 15 grams (g) of essential amino acids, or 4 ounces (oz.) of high-quality protein like lean beef, at each meal, could be beneficial to build and maintain adequate levels of muscle mass to enhance quality of life and prevent disease."

Despite the benefits of protein, Hanson says most people do not consume adequate protein in their daily diet.

"A significant percentage of adolescent and older females do not consume enough protein," she says. "In fact, very few Americans are consuming the protein recommendation from the government food guide."

That recommended amount is 0.8 g of protein per kilogram (kg) of body weight, or about 55 g of protein daily for a 150-pound (lb.) person. As examples, a 4-oz. hamburger has about 28 g of protein, a 6-oz. steak is 42 g of protein, a 3.5-oz. chicken breast provides 30 g of protein and one large egg has 6 g of protein.

With that said, lean beef and other protein-rich foods can be considered a foundation for a healthy diet. Some additional strategies for boosting your metabolism include:

1. Begin with breakfast

We've all been told not to skip breakfast and here's why: Research has shown that when you skip breakfast you actually tend to eat more throughout the day to compensate for your hunger. This in turn can cause

More metabolism boosters

Drink plenty of water. Dehydration can trick your brain into thinking you're hungry, so instead of reaching for a cold glass of water, you end up eating.

Consume calcium. Research is showing that calcium (Ca), an essential mineral, can actually boost your basal metabolic rate, which in turn can help with weight-loss efforts. In a National Dairy Council-funded study, researchers found that a high-calcium, low-calorie diet can boost fat loss by 42%, compared to only 8% for a solely low-calorie diet.

Don't eat before bedtime. This one is a no-brainer. When you eat two or three hours before going to bed, you store the food you're eating, which leads to weight gain.

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weight gain. Studies have also shown that eating breakfast increases your ability to perform better mentally, which is especially important for school-age children.

So, look at breakfast as the first opportunity of the day to jump-start your metabolism. Some nutritionists explain this in literal terms: Breakfast is “breaking” the overnight “fast” your body was in to conserve calories. Therefore, eating stimulates your metabolism.

And, protein — such as eggs or a whole-grain cereal with nuts — should be part of

your breakfast to help satisfy your appetite for hours. Conversely, a breakfast without protein, like coffee and a bagel or muffin, will likely have you starving and craving sugar by mid-morning.

2. Eat mini-meals

Rather than eating three large meals throughout the day, eating five or six small meals throughout the day keeps a steady stream of energy available to your body to keep blood sugar on an even keel. This boosts both your metabolism and your brainpower.

So, keep healthy snacks such as fruit, vegetables, nuts and yogurt with you and graze throughout the day as needed. But, be sure your main meals are smaller to accommodate all this snacking, or you’ll load up on extra calories you don’t need.

Recognize that skipping meals is a mistake. It forces your metabolism to slow down and conserve calories to compensate for the lack of food. When you finally do eat, your body remembers that it went for a long time without food and will store more calories in preparation for the next time

you're going to starve it. Thus, prevent this roller coaster by eating at regular intervals throughout the entire day.

3. Get moving

It's no surprise that exercising boosts your metabolism. But did you know that exercising in the morning is especially beneficial to help jump-start your metabolism for the day. Just a 20-minute walk or jog will make a difference.

Weight training is important, too, since it boosts lean tissue mass, which burns more

calories per pound than fat. The more lean muscle tissue you have, the more calories you burn each day.

Exercising at various times throughout the day is also beneficial. Rather than a 60-minute workout, two 30-minute (or three 20-minute) walks may help you burn more fat, according to new research.

4. Get your sleep

Research shows that sleep deprivation can put your hunger and appetite hormones out of whack. Leptin, an appetite-suppressing

hormone, decreases in adults who are sleep-deprived while ghrelin, a hunger-increasing hormone, spikes. A four-year study by the University of Wisconsin and Stanford University found that adults who regularly slept for only five hours a night increased their levels of hunger-inducing ghrelin by 14.9% and lowered their levels of appetite-suppressing leptin by 15.5%.

Experts recommend you get seven to eight hours of uninterrupted sleep each night.

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