The Skinny on Foods and Metabolism

Want to blaze through calories without sweating at the gym? Most dieters would jump at such a plan, and plenty of diet books make such claims. But before you start downing egg white omelets and green tea, read what the experts say about speeding your metabolism.

Metabolism 101. Metabolism is the full system of biochemical processes working inside your body, and your metabolic rate is the rate at which you use energy or calories for these processes. You burn the most calories each day with basic bodily functions like breathing, circulating blood and maintaining body temperature. This is your basal metabolic rate, which accounts for 60 to 75 percent of your total calorie needs. Physical activity and the digestion, absorption and storage of food make up the rest. Age, gender and genetics—things you can’t change—largely determine your metabolic rate. Diet, exercise and body composition also influence your calorie-burning potential, but many diets make exaggerated promises. Here’s the latest science on some common, metabolism-boosting strategies.

Protein Power. You “waste” some calories every time you eat, says Eric Ravussin, Ph.D., Director of Nutrition at the Obesity Research Center at Pennington Biomedical Research Center in Louisiana. He reports that on average about 10 percent of calories are used for digestion, absorption and then storage of these calories. More calories are used to process protein than for carbohydrate or fat, so beefing up the diet with extra protein can help you burn more calories, but in tiny amounts, around 20 calories a day. Ravussin explains that this metabolic boost doesn’t really make much of a difference, especially when you compare it to the amount of calories you could burn from just walking half a mile. More importantly, adequate protein can nourish your body and help you feel full longer.

Add Spice. Capsaicin, the compound responsible for the burn of chili peppers, might also rev your metabolic motor.

Genetically Engineered Foods Update

Genetically engineered (GE) foods (also referred to as biotechnology or genetically modified) have elicited strong reactions since their first introduction almost 15 years ago. Depending on whom you listen to, genetic engineering is either “doomsday tech” or “biotechnology for the future.” The public opinion on GE foods is split. According to a Pew Initiative on Food and Biotechnology (one of many initiatives under the umbrella of the Pew Charitable Trusts) survey, 46 percent of respondents don’t know what to think about the safety of GE foods; for those with an opinion, about half believe they are basically safe and about half believe they are unsafe.

GE foods under the microscope. Most people don’t understand the complicated science of biotechnology. GE foods are produced when scientists remove a copy of a gene from one organism and transfer that gene to a different organism. The new gene, which usually produces a new protein in the cell that confers a beneficial trait, then becomes integrated into every cell of the new organism. GE soybeans, corn, canola and cotton contain genes that protect the crop from particular herbicides (weed killers), so that the herbicides can be applied to the crop without harming it. And some varieties of squash and papaya have been engineered with plant virus genes that make them resistant to those particular plant viruses.

How do you know when you’re eating GE foods? Under current regulations, the U.S. Food and Drug Administration does not require labeling of GE food products. Only if you buy

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