

there's so much confusion about carbs these days. Popular eating plans like keto and Paleo claim that ditching them is the key to gaining muscle, losing weight, and revving energy. But active women and elite athletes are increasingly turning to plant-based diets, which are naturally higher-carb, to power their performance. So once and for all, what's the full story?

Despite the trend toward heavy proteins, your body must have carbs to function properly, experts say. Beyond bread, pasta, rice, and potatoes, carbs are also prevalent in fruit, green vegetables, legumes, and even milk. These foods are full of other healthy nutrients the body needs, including B vitamins, vitamin C, potassium, calcium, and fiber, so if you limit carbs, you're missing a lot of vitamins and minerals.

Without carbs, your energy level and your workout performance also take a hit. That's because their main job is to stock us up with glucose, a type of sugar that's our primary source of fuel, says Cassandra Forsythe, Ph.D., R.D.N., an assistant professor of physical education and human performance at Central Connecticut State University. That glucose moves into the liver and muscles to create glycogen stores, which your system draws on whenever it needs strength and stamina. Your body also uses the glucose from carbs to burn fat for energy, says Michele Olson, Ph.D., a professor of sport science at Huntingdon College in Alabama.

Glucose powers the brain too. Women who ate a no-carb diet for one week performed worse on memory tests than those who followed a low-calorie diet, according to research from Tufts University. "If you cut off the supply of glucose, the brain can't operate as effectively, and learning and memory decline," says Holly A. Taylor, Ph.D., the study author.

Finally, glucose is key to keeping us happy and satiated. "It helps the brain absorb the amino acid tryptophan, which spurs the production of serotonin, a neurotransmitter that boosts the mood and suppresses the appetite," says Lisa Mosconi, Ph.D., the author of *Brain Food*.

Since carbs are necessary for energy and good health, the key is choosing the best ones and eating them at the right times to optimize their benefits. Here's how to get what you need.

Find your range

The amount of carbs you should eat each day depends on your size and activity level. For women who work out moderately most days, two grams of carbs per pound of body weight provides the perfect amount of fuel (a tablespoon of cooked rice has about two grams of carbs). But if you're regularly putting in more than an hour of intense, sustained effort, you may need more, Olson says. For every 30 extra minutes you work out, eat an additional gram of carbs per pound of weight, she suggests.

Go complex

Whole grains, legumes, and fruits and vegetables are far better choices than simple carbs (like white rice, white bread, and baked goods) because they are higher in fiber, which may help to keep your energy—and your weight—steady, lower your risk of heart disease, and promote better GI health, says Keri Gans, R.D.N., a nutritionist in New York City and the author of *The Small Change Diet*. Aim for 25 grams of fiber per day, from foods like oats, beans, whole-grain bread and pasta, and produce. A good rule of thumb: 20 percent of a food's carbs should come from fiber, Forsythe says. That means a slice of bread with 15 grams of total carbs should contain three grams of fiber.

Spread 'em throughout the day

To keep your energy levels stable, consume small amounts of carbs at each meal and snack, and always pair them with protein. Combining the two nutrients helps you feel full and satisfied, keeps your metabolism humming, and helps your body build muscle, Forsythe says. "Eat one gram of protein for every two grams of carbs," she advises. Try an apple with peanut butter or whole-grain crackers with cheese. If you're doing a tough workout, eat a snack with 35 to 55 grams of carbs an hour or two beforehand so your body will have enough glycogen stores to keep you fueled.

Should you carbo-load before a race?

Eating a big bowl of pasta the night before a competition really does work—it boosts the body's glycogen stores to keep you fueled for the entire run, Olson says. The top mistake amateur athletes make, though, is not starting their carbo-loading early enough. The muscles and liver can hold only so much glucose at a time, so you need to have extra supplies in storage long before race day. "Increase your carbs to about 70 percent of your total calories for three days before the big event," Olson says. It's fine to have bagels, pizza, pasta, and potatoes—they all turn into energizing glucose. ★