

## Energy Foods

by Erika Bruhn

In the fitness industry, nearly everyone has an opinion about how to properly use food to maximize athletic performance. Nutrition is science, and it's big business. The number of energy food and drink products available to gym-goers and athletes is staggering. From energy bars to nutrition bars, bars for women, meal replacement bars, protein bars, energy gels, electrolyte replacement drinks and energy/recovery drinks, it's difficult to distinguish a nutritionally sound product from marketing speak.

As Spinning® instructors and enthusiasts, we need to understand how energy foods can improve our performance and help us attain better fitness. Are these products useful for a 40-minute Spinning class or a weight session at the gym? The answer is yes. The best advice, listen to your body.

Energy bars are an excellent source of carbohydrates. Packed with 40-45 grams per bar, 200-250 calories, 2-5 grams of fat, vitamins, minerals and antioxidants, these bars sustain energy over time. This means they also require digestion, just like a small meal. In other words, they are ideal for a hike, moderate bike ride, meal replacement or recovery food, but not for intense activity, like a Spinning class or run. Listen to your body during exercise—if food sounds appealing, eat; if not, wait, cool down and eat a recovery snack.

**Protein Bars** also contain 200-250 calories, but contain fewer carbohydrates and more protein—at least 20 grams per bar. Essential for building and repairing muscle tissue, protein has gained popular appeal as the main calorie and nutrient source in a low-carbohydrate diet. Although they are sometimes chalky in consistency, these bars are a useful recovery food. Remember, as you limit sugar and simple carbohydrates, bear in mind that a calorie is a calorie—excess calories are stored as fat, and protein is not exempt.

**Nutritional Bars** fall somewhere in the middle. With about 20 grams of carbohydrate per 200 calorie bar (one-half the amount of an energy bar), these bars are intended to be meal replacements or snacks consistent with the 40/30/30 philosophy: 40% of calories from carbohydrates, and 30% each from protein and fat. There is considerable medical research and evidence that indicates eating in this way can help you mentally and physically perform at your best.

**Simple carbohydrates**—flour, sugar, bread, rice, starch—have a high glycemic index, meaning the body converts them to sugar quickly. Insulin is a hormone that regulates blood sugar by removing carbohydrates from the bloodstream. What it doesn't use as fuel, the body stores as fat. Thus, when blood sugar rises, the body releases insulin, essentially locking up fat stores that could be used as fuel. On the other hand, the 40/30/30 philosophy maintains that if you limit sugar and excess calories, the body uses fat stores for energy, which, in the long run, is not only more efficient, but can also reduce your waistline.



**Bars for Women** are fortified with vitamins and minerals that women need, such as iron, folic acid and calcium. Intended to be a dietary supplement or light, low-fat snack, these bars contain 180 calories and 20-25 grams of carbohydrate per bar to satiate you before or after a ride. Although they are tasty, don't mistake these for energy bars. Not only are they light on calories; most of these have soy coating and chips that never fail to melt in the back pocket of your jersey.



**Energy Gels**—the mysterious packets athletes slurp down and swear by. With a consistency similar to honey, but not as sweet, these little packets pack carbohydrates, magnesium, potassium and other electrolytes into 100 efficient calories. Designed to quickly assimilate into the bloodstream without digestion, they are ideal for intense, race-day activity. During these conditions, blood moves away from the stomach to fuel muscles, causing food to sit, undigested. This causes bloating, cramps and stomach distress.

In addition to providing energy, gels help the body recover, by replacing carbohydrate stores and electrolytes lost in sweat. Quickly assimilated into the bloodstream, gels stabilize blood sugar, warding off the feared "bonk". Try different flavors and brands to determine what tastes and works best for you. If you're signing up for an upcoming endurance ride, like a 2-hour Spinning class, and find yourself getting shaky from low blood sugar during your regular class, gels can help.

**Electrolyte Replacement Drinks** also replace salts and potassium sweated out during exercise. The more you sweat, the more electrolytes you lose—salt, being the most critical. If you don't have enough salt in your system, you can drink five gallons of water and still suffer the same effects as someone severely dehydrated. This condition, hyponatremia, means a low concentration of sodium in the blood. Since sodium's primary function is to distribute and circulate water, if sodium levels are low, the body will not be able to move water away from the stomach to hydrate the rest of the body. In other words, you will still be dehydrated. So if you're exercising for more than an hour, in excessive heat or participating in long distance events like a marathon or triathlon, most nutritionists recommend you take along an electrolyte replacement drink to replenish what you're sweating out.

If you're looking for an alternative to some of the more popular drinks, which by the way, are loaded with high fructose corn syrup and food coloring, go to your local bike or running shop. There, you will not only find good products, but also professional advice about what works best. So ask around, solicit people's opinions about what product they prefer and why, and you're sure to find the right mix.

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