

SportsNutrition

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SPORTS NUTRITION TIPS

Without a doubt, *what* you eat and *when* you eat affects your athletic performance. A wisely selected sports diet can help you be stronger, train harder, and compete better. Use the following sports nutrition tips to help you eat to optimize your performance.

FUEL: The best foods to fuel your muscles are carbohydrates, either *simple sugars* (such as the naturally occurring sugars in fruits and juices) or *complex carbohydrates* (starchy foods, such as pasta, bread, rice, cereal, oatmeal, corn and other grains). These carbohydrates provide not only energy but also important vitamins and minerals. *Refined sugars* (such as in soft drinks, sports drinks and candy) also fuel muscles—but are nutrient-poor choices and lack vitamins that help your body's engine run best.

Your muscles store *only* carbohydrates—not protein or fat—in a form of sugar called *glycogen*. During hard exercise, your muscles burn this glycogen for energy. When you deplete your glycogen stores, as can happen during repeated days of hard training and a low carbohydrate diet, you feel overwhelmingly exhausted. Eating high carbohydrate foods (cereal, pancakes, bread, fruit, vegetables, pasta, potato) on a *daily* basis can help you train harder and compete better.

Although protein is a poor source of fuel, a small serving of a protein-rich food at two meals per day (plus the protein in two or three cups of milk or yogurt) is important to build and repair muscles. The protein should be the accompaniment to the carb-based meal, not the main focus.

QUICK ENERGY: If you are hungry, tired, and craving a quick energy boost prior to exercise, you don't have to eat sugar for energy. A simple snack of crackers, fruit, or a low fat granola bar can perk you up. Better yet, *prevent* the need for an energy boost! Simply eat a heartier breakfast and lunch that fuels you earlier in the day so you won't be running on fumes later that afternoon. These meals will be digested in plenty of time for your afternoon or evening workout. You will feel ready for action rather than hungry, tired.

For some people, eating lots of sugary foods for quick energy 15 to 45 minutes before exercise can hurt their performance. The sugar causes the body to secrete insulin which, when combined with exercise, can cause blood sugar to drop. If you are sensitive to blood sugar changes, you may feel light-headed, uncoordinated, shaky, and tired. This is needless—and preventable.

FLUIDS: Just as lack of carbohydrates can hurt athletic performance, so can lack of fluids. To prevent yourself from becoming dehydrated, drink lots of liquids before, during, and after strenuous exercise. To tell if you've had adequate fluids, monitor your urine. It should be pale yellow, *not* dark like beer.

Which is better: water or a sports drink? Water is fine for exercise that lasts less than an hour, particularly if you have enjoyed a pre-exercise snack to fuel your workout. If you are exercising for more than an hour and are low on energy, a sports drink during exercise offers energizing carbohydrates and can enhance your stamina and endurance. After exercise, water (plus a carbohydrate snack such as a fruit yogurt or smoothie), juice, or sports drink all provide what your body needs: water + carbohydrates.

PRE-COMPETITION MEALS: The day *before* a competition, you should eat carbohydrate-rich meals. This allows adequate time for your body to digest the carbs and store the energy as glycogen in your muscles.

One to three hours prior to a strenuous morning event (such as a 9:00 a.m. soccer game), you should also eat a light breakfast (cereal, bagel) or comfortable snack (energy bar, banana). This food helps maintain a normal blood sugar level and enhances your stamina and endurance. Before an afternoon or evening competition, eat a hearty breakfast, a comfortable lunch (soup, sandwich), and a snack or dinner as tolerated.

Although many athletes believe they should exercise on an empty stomach, current research suggests pre-exercise food actually improves performance. Because athletes vary in their ability to tolerate pre-exercise food, you need to *experiment during training* to learn how much and what kinds of food work best for your body. Some popular choices include oatmeal, cereal with lowfat milk, fresh or canned fruit, energy bars, bagels, pasta. Avoid large, hard-to-digest, fatty meals (bacon, cheese omelets, burgers, fried chicken).

RECOVERY FOODS: You should eat or drink carbohydrates as soon as tolerable (within two hours after hard exercise) to replace depleted glycogen stores. Muscles are most receptive to refueling at this time. A simple post-exercise refueler is fruit juice—a rich source of fluid, carbohydrates, vitamins. For athletes who do exhaustive exercise, consuming a little protein along with the carbs (as in fruit yogurt, chocolate milk) may enhance the speed of recovery and reduce soreness.

Remember: *Only* carbohydrates can quickly refuel your muscles and prepare you for tomorrow's workout. Hence, resist the greasy burger with french fries for your recovery feast; instead choose carbohydrate-rich thick-crust pizza with veggie toppings, pasta with meatballs, or a grilled chicken dinner that emphasizes potato, pasta, bread, vegetables, juices, and other carbs.