

INSIDE TRIATHLON

Nutrition Truths for Endurance Athletes

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You are responsible for experimenting in training (before the actual event or race) to discover and build a repertoire of acceptable foods and drinks, and any other supplements, that you will use to meet your fluid, energy, and electrolyte needs during long-distance events and races. You must figure out the basics—what and how

much you need to eat and drink and when you need to eat and drink it. Don't neglect to put your strategies to the test in various weather conditions at your intended race pace or intensity.

The only way that drinking and eating on the move become automatic on the day of the event or race is by practicing beforehand. Aim to be consistent and stick with what you know. When your favorite or old standby is no longer working, however, you must be willing to try something new. If you're contemplating tackling ultralength challenges, you first need to establish smart drinking and refueling habits in longdistance events and races.

Consider how your body processes foods during exercise. Blood flow to the gastrointestinal tract falls as your pace or intensity increases, making it harder to digest and absorb foods that you take in. In addition, your ability to consume and absorb calories when running (because of significant jostling of the stomach) is far less (by as much as 50 percent) than when cycling. Rely on simple carbohydrates during high-intensity efforts or when you need a rapid energy boost. Choose electrolyte replacement drinks, energy gels (take with water) and sport chews, glucose tablets, and if tolerated, soda or juice. During longer efforts of moderate intensity, add solid foods and high-calorie liquid drinks to boost your calorie intake and your spirits.

Refuel frequently instead of eating a large quantity at any one time, which diverts blood away from your working muscles. In other words, spread your hourly energy needs over 15- to 20-minute increments. Don't try to cram it all down on the hour mark. The best sports drinks, high-calorie liquid drinks, energy gels, and energy bars for you are the ones that go down and stay down.

Hitting the wall means that you have essentially depleted your muscle glycogen stores. Your legs (and other major muscle groups) have gone on strike, even though you may have been consuming adequate fluids and calories. Your training, or lack thereof, improper pacing, and general fatigue can contribute to this phenomenon.

You will often be able to continue and finish, albeit not with the desired performance. Bonking, when the body completely shuts down because of a severe drop in blood sugar, is a much more serious situation. The glycogen stored in muscles and the liver is essentially gone. Muscles and, more important, the brain are not receiving sufficient fuel. If left untreated, you may become increasingly irritable, confused, and disoriented. You could find yourself sitting or lying down and could possibly lapse into a coma. Stop whatever activity you were engaged in and boost your blood sugar by consuming readily absorbable carbohydrates, such as sports drinks, energy gels, soda, fruit juice, or glucose tablets, if available. Seek or ask for medical attention if necessary.

The best way to avoid bonking is to create a calorie buffer. Liquid calories in the form of electrolyte replacement drinks and high-energy liquid products are favored because they tend to be well tolerated and require less effort to get down than solid foods do. Large male endurance athletes often have to consciously work to consume enough calories (for example, as much as 500 calories per hour of prolonged cycling as compared to 300 calories per hour for smaller female athletes) to stay in energy balance.

Athletes who struggle with sensitive stomachs and other gastrointestinal problems are advised to learn beforehand what sports drink will be served during races and organized events. They can then train with that product or, if they will have access to water, carry their own acceptable powdered sports drink in premeasured baggies and reconstitute it along the way.

The less fit you are, the fewer shortcuts you can take. Knowing what you can survive on and still perform well with comes with experience. If you are less fit or less efficient (a novice rider or trail runner, for example), you need to drink and eat on a regular schedule. Set your watch or bike computer and train yourself to drink every 15 to 20 minutes and refuel every 30 to 60 minutes to keep pace with the energy that you're expending.