Top 10 Sports Nutrition Myths

In this article we take on the top 10 sports nutrition myths and help to separate fact from fiction so that you aren’t misled by these common misconceptions.

**Myth #1: The more protein you eat, the more muscle you will gain**
Fact: Yes, muscle tissue is made up of protein, and athletes do need a bit more protein than non-athletes, but the fact is that the vast majority of athletes meet their daily protein needs without even really trying. Extra protein beyond what’s needed is just extra calories. Rather than focus on eating more protein, time your protein intake in relation to your workouts. Muscle tissue fibers get damaged during the course of workouts, and strength training provides a stimulus for muscles to get bigger and stronger. Eating some protein before or just after a workout helps to ensure an ample supply of the amino acid building blocks the body needs for the repair and building of muscle tissue. And we’re not talking about loads of protein: Endurance athletes should consume about 10–20 grams of protein as soon as possible after exercise, while strength training athletes should consume roughly 20–40 grams of protein before and/or just after lifting. As for total daily protein needs, recreational athletes require in the range of 0.36–0.45 grams of protein per lb (0.8–1.0 grams per kg) body weight. For a 150-lb (68-kg) individual, that’s about 54–68 grams of protein per day. In comparison, serious endurance athletes require about 0.55–0.73 grams per lb (1.2–1.6 grams per kg), or about 83–110 grams per day for a 150-lb (68-kg) athlete. Finally, serious strength athletes require 0.68–0.77 grams per lb (1.5–1.7 grams per kg) body weight, or about 102–116 grams of protein daily.

**Myth #2: Vitamin supplements give you energy**
Fact: Popping a vitamin supplement won’t make you run faster, jump higher, or lift any more weight—at least not in the short term. Vitamins and their counterparts, minerals, don’t work that way because they don’t provide calories, energy, or fuel. Instead, they serve as metabolic cofactors that help the body to carry out the many biochemical reactions necessary for proper functioning. When vitamins or minerals are in short supply in the diet, the ability to function, including performing athletically, can be compromised. But if micronutrient needs are met, taking more vitamins and minerals won’t offer further benefit. In fact, taking too much could prove harmful. A one-a-day type of multivitamin/mineral supplement can be an effective measure for ensuring that you get adequate amounts of all necessary vitamins and minerals. The bottom line is that downing a vitamin pill before a competition doesn’t lead to better performance. If intake of a nutrient is marginal or low, a supplement can help close the gap, but the nutritional benefit will materialize over a matter of months—not minutes.

**Myth #3: Drinking fluids during exercise slows you down**
Fact: Excessive loss of fluid due to sweating is the single largest contributor to fatigue during exercise. Gone are the days of athletes’ gutting out long workouts or competitions without drinking fluids and for that matter, coaches’ insisting that all athletes consume the same fluid volume during exercise. In fact, it is now the consensus view of organizations such as the American College of Sports Medicine that athletes tailor their fluid intake during exercise to their sweat rate. Rather than slowing you down, drinking fluids during exercise can actually help improve your performance and increase endurance.
Staying hydrated generally requires something on the order of 13–26 fl oz (400–800 ml) every hour of exercise, preferably in smaller amounts taken frequently, such as 3–7 fl oz (100–200 ml) every 15 minutes. However, fluid needs can vary considerably from one athlete to the next, and from one workout to the next. So the best suggestion is to tie your fluid intake to your sweat rate so that you don’t end up losing too much fluid.

**Myth #4: It’s critical to avoid dehydration at all costs**
Fact: A falloff in exercise performance typically occurs with a loss of 2% or more of body weight as fluid. For a 150-lb (68-kg) athlete, this equates to about 3 lbs (1.4 kg) of fluid loss before performance is affected. Consequently, in shorter competitions where you aren’t likely to experience much of a fluid loss, it may not be worth taking the extra time required to down enough fluid to keep pace with your sweat rate. Rather than avoiding dehydration at all costs, it’s wise to stay in your hydration zone during exercise. An athlete's hydration zone is a body weight somewhere between their typical body weight before exercise and 2% below that weight. As an example, if you normally weigh 150 lbs (68 kg), your hydration zone is between 150 and 147 lbs (68–66 kg).

**Myth #5: When your body needs fluids, you’ll feel thirsty**
Fact: Thirst works effectively to keep your body hydrated over the long term, but during exercise, thirst is actually a poor indicator of fluid needs. In fact, by the time you feel thirsty during a workout or competition, you’ve probably already lost too much fluid. So, thirst is not a reliable gauge of fluid needs during exercise. Instead, follow a predetermined hydration plan that is tied to your sweat rate.

**Myth #6: A sports drink is no better than water**
Fact: Water alone definitely has its place. For example, water is usually fine for short bouts of exercise (e.g., less than an hour) in cooler weather. However, for longer workouts or competitions, and any time you are exercising in the heat or humidity, a sports drink that provides carbohydrates, fluids, and sodium is the better option. The advantages over plain water are many: First, a sports drink provides carbohydrates to help sustain blood glucose levels during exercise. Second, athletes typically consume more fluids when their hydration beverage is flavored, as is the case with a sports drink. Third, the sodium and carbohydrates in a sports drink cause the fluid in the beverage to be absorbed more quickly. The sodium also helps maintain the drive to continue drinking fluids during exercise, which is crucial to meeting fluid needs. Finally, the sodium also helps the body retain the fluid that is consumed. In some sports, such as cycling during hot weather conditions, fluid needs often outstrip carbohydrate needs, and this requires additional fluid. In these situations, a combination of a sports drink and plain water is often recommended for re-hydration during exercise.

**Myth #7: Athletes should avoid simple carbohydrates or sugars**
Fact: There’s no doubt that complex carbohydrates from whole grains, cereals, beans, vegetables, and fruit are good for all of us. In fact, these carbohydrate sources should make up the bulk of the carbohydrates we eat, day in and day out. But during exercise and for fast recovery just afterwards, easier-to-digest simple carbohydrates get the nod. During exercise, hardworking muscles want and need carbohydrates that can be digested and absorbed quickly. And after exercise, simple carbohydrates are more effective at flipping the metabolic switch from catabolism (breaking down) to anabolism (building up). The bottom line is that it’s not an all-or-none proposition when it comes to carbohydrate types for athletes. The further away in time you are from exercise, the more complex your carbohydrates can be. But just before, during, or just after exercise, simple carbohydrates are preferred.

**Myth #8: Carbohydrate loading always improves performance**
Fact: Carbohydrate loading offers proven endurance benefits for vigorous events or training sessions that go approximately 90 minutes or longer. But if your exercise session isn’t that long, and it’s not very intense, carbohydrate loading probably isn’t going to offer a performance benefit. The reason is that shorter, less intense exercise doesn’t fully deplete muscle glycogen fuel levels. Carbohydrate loading is only going to be helpful in situations where glycogen reserves would otherwise be depleted.

**Myth #9: Pasta the night before an endurance event constitutes carbohydrate loading**
Fact: Carbohydrate loading typically requires a combination of tapering exercise while increasing carbohydrate consumption, and it’s usually done over a few days. A single high-carbohydrate meal the night before a big competition is not an effective method for boosting muscle glycogen levels.

Myth #10: It doesn’t matter what you eat before exercise
Fact: What you eat before exercise does matter, and how much it matters depends on the intensity and duration of exercise. The goals of eating before exercise are to stave off hunger, to top off glycogen fuel stores, and to be comfortable. These goals are best met by consuming a pre-exercise meal that is high in carbohydrates, moderate in protein, and low in slower-to-digest fat and fiber. It’s recommended that endurance athletes consume their pre-exercise meal about 2–4 hours before exercise, as this allows enough time for the food to pass through the stomach. The amount of food to consume and the timing of intake in relation to exercise are best worked out during practice sessions. For athletes who take the time to find the right balance in terms of quantity of food and timing, eating before exercise can help extend endurance. Conversely, not testing a pre-exercise eating regimen can be disastrous and can lead to poor performance.