

We often have clients who are making the leap from a 5K or 10K to the 10 miler for The Bridge Run. While they often comment on the euphoria or endorphins from the higher mileage, they sometimes complain about the negative side effects such as light headedness, muscle cramps and general achiness in the later parts of their run. Many of these symptoms can be avoided by switching from a water bottle to a sports drink in addition to ensuring that your shoes are in good shape and you're not ramping up your mileage too quickly. Check out our frequently asked questions on which sports drink product you should chose, when they should be consumed and at what rate?

Before we begin, let's briefly review how an athlete's body works. Blood is 95% fluid and carries energy to the muscles including glucose, our bodies' preferred energy source. Muscle is 75% fluid and stores two-thirds of our carbohydrate or glucose supply in the form of glycogen. Sodium and potassium are needed for proper muscle contraction and heart rhythm. The perfect sports drink contains *fluid* to keep blood, muscle and cells in general hydrated, *glucose* for energy and *sodium* and *potassium* so our heart (a muscle) and our exercising muscles perform at their athletic best.

Who Should Be Drinking Sports Drinks?

Water is the fluid of choice in events lasting less than one hour but switch to sports drinks for longer activities or during high heat, high humidity workouts. Water, while keeping your blood and muscles hydrated, is missing the carbohydrate (energy) to fuel longer activities and the sodium and potassium (electrolytes) lost in sweat. Sports drinks should not replace water, low fat dairy and 100% fruit juice with and between meals and should be limited to exercise.

When Should They Be Consumed?

Drink at regular intervals or every 15-20 minutes. Think about the professional athletes on TV. Every time out, they have a water bottle filled with sports drink in their hand. The Bridge Run has aide stations with Gatorade set up throughout the course to meet your energy needs. Sweating is one sign that you are properly hydrated. When you exercise, the muscles that perform the work create internal heat that is released from your body in the form of sweat. In the absence of sweat, your body temperature rises, you become overheated and your performance worsens. Another good measure that you have stayed on top of your fluid needs during exercise is to weigh yourself before and after, with the goal of limiting your weight change to less than one percent. One pound of weight loss generally means you were 2 cups too short on keeping up with your fluid needs during your workout.

How Much Should You Consume?

According to the American College of Sports Medicine (ACSM) and the American Dietetic Association (ADA), you should drink 6-12 ounces of fluid at 15-20 minute intervals. This should include 30-60 grams of carbohydrate per hour to keep blood sugar levels in the correct range along with a steady source of electrolytes.

Nancy Clark's Homemade Recipe

Mix 4 Tbsp. sugar, ¼ tsp. salt, ¼ cup orange juice and 3.5 cups cold water. Some people substitute lemon juice or unsweetened Kool-Aid mix for the orange juice for a variety in flavor.

Product Comparison

A Water Bottle is the beverage of choice in events lasting less than 1 hour unless high heat or humidity is a factor. Water adequately hydrates our body, is free and helps avoid unnecessary calories and sugar found in sports drinks.

Vitamin Water Zero is the equivalent of water with vitamins and minerals added. While this version contains potassium, it has no sodium that is lost in sweat and no carbohydrate to provide fuel in longer events.

Muscle Milk is expensive at \$3.25 per serving. More protein does not create bigger muscles, rather muscles grow through progressive exercise as small tears are created, muscles rebuild growing stronger and bigger. Research published by Moore DR, Robinson MJ and Fry JL in the American Journal of Clinical Nutrition suggests that our bodies can not use more than 20 grams at a time, in fact an excess of protein is actually dehydrating. A cup will only hold so much water and the same is true of your muscles.

Coconut Water is a very rich source of potassium yet it is lower in carbohydrates than many sports drinks and weak in sodium. It is not an optimal choice during longer runs.

Propel Zero contains sodium and potassium electrolytes that are lost in our sweat along with some vitamins and minerals. However; it does not contain any fuel for endurance events. It is a good option for people who work out less than one hour, who are heavy sweaters or exercising in high heat and humidity and want to avoid extra calories.

PowerAde is similar to Gatorade in its energy and sodium contribution but contains 25% less potassium. Its energy source is high fructose corn syrup which more and more people are trying to reduce.

Gatorade has an adequate sodium and potassium ratio although many endurance athletes will choose to further supplement with an electrolyte tablet such as Endurolyte, especially if they are heavy sweaters. We encourage individuals to discuss the use of these supplements with their physician. Gatorade contains 14 grams of carbohydrate per 8 ounce serving and the energy source is sucrose and dextrose. It's the most commonly offered beverage at sporting events including The Bridge Run.