



Sports Drinks

Information:

Athletes who exercise for extended periods of time both during training and at events can lose a substantial amount of sweat. When you sweat, you lose both water and sodium, as well as deplete the carbohydrate stores that help fuel your exercise. Sports drinks contain water, carbohydrates, sodium, and other electrolytes such as potassium and calcium.

What's in a Sports Drink?

Carbohydrates provide the fuel for muscles and the brain and they contribute to the palatability of the drink. Ideally the sport drink should have a carbohydrate concentration of 4-8%. Higher carbohydrate concentrations impair gastric emptying and can cause gastric distress.

Sodium is the main electrolyte in sport drinks. It increases fluid uptake, retention and it also helps with salt replacement in heavy or salty sweaters. Sodium also encourages fluid intake via the thirst mechanism. The sodium concentration of most sport drinks are in the range of 100mg/8oz. If you will be exercising hard in the heat (particularly for more than 3 hours) and anticipate losing significant amounts of sweat, consume a salty food within 2-4 hours pre-exercise to help stimulate thirst and retain the consumed fluids. Immediately post exercise then consume salty foods to help replace the salt lost in the exercise bout.

Other ingredients can be found in sport drinks which assist in flavor, free radical defense, energy metabolism, and recovery. Athletes should read the labels of their sport drinks and make sure they are free of any banned substances on the WADA Prohibited List.

When should you consume sports drinks?

Sport drinks are typically consumed before, during and post training sessions and competitions. They help maintain hydration status and provide carbohydrate replacement for optimal performance.



WHAT'S THE BEST SPORTS DRINK?

Fluid requirements vary remarkably between athletes and between exercise bouts. Fluid losses are affected by genetics, body composition, fitness, environment and exercise mode and intensity.

The best sport drink also depends on personal taste, and tolerance. Choose sports drinks that are 40 to 80 calories (10 to 20g carb) and 55 to 110 gm sodium per 8 ounces.

This material was developed by professional sports nutritionists at the United States Olympic Committee. For more information and additional sport performance resources, visit:

www.teamusa.org/resources/usoc-sport-performance