

All about Sports Drinks

When you exercise you lose water and electrolytes, like sodium and potassium, through your sweat. Sweating is your body's way of cooling itself. If you don't drink enough to recover your sweat losses, you can become dehydrated. This can hurt your performance.

During exercise, your body also uses carbohydrates for energy. Being low in energy can also hurt your performance.

A good sports drink is designed with the right amount of fluid, electrolytes and carbohydrate to help replace your losses during exercise and help you get the most out of your exercise.

Sports drinks can help:

- | Keep your blood glucose (sugar) levels stable.
- | You exercise longer.
- | Make exercise feel easier.
- | Keep you mentally alert.

You could benefit from drinking a sports drink if you:

- | Exercise hard for at least an hour.
- | Exercise intensely. Examples of intense activities include; soccer, hockey, basketball and interval training.
- | Sweat a lot.
- | Have salty sweat. One way to tell is that you'll notice white powder on your face and clothes after you sweat.
- | Wear a lot of protective equipment, like in hockey or football.
- | Train or exercise in the heat and humidity.
Need to replace fluid and energy quickly, for example, during hockey tournaments or if you train or compete more than once per day.



Steps you can take

While sports drinks are helpful for some people, not everyone needs them. Water is a suitable choice for many people who exercise.

You likely don't need a sports drink if you:

- | Exercise for less than an hour.
- | The exercise isn't very intense like walking, casual bike riding, yoga, jogging, swimming or weight training.

If you buy a sports drink, look for one that includes:

- | Water as its first ingredient. Water is essential for rehydration.
- | Carbohydrates: 4 to 8 grams (g) carbohydrate per 100 mL. Choose drinks that include a mixture of different carbohydrate sources such as glucose, fructose, sucrose and maltodextrin. They are absorbed quickly during exercise to give you the energy that you need.
- | Sodium: 45 to 70 mg sodium per 100 mL. Sodium is lost through sweat and needs to be replaced. While the sodium in your regular diet will replace most, having sodium in a sports drink helps replace some as well. Having enough sodium will also increase your thirst and the drive to drink, which will help you to drink more and stay hydrated.
- | Potassium: 8 to 20 mg potassium per 100 mL. Potassium is lost through sweat and works with sodium to help restore fluid balance in the body.
- | Flavour: improves taste which can help you drink more.

A good sports drink does not need to include added amino acids, oxygen, caffeine or herbal ingredients.

Full strength 100% fruit juice, fruit drinks, pop or energy drinks are not recommended during exercise. They contain about double the amount of carbohydrate that is recommended. The carbonation in pop and energy drinks could lead to bloating and discomfort making it hard to drink enough to keep up with sweat losses.

To help you get the most out of your sports drink:

- 1 Drink enough to replace fluid lost through sweat. Use your thirst as a guide.
- 1 Sip, instead of gulp your sports drink during exercise. This will help you absorb more fluid rather than gulping a large amount of fluid at once.
- 1 Rinse your mouth with water after drinking a sports drink, when possible. Sports drinks may contain sugar and acid that can wear down the protective enamel in your teeth and cause tooth decay.

Table: Carbohydrate, Sodium, and Potassium in Sports Drinks and Other Beverages

Note : this chart provides information per 100 mL, typical of most beverage labels.

	<i>Carbohydrate (g/100mL)</i>	<i>Sodium (mg/100mL)</i>	<i>Potassium (mg/100mL)</i>
Recommended range	4 to 8	45 to 70	8 to 20
Store bought sports drinks (check labels)	3 to 6	31 to 74	10 to 26
Homemade sports drink (see recipe below)	5	63	19
Calorie free sports drink	0 to 2	40 to 46	9 to 12
Coconut water (commercial)	3 to 4	12 to 27	130 to 250
Orange juice	12	4	194
Cola	11	4	3

Source: individual manufacturers (sports drinks, coconut water), Canadian Nutrient File (2016)

Homemade Sports Drink Recipe

By mixing a few simple ingredients, you can make your own sports drink at a fraction of the cost! Combine: 60 mL ($\frac{1}{4}$ cup) of maple syrup with 1 mL ($\frac{1}{4}$ tsp) salt in 1 L (4 cups) of water.

Special Considerations:

Should I use an energy drink for hydration during exercise?

No, energy drinks are not sports drinks. They are not recommended for hydration during exercise or as a replacement for sports drinks. In fact, taking them during exercise could hurt your performance.

Most energy drinks contain either too much or too little sugar for during exercise and most are carbonated.

- They either contain over 11 g of carbohydrate per 100 mL, which is hard to absorb during intense exercise, or they are calorie-free and don't provide any energy at all.
- The carbonation in energy drinks also makes it harder to drink enough fluids and can cause stomach upset during exercise.

In addition to caffeine, energy drinks often contain ingredients like guarana (a source of caffeine), taurine, inositol, glucuronolactone and herbals such as ginseng or ginkgo biloba that may not be well tolerated by some people. The immediate feeling of "energy" is most likely due to the stimulant effects of the caffeine.

Can coconut water be used for hydration during sports?

Coconut water is another option to help rehydrate after exercise. However, it will depend a lot on personal preference and tolerance. Some research has found that those who grew up drinking coconut water tolerate it better than those who are not used to it. Studies show that it hydrates as well as sports drinks. While it has about the same amount of carbohydrates as sports drinks, it often has much less sodium and much more potassium.

It is always best to first try a variety of fluids during your training, well before competition, to find out which ones you tolerate best.

