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Nutrition Matters

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Sports Drinks - Do You Need Them?

Athletic training and competition can be demanding on the human body. A well-balanced diet goes a long way in meeting this demand, but it helps too, to pay special attention to the fluids you drink.

Sports drinks have been developed by some companies for recreational and competitive athletes. As well as supplying fluid, they contain carbohydrate as an energy source. They also contain sodium and potassium to maintain electrolyte balance.

Gatorade® and Powerade® are the most well-known sports drink in Canada. Other brands of drinks are marketed in the United States, but many of these contain ingredients or additives not allowed in sports drinks sold in Canada.

Should You Be Using Sports Drinks?

Consider the length and intensity of your workout. All athletes need to drink fluids. However, if you exercise strenuously for more than 60 minutes, your carbohydrate stores (muscle glycogen), which are used for energy during exercise may be used up. A sports drink can give you the extra carbohydrate your body needs.

If you exercise for less than 60 minutes, you don't need extra carbohydrate and minerals supplied by a sports drink - but don't forget about water replacement! Dehydration can cause fatigue, cramping, reduced performance and heat exhaustion. Cold water is best to drink because it empties from the stomach and enters the blood quickly.

When Should You Drink?

Drink before you feel thirsty, as you won't feel thirsty until after dehydration has already started. Try to drink up to 400-600 mL of water **2-3 hours before** you start exercising. Drink 150 mL - 340 mL about 15 minutes before you exercise. **During** activity, drink 150 to 350 mL of water (or sports drink if you exercise more than 60 minutes) every 15 to 20 minutes. Remember - this is just a guide; dehydration happens faster in hot weather so you may need more than these amounts. Try this in training to find out how much fluid is comfortable.

Don't drink sports drinks or juice **immediately before** exercising. Consuming sugar with an hour before exercise causes a release of insulin in the body. Insulin causes the muscles to take sugar from the blood, so when you start exercising, your blood sugar may be lower than it should be, decreasing your athletic performance. However, once you start to exercise, other hormones let the sugar from a sports drink stay in your blood. So, drink water before you exercise and save the sports drinks until you have begun.

What To Look For In A Sports Drink

Look for a sports drink that has between 6-20g carbohydrate per 250 mL. Sports drinks with more than 25g carbohydrate per 250 mL may take too long to leave your stomach. This means the water and sugar would not get to your blood and muscles as quickly as it should. Stomach cramping could result as well.

Sodium levels should be lower than 230 mg/L and potassium levels should be below 195 mg/L.

Taste is important in choosing a sports drink. If you like the taste, you may drink more - and the more fluids you drink, the better!

Aren't Energy Drinks Like Sports Drinks

No! Energy drinks should not be confused with sports drinks such as Gatorade® or Powerade®, which can help re-hydrate the body. Because energy drinks contain caffeine, they can cause the body to lose water which can lead to dehydration. These drinks not only keep you thirsty but can actually harm your athletic performance!

After Exercise...

It is important to replace water losses after you exercise. Weigh yourself before and after your activity to find out how much water you lost. Drink 500 mL (2 cups) of water for every 0.5 kg (one pound) you lose. Avoid alcoholic or caffeinated drinks (coffee, tea, cola), as these will dehydrate you further. Consume foods containing sodium (tomato or vegetable juice, pretzels, commercial soup, low-fat cheese, salted nuts) and foods containing potassium (vegetables, fruits, milk, legumes or meat) to replace electrolytes. It is also beneficial to consume high carbohydrate foods and drinks to build back glycogen stores. If you exercise strenuously or in hot weather, you may need as long as 24 to 48 hours to replace water loss. You will know you are rehydrated when your urine is clear or light yellow.

For most recreational athletes, water and a nutritious diet should be enough to supply what your body needs. Athletes who exercise strenuously 60 minutes or more may benefit from sports drinks. Use your training time to experiment with different fluid replacements. What works for one athlete may not work for another. Find out what works best for you so you can perform at your finest.

DRINK BEYOND THIRST - exercise dulls the thirst mechanism.

For more information, please contact your Public Health Nutritionist at the Peterborough County-City Health Unit, 743-1000.



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