

Sports Hydration: Get the facts

To stay hydrated, you need about 2 to 3 L (9 to 12 cups) of fluids every day. Being active increases your needs due to the fluids you lose through sweat. Depending on the sport or exercise you do, its intensity, the weather, and your individual sweat rate, you could lose anywhere from 0.3 to 2.4 L (about 1¼ to 10 cups) of sweat per hour. It's easy to see how exercising in hot weather can lead to large sweat losses, but it can also happen in cold-weather sports like hockey and skiing and even in water sports like swimming.

If you don't drink enough to replace your sweat losses, you can become dehydrated. This can leave you overheated, tired and hurt your performance. Signs of dehydration are thirst, dizziness, headache, and muscle cramps. Severe dehydration can increase the risk for heat illness and heat stroke.

Steps you can take

Stay Hydrated

- Drink throughout the day. Choose water most of the time, but 100% fruit juice, milk, tea, coffee, and sports drinks also provide fluids.
- Check the colour of your urine. Plenty of pale yellow (e.g. lemonade colour) urine is a sign you are well hydrated. A small amount of dark yellow (e.g. apple juice colour) urine could mean that you are dehydrated.
- Drink enough fluids during exercise. To know if you are drinking enough to replace fluid losses, weigh yourself just before and right after you exercise. Be sure to empty your bladder and remove sweaty clothing before weighing. If you lose more than 2% of your body weight during exercise, it means that you need to drink more. For example, a 70 kg (154 lb) person that loses more than 1.4 kg (3 lb) during exercise is not drinking enough. Weight loss right after exercise is water loss, not fat loss. Fat loss occurs slowly over days, weeks and months.
- Choose water or a sports drink during exercise. Sports drinks can be useful in the following situations:



- intense exercise
- exercise lasting longer than one hour
- exercise that takes place in hot or humid weather
- when you wear heavy sports equipment like in football and hockey
- when you have more than one sporting event per day, such as in a soccer tournament.

In addition to providing fluids, sports drinks provide energy (carbohydrates) for your muscles and brain and electrolytes (salts) to replace what you lose during exercise.

- Avoid carbonated soft drinks, full-strength juice, fruit drinks or energy drinks during intense exercise. These drinks prevent you from drinking enough to be hydrated as they may cause stomach upset and are too high in sugar for best absorption.
- Avoid overhydration. While it's important to drink plenty of fluids when you exercise, it is also important not to drink too much. Drinking too much, either before, during or after exercise, can cause low blood sodium levels (hyponatremia), which can be dangerous.

Symptoms of hyponatremia include:

- swollen hands and feet
 - vomiting
 - confusion
 - wheezing
 - weight gain during exercise or a competition
 - in rare cases, even death.
- Use your thirst as a guide. If you aren't sure how much you should be drinking, pay attention to your thirst and review the following fluid guidelines.

Fluids before, during, and after exercise

Here are some guidelines for how much fluid you may need to drink to stay hydrated and perform at your best. Individual needs may vary. To help your body absorb the fluids you drink, sip them slowly rather than drinking them all at once.

