

Sports Hydration; Get the facts

To stay hydrated, adults need about 2.2 to 3 L (9 to 12 cups) of fluids every day. Being active increases your needs due to the fluids lost 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.

Dehydration happens when fluid losses due to sweating are not replaced. This can leave you overheated, tired and hurt your performance. Signs of dehydration are thirst, dizziness, headache, fatigue and muscle cramps. Severe dehydration increases the risk for heat illness and heat stroke.



Steps you can take

- Drink throughout the day. Choose water most of the time, but, 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. Producing only a small amount of dark yellow (e.g. apple juice colour) urine could mean that you are dehydrated.
- Use your thirst as a guide. Don't forget to pay attention to your thirst. It is one way your body tells you it needs more fluid.
- Drink enough fluids before and during exercise. To know if you are drinking enough to replace fluid losses, weigh yourself just before and right after you exercise on a couple of occasions. Use the typical clothes and conditions you exercise in and at the intensity you usually 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 during exercise. 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. In addition to providing fluids, sports drinks provide energy (carbohydrates) for your muscles and

brain and electrolytes (minerals) to replace what you lose during exercise. Sports drinks can be useful in the following situations:

- Intense exercise like soccer, interval training, spin classes and cross fit; particularly if it lasts longer than one hour.
 - Exercise that takes place in hot or humid conditions.
 - When you wear heavy sports equipment like in football and hockey.
 - If you sweat a lot and your sweat is very salty. A sign of heavy salt loss through sweat is a white powdery residue on your skin and clothes.
 - When you have more than one sporting event per day, such as in a soccer tournament.
- 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. These drinks are also too high in sugar for best absorption of fluids.
 - Avoid over-hydration. While it's important to drink enough fluids when you exercise, it is also important not to drink too much. Drinking too much 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.

To help you know if you are over-hydrating you can weigh yourself before and after exercise. If you have gained weight over the duration of the exercise it is water and it usually means you drank more than you needed.

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.

Timing	Quantity
At least 4 hours before exercise	Aim for 5-10 mL per kg of body weight. This is 350-700 mL (1 ¼ cups to almost 3 cups) of fluid for a 70 kg person.
2 hours or less before exercise	Aim for 3-5 mL per kg of body weight if you have not urinated or only produced small amounts of dark urine. This is 210-350 mL (¾ to 1 ¼ cups) of fluid for a 70 kg person.
During exercise	Sip fluid during your activity. Avoid gulping or drinking too quickly as this can lead to over-hydration.
Immediately after exercise	<p>If you drank enough before and during your workout and there was no weight change, drink according to your thirst for the rest of the day.</p> <p>If you didn't drink enough and lost weight, drink 1-1.5 L (4-6 cups) of fluid per kg of weight you lost. Water is a good choice, but milk, and sports drinks are also options as well as high water containing foods like fruit, vegetables and yogurt. Eating food during rehydration will help your body hydrate better because the food helps your body hold on to the fluid you are drinking.</p>



Notes

Additional Notes From Your Health Care Professional

Distributed by:

