

Fluid

For Active Canadians



Are you getting enough?

Don't underestimate the importance of hydration

Getting enough fluid is a simple and effective way to get the most out of your workout or sport.

Hydration 101

- Fluid is lost in sweat, urine, digestive processes, breathing and through the skin.
- Physically active people need to drink enough fluid to balance out these losses and avoid dehydration.
- Dehydration can make for poor workouts.
- About 20% of our fluid intake comes from the food we eat, while 80% comes from the beverages we drink (including water, juice, milk, coffee, etc).¹ That means drinking beverages is really important for meeting our fluid needs.

Know the symptoms of dehydration^{1,2}

- Thirst, fatigue, weakness
- Headache, irritability, dizziness
- Reduced mental alertness
- Impaired vision and muscle control
- Scant, dark urine



Eight isn't enough

The recommendations for fluid intake are based on scientific evidence and include recommendations for how much fluid we need to drink as beverages. They are based on age and are different for men and women¹:

19 years and older



Women need to drink 2.2 L (about 9 cups*) of fluid per day.

Pregnant women need 2.3 L (about 10 cups*) of fluid per day.



Men need to drink 3 L (about 13 cups*) of fluid per day.

Highly active men and women and/or those who sweat a lot may need even more.

*1 cup = 250 mL

Drink more fluid when you are active to make up for sweat loss

Sweating is important to cool your body but it can also result in dehydration. The amount of extra fluid required to support physical activity is different for everyone. It depends on:

- How much you sweat
- The type, duration and intensity of your activity
- Your fitness level
- Your age
- The environment³

Drinking fluid before, during and after physical activity is key to preventing dehydration and supporting an effective workout.

What type of beverages?

Fluid needs can be met with more than just water; all beverages, including water, milk, 100% juice, coffee and tea, count.¹

Yes, coffee and tea *do* count; science tells us that a moderate level of caffeine (less than 180 mg caffeine/day) from beverages like coffee and tea is unlikely to increase daily urine output or cause dehydration.^{2,3,6} An average cup of coffee has around 135 mg of caffeine.*

*1 cup = 250 mL



Did you know?

Sodium (salt) is an important electrolyte lost in sweat; it is replaced when we eat foods or drink fluids that contain salt. Most Canadians get more than enough sodium in their diet.⁴



Quick Tip: *Keep your fluids cool!*

Cool drinks are more satisfying to your palate, which encourages you to drink up when you exercise.⁶

Don't confuse energy drinks with sports drinks

- Sports drinks and energy drinks were designed for different purposes.
- Sports drinks are for rehydrating and refuelling during endurance activities or intense stop-and-go activities lasting more than 60 minutes.^{3,6}
- Energy drinks are for improving mental alertness in people who are having difficulty staying awake. They typically contain more sugar than sport drinks do and may upset your stomach during physical activity.⁷

Did you know?

Following *Canada's Food Guide* will help you stay hydrated.⁵

- The *Food Guide* recommends drinking regularly and drinking more in hot weather or when you are very active.
- It also recommends that all Canadians drink 500 mL (2 cups) of milk* every day to ensure adequate vitamin D intake, and milk is about 85% water.
- Eating the recommended number of servings from the *Food Guide* will help you stay hydrated as many food-group foods, particularly vegetables and fruit, contain fluid.
- Eating a variety of foods is also important for hydration as it encourages you to drink and helps the body retain the fluid it needs.

* If you do not drink milk, drink fortified soy beverages that contain both calcium and vitamin D.

Fluid Tracker

Track your daily fluid intake over a three-day period to see if you are getting enough.



Women, you need 2.2 L (about 9 cups*) daily (2.3 L or about 10 cups* if you are pregnant).



Men, you need 3 L (about 13 cups*) daily.

*1 cup = 250 mL

My Recommended Goal:

_____ cups/day

Remember that you may need more on the days that you are physically active.

Did I get enough?

☐ Yes ☐ No

If not, check out the Idea Bank on the next page.

Time	Example	Day 1	Day 2	Day 3
Breakfast	✓ Glass of milk, 250 mL ✓ Cup of coffee, 250 mL			
Morning	✓✓ Water, 500 mL			
Lunch	✓ Glass of juice, 250 mL			
Afternoon	✓ Cup of tea, 250 mL ✓✓ Water, 500 mL			
Dinner	✓ Glass of milk, 250 mL			
Evening	✓✓ 100% fruit juice diluted with sparkling water, 500 mL			
TOTAL	11			
Did I work out today?	Yes			
Did I have...				
A variety of beverages?		☐	☐	☐
A drink before, during and after physical activity?		☐	☐	☐
2 glasses of milk?		☐	☐	☐

Idea Bank

Beverage ideas for your workout

Before a workout (2–3 hours before)

Drink a variety of beverages to keep fluid levels up.

- Sparkling water with lemon or lime
- Chocolate milk on ice
- 100% pure fruit juice
- Latte
- Low-sodium vegetable juice
- Yogurt drink
- Plain water
- Tea
- Hot chocolate
- Low-sodium soup



During a workout

Drink to prevent dehydration.

- Plain water
- For longer (60 minutes or more) and more intense workouts:
 - Diluted juice
 - Sports drinks



After a workout (15–30 minutes after)

Have beverages or beverage/food combinations to rehydrate, refuel and repair muscles.

- Smoothie (see recipe on next page)
- Water with an apple and peanut butter
- Chocolate milk
- Water with crackers and cheese
- Sports drink with trail mix
- Tea with hummus and pita bread
- Cereal with milk and fruit
- 100% juice with a granola bar
- Homemade muffin with milk
- Low-sodium vegetable juice with a sandwich



On-the-go tips

- Put beverages in reusable containers with ice cubes and pack them to take with you.
- Freeze a Tetra Pak of chocolate milk or juice.
- Remember to have a drink with meals and snacks on active days.
- Plan to take a drink with you to your workout.



Keeping on track

- Set reminders to drink in your electronic calendar or PDA.
- Find a buddy and work together to meet your fluid goals.
- Post a reminder somewhere you will see it (e.g., at your desk, in your car, on your fridge).
- Keep track of your daily fluid intake with a checklist.

Sport revival smoothie

- 1 banana (peeled)
- 250 mL of milk or chocolate milk
- 15 mL of honey, if you choose plain milk

Combine in a blender and drink it in!



For personalized advice, consult a Registered Dietitian (RD) with expertise in sports nutrition.

Visit dietitians.ca to find an RD in your area.

This is part of a series of informative resources for physically active Canadians developed in partnership with the Registered Dietitians at Dairy Farmers of Canada and CSEP Certified Exercise Physiologists®.



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References:

1. Institute of Medicine (2006). Dietary Reference Intakes: The Essential Guide to Nutrient Requirements. Washington: National Academies Press.
2. Dietitians of Canada. Why is water so important for my body? How do I know when I'm dehydrated? www.dietitians.ca/resources/resourcesearch.asp?fn=view&contentid=11280.
3. American College of Sports Medicine, American Dietetic Association, Dietitians of Canada (2009). Nutrition and athletic performance. *Medicine and Science in Sports and Exercise* 41:709-731.
4. Health Canada. Canadian Community Health Survey, cycle 2.2, Nutrition (2004). Nutrient intakes from food. www.statcan.gc.ca/pub/82-620-m/82-620-m2007003-eng.htm
5. Health Canada. Eating Well with Canada's Food Guide. www.hc-sc.gc.ca/fn-an/food-guide-aliment/index-eng.php.
6. American College of Sports Medicine Position Stand (2007). Exercise and fluid replacement. *Medicine and Science in Sports and Exercise* 39:377-390.
7. Health Canada. Safe use of energy drinks. www.hc-sc.gc.ca/hl-vs/iyh-vsv/prod/energy-energie-eng.php