



Water and Hydration

Hot temperatures can increase the risk of dehydration. During hot, humid conditions and prolonged or intense exercise, the body needs more fluids to replace sweat losses and prevent heat illness. Beat the heat by drinking plenty of water and other fluids - thirst alone may not tell you of your body's need for water.

Water is an essential nutrient

Water:

- makes up about 60 - 70% of the body
- maintains body temperature and keeps blood flowing
- carries oxygen and nutrients to working muscles
- takes away wastes to be eliminated in urine
- produces sweat to keep us cool
- maintains blood pressure and heart rate
- cushions organs and lubricates joints
- helps store energy (glycogen and creatine) in the muscle
- absorbs nutrients

Water intake can come from drinking water (city tap water), water in beverages (such as milk, 100% juice, coffee, and tea), and water from food (such as vegetables, fruit, and soups).

How much water is enough?

The amount of water you need depends on your age, gender, body size, level of physical activity and the climate in which you live.

Age or Stage	Total daily water needs from <i>all</i> sources (litres), approximate	
	Males	Females
4 – 8 years	1.7 L	1.7 L
9 – 13 years	2.4 L	2.1 L
14 – 18 years	3.3 L	2.3 L
19 + years	3.7 L	2.7 L
Pregnancy	-	3.0 L
Lactation	-	3.8 L

SOURCE: *Institute of Medicine (2004). Dietary Reference Intakes: Water, Potassium, Sodium, Chloride, and Sulfate, Washington DC: National Academy Press.*

Signs you are not getting enough water:

- dark yellow urine
- dry mouth, thirst
- increased body temperature
- dizziness, irritability, tiredness, weakness
- less coordination, decreased concentration
- poor vision, cramps, nausea, headaches
- rapid heart beat

Hydration Tips

- Whether it's very hot or not, encourage children to drink on a schedule (approximately every 15 to 20 minutes during physical activity).
- Enjoy tap water! It's readily available, safe, and inexpensive. It only costs 1 cent to fill a 1 litre water bottle more than 10 times.
- For added flavour, try water with a squeeze of lemon or diluted fruit juices (one part juice to one part water). In hot weather, children may drink more fluids if they are flavoured.
- Make sure all family members carry a clean filled water bottle when they're out and about. Note: water bottles should be personal and not be shared.
- Wash, rinse, and sanitize personal water bottles daily. If refilling during the day, simply rinse a couple of times with clean fresh water and refill.
- Keep beverages cool. Add a few ice cubes to your water bottle and fill with cold water. Note: it is better to store beverages out of direct sunlight and in a cold environment, especially if they have been handled or opened.

Hydration for Sports

Being active increases the need for fluids.

Children and teens are at greater risk for dehydration and overheating because they sweat less than adults but produce more heat during activity. Encourage them to drink often; don't wait for them to tell you they are thirsty.

- **Water:** Cool water is a *must* for athletes and the best choices for active kids. Adults participating in activities lasting less than 90 minutes should also choose water.
- **Juice:** The high sugar content in juice can slow fluid absorption and increase the chance of a stomachache. If fruit juice is consumed *during* exercising, it *should be diluted*.
- **Sports Drinks:** Sports drinks are not needed for activities that are less than 90 minutes. Sports drinks are beneficial to athletes who have been exercising and sweating intensely for 90 minutes or more, because they contain carbohydrate and electrolytes.
- **Energy Drinks:** The high sugar content and/or carbonation of energy drinks can interfere with hydration, making these a poor choice for use during physical activity. Health Canada cautions that children and pregnant or breastfeeding women should avoid energy drinks.
- **Caffeinated Beverages:** For the scoop on caffeine, please download or call to order our fact sheet titled "Caffeine and Your Health".

Hydration is vital to your good health!