

STAY HYDRATED FOR BETTER HEALTH

Debunking Common Beliefs



Common Belief: “Everyone needs to drink eight glasses of water per day”

We all have heard of the 8x8 rule. Drink 8 glasses (8 oz. each) of water per day. This rule is not entirely true as the amount of water that your body needs to function effectively is influenced by a number of factors such as weather, level of physical activity, age, weight and gender.

To get an estimate of the *minimum* amount of water you need to drink per day, divide your weight (in pounds) by 2 and drink that many ounces of water each day.

Your weight ÷ 2 = minimum oz. of water per day

Weight (in lbs)	Minimum amount of water to drink each day	Equivalent number of glasses (8 oz.)
120 lbs	60 oz. 1774 ml	8
140 lbs	70 oz. 2070 ml	9
160 lbs	80 oz. 2365 ml	10
180 lbs	90 oz. 2661 ml	11
200 lbs	100 oz. 2957 ml	13
220 lbs	110 oz. 3253 ml	14
240 lbs	120 oz. 3548 ml	15
260 lbs	130 oz. 3844 ml	16

Common Belief: “Only water counts”

Many people assume that you can only drink water to stay hydrated. The fluids we consume, such as milk, juice, broth, coffee, as well as the fruits and vegetables we eat can also help our body stay hydrated.

When selecting beverages, select most often:	When selecting beverages, select less often:
Water	Sodas
Milk (low fat or fat free)	Sports drinks and energy drinks
100% fruit juice	Fruit drinks
Fortified soy based beverages	Sweetened tea and coffee
Unsweetened beverages	



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Common Belief: “Bottled water is better than tap/fountain water”

It is very common to hear that drinking water from the faucet/fountain is not safe and that you should only drink bottled water. This should not be universally applied as it depends on where you live and whether the water comes from a safe water treatment facility.

Consider the following information posted on the Government of Canada website: hc-sc.gc.ca

- When drinking water leaves a treatment plant on its way to your house, it must meet strict safety standards. This does not mean that your water is free of all contaminants. It means that the levels of contaminants don't pose serious health risks.
- In Canada, bottled water is regulated as a food and therefore it must comply with the Food and Drugs Act. The regulations specify microbiological standards, acceptable treatments and labelling requirements.
- While bottled water is regulated federally as a food, the tap water distributed by municipalities is regulated by the appropriate province or territory.
- Quality standards for bottled water and tap water are similar. Both bottled water and municipally distributed tap water that meet or exceed their required health and safety standards, are considered to be safe.
- Water bottles can legally contain many things we would not tolerate in municipal drinking water. Only those that are labelled “spring” or “mineral” are subject to higher quality standards.

Keep the environment in mind!

Canadians consume more than two billion litres of bottled water each year. Globally, about 190 billion litres per year are consumed. More than 85% of these bottles do not get recycled.

(David Suzuki, 2008)

Let's keep the environment in mind; use a reusable water bottle.

Thirsty for more information?

Visit the Stay Hydrated website at uwindsor.ca/stayhydrated



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Water is Vital



Why is water vital?

Approximately 60% of the adult human body is comprised of water. Water is found throughout our bodies in our cells, tissues and organs.

Organ	% Water
Lung	83
Kidney	79
Muscles	79
Brain	73
Heart	73
Skin	64
Bones	31

Statistics source water.usgs.gov

Water plays a key role in many of our body's critical functions. For instance, water:

- Protects and moistures our joints and makes muscles more elastic
- Aids in weight management
- Helps our organs absorb nutrients better
- Regulates our body temperature
- Flushes out toxins and reduces the risk of urinary tract infections
- Moisturizes the skin and improves skin complexion
- Aids in digestion and prevents constipation
- Increases energy and enhances brain functioning
- Provides a natural headache relief

What does water do for you?

Weight Management

Water has zero calories unlike juice and other sugary drinks. Substituting these high calorie drinks with water can help you reduce your calorie consumption. Also, many studies have shown that humans can't tell the difference between hunger and thirst. Therefore, drinking a glass of water before reaching for a snack can also help you reduce your calorie intake.

Muscle Hydration

When exercising, your heart rate increases in order for your muscles to get a quick supply of blood and oxygen. If you don't drink enough water before and during exercise, this process becomes less efficient resulting in muscle pain, spasms, cramps and slowed muscle growth.

Kidney Function

Imagine drinking coffee without a filter. For a filter to work effectively it needs a constant flow of water. Our kidneys are our filters and water helps our kidneys get rid of toxins.

Healthy Bowels

Water keeps things flowing along the gastrointestinal tract. When you are dehydrated, your colon pulls water from your stool resulting in constipation. Water is the most effective natural remedy for constipation.

Skin Hydration

Not drinking enough water leads to dry, tight and flaky skin. Dry skin is less resilient and therefore it can either contribute to wrinkles or make existing wrinkles look more prominent.

Brain Function

Water to your brain is just like gas to your car. Your brain works non-stop 24 hours a day. Water fuels your brain and allows you to think and function more efficiently.



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Water is Vital

Other Health Benefits

Arthritis

The most important thing that someone with arthritis can do is to ensure that their joints are lubricated. Water not only lubricates but also pads joints and reduces the friction that causes pain.

Gout

Gout can be improved with proper consumption of water. Water helps remove uric acid and other toxins that build-up causing swelling and pain.

Osteoporosis

This painful condition is characterized by low bone mass and a structural breaking down of the bone tissue. The amount of water we consume can help prevent osteoporosis and also help sufferers cope.

Heart Disease

Recent studies have highlighted that drinking water is as important in preventing heart disease as exercising, not smoking and eating a heart healthy diet.

Hypertension

When you don't consume enough water, your body retains sodium to preserve fluids. Dehydration forces the shutdown of capillary beds and puts pressure on both capillaries and arteries, which leads to elevated blood pressure.

What can you do to increase the amount of water you drink?

Try the following tips:

- Buy a reusable water bottle that you like (BPA free) and take it with you everywhere you go. Based on its size, determine how many bottles you need to drink per day to stay hydrated.
- Make a habit of drinking a glass of water every morning when you get up, before each meal, after each trip to the bathroom and at bedtime.
- Set reminders on your smartphone/computer to drink water.
- Download an app for your smartphone to keep track of the amount of water you drank.
- Add more fruits and vegetables into your diet as they are also great sources of water.
- When drinking sugary drinks, dilute them with ice or water.
- Add a slice of lemon, lime, strawberries or other fruits to your water to give it a natural flavor.

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Water is Best



Most of our fluid needs are met through the water and other beverages we drink, and a small portion through the foods that we eat.

The amount of water that our body needs is influenced by a number of factors such as weather, physical activity level, weight, age and gender. At a minimum, it is recommended that you drink $\frac{1}{2}$ your body weight in ounces every day

**Your weight $\div 2$ =
minimum oz.
of water per day**

Example:

If you weigh 140 pounds –
drink at a minimum 70 oz.
(2070 ml) of water per day =
9 glasses (8 oz. each)

If you weigh 180 pounds –
drink at a minimum 90 oz.
(2661 ml) of water per day =
11 glasses (8 oz. each)

Beverages

Use the chart below, developed by the Dietitians of Canada (2014), to help you select the healthier beverages.

Fluids to choose from	Tips
Water	<ul style="list-style-type: none">• Water is calorie free and a great way to quench your thirst.• Add a slice of lemon or lime to make it more refreshing.• Drink tap water. You don't need to drink bottled water.• If you drink Well water it should be tested regularly.
Fruit or Vegetable Juice	<ul style="list-style-type: none">• Limit your intake of fruit juices since they are high in calories and low in fiber.• Eat the fruit instead.• 125 ml ($\frac{1}{2}$ cup) of juice is one serving of fruits and vegetables. Make sure you choose 100% real fruit juice.• Avoid fruit "drinks", "cocktails", "punches" or "beverages" as they have added sugar and fewer nutrients.
Milk/Fortified Soy or Rice Beverages	<ul style="list-style-type: none">• Aim for 500 ml (2 cups) of low fat milk or alternatives (less than 2% M.F.) as part of your fluid intake for the day.
Soft Drinks	<ul style="list-style-type: none">• Choose soft drinks less often. Regular soft drinks are high in calories and sugar and low in nutrients. Some soft drinks, such as colas, may also contain caffeine.• Diet soft drinks are calorie and sugar free but may still have caffeine.
Broth and Soups	<ul style="list-style-type: none">• Broth and broth-based soups can be a good source of fluid. However, most canned or dehydrated broths or soups are high in sodium (salt).• Try making your own or choose prepared broths or soups that are lower in sodium.



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Water is Best

**Refreshing,
calorie free and
healthy...
Make water your
drink of choice!**

Fluids to choose from	Tips
Sport Drinks	<ul style="list-style-type: none">• Sport drinks are usually not needed to keep hydrated when you exercise.• Water and a healthy diet will replace water and minerals lost during exercise. If you exercise very hard, in extreme weather, for a long time or wear a lot of sports equipment you may benefit from a sports drink.
Tea and Coffee (e.g. herbal tea, regular and decaffeinated coffee/tea)	<ul style="list-style-type: none">• Coffees and teas are not dehydrating. Limit caffeine intake to about 400 mg per day. That is equal to 750 ml (3 cups) of black coffee or 1 L (4 cups) of black tea per day.• Drink herbal teas or decaf coffee if you want to have more than the recommended amount of caffeinated beverages.• Limit specialty coffees and teas. They can be high in sugar.

Chart source: dietitians.ca

Foods with High Water Content

The fruits and vegetables that you eat can also contribute to the amount of water you need to drink to stay hydrated. Select fruits and vegetables that have a high water content and are nutrient dense.

Fruits (% water)		Vegetables (% water)	
Watermelon: 92%	Pineapple: 87%	Cucumber: 96%	Spinach: 92%
Strawberries: 92%	Raspberries: 87%	Radishes 95%	Eggplant: 92%
Grapefruit: 91%	Oranges: 87%	Zucchini: 95%	Sweet peppers: 92%
Cantaloupe: 90%	Blueberries: 85%	Celery: 95%	Cauliflower: 92%
Peaches: 88%	Bananas: 74%	Tomato: 94%	Broccoli: 91%

Statistics source: rrtcadd.org/resources

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Dehydration



Dehydration takes place when our body either loses or uses more fluids than it takes in.

What are the signs of dehydration?

The following are some of the most common signs of mild to moderate dehydration:	The following are examples of signs of severe dehydration:
Dry lips and mouth	Extreme thirst
Headache	Little to no urination
Dizziness	Sunken eyes
Flushed skin	Shriveled and dry skin with no elasticity
Thirst	Rapid heartbeat and breathing
Decrease in urination or dark urine	High fever
Sleepiness or tiredness	Confusion
Constipation	Blue lips
Low blood pressure	Unconsciousness
Increased heart rate	

What are the health risks associated with dehydration?

Mild to moderate dehydration can be reversed by drinking fluids right away but severe dehydration requires immediate medical attention.

Dehydration can cause serious health complications. The following are some of the health risks associated with dehydration:

- **Seizures**
Electrolytes (such as potassium and sodium) help carry electrical signals from cell to cell. If your electrolytes are not balanced, it can lead to involuntary muscle contractions and sometimes to a loss of consciousness.
- **Low blood volume shock (hypovolemic shock)**
This is one of the most serious and sometimes life-threatening complications of dehydration. It occurs when low blood volume causes a drop in blood pressure and a drop in the amount of oxygen in your body.



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Dehydration

- **Kidney failure**

This potentially life-threatening problem occurs when your kidneys are no longer able to remove excess fluids and waste from your blood.

- **Heat injury**

You may experience a heat injury if you don't drink enough fluids when exercising vigorously and perspiring heavily. Heat injury can range in severity from mild heat cramps to heat exhaustion or potentially a life-threatening heatstroke.

- **Coma and death**

When severe dehydration is not treated promptly, it can be fatal.

What can you do to stay hydrated?

The amount of water that your body needs to stay hydrated is influenced by a number of factors such as age, gender, weight, weather and physical activity level. At a minimum, you should drink $\frac{1}{2}$ your body weight in ounces every day.

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