

# EATING WELL YOUR WAY

# WATER WORKS

During warm weather we find ourselves outdoors enjoying the sunshine, relaxing by the pool, working in the yard, cycling, or taking a walk. Regardless of how you choose to enjoy the warm weather, staying hydrated is very important because your heart, brain, muscles, and cells all need water to work properly. Getting enough fluids is essential, especially during the summer, as fluid loss can happen more easily in hot, humid weather. Working hard in warm, indoor places can also cause us to overheat and increase our need for cool fluids.



Sweating is the body's main way to stay cool and prevent the body's temperature from rising. Active muscles can generate up to 20 times more heat during intense activity than muscles at rest. Since the body does not like its internal temperature to increase or decrease by any large amount, sweat is released onto the skin where it evaporates and cools the skin's surface. This process helps to cool the blood and keep the body's temperature at a normal and safe level.

The more a person sweats, the more fluid needs to be replaced. The amount of fluid that is lost will vary depending on the person and the type of activity. Some people naturally sweat more than others. You may also sweat more if you are:

- Male
- Unfit or poorly conditioned
- Exercising in hot and humid conditions
- Participating in intense activity



## HOW MUCH FLUID DO I NEED ?

You may be surprised to find out how much fluid your body needs (see table below). Heat and humidity, especially when combined with physical work, will increase these requirements. The harder and longer you are active, the more fluid you will need.

AGE RANGE	RECOMMENDED DAILY WATER INTAKE	
	MEN	WOMEN
19+ years	3L (approximately 13 cups) from fluids, including drinking water. (Not including alcohol).	2.2 L (approximately 9 cups) from fluids, including drinking water. (Not including alcohol).

Source: Institute of Medicine. (2004). *Dietary Reference Intakes for Water, Potassium, Sodium, Chloride, and Sulfate*. Washington DC. The National Academies Press.

## Did you know?

- Both liquids and solid food provide our bodies with hydration. About 80% of water comes from beverages and about 20% from food!
- Pregnant and breastfeeding women may need more fluids to meet their bodies' increased needs and help produce breast milk.

## Dehydration and Heat Related Illness

By the time you are thirsty, you may already have a mild form of dehydration. Dehydration can lead to more serious heat related illnesses such as heat cramps, heat exhaustion, and heat stroke. Heat cramps are painful muscular spasms that can occur during periods of heavy exertion. Heat exhaustion can occur when people are very active during hot, humid weather and become dehydrated from heavy sweating. Heat stroke is a life-threatening condition that can result when the body's temperature control systems stop working. Due to these potentially serious illnesses, it is important to stay hydrated and drink fluids throughout the day before you feel thirsty. Special attention needs to be given to the elderly, infants, preschool children, people with chronic illnesses such as heart conditions, those who are obese, and people involved in strenuous outdoor activities.

## Dehydration and Active Children

Children are at a greater risk for dehydration because they do not adapt as well as adults to extreme temperatures. Children participating in sport activities for less than one hour have a lower risk of dehydration than those involved in longer periods at a higher activity level. If children do become dehydrated, they can quickly overheat, leading to possible heat exhaustion or heat stroke. It is important for adults who are responsible for children to make sure they drink enough fluid on a regular basis throughout the day even if they say they are not thirsty.

## Dehydration and Older Adults

The older we get, the greater the risk of dehydration. Older adults are at risk because they often lose their ability to detect thirst. Many also suffer from memory loss or mobility problems; both of which increase the risk of dehydration. Older adults should drink often throughout the day even if they are not thirsty. Keep favourite drinks nearby and remember that soups, popsicles, gelatins, or other flavourful, fluid-rich foods should be encouraged as a part of a healthy meal plan.

## Did you know?

You can monitor your hydration status. Urine should be the colour of straw, high in volume and not appear to be concentrated (dark amber). Small volumes of urine is a good indicator of a need for greater fluid intake.

### Key References:

Institute of Medicine. (2004). *Dietary Reference Intakes for Water, Potassium, Sodium, Chloride, and Sulfate*. Washington DC: The National Academies Press. Online: [http://books.nap.edu/openbook.php?record\\_id=10925&chapselect=y0&page=1](http://books.nap.edu/openbook.php?record_id=10925&chapselect=y0&page=1). Accessed June 28, 2007

Windsor-Essex County Health Unit. (2005). *Nourishing Notes: Stay cool with more fluid*. Windsor, ON: Author.

We all need to make sure that we get enough fluids every day, especially when the temperature is hot, humidity is high, and during physical work. We need to take special care to ensure children and older adults get enough fluid on a daily basis. To help you and your family meet your hydration needs, consider the following tips:

- 1. Drink fluids with each meal and snack.**
- 2. Eat plenty of vegetables and fruits. They are high in water.**
- 3. Keep fresh drinking water within easy reach during the day.**
- 4. During physical activity, fluid breaks should be scheduled at least every 15-20 minutes and more frequently in hot and humid weather.**

For more information on the fluid needs for you and your family, please visit The Institute of Medicine of the National Academy of Sciences available at:

[http://books.nap.edu/openbook.php?record\\_id=10925&page=73](http://books.nap.edu/openbook.php?record_id=10925&page=73)

