

# Nourishing Notes

## Stay Cool with More Fluid

Take time out to drink! Water is the most important performance-enhancing nutrient in an active nutrition plan. But many people who are active are not drinking enough. By not drinking enough fluids or by losing too much fluid through sweating, you are setting yourself up for dehydration. Dehydration has a negative effect on physical and mental performance and can progress to heat illness, which can be fatal.

### Fluid Loss

Sweating is the body's natural way to stay cool and prevent the body temperature from rising. Active muscles can generate up to 20 times more heat during hard exercise than muscles at rest. When heated, the body releases sweat on the skin that evaporates and cools the skin's surface. This helps to cool the blood to keep the body temperature at a normal and safe level.

The more a person sweats, the more fluid needs to be replaced. Depending on the person and the type of activity, the amount of fluid that is lost will vary. 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

The risk of dehydration is greater for people that sweat more. Children participating in sport at a recreational level for less than one hour have a lower risk of dehydration than those involved in longer periods of activity at a higher level. If children do become dehydrated, they can quickly overheat leading to possible heat exhaustion or heat stroke.

To prevent the onset of dehydration, children involved in all levels of physical activity (i.e. from shorter recreational participation to more intense competition) should be encouraged to drink plenty of fluids throughout the day.

### More Fluid

- Drink fluids with each meal and snack during the day.
- Carry a bottle of water with you when you travel.
- Keep water bottles clean and avoid sharing with others.
- Don't wait until you're thirsty to drink fluids. By the time you become thirsty, chances are you're already well on your way to being dehydrated.

### Monitor Your Hydration Status:

- Urine should be straw coloured and high in volume and not appear to be concentrated (dark). Small volumes of urine produced is a good indicator of a need for greater fluid intake.
- Throughout activity, fluid breaks should be scheduled at least every 15-20 minutes and more frequently in hot and humid weather. Everyone should be required to drink some fluids during these breaks.

## Fluid Boosters

Water is exactly what an active body needs; however, it isn't the number one fluid choice for everyone. The key is to choose fluids that you enjoy to ensure that you are drinking enough.

**Flavoured Water:** Flavour your water with slices of lemon, lime or orange to improve the taste. Make your own frozen juice cubes and add to water to change the taste.

**Sports Drinks:** Boost your fluid intake with sports drinks. The light flavouring may encourage you to drink more. The carbohydrate (sugar) provides energy to working muscles during activity periods that are harder, stop-and-go or longer than 60 minutes. The sodium also adds flavour and gets you to drink more. Sports drinks can be used as a part of your fluid replacement plan, but they should not be the only fluid of choice. They contain little nutrition, extra calories and they can be costly.

**Other Sources:** Remember that you also get extra fluids from 100% fruit juice, lemonade, milk, smoothies, soups, decaffeinated coffee or tea, as well as watery foods including cucumbers, grapes, lettuce, oranges, plums, tomatoes and watermelon.

## Fluid Replacement

The best way to prevent dehydration is to drink before, during, and after activity. Drinking enough fluids will help you perform at your best, control body temperature, and avoid heat illness.

Many active people have a drinking plan. Everyone is different, so start with this guide and adapt the amount of fluid to meet your needs.

<b>Before:</b>	400-600 mL (about 2 cups) 2 hours before the activity
<b>During:</b>	150-350 mL (about ½-1 cup or 3-4 mouthfuls) every 15-20 minutes
<b>After:</b>	500 mL (2 cups)

The easiest way to tell if you are replacing your sweat losses is to weigh yourself without clothing before and after activity. Be sure to weigh yourself with the same scale. Any weight loss experienced represents lost fluid. You can then replace each pound of weight lost with 2 cups (500 mL) of water or each kilogram of weight lost with 4 cups (1 litre) of water.

### Make Your Own Sports Drink

Sports drinks should provide 4-8 g carbohydrate per 100 mL (4-8 % carbohydrate) for quick absorption. Or, make your own drink using fruit juice that provides 8-16 g carbohydrate per 100 mL (20-40 g per 250 mL).  
Mix: 500 mL (2 cup) juice

500 mL (2 cup) water

1 mL (¼ tsp) salt

This drink provides 4-8 % carbohydrate (depending on type of juice used), 0.6 g sodium.