



Preschooler *focus*

PHYSICAL ACTIVITY AND THE SUMMER HEAT

Summer is a great time to get outdoors, but the heat and humidity can also be challenging. The risk of overheating and becoming dehydrated are greater in children than in adults. Here's how you can help kids beat the heat this summer.

Protecting children from the heat starts with becoming aware of the risks

Not only does our body absorb heat from the environment, but it also creates heat whenever we move around. In order to protect children from overheating, it is important to understand how their body naturally cools down. *Sweating* and *giving off heat* are just two of the ways the body gets rid of extra heat and stays at a normal temperature of 37°C (98°F). Young children sweat less than adults, and so have to rely more on giving off heat. This works well when the temperature of the environment is lower than the child's body temperature. During summer heat waves, children can start to take in

more heat from the environment than they can give off, making it difficult to cool down. In the most serious of cases, a child's body temperature can increase to the point of heat stroke. Symptoms may include flush but dry skin, dizziness, confusion, and vomiting. A heat stroke can be life threatening and requires immediate medical attention. As a parent or caregiver, you can help children play outdoors safely this summer. In this Issue: find out why it is important for kids to properly hydrate, how to recognize dehydration, and what you can do to protect children from the heat.



What Is Dehydration?

Not only can kids overheat on a hot summer day, but they can also become *dehydrated*, meaning their body does not have enough water. Water is very important since it makes up 75% of the human body. Everyone loses water throughout the day from sweating and even breathing. When we sweat, we don't just lose water but also important electrolytes such as salt and potassium. When children dehydrate they tend to heat up faster than adults. It is important to provide lots of opportunities for your children to drink fluids when playing outside.



Don't forget the sunscreen!
The Canadian Paediatric Society recommends children wear sunscreen with a sun protection factor (SPF) of at least 30.

Signs of Dehydration

To help protect kids from the heat, it is important that parents and caregivers are able to recognize when a child is dehydrated.

The Canadian Paediatric Society lists the following as symptoms to look out for:

- Increased thirst
- Dry mouth or tongue
- Fatigue and irritability
- Little or no tears when crying
- Decreased urine and/ or dark coloured urine

If you believe your child may be dehydrated, you can remove them from the heat and give them something to drink. It is important that they get lots of rest and continue to drink plenty of fluids.

Did You Know?



Researchers at McMaster University have found that milk is a great rehydration beverage. Drinking milk after exercising in the heat did a better job than water at replacing the fluids that young children lost because it contains salt. Although drinking water is still important, milk is another option for keeping kids hydrated this summer.

Kids can keep on going if they are having too much fun. Make sure they take breaks from the heat when playing outside.



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Tips for Beating the Summer Heat:

- ☀️ Make sure kids have plenty of opportunity to drink before, during and after playing outdoors.
- ☀️ Dress children in light-coloured and loose clothing.
- ☀️ Encourage children to play in the shade, especially between 10 am and 2 pm when the sun is hottest.
- ☀️ Apply sunscreen on children 20 minutes before going out into the sun. Reapply frequently and after any water activities.
- ☀️ Help kids cool down by splashing around in some water. Pools, splash pads, and sprinklers are great ways to beat the heat together as a family.
- ☀️ Remember... it's okay to have some quiet time together indoors where it's cool!

Active Healthy Kids Canada (www.activehealthykids.ca)
Best Start Resource Centre (www.beststart.org/haveaballtogether/campaign.html)
Canadian Fitness and Lifestyle Research Institute (www.cflri.ca)
Canadian Society for Exercise Physiology (www.csep.ca/guidelines)
Caring for Kids (www.caringforkids.cps.ca)
McMaster University Child Health & Exercise Medicine Program (fhs.mcmaster.ca/chemp)
ParticipACTION (www.participaction.com)

References:

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Volterman, K., J Obeid, B Wilk, and BW Timmons. Chapter 13: Ability of milk to replace fluid losses in children after exercise in the heat. In: **Children and Exercise XXVII: The Proceedings of the XXVIIth International Symposium of the European Group of Pediatric Work Physiology**, N Armstrong and C Williams (Eds.). Routledge, Abingdon, UK, 2011, pp. 101-105.
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