Physical activity and the young mind

Young children are growing bigger, starting active habits and learning letters and numbers all at once. Healthy brain development is necessary for ideal **cognitive development**, which includes **language, memory, and problem solving skills**. Research tells us that cognitive development in this period is important for future academic success. We also know that young children's physical activity habits are still developing and changing from year to year. Scientists are becoming more interested in learning how physical activity and cognitive development are connected in this period.

What's the connection between physical activity and learning?

Active young children have better self-regulation, which is the ability to be aware of and control their own thoughts, behaviour and emotions, and can help young children be more prepared to learn. Physical activity also allows children to use up energy, which can improve behaviour and focus.

Some teachers and parents worry that more physical activity at school will take away from learning other subjects. This isn’t the case: more physical activity during school does not mean children will learn less. Schools are coming up with creative solutions to combine physical activity and classroom learning. A few preschools in the United States started using active lesson plans to teach literacy. For example, students would march while reading lines of a poem or do jumping jacks while rhyming words. They found that the students who took part in the active literacy program developed stronger literacy skills than the students who took part in the regular literacy curriculum. So look for opportunities to combine activity and learning at school and at home!
The Child Health & Exercise Medicine Program visited Hamilton schools in 2014 to better understand the relationship between fitness and academics in 550 elementary and high school students. We found that students with the lowest fitness levels also had lowest reading, writing and math scores.

Play-Based Early Years Curriculum

Kindergarten students in Ontario learn through a play-based curriculum that believes play and academics are not separate categories. Play is a great tool for learning because it makes the most of children’s natural curiosity and creativity, and active play may have even more benefits. Here are some ideas to combine physical activity and learning for young children:

• Practice counting by 1s, 2s, or 3s as children climb stairs, skip, hop and jump
• Identify letters on street signs and billboards when out for a walk
• Learn about time and distance by timing and measuring swimming, running, or biking races
• Learn about maps, trees, plants and animals with a nature scavenger hunt
• Learn about body parts and how they move with Simon Says

Sedentary behaviour and the young mind

Sedentary behaviours are activities that involve very little movement, such as sitting or lying down. Not all sedentary activities are created equal. The available evidence is clear: more screen time, like watching TV or playing video games, is linked to poor cognitive development, and more reading is linked to better cognitive development.

Canada’s Sedentary Behaviour Guidelines for the Early Years recommend:

• Caregivers minimize time infants, toddlers and preschoolers spend being sedentary during waking hours to one hour or less. This includes extended sitting, such as being in a stroller or high chair.
• Screen time is not recommended for children under 2 years old
• Less than one hour of screen time is recommended for children 2–4 years old