For our 24th issue, we're happy to share the Canadian 24 Hour Movement Guidelines for the Early Years (0-4 Years)! These guidelines were released in November 2017 and combine recommendations for physical activity, sedentary time and sleep for each day. Kids sleep, move and sit every day— it’s time we shift our focus from just one of these behaviours to how all these behaviours fit into every 24 hour day. The right combination of physical activity, sedentary time and sleep will help your child grow up healthy.

**New Guidelines for the Early Years**

The Guidelines give advice on: **Move** (physical activity), **Sit** (sedentary and screen time), and **Sleep**. There are different recommendations for different age groups.

<table>
<thead>
<tr>
<th></th>
<th>Infants (Less than 1 year)</th>
<th>Toddlers (1-2 years)</th>
<th>Preschoolers (3-4 years)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Move</strong></td>
<td>Be physically active several times a day in a variety of ways, particularly through interactive floor-based play—more is better. For those not yet mobile, encourage 30 minutes of tummy time spread throughout the day.</td>
<td>At least 180 minutes of physical activity, including energetic play, spread throughout the day.</td>
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<tr>
<td><strong>Sleep</strong></td>
<td>14 to 17 hours (aged 0-3 months) or 12 to 16 hours (aged 4-11 months) of good quality sleep, including naps.</td>
<td>11 to 14 hours of good quality sleep, including naps and consistent bedtime and wake-up times.</td>
<td>10 to 13 hours of good quality sleep, including naps and consistent bedtime and wake-up times.</td>
</tr>
<tr>
<td><strong>Sit</strong></td>
<td>Do not restrain for more than 1 hour at a time (e.g., in a stroller or high chair). Screen time is not recommended.</td>
<td>Do not restrain for more than 1 hour at a time (e.g., in a stroller or high chair). Screen time is not recommended for those under 2 years. For those aged 2 years, screen time should be no more than 1 hour per day.</td>
<td>Do not restrain or keep seated for more than 1 hour at a time (e.g., in a stroller or high chair). Screen time should be no more than 1 hour.</td>
</tr>
</tbody>
</table>
Meeting Guidelines and Health

Getting enough physical activity, limiting sedentary and screen time, and getting enough sleep are all associated with better health in toddlers and preschoolers. Lots of research is still being done in this area, and here is some of what we know so far:

• Young children who are more physically active tend to have better motor skills, fitness, cognitive development and lower levels of body fat.
• More screen time in the early years seems to have negative impacts on body weight, motor development, cognitive development and psychosocial health.
• Non-screen based sedentary activities, like reading, are good for cognitive development.
• Children who sleep less have higher body fat levels.

We are just starting to learn how the combinations of these behaviours can help young kids be healthy. In a recent survey, only 13% of Canadian toddlers and preschoolers met the overall 24-Hour Movement Guidelines. Most kids met the sleep (84%) or physical activity (62%) recommendation. The combination of high physical activity and low sedentary time is related to better motor development and fitness in preschoolers. Researchers are still learning about multiple movement behaviours and health.

Planning Your Child’s 24-Hour Day

Move:
• Provide daily opportunities for movement by planning trips to the park, local swimming pool or playground. Have a backup plan for bad weather.
• Ask questions about active opportunities at your child’s childcare centre or school.

Sleep:
• Set regular bedtime and wake-up times.
• Remove screens from children's bedrooms.

Sit:
• Instead of screen-based sedentary time, encourage activities like reading books, colouring or playing with small toys.
• Use active transportation, such as walking or biking, for short trips instead of the car or a stroller.

Four hundred preschoolers participated in our Health Outcomes and Physical activity in Preschoolers (HOPP) Study. Of the 3-to-4-year-olds in the study, most met the guidelines for physical activity and sleep, but almost half were getting too much screen time.

Be sure to consider all movement behaviours when planning your child's day.

The Child Health & Exercise Medicine Program at McMaster University is working to advance child health through excellence in research.

To learn about our current studies, visit us online at fhs.mcmaster.ca/chemp

References: Carson et al. 2017 Systematic review of the relationships between physical activity and health indicators in the early years (0-4 years); Chaput et al. 2017. Proportion of preschool-age children meeting the Canadian 24-Hour Movement Guidelines and associations with adiposity: results from the Canadian Health Measures Survey; Chaput et al. 2017 Systematic review of the relationships between sleep duration and health indicators in the early years (0-4 years); Kuzik et al. Systematic review of the relationships between combinations of movement behaviours and health indicators in the early years (0-4 years); Poitras et al. 2017. Systematic review of the relationships between sedentary behaviour and health indicators in the early years (0-4 years); Tremblay et al. 2017. Canadian 24-Hour movement guidelines for the early years (0-4 years): an integration of physical activity, sedentary behaviour, and sleep.

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