



What the MDI Measures

- General Health
- Help-Seeking for Emotional Well-being
- Breakfast
- Meals with Adults in Your Family
- Junk Food
- Frequency of Good Sleep
- Transportation to and from School

PHYSICAL HEALTH & WELL-BEING

The MDI asks children about key areas that research identifies as good indicators of children’s overall health. Physical health questions include asking children how they perceive their general health, and how they get to and from school. It also asks about their frequency of breakfast, meals with family, food consumption, and good sleep. To understand their mental well-being, children are asked who they seek help from if they feel sad, stressed, or worried. Children in the middle years who feel healthy are more likely to be engaged in school, have a feeling of connectedness with their teachers, perform better academically, and are less likely to be bullied or bully others (Forrest et al., 2013). Being physically active also promotes children’s mental health (Moeijes et al., 2018).

research

- Eating breakfast improves children’s concentration and memory (Adolphus et al., 2016). Consuming healthy fats as a part of breakfast, such as nuts or milk, may be particularly important for sustaining mental performance (Zipp & Eissing, 2019).
- Children ages 5-13 need 9-11 hours of uninterrupted sleep a night (Chaput & Janssen, 2016). Children who do not get enough sleep are more likely to have troubles at school, be involved in family disagreements, and display symptoms of depression (Buxton et al., 2015; Matricciani et al., 2019).
- Frequently eating meals together as a family is related to increased self-esteem and school success, and decreased chances of developing eating disorders, substance abuse, violent behaviour, and symptoms of depression (Jones, 2018). Families who enjoy meals together benefit from a greater sense of connection and better communication (Middleton et al., 2020).
- Children need a minimum of 60 minutes of energetic play each day, yet most Canadians are not getting this. Families, schools, and community all play crucial roles in helping young people stay physically active (ParticipACTION, 2020).
- Walking or wheeling to school is associated with better mental and physical health and an improved sense of connectivity in neighbourhoods (Buttazoni et al., 2019).
- Seeking help for emotional support can help prevent and address mental health issues (Rickwood et al., 2005; Xu et al., 2018).



PHYSICAL HEALTH & WELL-BEING

AT HOME

- Encourage children to get involved in planning and preparing family meals. Children are more likely to eat healthy foods when they are involved in preparation, and helping in the kitchen can boost their mood and self-confidence (Allirot et al., 2016; van der Horst et al., 2014). Mealtimes don't have to be long to reap the benefits, but make sure to turn off screens to make the most of family time (Jones, 2018).
- Make being active a family priority. Children are more active when their parents and guardians are active (Garriguet et al., 2017). Participating with your children in physical activity sets a positive example and provides valuable time to socialize and connect as a family.
- Getting to and from school can be an opportunity to increase daily exercise (Buttazoni et al., 2019). If your family has a longer commute, consider getting off a few stops earlier if you take transit, or park the car further away from the school to enjoy some extra exercise and avoid the drop-off traffic jam.
- Create a set bedtime routine with a regular bed and wake time. Do quiet activities to prepare for sleep, like having a bath or listening to a story. Keep bedrooms quiet and dark. Avoid caffeine and screen use close to bedtime, and remove screens and media devices from bedrooms (Buxton et al., 2015; Galland & Mitchell, 2010).

AT SCHOOL

- Try to limit the amount of time children stay sitting as much as possible. Have standing workspaces and offer movement breaks. Include time for vigorous physical activity every day. Doing so will contribute to students' having a good night sleep to help them be alert and engaged in school. (ParticiPACTION, 2020).
- Team up with a community sponsor to host a breakfast club where kids can have a healthy meal before school starts. School breakfast programs have been shown to support students' concentration, memory, and academic performance, especially in undernourished children (Adolphus et al., 2016).

IN COMMUNITY

- Many families cannot afford to meet guidelines for healthy eating (Mulik & Haynes-Maslow, 2017). Include your neighbourhood food security network in efforts to ensure families have awareness of and access to affordable healthy food options (Miewald et al., 2012).
- Promote active transportation to schools by identifying and addressing barriers through discussions with children, families, and community members. Walking school busses, crossing guards, places to park bikes and scooters, and safety awareness campaigns can promote active school transportation (Buttazoni et al., 2019)
- Youth are less likely to seek help for emotional support if there is a public stigma associated with mental health. Community programs and initiatives to reduce mental health stigma and improve mental health literacy can promote help-seeking in young people (Nearchou et al., 2018).

For more resources and ideas on how to use MDI data to catalyze action, visit discovermdi.ca.

references

- Adolphus, K., Lawton, C. L., Champ, C. L., & Dye, L. (2016). The effects of breakfast and breakfast composition on cognition in children and adolescents: A systematic review. *Advances in Nutrition*, 7(3), 590S-612S. <https://doi.org/10.3945/an.115.010256>
- Allirot, X., da Quinta, N., Chokupermal, K., & Urdaneta, E. (2016). Involving children in cooking activities: A potential strategy for directing food choices toward novel foods containing vegetables. *Appetite*, 103, 275-285. <http://dx.doi.org/10.1016/j.appet.2014.03.030>
- Buxton, O. M., Chang, A. M., Spilsbury, J. C., Bos, T., Emsellem, H., & Knutson, K. L. (2015). Sleep in the modern family: Protective family routines for child and adolescent sleep. *Sleep health*, 1(1), 15-27. <http://dx.doi.org/10.1016/j.sleh.2014.12.002>
- Buttazzoni, A. N., Van Kesteren, E. S., Shah, T. I., & Gilliland, J. A. (2019). Active school travel intervention methodologies in North America: A systematic review. *American Journal of Preventive Medicine*, 55(1), 115-124. <https://doi.org/10.1016/j.ajth.2019.01.007>
- Forrest, C. B., Bevans, K. B., Riley, A. W., Crespo, R., & Louis, T. A. (2013). Health and school outcomes during children's transition into adolescence. *Journal of Adolescent Health*, 52(2), 186-194. <https://doi.org/10.1016/j.jadohealth.2012.06.019>
- Galland & Mitchell (2010). Helping children sleep. *Archives of Disease in Childhood*, 2010, 1-4. doi: 10.1136/adc.2010.162974
- Garriguet D, Colley RC, & Bushnik T. (2017). Parent-child association in physical activity and sedentary behaviour. *Statistics Canada Health Reports*, 28(6), 3-11.
- Jones, B. L. (2018). Making time for family meals: Parental influences, home eating environments, barriers and protective factors. *Physiology & behavior*, 193, 248-251. <https://doi.org/10.1016/j.physbeh.2018.03.035>
- Matricciani, L., Paquet, C., Galland, B., Short, M., & Olds, T. (2019). Children's sleep and health: A meta-review. *Sleep Medicine Reviews*, 46, 136-150. <https://doi.org/10.1016/j.smrv.2019.04.011>
- Middleton, G., Golley, R., Patterson, K., Le Moal, F., & Coveney, J. (2020). What can families gain from the family meal? A mixed-papers systematic review. *Appetite*, 153, 1-10. <https://doi.org/10.1016/j.appet.2020.104725>
- Miewald, C., Holben, D., and Hall, P. (2012). Role of a food box program in fruit and vegetable consumption and food security. *Canadian Journal of Dietetic Practice and Research*, 73(2), 59-65. <https://doi.org/10.3148/73.2.2012.59>
- Moeijes, J., van Busschbach, J. T., Bosscher, R. J., & Twisk, J. W. (2018). Sports participation and psychosocial health: A longitudinal observational study in children. *BMC Public Health*, 18(1), 1-11. <https://doi.org/10.1186/s12889-018-5624-1>
- Mulik & Haynes-Maslow (2017). The affordability of MyPlate: An analysis of SNAP benefits and the actual cost of eating according to dietary guidelines. *Journal of Nutrition Education and Behavior*, 49(8), 623-631. <http://dx.doi.org/10.1016/j.jneb.2017.06.005>

REFERENCES CONT'D

ParticipACTION (2020). *The role of the family in the physical activity, sedentary and sleep behaviours of children and youth*. The 2020 ParticipACTION Report Card on Physical Activity for Children and Youth. <https://www.participaction.com/en-ca/resources/children-and-youth-report-card>

Nearchou, F. A., Bird, N., Costello, A., Duggan, S., Gilroy, J., Long, R., ... & Hennessy, E. (2018). Personal and perceived public mental-health stigma as predictors of help-seeking intentions in adolescents. *Journal of Adolescence*, 66, 83-90. <https://doi.org/10.1016/j.adolescence.2018.05.003>

Rickwood, D., Deane, F. P., Wilson, C. J., & Ciarrochi, J. (2005). Young people's help-seeking for mental health problems. *Australian e-Journal for the Advancement of Mental Health*, 4 (3), 218-251. <https://ro.uow.edu.au/hbspapers/2106>

Xu, Z., Huang, F., Koesters, M., Staiger, T., Becker, T., Thornicroft, G., & Ruesch, N. (2018). Effectiveness of interventions to promote help-seeking for mental health problems: Systematic review and meta-analysis. *Psychological Medicine*, 48(16), 2658-2667. <https://doi.org/10.1017/S0033291718001265>

Zipp, A., & Eissing, G. (2018). Studies on the influence of breakfast on the mental performance of school children and adolescents. *Journal of Public Health*, 27(1), 103-110. <https://doi.org/10.1007/s10389-018-0926-4>