YDi

Physical Well-being

What the YDI Measures

- General Health
- Health Conditions
- Eating Behaviours
- Food Security
- Good Sleep
- Physical Activity
- Screen time & sedentary behaviour
- Social Media usage
- Substance Use

The emerging autonomy in adolescence offers youth more decision-making power to dictate their health behaviours. Understanding adolescent physical wellbeing indicators can provide insight into the frequency with which youth engage in different health-promoting and risk behaviours. Research suggests that health literacy may impact the uptake of these behaviours among adolescents (Fleary et al., 2018).

YDI 2022 data indicated that only 23% of students were meeting recommended sleep guidelines and only 8% were meeting recommended guidelines for physical activity. 37% of youth reported having breakfast everyday. Most youth (92%) did not meet sedentary behaviour guidelines, reporting more than two hours of either sitting and watching media, or spending time on a computer, laptop, tablet, or smart phone outside of school.



Adolescents need **more sleep**! Canadian guidelines recommend youth have 8-10 hours of uninterrupted sleep per night (Canadian Society for Exercise Physiology). Physical changes to circadian rhythms in adolescents lead to delays in falling asleep, yet sleep is fundamental for staying engaged at school and for mental health (Alfonsi et al., 2020).

Action Ideas:

- Delaying school start time has been shown to significantly improve sleep for adolescents, as well as their mental health and school engagement (Windome et al., 2020). The American Pediatric Society recommends school starts no earlier than 8:30 am.
- The American Academy of Sleep Medicine has a <u>list of resources</u> for teachers to use with their classrooms.



YDI data show youth would benefit from more **physical activity**. Integrating activity into the school day can help! Physical activity is linked to better cognitive function and academic performance (Muntaner-Mas et al., 2022). It also improves depressive symptoms (Recchia et al., 2023).

Action Ideas:

- Integrate more opportunity for physical activity at school and try to limit screen use during instructional time. <u>Walk, Talk, Decide</u> discussion activities can help get youth moving and off their devices.
- Physical activity isn't just for PHE. Movement can be added to any subject as a way to boost energy and focus. Check out these <u>small space activities</u>.



Physical Well-being



Canadian guidelines suggest a limit of two hours of **recreational screen time** daily. In 2022, 35% of YDI participants reported spending 5 or more hours on recreational **screen time.** The Canadian Paediatric Society notes that there are potential benefits and risks of teens using digital media. Some potential benefits include communicating with friends and allowing socially anxious youth to be more socially connected. Some potential risks include feeling "addicted" to devices, experiencing increased anxiety and depressive symptoms if youth are sending or receiving negative direct messages, more challenges with learning if youth are frequently multitasking using media, and engaging in risky behaviour online (Canadian Paediatric Society, Digital Health Task Force, 2019).

Action Ideas:

- Offer digital literacy at school. Here are some helpful resources from <u>Mentally Healthy Schools</u>.
- Check out <u>mediasmarts.ca</u> for helpful resources to promote digital and media literacy in the classroom and at home, including educational videos and lesson plans.



Youth who experience **food insecurity** may worry about having enough food or have limited access to food (e.g., missing meals, reduced food intake or going a day or more without food). Statistics Canada reports that 5.8 million Canadians, including 1.4 million children, lived in households with some degree of food-insecurity in 2021 (Tarasuk et al., 2022). On the YDI 2022 survey, 9% of youth reported experiencing food insecurity.

Action Ideas:

- Although not all young people may have access to food at home, they could look to school for a healthy meal. Some schools offer hot lunch programs that are free to students who cannot afford to pay. Other schools keep healthy snacks in the office for hungry youth.
- Youth frequently skip breakfast. 37% of youth on the YDI 2022 survey skipped breakfast 7 days a week. School-based breakfast programs can benefit students experiencing food insecurity and students who don't have enough time to eat in the morning. Eating breakfast improves mental focus at school (Zipp & Eissing, 2019).



Substance use is often initiated in adolescence or early adulthood (Poudel & Gautam, 2017), a time of life associated with novelty seeking and impulsivity (Hamidullah et al., 2020). Substance use during adolescence can lead to dysregulation of brain functions and increase risk of mental health issues (Brownlie et al., 2019; Newton et al., 2013).

Action Ideas:

 Check out the Public Health Agency of Canada's <u>Blueprint for Action:</u> <u>Preventing Substance-Related Harms Among Youth Through a</u> <u>Comprehensive School Health Approach</u> to find school-based strategies for preventing substance-related harms among youth.



Physical Well-being

References

Alfonsi, V., Palmizio, R., Rubino, A., Scarpelli, S., Gorgoni, M., D'Atri, A., Pazzaglia, M., Ferrara, M., Giuliano, S., & De Gennaro, L. (2020). The association between school start time and sleep duration, sustained attention, and academic performance. *Nature and Science of Sleep*, *12*, 1161–1172. <u>https://doi.org/10.2147/NSS.S273875</u>

Brownlie, E., Beitchman, J. H., Chaim, G., Wolfe, D. A., Rush, B., & Henderson, J. (2019). Early adolescent substance use and mental health problems and service utilisation in a school-based sample. *The Canadian Journal of Psychiatry*, 64(2), 116-125. <u>https://doi.org/10.1177/0706743718784935</u>

Canadian Paediatric Society, Digital Health Task Force. (2019). Digital media: Promoting healthy screen use in school-aged children and adolescents. *Paediatrics & Child Health*, 402-408. <u>https://doi.org/10.1093/pch/pxz095</u>

Canadian Society for Exercise Physiology. 24-Hour Movement Guidelines for Children (5-11 years) and Youth (12-17 years). <u>https://csepguidelines.ca/guidelines/children-youth</u>

Fleary, S. A., Joseph, P., & Pappagianopoulos, J. E. (2018). Adolescent health literacy and health behaviors: A systematic review. *Journal of Adolescence*, *62*, 116–127. <u>https://doi.org/10.1016/j.adolescence.2017.11.010</u>

Hamidullah, S., Thorpe, H. H., Frie, J. A., Mccurdy, R. D., & Khokhar, J. Y. (2020). Adolescent substance use and the brain: behavioral, cognitive and neuroimaging correlates. *Frontiers in Human Neuroscience*, 298. <u>https://doi.org/10.3389/fnhum.2020.00298</u>

Muntaner-Mas, A., Mazzoli, E., Abbott, G., Mavilidi, M. F., & Galmes-Panades, A. M. (2022). Do physical fitness and executive function mediate the relationship between physical activity and academic achievement? An examination using structural equation modelling. *Children*, 9(6), 823. <u>https://doi.org/10.3390/children9060823</u>

Newton, N. C., O'Leary-Barrett, M., & Conrod, P. J. (2013). Adolescent substance misuse: neurobiology and evidence-based interventions. *Current Topics in Behavioural Neurosciences, 13*, 685–708. <u>https://doi.org/10.1007/978-3-642-28720-6_164</u>

Poudel, A., & Gautam, S. (2017). Age of onset of substance use and psychosocial problems among individuals with substance use disorders. *BMC psychiatry, 17*(1), 10. <u>https://doi.org/10.1186/s12888-016-1191-0</u>

Recchia, F., Bernal, J. D. K., Fong, D. Y., Wong, S. H. S., Chung, P. K., Chan, D. K. C., Capio, C. M., Yu, C. C. W., Wong, S. W. S., Sit, C. H. P., Chen, Y. J., Thompson, W. R., & Siu, P. M. (2023). Physical Activity Interventions to Alleviate Depressive Symptoms in Children and Adolescents: A Systematic Review and Meta-analysis. *JAMA pediatrics*, 177(2), 132–140. <u>https://doi.org/10.1001/jamapediatrics.2022.5090</u>

Tarasuk, V., Li, T., & Fafard St-Germain, A.A. (2022). *Household food insecurity in Canada, 2021*. <u>https://proof.utoronto.ca/wp-content/uploads/2022/08/Household-Food-Insecurity-in-Canada-2021-PROOF.pdf</u>

Widome, R., Berger, A. T., Iber, C., Wahlstrom, K., Laska, M. N., Kilian, G., Redline, S., & Erickson, D. J. (2020). Association of delaying school start time with sleep duration, timing, and quality among adolescents. *JAMA Pediatrics*, *174*(7), 697. <u>https://doi.org/10.1001/jamapediatrics.2020.0344</u>

Zipp, A., & Eissing, G. (2019). Studies on the influence of breakfast on the mental performance of school children and adolescents. *Journal of Public Health*, 27, 103-110. <u>https://doi.org/10.1007/s10389-018-0926-4</u>



Physical Well-being

Website Resources

American Academy of Sleep Medicine sleep resources: <u>https://sleepeducation.org/get-involved/campaigns/sleep-recharges/educator-resources/</u>

Walk, Talk, Decide: <u>https://www.theteachertoolkit.com/index.php/tool/walk-talk-decide</u>

Small space physical health education activities: <u>https://phecanada.ca/programs/phe-learning-centre/physical-education-activities</u>

Mentally Healthy Schools resources: <u>https://mentallyhealthyschools.org.uk/risks-and-protective-factors/lifestyle-factors/internet-and-social-media/</u>

Media Smarts: <u>https://mediasmarts.ca/teacher-resources?</u> <u>gclid=CjOKCQjwmZejBhC_ARIsAGhCqndECcDAuDiuWik70_0akb4q6AjTg7Xs9JIP3Npgh7TalXwuePzpZv4aAulKEA</u> <u>Lw_wcB</u>

The Public Health Agency of Canada's Blueprint for Action: Preventing Substance-Related Harms Among Youth Through A Comprehensive School Health Approach: <u>https://www.canada.ca/content/dam/phac-aspc/documents/services/publications/healthy-living/blueprint-for-action-preventing-substance-related-harms-youth-comprehensive-school-health/final-blueprint-en.pdf</u>

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