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| ***The Role of School Food Programs in Promoting Student Well-Being*** |  | ***http://d3n8a8pro7vhmx.cloudfront.net/osnp/sites/2/meta_images/original/osnpLogo.gif?1455154113*** |
| The well-being of our children and youth is a central concern for many. Educational initiatives in Canada and the United States recognize nutrition as an important focus for well-being efforts.[[1]](#endnote-1),[[2]](#endnote-2) The impact of nutrition on academic outcomes is clear, with research showing a relationship between diet and improved cognitive performance, attendance, grades, standardized test scores, absenteeism,[[3]](#endnote-3) classroom behavioral issues, school achievement, and drop-out rates.[[4]](#endnote-4) However, well-being is about more than academic achievement. The Ministry of Education emphasizes four foundations for student well-being: *Healthy Schools, Positive Mental Health, Equity and Inclusive Education, and Safe and Accepting Schools*.[[5]](#endnote-5) Typical school food programs in Ontario use volunteers to prepare and serve nutritious foods in school breakfast, lunch or snack programs, and are well-positioned to have a positive impact on student well-being.***School food programs have a key role to play in all aspects of student well-being.*** |
| **Healthy Schools** |  |  |
| Healthy schools are places that encourage healthy behaviours over a lifetime, and healthy eating is part of the Ontario Health and Physical Education Curriculum. The need to promote nutrition as part of healthy living is clear in the literature on overweight and obesity among children, an issue identified as a public health crisis with potential impacts for years to come.[[6]](#endnote-6) Children who are obese have a greater risk of chronic disease and other health problems that may worsen in adulthood.[[7]](#endnote-7) Causal factors are complex but include consumption of sugar-sweetened beverages, lack of fruit and vegetable intake,[[8]](#endnote-8) limited access to healthy affordable food, greater availability of high-energy-dense foods and increasing portion sizes.[[9]](#endnote-9) School food programs can help. There is evidence that free and reduced-price lunches improve health outcomes for children.[[10]](#endnote-10) Vegetable and fruit initiatives have been shown to improve student’s knowledge and attitudes about nutrition and health,[[11]](#endnote-11) foster acceptability and willingness to try vegetables and fruit,[[12]](#endnote-12) and increase rates of vegetable and fruit consumption.[[13]](#endnote-13) Food skills programs have been shown to increase vegetable and fruit consumption,[[14]](#endnote-14) as has garden-based learning.[[15]](#endnote-15) Finally, there is evidence that school-based interventions can have significant effects on weight[[16]](#endnote-16) and are valuable tools in the battle against childhood obesity.[[17]](#endnote-17)***School food programs encourage healthy living and healthy schools.*** | ***WHAT WE SEE…***We often hear from teachers, students and parents that school food programs encourage students to eat fruits, veggies and other healthy foods that they otherwise may have never been exposed to.  If a student is offered fresh, healthy food on a daily basis from kindergarten to grade 12 it is highly likely to have a positive impact on their short and long term dietary intake and preferences. *“Some of the only vegetables I ever ate as a kid were the ones served in the snack program at school “*~ Former student in Windsor/Essex |
| **Positive Mental Health** |
| ***WHAT WE SEE…***Teachers often tell us that students are more content on days when the breakfast program is offered. It’s difficult to know if it is the nutritional impact of the program that fuels this behavioral change or if it is the social impact. What we do know is that feeding children good food at school is a powerful way of helping them feel cared for and that can go a long way in terms of their overall well-being.  *“If I don’t eat breakfast I feel grumpy and have a bad day”*~ Gr. 3 student in Windsor/Essex | Promoting positive mental health is a key component of well-being and research is beginning to reveal the connection between nutrition and mental health. One Canadian study suggests that dietary variety in children may reduce the risk of internalizing disorders[[18]](#endnote-18) and poor diet has been associated with depression in school children.[[19]](#endnote-19),[[20]](#endnote-20) Junk food consumption has been linked to increased risk for distress and violent behaviors in children and adolescents,[[21]](#endnote-21) while an unhealthy diet has been significantly associated with greater emotional distress in adolescents regardless of age, ethnicity and gender.[[22]](#endnote-22) Finally, there is also correlational evidence that fruit and vegetable consumption may be related to a range of well-being states in early adulthood.[[23]](#endnote-23)The good news is diet is modifiable and addressing healthy eating to positively impact mental health makes sense. Children spend more time at school than anywhere else so educators need to promote positive mental health through diet and exercise,[[24]](#endnote-24) but school food programs also play a part. Participation in school breakfast programs has been linked to better functioning on student-reported measures of depression and anxiety, and teacher-reported hyperactivity.[[25]](#endnote-25) As well, research suggests that school breakfast programs provide children with a stronger basis to lead more emotionally healthy lives.[[26]](#endnote-26) ***School food programs are a route to improved mental health.*** |

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| **Equity and Inclusive Education** |  |  |
| All children deserve the best possible start in life. Supporting equity and inclusive education means addressing systemic barriers to student achievement and well-being.[[27]](#endnote-27) Students without reliable access to food face a sizeable barrier to achievement and well-being. Food insecurity refers to a lack of food due to availability, accessibility and/or affordability[[28]](#endnote-28) and is associated with poor diet and feelings of social stigma.[[29]](#endnote-29) Food insecurity is a significant problem in Canada,[[30]](#endnote-30) with 5.2% of families reporting child-level food insecurity, a figure greater among lone-parent families and those receiving social assistance.[[31]](#endnote-31) Food insecurity has been associated with developmental consequences for children, both nutritional and non-nutritional,[[32]](#endnote-32) spanning several years.[[33]](#endnote-33) Food insufficiency is associated with decreased school attendance and academic achievement,[[34]](#endnote-34) and reduced cognitive, academic, and psychosocial outcomes for children and teens.[[35]](#endnote-35) The role of school food programs in addressing food security has been recognized. School meals contribute to the daily fruit and vegetable intake for ethnically diverse and low income students,[[36]](#endnote-36) and free lunch programs have been shown to reduce food insecurity.[[37]](#endnote-37) Recommendations to address food security in Canada include a funded, pan-Canadian school meal program to provide safe and nutritious foods for children and youth in their everyday.[[38]](#endnote-38) ***School food programs can help level the playing field for all children.*** | ***WHAT WE SEE…***For decades a hidden “second job” of many teachers has been feeding students who show up hungry.  They do this out of compassion but also because they know that a hungry child does not have an equal opportunity to learn.School food programs can also be a place to celebrate cultural diversity and connect students as they share a meal together.  It’s a place where everyone is equal.  Students as young as 7 volunteer in the program alongside grandparents and people of all ages, races and abilities.  It’s truly an inclusive program.*“The Breakfast Club has been one of the best ways to reach our New Canadian Parents.  They feel comfortable helping feed the kids even when they can’t speak English all that well.  Over time, we see how this helps them be more comfortable in joining our school community.”*~ Principal at a Windsor school |
| **Safe and Accepting Schools** |
| ***WHAT WE SEE…***Offering breakfast, snack or lunch programs is an excellent way to create a safe and caring school environment for students. *“Everyone is welcome at breakfast club and everyone helps out.  Even our principal serves breakfast on Wednesdays.”* ~ London Breakfast Club volunteer | Safe and accepting schools are places where all students feel included, accepted and supported. A positive and safe school climate has been shown to be associated with school connectedness – a belief by students that adults and peers in the school care about their learning and about them as individuals. It is a protective factor, decreasing the likelihood of risky behaviour, and is positively related to academic achievement.[[39]](#endnote-39) Factors that can increase school connectedness include adult support, belonging to a positive peer group, commitment to education and school environment.[[40]](#endnote-40)Healthy school food can also increase school connectedness and reinforce to children, families and community that student health and well-being are valued.[[41]](#endnote-41) Fostering school connectedness and creating a safe and accepting culture is the responsibility of everyone in the school environment. As part of the school community, school food programs have the opportunity to further reinforce and support school connectedness by providing caring and compassionate adult support, opportunities for group learning and a commitment to nutrition education and a positive school environment. ***School food programs help kids feel connected.*** |
| While many people are aware that school food programs exist, the many and various benefits are not as well known. Research supports the positive effects of nutrition on academic achievement and mental health, while also promoting equity and inclusion, and healthy, safe and accepting schools. With support from the Ministry of Children and Youth Services, the Ontario Student Nutrition Program - Southwest Region administers funding and provides program support to 480+ school food programs serving over 110,000 students each school year. But not all schools operate a school food program. There is an opportunity for program growth and implementation across all schools. With the program enhancements to achieve full implementation, all students can reap the benefits of academic achievement and overall well-being that good nutrition can provide. ***The Ontario Student Nutrition Program in the South West Region is administered by VON Canada, Windsor- Essex Site******Our mission is to ensure that every student in the South West Region attends school well nourished and ready to learn.*** |

1. ‘Ontario’s Well-Being Strategy for Education: Discussion Document’. [↑](#endnote-ref-1)
2. Lewallen et al., ‘The Whole School, Whole Community, Whole Child Model’. [↑](#endnote-ref-2)
3. Florence, Asbridge, and Veugelers, ‘Diet Quality and Academic Performance’; Michael et al., ‘Critical Connections’. [↑](#endnote-ref-3)
4. Grantham-McGregor and Olney, ‘School Feeding, Cognition, and School Achievement’. [↑](#endnote-ref-4)
5. ‘Ontario’s Well-Being Strategy for Education: Discussion Document’. [↑](#endnote-ref-5)
6. *No Time to Wait: The Healthy Kids Strategy*. [↑](#endnote-ref-6)
7. ‘Childhood Obesity Causes & Consequences | Overweight & Obesity | CDC’. [↑](#endnote-ref-7)
8. Ontario Agency for Health Protection and Promotion, *Addressing Obesity in Children and Youth*. [↑](#endnote-ref-8)
9. ‘Childhood Obesity Causes & Consequences | Overweight & Obesity | CDC’. [↑](#endnote-ref-9)
10. Gundersen, Kreider, and Pepper, ‘The Impact of the National School Lunch Program on Child Health’. [↑](#endnote-ref-10)
11. Joshi, Azuma, and Feenstra, ‘Do Farm-to-School Programs Make a Difference?’ [↑](#endnote-ref-11)
12. MacKelvie O’Brien and Richardson, ‘BC School Fruit and Vegetable Nutritional Program: Evaluation 2012 - 2013’. [↑](#endnote-ref-12)
13. ‘Fruits and Veggies for Every Student (FAVES) Snack Program: Evaluation of the London District Catholic School Board FAVES Snack Program’. [↑](#endnote-ref-13)
14. ‘Evidence Brief: Impact of Food Skills Programs on Fruit and Vegetable Consumption among Children and Youth’. [↑](#endnote-ref-14)
15. Berezowitz, Bontrager Yoder, and Schoeller, ‘School Gardens Enhance Academic Performance and Dietary Outcomes in Children’. [↑](#endnote-ref-15)
16. Katz, ‘School-Based Interventions for Health Promotion and Weight Control’. [↑](#endnote-ref-16)
17. Millimet, Tchernis, and Husain, ‘School Nutrition Programs and the Incidence of Childhood Obesity’. [↑](#endnote-ref-17)
18. McMartin et al., ‘Diet Quality and Mental Health in Subsequent Years among Canadian Youth’. [↑](#endnote-ref-18)
19. Dennison, Sisson, and Morris, ‘Obesogenic Behaviours and Depressive Symptoms in Children’. [↑](#endnote-ref-19)
20. Rubio-López et al., ‘Nutrient Intake and Depression Symptoms in Spanish Children’. [↑](#endnote-ref-20)
21. Zahedi et al., ‘Association between Junk Food Consumption and Mental Health in a National Sample of Iranian Children and Adolescents’. [↑](#endnote-ref-21)
22. Kulkarni, Swinburn, and Utter, ‘Associations between Diet Quality and Mental Health in Socially Disadvantaged New Zealand Adolescents’. [↑](#endnote-ref-22)
23. Conner et al., ‘On Carrots and Curiosity’. [↑](#endnote-ref-23)
24. Newton, ‘Mental Health, Physical Activity and Nutrition’. [↑](#endnote-ref-24)
25. Murphy et al., ‘The Relationship of School Breakfast to Psychosocial and Academic Functioning: Cross-Sectional and Longitudinal Observations in an Inner-City School Sample’. [↑](#endnote-ref-25)
26. Brown, Beardslee, and Prothrow-Stith, ‘Impact of School Breakfast on Children’s Health and Learning: An Analysis of the Scientific Research’. [↑](#endnote-ref-26)
27. ‘Ontario’s Well-Being Strategy for Education: Discussion Document’. [↑](#endnote-ref-27)
28. Sharma et al., ‘Multidisciplinary Approaches to Address Food Insecurity and Nutrition among Youth and Their Families’. [↑](#endnote-ref-28)
29. Mikkonen and Raphael, *Social Determinants of Health*. [↑](#endnote-ref-29)
30. Howard and Edge, ‘Enough for All Household Food Security in Canada’. [↑](#endnote-ref-30)
31. Mikkonen and Raphael, *Social Determinants of Health*. [↑](#endnote-ref-31)
32. Jyoti, Frongillo, and Jones, ‘Food Insecurity Affects School Children’s Academic Performance, Weight Gain and Social Skills’. [↑](#endnote-ref-32)
33. Howard, ‘Transitions between Food Insecurity and Food Security Predict Children’s Social Skill Development during Elementary School’. [↑](#endnote-ref-33)
34. Michael et al., ‘Critical Connections’. [↑](#endnote-ref-34)
35. Alaimo, Olson, and Frongillo, ‘Food Insufficiency and American School-Aged Children’s Cognitive, Academic, and Psychosocial Development’. [↑](#endnote-ref-35)
36. Robinson-O’Brien et al., ‘Associations Between School Meals Offered Through the National School Lunch Program and the School Breakfast Program and Fruit and Vegetable Intake Among Ethnically Diverse, Low-Income Children’. [↑](#endnote-ref-36)
37. Gundersen, Kreider, and Pepper, ‘The Impact of the National School Lunch Program on Child Health’. [↑](#endnote-ref-37)
38. Howard and Edge, ‘Enough for All Household Food Security in Canada’. [↑](#endnote-ref-38)
39. Michael et al., ‘Critical Connections’. [↑](#endnote-ref-39)
40. Centers for Disease Control and Prevention, ‘School Connectedness: Strategies for Increasing Protective Factors Among Youth’. [↑](#endnote-ref-40)
41. ‘School Food’. [↑](#endnote-ref-41)