

# Benefits of Farm to School

## Evidence from Canada

### ABOUT FARM TO SCHOOL

Farm to School brings healthy local food into schools, from preschool to campus, and provides students with hands-on learning opportunities that foster food literacy, while strengthening the local food system and enhancing school and community connectedness.

Farm to School activity may differ by school, but it is always directed toward more healthy local foods on the minds and on the plates of children and youth. Farm to School models strive to include:

- **Healthy, local food in school:** Schools source local food in many ways, including through direct farmer relationships, food distributors, schoolyard farms, or the harvesting of wild or traditional foods. When local food arrives in schools it is often served in the form of a salad bar, hot lunch program, tasting activity, fundraiser, or community celebration.
- **Hands-on learning:** Step into any school offering Farm to School and you will find students learning about food in the school garden, greenhouse, kitchen or classroom. They may also be getting ready for field trips to local farms, forests, and shores.
- **School and community connectedness:** Schools establish relationships with farmers, community members, and support organizations, tapping into local knowledge, passion, skills, and resources.

### TOWARD A FULL PLATE

*Farm to Cafeteria Canada's School Food Map has been tracking Canadian Farm to School initiatives since 2014. Farm to School activity has been recorded in every province and territory, and is visibly gaining momentum in Canada.*

#### Self-reported in Canada:

- 1159 Canadian schools (preschool – university)
- 809,827 Canadian students
- 559 schools with gardens or greenhouses
- 572 schools cooking/preserving local, healthy foods
- 423 schools who purchase local, healthy foods
- 407 schools serving local, healthy meals
- 233 schools composting food waste
- \$16 M - estimated amount spent annually on local foods



\*Map data current as of September 2018

# Benefits Documented in Canada



## PUBLIC HEALTH

Farm to School improves student nutrition by providing easy access to healthy, local food, especially vegetables and fruits.

- ✓ Increases availability of fresh local vegetables, fruits and other healthy foods in schools.<sup>1,2,3,4,5,6</sup>
- ✓ Increases students' preferences toward vegetables and fruit.<sup>7</sup>
- ✓ Increases students' willingness to try new vegetables and fruits.<sup>2,4,8,9</sup>
- ✓ Increases students' consumption of vegetables and fruits.<sup>4,5,6,9</sup>
- ✓ Leads students to consume a greater variety of vegetables and fruits.<sup>4,5,6,10</sup>
- ✓ Improves quality, freshness, taste, and nutrition of school food.<sup>11</sup>
- ✓ Provides opportunities for moderate physical activity through school gardening.<sup>12,13</sup>

An evaluation of a 2008/09 Farm to School Salad Bar program in BC reported that:

**47%**

of parents said their children were **more willing to try new fruit and vegetables**, and attributed this to the farm to school salad bar initiative.

**63%**

of parents stated that their children **knew more about making healthier food choices**.

**50%**

of parents said their children were **more aware about local foods**.<sup>9</sup>



## EDUCATION AND LEARNING

Farm to School supports cross-curricular and experiential learning.

- ✓ Increases student knowledge, awareness and interest about the local food system, local foods and local farmers.<sup>2,3,4,5,6,7,8,9,10,11,14,15,16</sup>
- ✓ Increases student knowledge, awareness and interest about nutrition and healthy eating.<sup>2,4,6,9,12,14,15</sup>
- ✓ Enhances student skill development with respect to growing, harvesting, preparing, cooking and/or serving healthy local food.<sup>3,4,5,6,8,10,16,17,18</sup>
- ✓ Enhances student engagement and knowledge retention across a wide range of school subjects including math and science.<sup>8</sup>
- ✓ Enables students to grow character strengths including motivation, responsibility, confidence, initiative, leadership and creativity.<sup>8,10,12</sup>
- ✓ Increases student knowledge about careers in producing, growing, cooking, preparing, and serving food.<sup>10</sup>

“*Students involved in lunch service develop skills such as proper cutting techniques. They also learn many traditional Cree food preparation techniques such as drying, smoking and roasting game such as elk, bison and deer.*”<sup>18</sup>



## ENVIRONMENTAL OUTCOMES

Farm to school fosters environmental stewardship amongst students and the school community, and contributes to more sustainable ecosystems.

- ✓ Supports students to connect with nature and develop eco-friendly-attitudes: Students learn to care about plants and the earth; students learn to compost.<sup>8,12</sup>
- ✓ Increases student knowledge, awareness and interest about environmental, ecological, and food security issues.<sup>8,10</sup>
- ✓ Leads students to better value environmentally sustainable food systems and to understand the impacts of their own food choices on future generations.<sup>19</sup>



## COMMUNITY CONNECTEDNESS

Farm to School fosters strong relationships between schools and a wide range of partners including growers, community members and support organizations.

- ✓ Contributes to community building: strengthens relationships, including among schools, families, Elders, farmers, communities, teachers, principals, and elected representatives. <sup>2, 3, 4, 5, 6, 8, 10, 11, 12, 14, 17</sup>
- ✓ Increases collaboration and synergies among partners throughout the food system. <sup>6</sup>
- ✓ Creates opportunities for Elders, knowledge keepers, parents and other members of Indigenous communities to be involved with the school. <sup>5, 6</sup>
- ✓ Supports schools to source traditional foods off the land. <sup>10, 18</sup>

“ Perhaps the most significant factor that indicates the success of the program for me as an administrator is the presence of our aboriginal parents. It was rare that we had this population in the school prior to the establishment of the salad bar.... It brought them into the school, and they have continued to come. Elders as well have increased their presence in the school, and it has had a fantastic impact...It has led to positive relationships with some of our most vulnerable families. Food heals in many ways.”

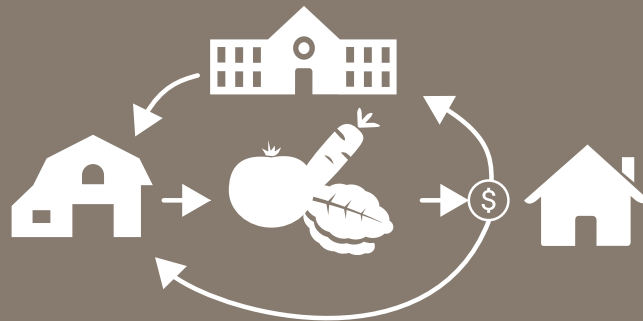
– Rick Miller, Principal Mountview Elementary School, Williams Lake, BC <sup>5</sup>



## ECONOMIC

Farm to School supports the sustainability of the regional food system: Buying from local producers and processors helps stimulate the local economy.

- ✓ Increases business and income for local farmers. <sup>2, 3, 6, 14, 20, 21</sup>
- ✓ Increases farmer access to new markets and new business opportunities. <sup>2, 3, 11</sup>
- ✓ Enables schools to leverage additional funding opportunities. <sup>8, 10</sup>
- ✓ Supports community job creation. <sup>8</sup>
- ✓ Increases sales of cafeteria food. <sup>3</sup>
- ✓ Leads families to purchase more local foods at home. <sup>1</sup>



*In 2017 Manitoba Farm to School's Healthy Choice Fundraiser engaged 209 K-12 schools and 60 licensed daycares who collectively sold 546,509 lbs of vegetables grown locally by Manitoba Farmers. The total economic impact from the campaign, which ran from September - December 2017, was \$653,200. This not only supported local farmers, but investing a profit of \$326,000 back into participating schools and licensed daycares.<sup>21</sup>*

*Similarly, in its second year Nova Scotia's Nourish Your Roots healthy farm to school fundraising campaign sold 11,020 boxes of local produce to 56 schools. This generated \$330,600 in gross revenue, \$98,831 of which was invested to support schools' healthy eating initiatives, while \$198,709 was directed to local NS farmers. The remaining \$33,060 was directed back to Nourish NS for program sustainability.<sup>20</sup>*

## REFERENCES

1. Farm to School Pilot Program Evaluation Report. The Farm to School Steering Committee. 2009. [<http://www.halton.ca/common/pages/UserFile.aspx?fileid=47195>]
2. BC Fruit and Vegetable Nutritional Program. Submitted by Context. October 2013 [[http://www.sfvnp.ca/assets/bcsfvnp\\_evaluation\\_2012-2013\\_final\\_report\\_october\\_30\\_2013.pdf](http://www.sfvnp.ca/assets/bcsfvnp_evaluation_2012-2013_final_report_october_30_2013.pdf)]
3. Jones, C., Mitchell, J., Bailey, C. Alternative Avenues for Local Foods in Schools: Ingredients for Success. November 2015. [<http://ecosource.ca/wp-content/uploads/Alternative-Avenues-to-Local-Food-in-School.pdf>]
4. MacKelvie O'Brien, K., Richardson, L. Produce Availability in Remote Communities Initiative (BC). Heart and Stroke Foundation, Context Research Ltd. December 2012. [<http://www.farmtocafeteriacanada.ca/wp-content/uploads/2014/06/PAI-Final-Report-on-Projects-and-Evaluation.pdf>]
5. Bays, J. Farm to School Sprouts in British Columbia! A final report of the farm to school salad bar initiative. August 2014. [<http://www.farmtocafeteriacanada.ca/wp-content/uploads/2014/08/farm-to-school-sprouts-in-BC.pdf>]
6. Nourishing School Communities: Impact Report 2013-2016. October 2017. [[http://www.farmtocafeteriacanada.ca/wp-content/uploads/2017/10/NSC\\_Report-2017\\_EN\\_online.pdf](http://www.farmtocafeteriacanada.ca/wp-content/uploads/2017/10/NSC_Report-2017_EN_online.pdf)]
7. Triador, L., Farmer, A., Maximova, K., Willows, N., and Kootenay, J. A School Gardening and Healthy Snack Program Increased Aboriginal First Nations Children's Preferences toward Vegetables and Fruit. *Journal of Nutrition Education and Behaviour* 47(2): 176-180. 2015. [[https://www.jneb.org/article/S1499-4046\(14\)00674-5/fulltext](https://www.jneb.org/article/S1499-4046(14)00674-5/fulltext)]
8. Doyle, E. The Benefits and Sustainability of School Gardens: a case study of St. Francis school greenhouse (Harbour Grace, NL). Division of Community Health and Humanities. February 2014. [<https://www.mun.ca/harriscentre/reports/arf/2012/12-13-TSP-Final-Doyle.pdf>]
9. Evaluation of the Community Capacity Building Strategy. Social Research and demonstration corporation. June 2010. [<http://www.farmtocafeteriacanada.ca/wp-content/uploads/2016/02/Farm-to-School-Final-Evaluation-Report.pdf>]
10. Atkinson, R. Raising the Bar! A look at the early impact of the Farm to School Canada Grant Program. Farm to Cafeteria Canada. 2018. [[http://www.farmtocafeteriacanada.ca/wp-content/uploads/2018/06/wfk\\_report\\_2018\\_online.pdf](http://www.farmtocafeteriacanada.ca/wp-content/uploads/2018/06/wfk_report_2018_online.pdf)]
11. Atkinson, R.A, McKenna, M.L., Bays, J, Lahey D., Wylie-Toal, B., Vrins, M. Local Foods: Canadian Schools, Campuses and Health Care facilities Speak up. Fredericton, NB: Farm to Cafeteria Canada. October 2013. [<http://www.farmtocafeteriacanada.ca/wp-content/uploads/2013/10/Report-Local-Foods-Canadian-schools-campus-and-health-care-facilities-speak-up-2013.pdf>]
12. Upitis, R., Hughes, S., and Peterson, A. Promoting environmental stewardship through gardens: A case study of children's views of an urban school garden program. *Journal of the Canadian Association for Curriculum Studies* 11 (1), 92-135. 2013. [<https://jccacs.journals.yorku.ca/index.php/jccacs/article/view/36544>]
13. Bell, A.C., & Dymont, J.E. Grounds for action: Promoting physical activity through school ground greening in Canada. Evergreen. 2006. [<https://www.evergreen.ca/downloads/pdfs/Grounds-For-Action.pdf>]
14. From the Ground UP: Yukon Healthy Choice Fundraiser 2013. Evaluation report submitted by RavenQuest Consulting. 2013. [<http://www.yukonfromthegroundup.ca/files/ftgevaluationreport2013.pdf>]
15. Growing Chefs! Annual Report, School Year 2016/2017. [[http://www.growingchefs.ca/sites/default/files/growing\\_chefs\\_ar\\_2016\\_2017\\_final\\_web.pdf](http://www.growingchefs.ca/sites/default/files/growing_chefs_ar_2016_2017_final_web.pdf)]
16. Rojas, A.W., Black, J., Orrego, E., Chapman et Will Valley, G.E. Insights from the Think&EatGreen@School Project: How a community-based action research project contributed to healthy and sustainable school food systems in Vancouver. *Canadian Food Studies* 4(2): 25-46. 2017. [<http://canadianfoodstudies.uwaterloo.ca/index.php/cfs/article/view/225>]
17. Farm to School Stories: From the Field in Greater Vancouver (BC). May 2013. [<http://www.farmtocafeteriacanada.ca/wp-content/uploads/2013/06/Farm-to-School-Stories-May-15-2013-1.pdf>]
18. Carten, S. Farm to School: Canada Digs In! Storybook. Farm to Cafeteria Canada. 2015. [[http://www.farmtocafeteriacanada.ca/wp-content/uploads/2015/11/F2S-Storybook\\_en\\_online.pdf](http://www.farmtocafeteriacanada.ca/wp-content/uploads/2015/11/F2S-Storybook_en_online.pdf)]
19. Carlson, L., Williams, P.L., Hayes-Conroy, J.S., Lordy, D., and Callaghan, E. School Gardens: Cultivating Food in Nova Scotia Public Schools? *Canadian Journal of Dietetic Practice and Research* 77(3): 119-124. 2016. [<http://dcjournal.ca/doi/full/10.3148/cjdr-2015-051>]
20. Nourish your Roots: Evaluation report 2016. A report prepared by Nourish Nova Scotia, an evaluation support provided by the Healthy Populations Institute (Dalhousie University). February 2017. [[https://static1.squarespace.com/static/5b5b5824f2e6b10639fdaf09/t/5ba2376e21c67c53d09fce59/1537357684244/NYR\\_Evaluation\\_Report\\_2016\\_FINAL.pdf](https://static1.squarespace.com/static/5b5b5824f2e6b10639fdaf09/t/5ba2376e21c67c53d09fce59/1537357684244/NYR_Evaluation_Report_2016_FINAL.pdf)]
21. Farm to School Manitoba. Manitoba Healthy Choice Fundraiser 2017-2018 Annual Report. [Not publicly available].



*Farm to School: Canada Digs In!* is a multi-sectoral chronic disease prevention initiative lead by Farm to Cafeteria Canada in partnership with the Social Planning and Research Council of British Columbia, the Public Health Agency of Canada, Whole Kids Foundation, Meal Exchange, Heart and Stroke Foundation of Canada, Food First Newfoundland, New Brunswick Department of Agriculture, Aquaculture and Fisheries, Equiterre, Sustain Ontario and the Public Health Association of British Columbia.