

# PROMOTING HEALTHY EATING AND SUSTAINABLE LOCAL FOOD IN BC:

*An Action Framework for Public Institutions - Health Authorities, Educational Institutions, Childcare Facilities, and Local Governments*

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## Introduction

Healthy populations are a cornerstone of dynamic organizations, thriving communities, and prosperous societies. Unfortunately, the past 25-30 years has seen a dramatic increase in unhealthy weight gain and a host of related chronic diseases, which are negatively impacting the health and wellbeing of British Columbians. For example, in 2004, more than 40% of BC's adult population was found to be overweight while a further 19% were classified as obese.<sup>1</sup> Particularly worrisome is the increasing weights of children and youth. From 1978 to 2004, the prevalence of overweight and obese Canadian children and youth grew from 15% to 26%.<sup>2</sup> British Columbia's (BC) population is on a health trajectory that will have significant consequences for the well-being of our province.

Healthy eating is critical to achieving and maintaining a healthy body weight and the prevention of chronic diseases. Safe, affordable and nutritious food is essential to good health; however, there is reason for concern over BC's access to these foods. A recent review of the academic and grey literature found that BC is overly dependent on other countries for its fruits and vegetables.<sup>3</sup> A substantial proportion of BC's food imports come from California, a state that is currently experiencing a severe drought.<sup>3,4</sup> While we depend on external sources for our food, BC has gradually lost its capacity to produce and process foods such as fruits and vegetables.<sup>5</sup> As we encourage BC's population to eat 5-10 daily servings of fruits and vegetables, it becomes important to ensure sustainable access to these foods.

“All public and private sector institutions have a role to play in promoting healthy eating.”

Promoting healthy eating and sustainable, local food production will require concerted action and policies from multiple stakeholders acting at multiple levels. While all public and private sector institutions have a role to play in promoting healthy eating, this paper will focus on actions that can be taken by health authorities, educational institutions, childcare facilities, and local governments. This

focus is based on several factors. These institutions provide oversight for many of the environments where children, youth, and adults live, work, learn, play, heal, and eat. They have access to a variety of tools, resources and opportunities that can transform environments and

influence healthier behavioral choices. As purchasers of food, these institutions have a formidable capacity to shift the balance and re-localize food production. Most importantly, there are well established relationships among these institutions and they are already providing leadership by taking action in this area. This leadership has provided both the inspiration and impetus for developing this document.

### *How to use this Action Framework*

This action framework provides a broad range of ideas that health authorities, educational institutions, childcare facilities, and local governments can take to support the determinants of healthy eating while promoting a local and sustainable food supply. These actions, sourced from local initiatives as well as national and international policy documents, offer ideas for: enhancing food knowledge and skills; increasing affordability and availability of healthy food; and, providing adequate incomes and fostering work-life balance so families have the money and time to eat healthy.

“Actions are proposed which could encourage greater production of local food. Importantly, the proposed actions can also contribute to myriad other institutional goals.”



In the context of BC’s vulnerability within a global food system – including rising food prices, diminishing fossil fuels (on which the modern food system is dependent), and a changing climate (that is impacting food production) – actions are proposed which could encourage greater production of local food. Importantly, the proposed actions can also contribute to myriad other institutional goals such as organizational sustainability and leadership.

The action ideas contained in this document were drawn from a consideration of a variety of tools, resources and opportunities that institutions can utilize and/or engage to promote healthy eating and a local, sustainable food system.

These actions are grouped under four main headings:

- People
- Food Services
- Land and Land-Use Planning
- Reducing Waste and Supporting Sustainability.

Not all the options presented will be appropriate for each and every institution, nor every department within each institution. Depending on the organization’s mandate, size, financial and human resources available, institutions can choose the best options to adapt and adopt to begin the change process. Importantly, these actions do not need to be accomplished alone; partnerships with other organizations can ease implementation of many of the suggested ideas. Follow the numbers in superscript to access resources listed in the bibliography that clarify concepts and promising practices used in this framework.

## Action Options

### People (staff, students, patients and visitors)

1. Food Knowledge and Skills
  - 1.1 School curricula
  - 1.2 Field trips
  - 1.3 Lunch lectures and workshops
  - 1.4 Campaigns
  - 1.5 Skill development
2. Employee Policies
  - 2.1 Living wage policy
  - 2.2 Work-life balance
  - 2.3 Kitchens and lunch rooms
  - 2.4 Support for breastfeeding

### Food Services

3. Access to Healthy, Local Food
  - 3.1 Food Procurement Policy
  - 3.2 Healthy Eating Policies
  - 3.3 Healthy Meeting Policies

### Land and Land-Use Planning

4. Institution-Owned land
  - 4.1 Edible landscaping
  - 4.2 Food gardens
  - 4.3 Pocket markets
  - 4.4 Food box programs

### Reducing Waste and Supporting Sustainability

5. Zero-Waste Policies

## Benefits

The proposed actions can produce many tangible and intangible benefits for people, institutions and communities alike. Here are just a few examples:

### *People*

- Improved taste for, and exposure to, healthier foods that can encourage healthier eating<sup>6,7</sup>
- Improved health of staff, students, young children, community members, patients, and visitors<sup>8,9</sup>
- Increased knowledge and skills in staff and students<sup>6</sup>
- Increased opportunities to cultivate and demonstrate leadership<sup>10</sup>
- Increased opportunities for staff personal/professional development
- Enhanced belonging and team spirit
- Enhanced social supports/networks<sup>11,12</sup>

### *Organizations*

- Improved productivity and decreased absenteeism in staff<sup>8</sup>
- New opportunities to demonstrate a commitment to staff, student, children, and patient health and well-being
- Improved learning conditions for students<sup>13</sup>
- Improved quality of care for patients<sup>14</sup>
- Strengthened organizational/team cohesion/spirit
- Increased preparedness in emergency/disaster management<sup>15</sup>
- Increased opportunities for meeting green house gas (GHG) reduction requirements\*

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\* At present, there are no metrics to quantify the savings/reduction of GHG that could result from these actions.

## *Community*

Contribute to the local economy by:

- Improved markets for local food <sup>16</sup>
- Increased opportunities for generating local business <sup>17</sup>
- Strengthening community resources due to retention of “food dollars” in the community <sup>18</sup>
- Greater opportunities for creating employment <sup>19</sup>

Improve the environment by:

- Creating opportunities to reduce “food miles” and mitigate GHG production
- Decreasing waste headed to the landfill <sup>20</sup>

Improve the well-being of community by:

- Creating greater opportunities for community <sup>21</sup> and civic engagement



## People (staff, students, patients and visitors)

BC's population, similar to elsewhere in North America, has lost their connection to food and the skills necessary to grow and prepare it.<sup>22</sup> Few pay attention to the quality of their food and many have lost their cultural ties to food. When asked, many children will say that their food comes from a box, a can, a refrigerator or store. The numbers of children that partake in family meals have also been declining.<sup>23</sup> This connection to food is believed to be crucial to healthy eating.<sup>24</sup> Furthermore, best evidence indicates that breast fed infants develop a lifelong mechanism against unhealthy weight gain.<sup>25</sup> Health authorities, educational institutions, childcare facilities, and local governments are important places where a re-connection to food can be fostered and breast feeding encouraged. These are also places where delicious and healthy food can be introduced to children and adults alike. Most importantly, these institutions have the capacity to foster a better work-life balance for their staff and provide families with the time to cook and eat together.

This section identifies a range of action/policy ideas that health authorities, educational institutions, childcare facilities, and local governments can take to create a healthy eating culture among their staff, students, patients, and their families while promoting a sustainable and local food supply. These actions are organized under:

- Food knowledge and skills
- Healthy employee policies



“BC’s population has lost their connection to food.”

These actions could lay the foundation for healthy eating while generating a taste for local food which, in turn, could lead to greater demand and, therefore, production of local food.

### *1. Food Knowledge and Skills*

#### **1.1 School Curricula**

Include all aspects of the food system (from production to consumption as well as recycling of waste) in the K-12 school curriculum. This is a sustainable approach to teaching children about

the food they eat, how it is produced, how it gets to the various places where they access food and the many issues that impact this system. The curriculum could be designed for progressive learning within a variety of subjects across the K-12 continuum.

### 1.2 Field Trips

Augment school curricula by incorporating field trips to nearby farms, gardens or other food production venues. While field trips are typically initiated within elementary and secondary schools, these can also be undertaken by childcare facilities and other organizations. Field trips can connect children, staff, and their families with learning opportunities and provide direct access to fresh food through visits to local farms and food production venues.



There are several urban farms, such as UBC Farm<sup>26</sup> and those in the Fraser Valley that have established the Circle Farm Tour<sup>27</sup> that welcome visitors. Each year, many children from childcare facilities and elementary schools visit these farms. Field trips can be a great opportunity to raise awareness about food-related issues and connect staff and students to local food producers.

### 1.3 Lunch Lectures and Workshops

Organize lunch time brown bag presentations and workshops to increase awareness about both food and healthy eating. Taste-testing of local produce, showing films and documentaries related to food issues and organizing potluck meals are just some of the ways to increase awareness and education among staff and students while making sessions interesting and fun.

## 1.4 Campaigns

Implement education campaigns as part of a larger strategy to promote healthy eating among students and staff.

## 1.5 Skill Development

Provide opportunities for staff, students and, where appropriate, patients to develop gardening, food shopping and cooking skills. These opportunities can be created in partnership with community groups or organizations.

# 2. Employee Policies

## 2.1 Living Wage Policy

Adopt a Living Wage Policy for permanent, temporary and contracted staff to ensure that they have sufficient income to eat healthy. The term 'Living Wage' refers to a rate of pay that provides sufficient income to meet the basic needs of daily living based on the actual cost of residing in a particular community.<sup>28,29</sup> Although no direct causal link has been established between higher wages and healthy eating, there is a significant body of evidence suggesting that, when people earn sufficient income to purchase healthy foods, they are more likely to do so.<sup>30</sup> Living Wages have been calculated for a number of cities and towns across BC.<sup>31</sup>

Policies that provide a living wage can increase staff's ability to afford healthy foods.<sup>28</sup> In 2010, the City of New Westminster passed Canada's first Living Wage Policy.<sup>32,33</sup> A number of organizations in BC have also become *Living Wage Employers*.<sup>34,35</sup>



## 2.2 Work-Life Balance

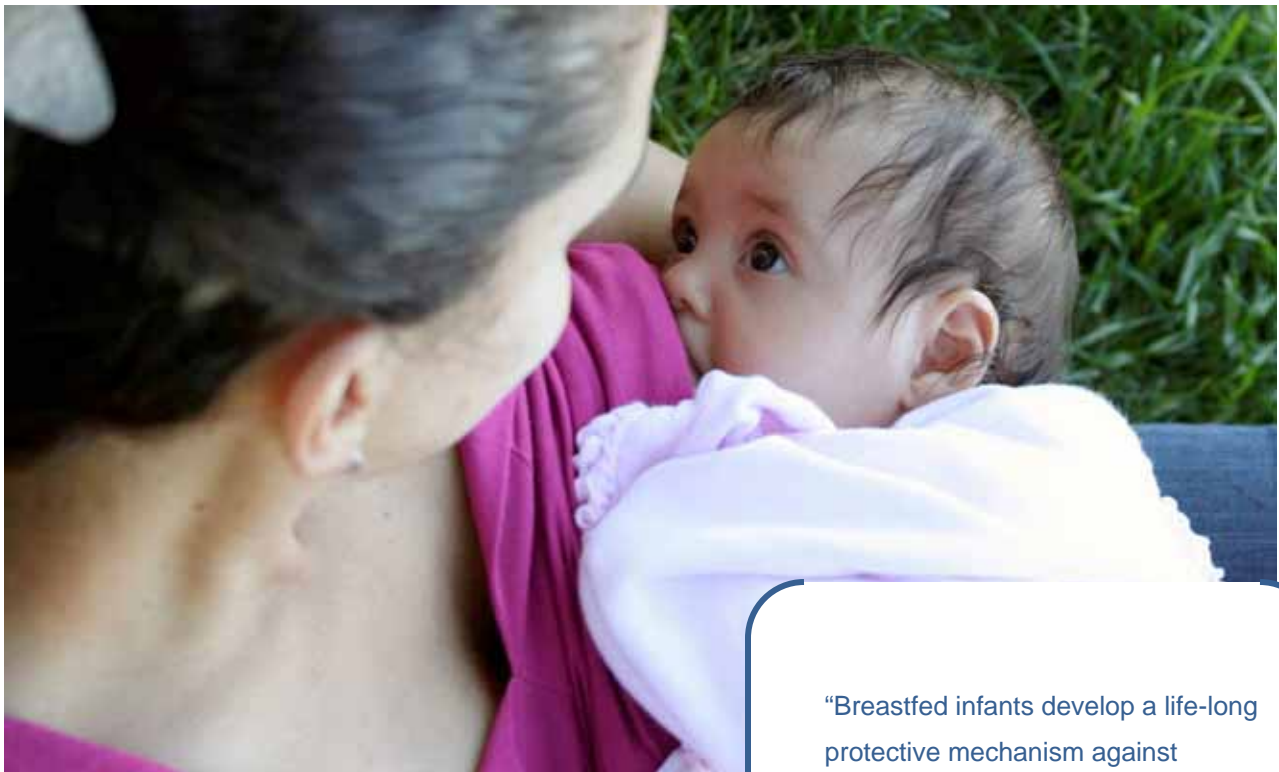
Provide staff with flexibility during the work day and foster manageable job expectations to promote work-life balance among staff. Working long hours and commuting great distances, as many BC workers do, can cut into the time available for grocery shopping, cooking, and family meals. Encourage staff to take lunch/dinner breaks.

## 2.3 Kitchens and Lunch Rooms

Provide adequate space and well-equipped lunchrooms/kitchens to promote healthy eating at work. Kitchens and lunch rooms are also helpful when organizing potluck lunches or dinners.

## 2.4 Support for Breastfeeding

Encourage the breastfeeding of infants with employee policies (breaks for feeding and/or expressing milk as well as flexible schedules and on-site childcare). Provide a supportive environment by creating areas for feeding and expressing milk, and storage of expressed milk.<sup>36</sup>



“Breastfed infants develop a life-long protective mechanism against unhealthy weight gain.”<sup>25</sup>

## Food Services

Institutional food services include all the food that is made available to staff, students, patients, and visitors for which oversight and decision-making rests with health authorities, educational institutions, childcare facilities, or local governments. Food services cover:


- Prepared meals (cafeterias, hot meal programs and patient meal trays)
- Convenience food available through coffee shops, kiosks, concession stands and vending machines
- Food served at meetings or used for fundraising

These food services can be provided through in-house programs or contracts.

Food services are a formidable resource for shaping both healthy eating and a sustainable, local food supply. Significant numbers of children and adults spend close to one third of their day in buildings and programs managed by these institutions. This is a captive audience that can be influenced to eat healthy. Furthermore, institutional procurement of local food can create the volume of demand necessary to encourage local farmers to produce more local food. Lack of market access is a major challenge encountered by local farmers<sup>37</sup>, many of whom are leaving farming and selling fertile farmland.

This section identifies a range of action/policy ideas that health authorities, educational institutions, childcare facilities and local governments can take to shape the eating habits of staff, students, patients, and visitors while generating a noteworthy market for healthy local food.

These actions have a significant capacity for promoting healthy eating among BC's population and enhancing the local food economy to produce a more reliable and local source of healthy food.



“Food services are a formidable resource for shaping both healthy eating and a sustainable, local food supply.”



### 3. Access to Healthy, Local Food

#### 3.1 Food Procurement Policy

Enact a food procurement policy that increases the organization’s control over the quality of food that is sold or advertised to staff, students, and patients. Procurement policies can be developed and implemented in a number of different ways and usually apply to two main types of food services:

- Meals sold or served by the institution to staff, students, or patients
- Items sold in vending machines, concession stands, cafés, restaurants, etc.



The following are considerations that could be included in a food procurement policy:

#### *Buy local and sustainable*

Negotiate supplier and vendor contracts that emphasize local foods in season, favouring sustainably produced foods (e.g., methods that reduce Greenhouse Gas emissions, purchasing Ocean Wise seafood and Fair Trade products, etc.). Strengthen the local economy through fair returns to local farmers.

In 2007, the University of Victoria adopted a strategic plan to promote the purchasing of locally-produced and environmentally sustainable products. The university now estimates that 46% of their fruits and vegetables are procured from Vancouver Island farms.<sup>38</sup>

### *Food Safety*

Learn from and follow promising practices related to acceptable levels of pesticides, hormones antibiotics and Genetically Modified Organisms in all food that is procured.<sup>39, 40</sup>

### *Preferred pricing in food procurement*

Negotiate preferred pricing of healthier and local foods through mechanisms such as bulk purchasing (or collaborative purchasing with other institutions).

### *Targets*

Set targets that establish the proportion of certain food categories that will be permitted to be sold in vending machines and cafeterias. Use the provincial Guidelines for Food and Beverage Sales established for settings such as schools, recreation centres and municipal buildings.<sup>41,42</sup>

Targets can also be set for the amount of local food that is purchased. Stage-in procurement of local foods with targets, allowing time for institutions to adapt to locally available food products and local food producers to create the volume of supply needed by institutions.

### *Farm to Cafeteria Program*

Develop and implement a Farm to Cafeteria program to access fresh, local, in-season foods directly from local farmers.

Farm to Cafeteria Programs have already been implemented in 26 schools across BC. These programs have been found to “increase fruit and vegetable consumption and enhance knowledge and expertise about food and the local food system.”<sup>7</sup>



### 3.2 Healthy Eating Policies

Develop and adopt policies that make healthy eating the easier choice. The following actions can facilitate healthy choices:

#### *Nutritional Guidelines*

Use resources such as Guidelines for Food and Beverage Sales in BC facilities and Eating Well with Canada's Food Guide<sup>43</sup> to set minimum nutrition criteria for all food available through meal programs, patient food, cafeterias, kiosks, concession stands, vending machines, etc.<sup>42,44</sup>

Ensure that food available meets the needs of a culturally diverse population; particularly, for First Nations peoples.

The Ministries of Education and Health have partnered to develop Guidelines for Food and Beverage Sales in BC Schools<sup>41</sup>, which outline minimum nutritional standards for all food, snacks and beverages that are sold in schools.



#### *Establish Healthy Portion Sizes*

Use Eating Well with Canada's Food Guide to develop and implement standards for food portion sizes that support healthy eating for all food available within institutions.



### *Preferred Product Placement and Pricing*

Require that cafeterias, kiosks, concession stands and vending machines preferentially place healthy and local options most prominently - near check-out stands and at eye-level in vending machines.<sup>45</sup>

Negotiate preferred pricing for local and healthier foods sold in cafeterias, kiosks, concession stands and vending machines.

### *Food Safety*

Ensure that food is prepared according to established food safety standards in order to control Salmonella and Listeria.<sup>46,47</sup>

### *Menu Labelling*

Identify healthy choices on menus in cafeterias and kiosks. Provide clear nutritional information on menus and other food items sold so that consumers have the information they need to make a healthier choice.<sup>48</sup>

## **3.3 Healthy Meeting Policies**

Develop and implement policies to formalize an organization's commitment to healthy food and refreshments during meetings. Adopting a healthy meeting policy like Eat Smart, Meet Smart<sup>49</sup> can ensure that healthy food choices (like fruits and vegetables) are prioritized and, when less healthy choices are offered, portion sizes are reduced (by cutting desserts in half, for example). Encourage the inclusion of local food at any meeting or conference organized or sponsored by the institution.

## Land and Land Use Planning

Land and land use planning (where appropriate) have crucial implications for promoting a sustainable and local food supply in BC. Land use affects every aspect of the food system from what is grown to how far food is transported and the extent to which community members have access to healthy food choices. Unused or underused land is an important resource that institutions can leverage for food production. From institutional gardens to edible landscaping, there are many innovative ways for health authorities, educational institutions, childcare facilities and local governments to maximize food action in their own backyards. While the produce that is harvested can be used to supplement an organization's meal programs or can be shared with a group from within the community, these initiatives can also be invaluable tools for connecting staff, students, patients, and visitors to the sources of their food and educating them about healthy eating. The proposed actions can also make an important contribution to promoting a sustainable and local food supply in BC.

This section identifies a range of food actions that health authorities, educational institutions, childcare facilities, and local governments can undertake to promote urban agriculture. These actions have the capacity to:

- Maximize the use of available land and space to produce, process, and distribute food
- Increase the production of nutritious, local food
- Facilitate greater access to nutritious, local food
- Connect people to the sources of their food to facilitate healthy eating.

### *4. Institution-Owned Land*

#### **4.1 Edible Landscaping**

Incorporate trees and plants that produce fruit, nuts, vegetables or herbs into spaces previously occupied by decorative plants. Local governments could include edible landscaping as key components of their agricultural strategies to enhance local food production.

## 4.2 Food Gardens

Allocate available land and space for growing food and partner with local organizations and farmers to create one (or more) of the following types of gardens, all of which can increase access to local food.

### *Community Gardens*

Develop community gardens to create opportunities for people to grow their own food.<sup>50</sup>



### *Rooftop Gardens*

Increase space utilized for food production by developing a rooftop garden. These gardens can range from container gardens that use planters, garden boxes and other such structures to more traditional gardens where roofs are covered in soil.<sup>51</sup>

### *Larger-Scale Gardens and Orchards*

Allow land to be transformed into an urban farm, if sufficient space is available.<sup>52</sup> Larger-scale gardens are often accomplished in partnership with local urban farmers.

The George Pearson Centre, a residential care facility in south Vancouver that houses 120 adults living with disabilities, partnered with five urban farmers to transform half an acre of their lawn into an urban farm. The farm provides fresh produce for meals served to the centre's residents. This garden also serves as a tool to raise awareness about healthy eating and teach skills on food production to residents, staff, and community members.<sup>53</sup>

### 4.3 Pocket Markets

Dedicate space for pocket markets (smaller scale Farmer's Markets) to increase opportunities for staff and visitors to purchase healthy food directly from local farmers. The smaller scale of pocket markets allows them to be tailored to the needs of an institution.

### 4.4 Food Box Programs

Bring fresh produce directly to staff, students and their families by implementing a Food Box Program. A Food Box Program is a food distribution program that bulk buys healthy, locally-grown, in-season food (which typically reduces the cost of healthy foods for recipients) and delivers food boxes to consumers on a regular basis through a central pick-up location. These boxes also typically contain nutritional information and recipes that encourage healthy food preparation.



Students at Simon Fraser University started a Pocket Market as well as a Good Food Box program to help make purchasing local food more convenient and increase the affordability of local foods for staff and students.<sup>54</sup>

*Beyond action on institution-owned land, local governments have significant capacity to shape the food environment in the communities they serve. Local governments have access to tools such as zoning, by-laws and official community plans that can harness greater land use for food action. Some post-secondary institutions also have the capacity to promote food actions on their campus communities through the development of land use plans. Ideas for these actions, which were specifically developed for local governments, are available in A Seat at the Table: A Resource Guide for Local Governments to Promote Food Secure Communities.<sup>55</sup>*

## Reducing Waste and Supporting Sustainability

Over and above the ideas for actions proposed in the earlier sections, there are other actions that institutions can take which could contribute to healthy and sustainable communities.

This section identifies actions that health authorities, educational institutions, childcare facilities, and local governments can take to reduce waste – an important component of improving sustainability of both the food system as well as BC communities. These actions have the capacity to:

- Reduce the economic impact to organizations associated with food waste
- Reduce the impact of food waste to on the environment



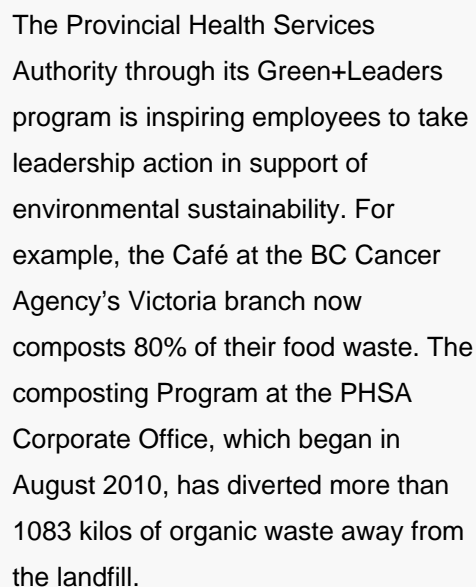
## 5. Zero-Waste Policies

Adopt “zero waste” policies to minimize food-related waste. There are a number of ways that institutions can minimize waste associated with food.

These include:

- Minimizing packaging in food procurement
- Minimizing waste in food preparation
- Using reusable washable implements in cafeterias
- Recycling
- Using established safety guidelines<sup>47</sup>, donating surpluses of prepared food (from meal programs and cafeterias) to organizations that depend on charitable food.

Composting of organic waste can not only reduce waste going into the landfill, it can also supply rich soil for growing local and healthy food.



The Provincial Health Services Authority through its Green+Leaders program is inspiring employees to take leadership action in support of environmental sustainability. For example, the Café at the BC Cancer Agency's Victoria branch now composts 80% of their food waste. The composting Program at the PHSA Corporate Office, which began in August 2010, has diverted more than 1083 kilos of organic waste away from the landfill.

## Conclusion

This document has presented a variety of options – from enhancing skills and knowledge of people to growing food on institution-owned land – that health authorities, educational institutions, childcare facilities, and local governments can take to promote healthy eating and improve the sustainability of healthy food production. Given that staff, students, patients as well as visitors make up a significant percentage of BC's population; these wide ranging actions have the capacity to promote healthy eating and improve the health of the population, build dynamic organizations, strengthen local economies and contribute to vibrant communities in BC.



## Bibliography

1. Tjepkema, M. (2005). *Adult obesity in Canada: Measured height and weight*. Ottawa, ON: Statistics Canada. [Document]. Available online at: [http://www.aboutmen.ca/application/www.aboutmen.ca/asset/upload/tiny\\_mce/page/link/Adult-Obesity-in-Canada.pdf](http://www.aboutmen.ca/application/www.aboutmen.ca/asset/upload/tiny_mce/page/link/Adult-Obesity-in-Canada.pdf).
2. Select Standing Committee on Health. (2006). *A strategy for combating childhood obesity and physical inactivity in British Columbia*. Victoria, BC: Legislative Assembly of BC. [Document]. Available online at: <http://www.leg.bc.ca/cmt/38thparl/session-2/health/reports/Rpt-Health-38-2-29nov2006.pdf>.
3. Ostry, A., Healthwise Communications Inc., & Jan Enns Communications. (2010). *Food for thought: The issues and challenges of food security*. Vancouver, BC: Provincial Health Services Authority. [Document]. Available online at: [http://www.phsa.ca/NR/rdonlyres/C3E70150-66FF-48E1-B2F1-45BB83B03019/0/FoodforThought\\_ResearchBooklet\\_FINAL.pdf](http://www.phsa.ca/NR/rdonlyres/C3E70150-66FF-48E1-B2F1-45BB83B03019/0/FoodforThought_ResearchBooklet_FINAL.pdf).
4. California Department of Water Resources. (2011). *Background information on droughts*. Sacramento, CA: Government of California. [Document]. Available online at: <http://www.water.ca.gov/drought/docs/CalDrought.pdf>.
5. Climate Action Initiative. (n.d.) *BC agriculture climate change action plan 2010-2013*. Victoria, BC. [Document]. Available at: <http://www.bcagclimateaction.ca/wp/wp-content/media/BC-Agriculture-Climate-Change-Action-Plan.pdf>.
6. Ratcliffe, M.M., Merrigan, K.A., Rogers, B.L., & Goldberg, J.P. (2011). The effects of school garden experiences on middle school-aged students' knowledge, attitudes, and behaviors associated with vegetable consumption. *Health Promotion Practice*, 12: 36-43.
7. Tobin, P. (2008). *Changing the way we think about feeding our kids. An evaluation of the Farm to School Salad Bar Project*. Victoria, BC: Public Health Agency of BC. [Document]. Available online at: [http://www.healbc.ca/files/Quesnel\\_Final\\_Evaluation\\_Report\\_June\\_2008.pdf](http://www.healbc.ca/files/Quesnel_Final_Evaluation_Report_June_2008.pdf).
8. Duxbury, L., Higgins, C., & Coghill, D. (2003). *Exploring the link between work-life conflict and demands on Canada's health care system*. Ottawa, ON: Public Health Agency of Canada. [Website]. Accessed at: <http://www.phac-aspc.gc.ca/publicat/work-travail/report3/index-eng.php>.
9. Twiss, J., Dickinson, J., Duma, S., Kleinman, T., Paulsen, H., & Silveria, L. (2003). Community gardens: Lessons learned from California Healthy Cities and Communities. *American Journal of Public Health*, 93:1435-1438.
10. P-Patch Community Gardening Program. (2009). *I love my p-patch! A community garden leadership handbook*. Seattle, WA: City of Seattle.
11. District of North Saanich. (2011). *Growing towards food self-reliance: A whole community agricultural strategy*. [Document]. Available online at: <http://www.northsaanich.ca/Assets/NSaanich/PDF+Files/Reports+and+Publications/Planning/Whole+Community+Agricultural+Strategy+Draft.pdf>.
12. Lyson, T.A. (2004). *Civic agriculture: Reconnecting farm, food, and community*. Lebanon, NH: University Press of New England.
13. Ozer, E.J. (2007). The effect of school gardens on students and schools: Conceptualization and considerations for maximizing healthy development. *Health Education & Behavior*, 34:846-863.
14. Health Care Without Harm. (2006). *Food and food purchasing: A role for health care*. [Document]. Available online at: [http://www.noharm.org/lib/downloads/food/Food\\_and\\_Food\\_Purchasing.pdf](http://www.noharm.org/lib/downloads/food/Food_and_Food_Purchasing.pdf).

15. Ottem, A. (2010). *Health eating and food security: Promising strategies for BC*. Vancouver, BC: Dieticians of Canada, BC Region. [Document]. Available at: [http://www.bchealthyiving.ca/sites/all/files/file/FINAL\\_HEFS\\_Report\\_Apr%2029.pdf](http://www.bchealthyiving.ca/sites/all/files/file/FINAL_HEFS_Report_Apr%2029.pdf).
16. Friends of the Greenbelt Foundation. (2011). *Ontario's Local Food Champions 2011: Cultivating change in the broader public sector*. Toronto, ON. [Document]. Available at: [http://www.greenbelt.ca/sites/default/files/research/ontario039s\\_local\\_food\\_champions\\_2011.pdf](http://www.greenbelt.ca/sites/default/files/research/ontario039s_local_food_champions_2011.pdf).
17. The New Economics Foundation. (2006). *The world on a plate: Queen's Market. The economic and social value of London's most economically diverse street market*. London, UK. [Document]. Available online at: [http://www.neweconomics.org/sites/neweconomics.org/files/The\\_World\\_on\\_a\\_Plate.pdf](http://www.neweconomics.org/sites/neweconomics.org/files/The_World_on_a_Plate.pdf).
18. Project for Public Spaces. (n.d.). *The benefits of public markets*. [Webpage]. <http://www.pps.org/articles/the-benefits-of-public-markets/>.
19. Project for Public Spaces Inc. & Partners for Livable Communities. (2003). *Public markets as a vehicle for social integration and upward mobility*. New York, NY: Project for Public Spaces. [Document]. Available online at: [http://www.pps.org/pdf/Ford\\_Report.pdf](http://www.pps.org/pdf/Ford_Report.pdf).
20. Cassidy, A., & Patterson, B. (2008). *The planner's guide to the urban food system*. Los Angeles, CA: Center for Sustainable Cities, University of Southern California. [Document]. Available online at: <http://postcarboncities.net/files/PlannersGuidetotheFoodSystem.pdf>.
21. Miro, A. & Siu, J. (2009). *Creating healthy communities: Tools and actions to foster environments for healthy living*. Vancouver, BC: Smart Growth BC. [Document] Available at: <http://www.smartgrowth.bc.ca/Portals/0/Downloads/CreatingHealthyCommunitiesGuide.pdf>.
22. Vileisi, A. (2008). *Kitchen literacy. How we lost knowledge of where food comes from and why we need to get it back*. Washington, DC: Island Press.
23. Gillman, M.W., Rifas-Shiman, S.L., Frazier, A.L., Rockett, H.R., Camargo, C.A. Jr., Field, A.E. et al. (2000). Family dinner and diet quality among older children and adolescents. *Archives of Family Medicine*, 9:235-240.
24. Alaimo, K., Packnett, E., Miles, R.A. & Kruger, D.J. (2008). Fruit and vegetable intake among urban community gardeners. *Journal of Nutrition Education and Behavior*, 40:94-101.
25. Harder, T., Bergmann, R., Kallischnigg, G., & Plagemann, A. (2006). Duration of breastfeeding and risk of overweight: A meta-analysis. *American Journal of Epidemiology*, 162:397-403.
26. UBC Farm at the University of British Columbia. (n.d.). *Farm discovery tours > Schools program*. [Webpage]. Available online at: <http://www.landfood.ubc.ca/ubcfarm/schools.php>.
27. Circle Farm Tour. (n.d.). *Circle Farm Tour – An incredible experience for the whole family*. [Webpage]. Available online at: <http://circlefarmtour.com/>.
28. Richard, T., Cohen, M., Klein, S., & Littman, D. (2008). *Working for a living wage. Making paid work meet basic family needs in Vancouver and Victoria*. Vancouver, BC: Canadian Center for Policy Alternatives. [Document]. Available online at: [http://www.policyalternatives.ca/sites/default/files/uploads/publications/reports/docs/ccpa\\_bc\\_livingwage\\_2010.pdf](http://www.policyalternatives.ca/sites/default/files/uploads/publications/reports/docs/ccpa_bc_livingwage_2010.pdf).
29. Bacon, L. (2010). The living wage investment for BC employers. *BCBusiness*. [Online Article]. Available at: <http://www.bcbusinessonline.ca/bcb/bc-blogs/boss-ladies/2010/05/07/living-wage-investment-bc-employers>.
30. Health Officer's Council of BC. (2008). *Health inequities in British Columbia*. Victoria, BC: Public Health Agency of BC. [Document]. Available online at: [http://www.phabc.org/modules/Food\\_Security/files/Health\\_Inequities\\_in\\_BC\\_Report\\_Nov\\_2008.pdf](http://www.phabc.org/modules/Food_Security/files/Health_Inequities_in_BC_Report_Nov_2008.pdf).
31. First Call: BC Child and Youth Advocacy. (2011). *BC living wage campaigns*. [Webpage]. Available online at: <http://www.firstcallbc.org/pdfs/lw/BC%20LW%20Campaigns%20updated%20Feb%2011.pdf>.



32. City of New Westminster. (2010). *What's new: Living wage policy*. [Webpage]. [http://www.newwestcity.ca/2010/05/13/living\\_wage\\_policy.php](http://www.newwestcity.ca/2010/05/13/living_wage_policy.php).
33. Hall, P. (2010). *Beyond minimum wage: A living wage in B.C.* BC Business. [Online Article]. Available online at: <http://www.bcbusinessonline.ca/bcb/business-sense/2010/11/03/beyond-minimum-living-wage-bc>.
34. Vancity. (2011). *Vancity becomes the largest organization in Canada to adopt living wage policy*. [News Release]. Available online at: <https://www.vancity.com/AboutUs/OurNews/MediaReleases/May24/>.
35. First Call: BC Child and Youth Advocacy Coalition. (2011). *Living wage employers*. [Document]. Available online at: <http://firstcallbc.org/pdfs/lw/employers%20list.pdf>.
36. Goodridge, J.M. (2007). *Report to the Breastfeeding Policy Committee, Memorial University*. St. John, NL: Memorial University.
37. Hild, C. (2009). *The economy of local food in Vancouver*. Vancouver, BC: Vancouver Economic Development. [Document]. Available at: [http://www.vancouvereconomic.com/userfiles/file/Local-Food-in-Vancouver-webversion\(1\).pdf](http://www.vancouvereconomic.com/userfiles/file/Local-Food-in-Vancouver-webversion(1).pdf).
38. University of Victoria. (2010) *Green purchasing*. [Webpage]. Available online at: <http://web.uvic.ca/sustainability/GreenPurchasing.htm>.
39. Health Care Without Harm. (n.d.). *Issues: Protect antibiotics action centre*. [Webpage]. Available online at: [http://www.noharm.org/us\\_canada/issues/food/protect\\_antibiotics.php](http://www.noharm.org/us_canada/issues/food/protect_antibiotics.php).
40. Population and Public Health, Provincial Health Services Authority. (2010). *Implementing food security indicators: Phase I. Food Security Indicators Project*. Vancouver, BC: Provincial Health Services Authority. [Document]. Available online at: [http://www.phsa.ca/NR/rdonlyres/97773454-AEC6-4BAE-9680-0DEF4D7B66F1/0/ImplementingFoodSecurityIndicatorsReport\\_20May2010FINALweb.pdf](http://www.phsa.ca/NR/rdonlyres/97773454-AEC6-4BAE-9680-0DEF4D7B66F1/0/ImplementingFoodSecurityIndicatorsReport_20May2010FINALweb.pdf).
41. Ministry of Education & Ministry of Health. (2007). *Guidelines for food and beverage sales in BC schools*. Victoria, BC: Ministry of Education. [Document]. Available online at: [http://www.bced.gov.bc.ca/health/2010\\_food\\_guidelines.pdf](http://www.bced.gov.bc.ca/health/2010_food_guidelines.pdf).
42. Ministry of Labour and Citizens' Services. (2007). *Healthier choices in vending machines in BC public buildings. Policy paper*. Victoria, BC. [Document]. Available online at: <http://www.lcs.gov.bc.ca/HealthierChoices/pdf/CompletePolicy.pdf>.
43. Health Canada. (2007). *Canada's food guide*. Ottawa, ON: Government of Canada. [Website]. Accessed at: <http://www.hc-sc.gc.ca/fn-an/food-guide-aliment/index-eng.php>.
44. BC Recreation and Parks Association. (2008). *Healthy food & beverage sales policy*. Stay Active – Eat Healthy. [Toolkit]. Available online at: [http://www.stayactiveeathealthy.ca/managers/modular\\_toolkit.html](http://www.stayactiveeathealthy.ca/managers/modular_toolkit.html).
45. Wansink, B., Just, D.R., & McKendry, J. (2010). *Lunch link redesign*. New York, NY: New York Times. [News article]. Available online at: [http://www.nytimes.com/interactive/2010/10/21/opinion/20101021\\_Oplunch.html?scp=6&sq=cafeteria%20design&st=cse](http://www.nytimes.com/interactive/2010/10/21/opinion/20101021_Oplunch.html?scp=6&sq=cafeteria%20design&st=cse).
46. Ministry of Health. (n.d.). *Caring about food safety*. [Course]. Available online at: <http://www.health.gov.bc.ca/protect/food-safety-module/files/home.htm>.
47. Food Protection Services, BC Centre for Disease Control. (2006). *Food guidelines and information*. Vancouver, BC: BC Centre for Disease Control. [Webpage]. Available online at: <http://www.bccdc.ca/foodhealth/foodguidelines/default.htm>.
48. Heart & Stroke Foundation of BC. (2011). *Heart & stroke health check . . . helping you eat well*. [Webpage]. Available online at: [http://www.heartandstroke.bc.ca/site/c.kplPKXOyFmG/b.3644437/k.7BF3/Health\\_Check.htm](http://www.heartandstroke.bc.ca/site/c.kplPKXOyFmG/b.3644437/k.7BF3/Health_Check.htm).
49. ActNowBC. (2008). *Eat smart, meet smart: How to plan and host healthy meetings, events and conferences*. Victoria, BC: Western and Northern Canadian Collaboration for Healthy Living.

- [Document]. Available at: <http://www.actnowbc.ca/media/08-024%20Eat%20Smart%20Meet%20Smart%20Booklet%20-%20May%2026.pdf>.
50. City of Vancouver. (2011). *Social planning, food policy, a city of gardens*. [Webpage]. <http://vancouver.ca/commsvcs/socialplanning/initiatives/foodpolicy/projects/gardens.htm>.
  51. Germain, A., Gregoire, B., Hautecoeur, I., Ayalon, R., & Bergeron, A. (2008). *Guide to setting up your own edible rooftop garden*. Montreal, QC: Alternatives and the Rooftop Gardens Project. [Document]. Available at: [http://rooftopgardens.ca/files/howto\\_EN\\_FINAL\\_lowres.pdf](http://rooftopgardens.ca/files/howto_EN_FINAL_lowres.pdf).
  52. Nasr, J. MacRae, R., & Kuhns, J. (2010). *Scaling up urban agriculture in Toronto: Building the infrastructure*. Toronto, ON: Metcalf Foundation. [Document]. Available at; <http://metcalfoundation.com/wp-content/uploads/2011/05/scaling-urban-agriculture.pdf>.
  53. FarmersOn57th. (2011). *FARMERS on 57<sup>th</sup> at George Pearson Centre*. [Webpage]. Available online at: <http://farmerson57th.wikispaces.com/>.
  54. SFU Local Food Project. (2009). *SFU harvest box*. [Webpage]. Available online at: <http://sfulocalfood.ca/projects/sfu-harvest-box>.
  55. Enns, J., Rose, A., de Vries, J., & Hayes, J. (2008). *A seat at the table: A resource guide for local governments to promote food secure communities*. Vancouver, BC: Provincial Health Services Authority. [Document] Available online at: <http://www.phsa.ca/NR/rdonlyres/D49BA34E-B326-4302-8D0C-CC8E5A23A64F/0/ASeatattheTableResourceGuideforlocalgovernmentstopromotefoodsecurecommunities.pdf>.
  56. Halweil, B. (2002). *Home grown: The case for local food in a global market*. Washington, DC: Worldwatch Institute. [Document]. Available at: <http://www.worldwatch.org/system/files/EWP163.pdf>.