

The background of the entire page is a vibrant green with a bokeh effect of soft, out-of-focus light spots. Scattered across the background are several realistic green leaves of various sizes and orientations, some showing detailed vein patterns.

From Seed to Plate

A stylized white leaf icon, resembling a drop or a seedling, is positioned to the left of the subtitle text.

**A Community Based Solution To
Improve Food Literacy**

Table of contents

THE LONDON COMMUNITY RESOURCE CENTRE	3
OBJECTIVE OF THIS GUIDEBOOK	4
REACHING AN EPIDEMIC: CHILDHOOD OBESITY	5
THE MISSING PIECE: FOOD LITERACY	6
A CALL TO ACTION	7
KNOWLEDGE GARDENS	8
CLASSROOM PROGRAMS	9
GROWING CHEFS! ONTARIO	10
WHAT IS A FRESH FOOD MARKET?	11
FRESH FARMERS MARKET	12
ADDITIONAL RESOURCES	13
AWKNOWLEDGEMENTS	14
REFERENCES	15



MISSION

To improve our collective well-being by bringing together individuals, organizations and resources to foster community action and create positive social change

VISION

A community with resources that enable people to work together to improve their quality of life

COREVALUES

A sense of community, defined as “a group of people or organizations living in the same place, with a sense of identity and shared interests.”

THE LONDON COMMUNITY RESOURCE CENTRE

Established in 1974, the London Community Resource Centre (LCRC) is an incorporated community development agency, tailored to the meet the needs of the population of London.

Since 2002, the LCRC has provided opportunities for community members to learn how to prepare, preserve, and enjoy locally grown, fresh food. The LCRC is a registered charity that supports the community, through collaboration with local businesses and community partners.



255 Horton Street, 3rd Floor, Suite 1
 London, Ontario N6B 1L1
 Tel 519-432-1801
lcrc@lcrc.on.ca



OBJECTIVE OF THIS GUIDEBOOK

We believe the following information will enable communities to learn about the success of the 'From Seeds to Plate' project and the reasons for implementation. We aim to encourage groups to incorporate similar strategies when establishing their own initiatives. The article highlights the importance of in-class food education, on-site fresh-food markets, and knowledge gardens when addressing the growing lack of food literacy in our neighbourhoods. We believe that by improving food literacy, starting with school-aged children, communities will gain the necessary skills and knowledge to make healthier food choices.

Our goal is to provide schools with the tools needed to teach students where their food comes from, how to prepare it, and the importance of enjoying a variety of nutritious foods.





REACHING AN EPIDEMIC: CHILDHOOD OBESITY

One in four Canadian children are considered to be either overweight or obese (8). It is well documented that obesity is linked to multiple chronic diseases, such as Type II Diabetes and Cardiovascular Disease (14). Research indicates that the rising obesity rates are not due to individual factors alone.

Characteristics of the built environment can also encourage or discourage behaviours that lead to a healthy lifestyle (8).

Research has found that individuals living in low income neighborhoods, as well as school-aged children, are at a heightened risk of developing unhealthy eating habits. This is due to increased exposure to fast-food outlets, and decreased access to grocery stores or markets, known as a “food desert.” (13). Nowak (2012) suggests that to reverse the current trend of childhood obesity, we must start by increasing children’s food literacy.

“...to reverse the current trend of childhood obesity, we must start by

increasing children’s food literacy.”

—Nowak (2012)

25% of children are overweight or obese.





“children will broaden their diet and value food more strongly when they are encouraged to enjoy all aspects of it: from growing, to tasting, to sharing it with others”

WHAT IS IT?

Food literacy is defined as “the relative ability to basically understand the nature of food and how it is important to you, and how able you are to gain information about food, process it, analyze it, and act upon it” (14).

THE MISSING PIECE: FOOD LITERACY

Unfortunately, the majority of school-aged children lack the knowledge of where their food comes from and how food is produced and why healthy food is important for maintaining a healthy lifestyle. By introducing food skill development at an early age, it has been found that (14). This can be achieved through expanding a child’s food preferences, introducing them to the flavours of another culture, and increasing their basic cooking skills (14).





“From Seeds to Plate highlights the importance of a healthy and sustainable environment, weaving information and training on sustainable practices and environmental stewardship through all of the project activities.”



A CALL TO ACTION

We have reached a critical time in history and the way that food is grown and cooked is going to radically affect what the next generation grows up on. For thousands of years we cooked with good healthy ingredients that we farmed or gardened respectfully and in harmony with nature. There is a decline in this transfer of knowledge, leaving a gap in essential life skills which directly impacts our health. Childhood diabetes and obesity are at epidemic proportions and for the first time in history our children will have a shorter life expectancy than their parents. Making healthy choices will not only impact our personal health but the health of our planet.

The central goal of From Seeds to Plate is to provide alternative learning opportunities and teach community members essential life skills through hands-on experiences.

Students will plan, plant and care for the Knowledge garden. Community members will have the opportunity to interact first hand with local farmers and learn about every stage of food production through participation at the weekly market. This sharing of knowledge about how to grow, prepare and preserve food today ensures a healthy future.

**—Linda Davies,
Executive Director,
London Community Resource Centre**



KNOWLEDGE GARDENS

Gardens provide opportunities for children to get their hands dirty while learning. A Knowledge Garden can be used to bring science, math, and visual arts to life through lessons in photosynthesis, as well as mathematical calculations of perimeter and area for the creation of the garden plot. The experience of seeding, soil, water and sun come together to create a tiny plant, demonstrating the wonder and power of nature through environmental education. Students are taught responsibility by tending to the garden and keeping the vegetables thriving (2).

Children learn the importance of preserving open land for food crops and trees. By nurturing the garden and taking care of their environment, they witness the magic of nature. Another fundamental component to these gardens is how students learn to collaborate together and work as a team. Parents, students and teachers can all enjoy the feeling of community that comes from knowledge gardens. Students report an increased sense of well-being (11). The school garden provides a safe place for students to enjoy fresh air, contributing to a positive attitude toward learning (3).

Garden programs require ongoing commitment, patience, and delayed gratification, as gardens require constant attention and care. Qualities gained by participating help youth to improve their learning and increase their engagement during school. Continuous contact with nature, in the form of play areas, or the presence of plants in the home, helps to improve an individual's cognitive functioning through an enhanced attention span and decreased impulsivity (15).



CLASSROOM PROGRAMS

The World Health Organization states that ‘health depends on our ability to understand and manage the interaction between human activities and the physical and biological environment’ (8). Health literacy involves one’s ability to understand and use information provided (1, 13). The goal is to improve health by empowering people in this way and we hope to emphasize skill development by changing an individual’s capacity to act within in their social environment (1).

Having access to information is crucial, but will never be sufficient to address all challenges faced by marginalized populations (12). We need to be able to help individuals develop practical skills, such as comparing the nutrient value of competing food products, to put knowledge into action. The effects of poor health literacy effects many aspects of a person’s life – including their ability to access healthcare services, which can compromise the health status of both the individual and their family (1). Studies suggest that children of parents with limited literacy skills are less likely to receive benefits of basic preventative care” (16). Studies also indicate that individuals with a low health-literacy have an impaired ability to understand information, which could cause them to more frequently access expensive healthcare services, such as visits to the emergency department (1). In this instance, a reduced ability to apply preventative care measures results in non-emergent care needs becoming emergent (1). It has been concluded that the most effective way to reduce disease disparities is to provide individuals with preventative health tools that address and improve health literacy. Further, research suggests that in order to reduce child health inequities, future health promotion initiatives should include strategies addressing the health literacy needs of children, adolescents and caregivers (16).

Sanders concludes a “[classroom] should be used more effectively as [a laboratory] to reinforce critical messages about individual health behaviours” (16) At Growing Chefs! Ontario they believe in getting kids excited about wholesome, healthy foods and to “provide an avenue for chefs and growers to get more involved in the community and to support food education” (10). In this way, Growing Chefs! hopes to encourage the children’s urban agriculture and provide them “with the confidence, knowledge and enthusiasm to grow and prepare good, healthy cuisine” (10).

“The goal is to improve health by empowering people...”

“We need to be able to help individuals develop practical skills, such as comparing the nutrient value of competing food products, to put knowledge into action.”





GROWING CHEFS! ONTARIO

Understanding how we grow food, learning about where it comes from, the different names given to foods, how we use our senses with food, the history of different foods and what they mean in different cultures all help children to develop better eating habits. It has been proven that increased food literacy at a community level helps people to make informed choices about their food sources. This aids in the development of a vibrant local and sustainable food system.

... “programs provide children with opportunities to use cooking as a vehicle to encourage many important skills in areas of math, science, history, geography, literacy and even art.”



Growing Chefs! Ontario food education programs provide children with opportunities to use cooking as a vehicle to encourage many important skills in areas of math, science, history, geography, literacy and even art. We strive to make everything we cook with children and youth to be something they will want to cook again on their own. We help participants understand why they are learning to make each particular dish, which means explaining the importance of learning various skills in the kitchen and how they could apply in other parts of their lives, such as the classroom, the workplace or at home. We believe this approach to learning helps participants develop a better understanding of what they are learning and why.

— **Andrew Fleet**
Executive Director
Growing Chefs! Ontario

What Is A Fresh Food Market?

A fresh food market is a venue that provides local farmers with the opportunity to informally offer their products to the community. Through the market, consumers access a variety of seasonal produce that has been locally grown. Fresh food markets provide opportunities for the consumer to buy local and support local farmers (7).

Benefits To Farmers (6)

1. *You can generate your own profit*
Set your own prices and cut out the middleman
2. *There is less pressure to meet a given quota*
Fresh food markets allow farmers to sell what they can grow; you are not pressured into meeting minimum quantities



Benefits To Consumers (5)

1. *You have access to fresh-picked produce with optimal nutritional value*
Fresh food markets offer seasonal fruits and vegetables, which means that they're picked during their time of optimal freshness and do not require preservatives or any additional chemicals
2. *Food is bred for flavor, not uniform size or travel hardness*
Food does not need to travel a long distance or meet the aesthetic requests from supermarkets; (ii) Food is grown naturally
3. *Helps you to reduce your carbon footprint*
No excess packaging, and distance that produce has to travel to a fresh food market is closer than to a supermarket; the end result is better for the environment
4. *Learning experience*
You are able to talk to the farmers that grew the produce and learn how it was made, how to prepare it, and how to store it
5. *Shopping at a fresh food market is fun, not a chore*
6. *You can find specialty products that may not be found in grocery stores*

Benefits To The Community (4)

1. *Helps to stimulate the local economy by supporting local producers and purveyors*
This helps to preserve jobs and create new ones
2. *Brings the community closer*
Fresh food markets are a place that brings the community together; a place where everyone can mingle with each other



“The Mobile Good Food market has shown that people will buy produce as long as it is fresh, affordable, culturally appropriate and available nearby”

“They are good for everybody: farmer, customer, and community at large! The key at our market is that it is producer based, so everybody either 'grows it, raises it, bakes it, or makes it'”

—**Christine Scheer**
Farmer's Market
Manager



FRESH FARMER'S MARKET

What Is A **Mobile Food Market**?

A mobile food market is a market on wheels that is able to travel to different neighborhoods, selling fresh vegetables and fruit (7).

Benefits Of A **Mobile Food Market**(7)

- Customers can purchase high quality produce at an affordable price
 - Fresh produce usually lasts longer
- Customers are able to negotiate prices compared to grocery stores
- Increases access to fresh food, especially in areas where there is a high concentration of fast-food outlets, coupled with limited availability of grocery stores (food deserts)

ADDITIONAL RESOURCES

London Community Resource Centre:

<http://lcrc.on.ca>

The STOP:

<http://www.thestop.org/home>

Growing Chefs! Ontario:

<http://growingchefsontario.ca>

Covent Garden Farmers' Market:

<http://www.coventmarket.com>

Food Share Ontario:

<http://www.foodshare.net>

The Edible Schoolyard Project:

<https://edibleschoolyard.org>

Ontario Edible Education Network:

<http://sustainontario.com/initiatives/ontario-edible-education-network>





ACKNOWLEDGMENTS

The London Community Resource Centre would like to thank:

TD FRIENDS OF THE ENVIRONMENT

TURF PRO LANDSCAPING

CITY OF LONDON

SLOW FOOD

MIDDLESEX– LONDON HEALTH UNIT

GROWING CHEFS! ONTARIO

COVENT GARDEN MARKET

**THAMES VALLEY DISTRICT SCHOOL
BOARD**

UNIVERSITY HEIGHTS P.S

**SUPPORTING FARMERS, STAFF and
VOLUNTEERS**

A special thank you to Western University's Community Service Learning students Brennan Dedecker, Mimi Nguyem, and Tess Royall , for their involvement in preparing this publication.



REFERENCES

- (1) Anjana Naidu. (2008). Health literacy. *Whitireia Nursing Journal*, (15), 39.
- (2) Bergsund, M. (2012). The Benefits of a School Garden. *My Healthy School*. Retrieved from: <http://www.myhealthyschool.com/gardens/benefits.php>
- (3) Denver Urban Gardens. (2010). Benefits of School-Based Community Gardens. A compilation of research findings Retrieved from: http://dug.org/storage_____/publicdocuments/Benefits%20of%20School%20Gardens.pdf
- (4) Farmers Market Ontario (2014). *How a Community like Yours Can Benefit from Farmers' Markets*. Retrieved from <http://www.downtowngeorgetown.com/news/farmers-market>
- (5) Farmers Market Ontario (2014). *How You As A Consumer Can Benefit From Farmers' markets*. Retrieved from <http://www.downtowngeorgetown.com/news/farmers-market>
- (6) Farmers Market Ontario (2014). *How You As A Farmer Can Benefit From Farmers' markets*. Retrieved from <http://www.downtowngeorgetown.com/news/farmers-market>
- (7) Food Share Toronto. (2013). *Stories from the mobile good food market*. Retrieved from http://www.foodshare.net/files/www/Fresh_Produce/MGFMbooklet-web.pdf
- (8) Gilliland, J. A., Rangel, C. Y., Healy, M. A., Tucker, P., Loebach, J. E., Hess, P. M., . . . Wilk, P. (2012). Linking childhood obesity to the built environment: A multi-level analysis of home and school neighbourhood factors associated with body mass index. *Canadian Journal of Public Health*, 103(3), S15.
- (10) Growing Chefs! Ontario. (2014). *About*. Retrieved from <http://growingchefsontario.ca/about>
- (11) Habib, D., & Doherty, K. 2007. Beyond the garden: Impacts of a school garden program on 3 and 4 graders. *Seeds of Solidarity*: 2-14
- (12) Kickbusch, I. S. (2001). Health literacy: Addressing the health and education divide. *Health Promotion International*, 16(3), 289-297. doi:10.1093/heapro/16.3.289
- (13) Lee H. The role of local food availability in explaining obesity risk among young school-aged children. *Social science & medicine* (1982). 2012;74:1193-1203.
- (14) Nowak, A. J., Kolouch, G., Schneyer, L., & Roberts, K. H. (2012). Building food literacy and positive relationships with healthy food in children through school gardens. *Childhood Obesity (Formerly Obesity and Weight Management)*, 8(4), 392-395. doi:10.1089/chi.2012.0084
- (15) Ober Allen, J., Alaimo, K., Elam, D., & Perry, E. (2008). Growing vegetables and values: Benefits of neighborhood-based community gardens for youth development and nutrition. *Journal of Hunger and Environmental Nutrition*, 3(4), 418-439. doi: 10.1080/19320240802529169