



PLANTS TO PLATES ACTIVITY GUIDE

A FOOD EDUCATION PROGRAM FOR KIDS



Every kid in every school no matter their background, deserves to learn the basics about food - where it comes from, how to cook it and how it affects their bodies. These life skills are as important as reading and writing, but they've been lost over the past few generations. We need to bring them back and bring up our kids to be streetwise about food.

- Jamie Oliver, CHEF AND ACTIVIST

Food preferences are formed in early childhood and have lasting effects for the rest of our lives. Good food education allows children and youth to develop a greater understanding of, and a more balanced relationship with, food and can empower them to make responsible, healthy and sustainable food choices for life.

Plants to Plates is an interactive food education program for children and youth. This program takes a "Plants to Plates" approach, pairing kitchen skill building with garden activities and making connections between how food is grown and how to prepare nutritious, tasty meals. More broadly, this program aims to get participants thinking critically about the food they eat, and where this food is coming from.

Table of Contents

Welcome!	5
How to use this guide	6
Top tips	7
SESSIONS	
Become familiar with tools used in the kitchen and garden, learn how to properly use a sharp knife and how to follow a recipe.	8
 Getting real about food. Discover what makes food healthy and how to distinguish between whole fool lightly processed and heavily processed foods. 	
3. Plants we eat	13
We would have no food without plants; learn more about them and the importance of eating many fruits and vegetables.	
4. Sugar, sugar everywhere	15
5. Food miles: Where does our food come from? Explore how our current food system works and what a more sustainable food system looks like.	17
6. Beware of branding: The power of food advertising	19
7. You are what you eat: How culture and traditions shape our food choices Share family food traditions and see how these change over time.	22
8. All around the table: Food and community	24
The Ecology Action Centre's food work	26
Appendix A: Garden activities	2 8
Appendix B: References	31





Welcome!

ABOUT PLANTS TO PLATES

This is a "ready to go," practical food program designed for anyone with an interest in educating kids about food (even those with limited food experience). It can be adapted depending on how much you know, the resources you have available and the kids with whom you're working. This activity guide includes eight food-related sessions. Although it's not necessary to follow the sessions in the order presented, the early sessions focus on basic skill development (e.g., how to use basic kitchen tools) and are followed by more complex activities that engage kids in thinking more broadly about food.

WHO SHOULD USE THIS GUIDE?

Volunteers, teachers, parents, program managers, youth club leaders, afterschool activity coordinators - this is for you! We hope this guide will make it easier to incorporate food education into your programs by providing you with a collection of tested activities that have been used successfully in kids' programs.

The Plants to Plates program can (and we certainly have!) be used with older and younger kids. Most of the activities can be adapted to suit the ages in your group with a few easy adjustments, such as the time or materials needed.

PLANTS TO PLATES BY NUMBERS:

2 hours

approximate session length

ratio of children to session leaders

for ages

8-12

ideally, (can be adjusted)

6-15



How to use this guide

This activity guide is divided into eight individual sessions. Each session presents a different theme and follows a similar format that includes an introduction, activities to explore the theme, and hands-on garden and kitchen activities.

STARTING OUT

Each session begins with a few details to help you as the leader.

The Learning Objectives, Special Materials, and Timing and Flow sections are there to help you prepare. The suggestions in the Timing and Flow section may need to be adjusted depending on the length of your program or chosen recipe; you may need to adjust or cut the order of the activities to suit your needs.

The Backgrounder for Educators before your session is a primer to bring you up to speed no matter what your previous experience with food education. Ask for help when you need it. There may be sessions you feel less comfortable with; consider recruiting a community volunteer, like an experienced senior, local community garden coordinator, or parent with savvy kitchen skills, to help support that session. The Extra Resources sections at the end of each session provide more background.



PREFER PAPER?

This guide was created with your printer in mind! Printing each session separately, as needed, will help you avoid printing our pretty (although ink-heavy) photo pages.

If you are using a paper copy of this guide, be sure to visit ecologyaction.ca/ plantstoplates to get all the extra resources that are referred to (bolded and hyperlinked) throughout this guide.

GET COOKIN'!

Kids love to cook and it's important to give them enough time to practice and for you to demonstrate food skills (e.g., chopping, measuring, recipe reading, using the stove). When choosing recipes, consider time carefully (recipes that take less than one hour for food preparation are ideal). Leave enough time for prep, demonstration and hands-on learning, as well as enough time to cook and clean up during the session. You may need to re-organize the session to fit within your timeframe. For example, you can prepare the food and then continue with the sessions' activity while the meal is cooking.

Having a full-scale kitchen is helpful, but not necessary. You can still have a successful program with basic equipment and enough space for your group to work. Find a list of basic equipment here.



FOOD FUN FOR ALL!

Throughout this guide, you'll find ideas on how to adapt and adjust the activities to make them inclusive and accessible to all the kids in vour program.

TO GARDEN OR NOT TO GARDEN?

An important piece of the participants' food education is learning how food is grown. Being out in the garden is often a favourite part of the program! Not everyone has garden space and you may need to offer this program outside of the growing season. Given these limitations, we've included basic recommendations for garden activities in each session, with detailed explanations in Appendix A: Garden Activities. If gardening together is not an option, then you may want to shorten the session or add another recipe.



Top tips

RECIPES

- · Involving kids in choosing the recipes is a great way to get your group excited about the food you'll make together. Select appropriate recipes in advance and allow each participant to choose a recipe for one of the sessions.
- There's a lot of choice when it comes to recipes. Here are a few factors to consider:
- ✓ Healthy: Whole grain, less sugar, using vegetables and fruits
- Seasonal and/or locally available; includes affordable ingredients
- ✓ Hidden (extra) steps like cooling
- ✓ Special equipment needed
- ✓ Dietary concerns
- Easily doubled for more participants
- ✓ Hard-to-find ingredients can be substituted with something more

COOKING

- · As much as possible, try to make your sessions hands-on. Encourage all the kids to be part of the whole process: reading the recipe, washing, cutting, measuring and cleaning up! It may take more time, but it's an essential part of the learning process!
- Make sure everyone has a job. Try dividing your group into teams and having each team working with a volunteer on a separate recipe.
- Getting kids to help clean-up as you go will save you a lot of time at the end.
- Have extras? Kids love being able to bring home leftovers to their families. Keep a stock of reusable containers on hand. This is a good opportunity to talk about how to store leftovers by refrigerating or freezina.

ENGAGEMENT

- Keep it moving. Too much idle time can lead to boredom, excessive silliness and acting out. To avoid this, organize yourself before your session. Review the guide and make sure you have all your tools and activity resources ready to go. Have ingredients laid out at different cooking stations. Prepare a few backup activities in case you find yourself with extra time or some kids are finished ahead of time. Drawing and colouring supplies can be handy for this. We also like the short snapper activity ideas compiled by FoodShare (Back pocket activities) and The Food Project.
- Making tasks mini-competitions is often a good way to get kids motivated and focused on a task. Works well even with cleaning!
- Leave enough time to eat together. Enjoying the food you prepared together encourages kids to try new foods and is a great time to share what you learned. If you had teams of kids working on different recipes, then let each team share what they did and their experiences. Is there anything they would do differently next time? This is also a good time for you to do an informal evaluation on how the kids enjoyed the day.



Developing confidence in the kitchen and basic cooking skills - including knife skills, food safety and recipe comprehension - is the first step to encouraging kids in preparing fresh, nutritious meals from whole ingredients. People choose food based on taste, nutritional value and time; developing basic kitchen and food preparation skills with kids enables them to create delicious, healthy meals quickly and confidently. Also, cooking is a type of experiential learning that also promotes language development, fine and gross motor skills, cooperation, following directions, and basic math.



LEARNING OBJECTIVES

Kids will become familiar with tools used in the kitchen and in the garden, learn how to properly use a sharp knife and how to follow a recipe.



SPECIAL MATERIALS NEEDED

- · Chart paper, markers
- Kitchen tools& matching foods
- Cut up recipe
- Blanket or table cloth

0

SAMPLE TIMING AND FLOW

10 min Welcome, Silly Name Game, and Answer with your Feet

10 min Group Rule Creation

5 min Welcome to the Kitchen

10 min Kitchen Toolbox, Guess Who

10 min Recipe Mashup

15 min Get Chopping

20 min Additional Meal Preparation

20 min Garden Activity

15 min Meal Sharing

5 min Clean-up

ACTIVITIES

WELCOME TO PLANTS TO PLATES!

We'll be trying something new in the kitchen and the garden. Each session will have a different theme. This session's theme is "My Food Toolbox," and we will learn how to use the special tools we have in the kitchen and the garden.

SILLY NAME GAME

Stand in a circle. Have everyone introduce themselves. Ask each person to say his/her name and describe her/himself with an adjective (blue-eyed Bob, Carrot Carla, Silly Sam). Once everyone has introduced themselves, go around again, saying your own name and then the person next to you.

ANSWER WITH YOUR FEET

Take a quick survey. Here's an active way to gauge what level of experience your group has with food. Clear an open space. Explain that you will be making statements about levels of experience with food. If the statement is true for you, move to the right side of the room. If it's definitely not true, then move to the left side. If you feel that it's sometimes true, then stay in the middle of the room.

Some statements to use:

- I help my parents buy groceries at least once a week.
- I am not allowed to use the stove at my house.
- I feel really confident using a sharp knife.
- I have grown a tomato plant before.

PLANTS TO PLATES GOLDEN RULES

Try to develop rules with student input. Using suggestions below as a guide, ask the kids for help in adding examples to each category. Write your rules on chart paper, have everyone sign their name in agreement, and hang somewhere visible; review at the beginning of every session.

- Respect one another: this means listening when another participant is speaking. Focusing on the likes, not the dislikes! Respect different opinions and avoid influencing others' with comments or by making faces if something is not your favourite.
- **2.Be safe:** Knives stay at the table. Wash your hands, keep hair tied back. Practice good hygiene.
- **3.Be responsible:** Clean as you go. Care for tools. Put things back where you found them.
- **4.Be an ally:** Help each other; keep an open mind (try new things!); work together.



WELCOME TO THE KITCHEN

Familiarize your group with the kitchen.

Take a walk around and point out:

- ✓ Recycling, compost, and garbage;
- ✓ Dishes and utensils;
- ✓ Fridge and freezer;
- ✓ Pantry cupboards, spice shelves;
- ✓ Sink, drying rack, dishwasher, dish towel;
- ✓ Stove.

KITCHEN TOOLBOX: GUESS WHO?

What you'll need

- A variety of foods and kitchen tools used to process these foods (e.g., garlic press & garlic clove. Lemon juicer & lemon. Potato masher & potato).
- Arrange tools around the table and cover (use a blanket or table cloth). Place foods on top on the cloth.

What to do

- Have kids try to guess what the tools are using only their sense of touch.
 No peeking! Ask them if they can match the tool with the food by placing the food beside the covered tool.
- Once everyone has guessed, reveal the hidden tools and go over what each one is used for.

RECIPE READING

Knowing how to read a recipe is an important kitchen skill. A recipe is like a story. It describes how and in what order you put the ingredients together. Most recipes are laid out in similar way.

Hand out a few recipes for kids to follow along.

Ask: What is the name of this recipe? How many people will this recipe serve? How long does it take to make?

Explain that a recipe begins with a list of ingredients and how much of each ingredient is needed. There are different ways to measure these quantities. For example, cups of flour, teaspoons of spice or sticks of butter. We'll be practicing measuring over the next few sessions.

Next, we have the directions. This is the order in which you mix your ingredients. It may say mix eggs, sugar and butter. How do we know how much of each? Refer back to the ingredients list.

Confidence in reading recipes can enable you to change it!

Ask: What are different ways you can adjust recipes?

If you are missing one ingredient, then what can you use instead? If you need to feed twice as many people than the recipe is written for, then how do you adjust the recipe? What about making it less sweet? How can you adjust for special diets? What about adding more local ingredients?



TIP: FOOD SAFETY

Practicing good food safety is vitally important and should be embedded into every session. An in-depth look at food safety practices is beyond the scope of this guide but thankfully many resources already exist. Brush up on your own food safety knowledge by checking out **Health Canada's** recommendations. For ideas on how to incorporate food safety into your programming check out these programs: **Chefs! Cooking program** and Kids in the Kitchen.



FOOD FUN FOR ALL!

Consider cultural and economic background when choosing recipes.

Try to balance between introducing new ingredients and using foods and recipes that will be relevant, appealing and realistic for kids to make in the future.



TIP

Throughout the program, encourage your group to think about how they might adjust recipes, particularly with the sample recipes you're preparing. For example: How would you use more local ingredients? Make it healthier? Make it vegetarian?



RECIPE MASHUP

What you'll need:

Printed recipe that has many steps. Cut each step out individually (keep list of ingredients together as one step). Mix steps in a bag.

What to do:

Ask the kids to try to place the steps in order. Divide kids into two groups and make it a competition! Help kids along by pointing out that ingredients are most often listed in the order they are used in the recipe!



Pick recipes that involve a lot of chopping like chicken fajitas, pasta salad, soup or stir fry.

GET CHOPPING

Pick a recipe that requires a lot of chopping of a variety of ingredients. Have one cutting board and one knife per kid. Show kids how to safely carry and **hold a knife**. Demonstrate the rocking motion by keeping the knife tip down on the cutting board while cutting. Explain that this position gives the best power. Have kids first practice the cutting motion without food. Then practice on all different kinds of ingredients.

Medium-sized, softer, straight foods will be easier for younger and more inexperienced choppers. For round ingredients like carrots or potatoes, it's best to chop them in half first to create a flat surface. Explain that when cooking, smaller pieces of food will cook faster and most often, we want to cut food into similar size pieces so it will cook at the same rate.



TIPS

Try modelling the knife rules and chopping techniques by intentionally breaking them. Get kids to evaluate your skills with a thumbs up or thumbs down vote. Follow up with explanations why bad techniques can be unsafe.

If there's time, then try cutting in different ways: **chopped**, **sliced**, **diced**, **julienned**, **minced**.



SUGGESTED GARDEN ACTIVITY

A great way to introduce the garden is by doing a **Garden Scavenger Hunt**.



EXTRA RESOURCES

- Foodshare's guide to cooking and tasting has some excellent tips on how to get younger participants excited about food.
- The Ecology Action Centre's Facilitators Guide, although not specific to children and youth, is also a very helpful resource when planning to teach people about food.





Getting real about food

BACKGROUNDER FOR EDUCATORS

Pre-prepared, processed, and other convenience foods have become normalized food choices; in fact, in 2004, 48% of calories consumed by Canadians came from highly processed foods. While some processing of whole foods or ingredients is necessary, highly processed foods have very little nutritional value and high amounts of added sugar, fat, salt, and additives that prevent food spoilage. In many cases, the nutrients have been removed to allow the processed food to last longer. And yet, convenience foods often come in misleading packaging that would make you believe that they are healthy.



LEARNING OBJECTIVES

Kids will gain a better understanding of what it means for a food to be healthy and learn to distinguish between whole foods, minimally processed foods and highly processed foods.



SPECIAL MATERIALS NEEDED

- Paper, crayons or markers for drawing
- Example foods ranging from whole foods to lightly processed to heavily processed
- Food Detective worksheet

(1)

SAMPLE TIMING AND FLOW

10 min Picture your Favourite Food

5-10 min Introduction to Whole

Foods & Food line-up

40 min Meal Preparation

15 min Food Detectives

25 min Garden Activity

15 min Meal Sharing

5 min Clean-up

ACTIVITIES

PICTURE YOUR FAVOURITE FOOD

As kids are arriving, ask them to draw a picture of their favourite food. (This can be used later as foods to add to the food line-up.).

WHAT IS HEALTHY FOOD?

There are lots of different aspects of what makes a food healthy or unhealthy, and one of these is how and to what level the food has been processed.

Ask: Does anyone knows what we mean by whole foods?

This is a different concept than taking a whole apple, for example, and calling it not "whole" after it's been cut in half. Whole foods are still in their original form (or very close) to the way they come from plants and animals. They are fresh foods! They are full of the nutrients our bodies need to be strong and healthy.

Ask: Does anyone knows what processed food means?

Processed foods are those that have been changed, sometimes a little and sometimes a lot, from their original form. There are different levels of processing: some foods have only been changed a little, like a whole grain loaf of bread, for example; and others like boxed macaroni and cheese and chicken nuggets have been changed a lot.

Name some foods and ask them whether they are whole or processed foods (e.g., apple, apple slices, apple juice, apple flavoured granola bar). As a group, contrast whole foods and processed foods—what are some ways to tell the difference? Almost every food you buy in a packet, box or tub is processed in some way. Many of these foods have been produced in factories.

FOOD LINE-UP

Display a variety of foods on a table. Ask participants to place the foods into a line-up of least to most processed.

Ask: What are some clues that help you determine this? Number of ingredients? Packaging? Why should we try to limit the amount of processed food we eat? What happens when food is overly processed?

Over-processing removes nutrients and adds excessive sugar, fat, and salt to foods. This makes it tricky, because adding all that fat, sugar and salt can make processed food taste really good, but it is actually a lot less healthy than whole foods.



FOOD DETECTIVES

Every type of food has a story, but for many foods that story is a mystery. Labels and packaging are good places to look for clues for your food's story.

Pass out Food Detective worksheet and have kids work in pairs or larger groups and write their answers on chart paper. Once groups have answered the questions about their foods, bring the group back together and support kids in placing the foods into the line-up of least to most processed food.

EXAMPLES

WHOLE FOOD	PROCESSED	
Tomato	Ketchup: added sugar and salt	
Green bean	Canned beans: Has a lot of added salt. Energy used during processing.	
Oatmeal	Flavoured instant oatmeal: added sugar, nutrients removed, packaging.	
Apple	Apple juice : while some might be pure many have added ingredients including lots of sugar.	

Time permitting, have kids place their Favourite Foods (their drawings from the start) along the processed food line up. Next, have kids draw a picture of a less processed version of their favourite food (Hint: what was one of the original ingredients?)



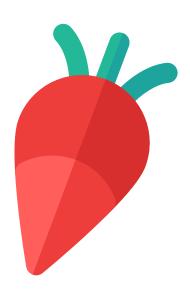
SUGGESTED GARDEN ACTIVITY

If you're starting your program in the spring or early summer, then starting seeds now will mean the kids will be able to watch their plants grow throughout the program. If it's not an appropriate time to start seeds, the **Seed Matching** activity is a good way to introduce seeds.



EXTRA RESOURCES

- Canada's Food Guide can help you choose food wisely
- Food Banks Canada has a selection of nutrition resources including: nutrition activity sheets for kids, 'Doing more with less', and 'Planning healthy family meals'.





Pick recipes that use whole ingredients like blueberry-bran muffins or homemade granola bars.



FOOD FUN FOR ALL!

When talking about processed foods, be aware that many people eat these foods, and for many kids, this will be the kind of food that is most readily available to them. We don't want to shame anyone for eating these foods. Avoid attaching moral judgements by calling foods "bad" and "good". Instead, focus on the idea that as much as possible, we want to be fueling our bodies and minds with foods that have the most quantity and variety of nutrients. This means replacing foods with fewer or little nutrients.



We know that eating a diet rich in fruits and vegetables is good for our health and can help in preventing certain types of cancer, reducing the risk of heart disease and the risk of obesity. However, most Canadians are still not eating enough fruits and vegetables. According to surveys, 70% of children aged 4 to 8 are eating fewer than the recommended 5 daily servings of fruits and vegetables. Increased familiarity with a variety of fruit and vegetables, in different shapes and colours and how to use them can encourage children and youth to include fruit and vegetables in their food choices.



LEARNING OBJECTIVES

To foster a willingness to try new foods through developing familiarity with a wide range of fruits and vegetables, as well as an increased understanding of the importance of fruits and vegetables for both human health and the environment.



SPECIAL MATERIALS NEEDED

- Veggie Cards
- Small prizes (optional)
- Plant Pictures



SAMPLE TIMING AND FLOW

15 min Let's Talk About Plants

15 min Plant Relay

30 min Garden Activity

40 min Meal Preparation

15 min Meal Sharing

5 min Clean-up

10 min Extra time: Salad & Wrap judging and awards

ACTIVITIES

LET'S TALK ABOUT PLANTS

In this session we're talking about the plants that we eat.

Ask: What foods would we have if we didn't have plants?

Based on the answers, trace each food item back to the source.

- Hamburgers the cows ate grass.
- Cake the sugar came from sugar cane and the flour came from wheat plants.
- Yogurt came from milk, which is from cows that ate grass.

Would we have any food without plants?! Explain how important plants are to give us energy and nutrients to keep our bodies healthy.

Describe that, just like humans have a head, a torso, arms, and legs, plants have different parts too. Use these **Plant Pictures** or real plant examples to show that all plants have roots, fruits, leaves and seeds. Which part we eat depends on the plant. Encourage group discussion.

Ask: How do you know that this beet is a root? Why do you think plants have roots? Why are seeds so small? What role do the leaves play in the growth of plant?

Also point out that we commonly know certain plants as being vegetables, but technically, they are the fruit of the plant. Can anyone name one of these? Answer: tomatoes, peppers, string beans, squash, cucumbers. Point out that many of the foods we eat are made of plant seeds, such as flours made from grains like wheat. Other examples are rice, corn, nuts, beans, lentils and peanuts. Review the purpose of each part of the plant:

- Roots helps anchor the plant in the ground, absorb water and nutrients from soil
- Fruits a home for seeds, attracts animals
- Leaves catch the sun and turn it into food for the plant
- Seeds for replanting and re-growth

To refresh your memory and see a full list of food items organized by plant part **click here**.



PLANT PART RELAY

This activity is best done outdoors. Set up Plant Part category bins (like kitchen bowls!) in a line. Get them to line up about 15 meters away.

Split the group into two teams (of around 7 or 8), but highlight that the teams will not be competing against each other. They'll be using the same bins.

Have one session leader stand at the start line with the kids. They will be in charge of handing out the veggie cards. Have another session leader stand at the other end to help kids choose the right plant category.

Each individual runner/hopper has to sort the produce item they are given into the correct Plant Part bin before coming back and tagging the next person in line. That person then gets their vegetable or fruit from the session leader. They should have an idea of where it goes, but if not, their team can prompt them.

To make things trickier after the first round or if space is limited, have participants hop, skip or jump instead of run.

THE VEGGIE CHALLENGE

Host a friendly competition to make wraps or salads. Create challenges like:

- Must contain one of each of the plant parts
- Must contain veggies of at least 4 different colours
- Must contain at least 4 ingredients local to Nova Scotia.

Bring a "judge" (teacher, volunteer). You can award winners (and honourable mentions) for different categories, such as: appearance, adherence to criteria, taste, imagination, and overall "wow" factor.



EXTRA RESOURCES

- The Edible Schoolyard Project provides a platform for food and garden programs from around the world to share resources and ideas.
- This 12 part Garden Workshop Curriculum by the Ecology Action Centre is a useful tool for any new gardener. Filled with instructions and group activities on how to plan, plant, and care for a garden.
- The Froogie App helps track daily servings of fruit and vegetables in a fun and interactive way!



RECIPE **SUGGESTIONS**

Choose vegetable heavy recipes like vegetable wraps or salads. Get tasting as many vegetables as you can. Encourage kids to taste them both fresh and cooked.



SUGGESTED GARDEN ACTIVITY

Continue exploring the plants we eat with the Name That Plant! activity.



FOOD FUN FOR ALL!

Several activities in this program are quite physically active, such as the relay race, which may be challenging for some. To ensure that everyone is included, try modifying the activity level (e.g., speed walking instead of running or have the race on a wheelchair friendly floor) or find other meaningful roles (e.g., time keeper, judge, relay course designer).



Sugar, sugar everywhere

BACKGROUNDER FOR EDUCATORS

Sugar exists in many foods we eat, either naturally occurring (as in whole fruits) or as added sugar (as in the syrup that canned fruits are packed in). Though naturally occurring sugars in fruit, vegetables, and milk are part of a healthy diet, consuming too much sugar is associated with multiple health risks such as heart disease, stroke, obesity, diabetes, and cavities. The World Health Organization recommends a maximum daily intake of added sugar should only be 5% of our daily caloric intake. This equals about 6 teaspoons for kids; Canadian children consume more than five times the recommended amount (with adults consuming the equivalent of almost 40 kg a year). Over two thirds of packaged and highly processed foods contain added sugars, including snacks and beverages. Look for these names on the labels: molasses, barley malt, corn syrup, evaporated cane juice, glucose, fructose, dextrose, maltodextrin, maltose, or sucrose. Many of these products are marketed specifically to children via cartoons, colourful branding, and elaborate packaging, with the sugar industry resisting efforts to reduce sugar intake.



LEARNING OBJECTIVES

Kids will gain a greater awareness of just how much "hidden" sugar is in many foods and drinks, and discover snack alternatives with less sugar.



SPECIAL MATERIALS NEEDED

- 4 large bowls
- 2 sets of measuring spoons
- 2 liquid measuring cups
- A collection of popular drink containers (e.g., pop, energy drink, sports drink, iced tea, fruit flavored drink, chocolate milk, 100% unsweetened juice) and snack or candy packaging.
- A large bag of granulated sugar
- Clear glasses
- Enough teaspoons for your group



SAMPLE TIMING AND FLOW

10 min Sugary Facts

10 min Measuring Relay Race

20 min Sugar Shock

40 min Meal Preparation

20 min Garden Activity

15 min Meal Sharing

5 min Clean-up

*One teaspoon of sugar is equal to 4 grams of sugar

ACTIVITIES

SUGARY FACTS

Get your group warmed up by seeing what they know. Split the group in two teams and have them "buzz in" if they know the answer.

Q: From which food or drink source do people get most of their sugar?

A: Pop and sugary drinks are very high in sugar and have little to no nutrients^x

Q: An 8 year-old should have a maximum of how many teaspoons of sugar (from foods containing added sugar) a day?
6 tsp, 8 tsp or 12 tsp?

A: 6 teaspoons^{xi}

Q: How many teaspoons of sugar are in a regular (355 ml) can of pop?

A: About 10 teaspoons

Q: Average amount of sugar teenage boys in Canada consume dailv?

A: 41 teaspoonsxii

Q: When sugar is added to food, it must be listed on the ingredients label, but added sugar comes in many different forms with different names, which can make it hard to find on the label. How many different names of sugar can be listed on food labels?

A: 152 different names!**iii Bonus points if they know some of the common examples: sucrose, high-fructose corn syrup, maltose and dextrose.

Q: Sugar is produced from sugar cane and what else?

A: Sugar beets



MEASURING RELAY RACE

Brush up on your measuring skills with this fun relay race.

What you'll need:

- 4 Large bowls
- 2 sets of measuring spoons
- 2 liquid measuring cups

What to do:

- Practice reading the fractions on both the measuring cups and measuring spoons.
- Place two bowls full of water at one end of the table with the measuring tools. Place the two empty bowls at the other end of the table.
- Divide kids into two groups and have them line up next to one another along the length of the table.
- The leader will read off a series of measurements written on paper so the kids can practice reading them too. The child closest to the water bowl will have to use the appropriate tool to measure the correct amount of water and then pass the water down the line. Careful, don't spill! The goal is to empty your water bowl before the other team (and/or be the most exact team).
- Have kids rotate between each measurement to make sure everyone has the chance to measure.

SUGAR SHOCK

This measuring activity provides a shocking visual of just how much sugar is in many of many of our drinks and foods.

What you'll need:

- A collection of popular drink containers (e.g., pop, energy drink, sports drink, iced tea, fruit flavoured drink, chocolate milk, 100% unsweetened juice) and snack or candy packaging
- A large bag of granulated sugar
- Clear glasses
- Enough teaspoons for your group

What to do:

- Have a collection of drink containers and food wrappers displayed on the table
- Ask the group to guess and put the drinks and food in order from most to least amount of sugar. Take a picture to remember the order.
- Ask each kid to choose a package and look up the amount of sugar in their item.
- Then, using the teaspoons, measure the amount of sugar in each item into a clear glass (make sure your glasses are the same size and shape for comparison).
- Compare your items. Line up each item, as well as their glass of measured sugar. How does this line up compare to your original prediction?
- Also measure out the recommended daily intake and compare this glass to the rest

Ask: What surprised you the most and why? Do you think you have more sugar than the daily recommended amount? What are some things we can drink and eat instead of sugary drinks and snacks?



Pick snacks light in sugar like smoothies, kale chips or beet muffins.



SUGGESTED GARDEN ACTIVITY

When your taste buds aren't being overwhelmed by sugar, you'll actually be able to taste more of food's other ingredients! This is good week to introduce and start working on an herb spiral or play the Follow Your Noseherb guessing game.



FOOD FUN FOR ALL!

Know your kids. It's important to go beyond knowing who has an allergy to really get to know each child. This helps you to be aware of who may need extra help with reading, who does better in a quieter group, or who needs to be kept busy. Make sure everyone on your team (volunteers!) are also made aware.



EXTRA RESOURCES

- Discover ways to sweeten food without sugar
- Countries like Mexico, the U.K. and some areas of the United States have been experimenting taxing sugar-sweetened drinks with the hope that by reducing consumption of these drinks they can reduce obesity rates.

The average distance food travels from farm to store (known as food miles) has increased significantly over the last few decades—now 8,000km!xiv While there are some benefits to importing food, such as greater access to produce throughout the year, there are many hidden costs to this approach. Foods that travel long distances are often harvested before they are fully ripe and lose nutritional value over time.xv Purchasing imported foods requires a longer supply chain, with the producers of imported products often receiving less compensation than if they sold their products more directly to consumers. The long distance transportation of food contributes to climate change and certain farming and fishing methods have negative environmental impacts. Purchasing food locally supports local and regional economies. There are also social benefits of purchasing local food, such as fostering relationships between farmers and consumers, maintaining farming communities, and transferring agriculture knowledge to the next generation.



LEARNING OBJECTIVES

Kids will gain a better understanding of our current food system and what a more local food system looks like.



SPECIAL MATERIALS NEEDED

- World map and stickers
- Foods with labels originating from a variety of places
- Crayons and paper
- Props for roles: bandana, "pilot" and "truck driver" hats, tie, apron, play money and coins.



SAMPLE TIMING AND FLOW

10 min My Food Map

15 min Where is our Food Coming From?

15 min The Story of Tommy the Tomato

40 min Meal Preparation

25 min Garden Activity

15 min Meal Sharing

5 min Clean-up

ACTIVITIES

MY FOOD MAP

Get kids to draw a picture of where they think food comes from.

Ask: Who produces it? Where? How does it get here? Who brings it?

WHERE IS OUR FOOD COMING FROM?

Start by asking kids if they know what we might mean when food is "local". What are some foods that are produced locally in your region? Allow this question to flow into a deeper discussion about where food comes from.

Using a world map, explore where items in a sample bag of groceries comes from. Get kids to reach into the bag and read the label to find where the food item comes from. Then find that place on the map (mark with a sticker). Point out where your home is in relation. Be aware that many processed foods have labelling indicating where it was packaged but not the original source of ingredients. Point out the difference between these types of labels to those on whole foods.

Some example food for your grocery bag (information comes from **Food Miles Report**, using Nova Scotia data.) Not in Nova Scotia? Adapt the details below to your local context.

FOOD ITEM	DETAILS	
Imported apple	Nova Scotia produces roughly 4 times the amount of apples then we eat. Yet, we import about 50% of the apples we eat. The imported apples travel an average of 7,443 km to reach us.	
Banana	Besides apples, the most commonly eaten fruits are bananas, melons and oranges. While Nova Scotia doesn't produce many (or any) of these fruits, we are world leaders in blueberry production, which aren't among one of our most commonly eaten fruits.	
Flour	This comes from wheat and other grains that are most often grown on the Prairies.	
Veggies	A surprisingly small proportion of the vegetables we eat in Nova Scotia are actually grown here. We produce roughly enough (or more) cabbage, carrots, onions, potatoes and turnips to supply our needs, but many are still imported. Depending on the time of year, they may be locally sourced.	
Sugar	What's an example of a local alternative? Honey? Maple syrup?	
Pepperoni	Presently, most of the beef you find in the grocery stores is imported.	
Milk	Produced on farms around Nova Scotia.	



Discussion

- In Nova Scotia, 16 % (in 2013)*vi of the food dollars we spend are going back to our farmers. Explain to kids that, on average, if you have 10 items in a grocery bag, then just one item would be from Nova Scotia. How do you think this has changed from when your grandparents were kids?
- Ask kids if they know common fruits and vegetables grown in Nova Scotia?

Ask: Why do we get food from all over the world?

Encourage discussion and consider the following:

- Season dependent; so we have fruits and vegetables during the winter.
- Cultural preferences for familiar foods from home.
- Dependent on the success of the harvest.
- Trade economics! (Break this one down with the following activity)

HOW DOES OUR FOOD GET HERE?

Introduce Tommy, the traveling tomato from California (depending on the season, Tommy can be Abby the apple from Argentina). Explain that Tommy has to travel very far to get here and that many people have helped him along the way. Encourage kids to brainstorm all the different people and jobs that were needed to get Tommy here from California: farmer, company owner (distributer), pilot, truck driver, warehouse owner (who owns the space where the tomato ripens and turns red), grocery store owner, consumer. Then, bring the story to life. Choose kids to play the different roles in the chain. Give them a prop to represent their role (e.g., straw hat for farmer). Once you've assigned the roles, arrange them in the correct order.

Hand the consumer a paper dollar and have extra coins on hand. "If the consumer pays a dollar for the tomato, then how much gets back to the farmer?" Get kids to pass the dollar down the line. Each time it gets passed, the person gets to keep a little (e.g., pilot gets to keep a quarter dollar, business man another quarter). By the time it gets to the farmer, there's usually only 5 cents left.

Ask the farmer how they feel. Do they feel the amount they received is a fair exchange for their time to grow this tomato? Ask participants if they can think of a way to make this process fairer. What about if this tomato were grown in Nova Scotia; would that change the number of people in the chain? What if the farmer drives his/her tomatoes to market themselves, then how much of the dollar does he receive? You can get the consumer to pay their dollar to the farmers, so the kids can see the difference.

Ask: What are the differences between these two food chains or food systems. Which one takes more energy? What effects does each system have on the people and environment? What are the health benefits of knowing how your food was grown?



EXTRA RESOURCES

- The Ecology Action Centre's **Food Miles Report** is packed with well-researched information on the effects of a more local food economy.
- The **Adventures in Local Food** blog has lots of recipes and information on eating seasonally and preserving foods.
- The Falls Brook Centre has more activities (appropriate for older children and youth) that encourage deeper thought on where food comes from.



Try making recipes with local ingredients. Local availability will change throughout the seasons. Point out to your group where the ingredients are being produced. *Ideas: Pizza, Salad, Squash soup.*



Compost is a fundamental part of fertile soil and productive gardens.
Introduce the basics by doing a composting activity.



FOOD FUN FOR ALL!

Canned peas vs. fresh snap peas? Local or not local? Organic or affordable? There are so many options when choosing food it can be overwhelming. What we want to strive for is to consider how far food travels, whether it's healthy, who grew or caught it, whether it's also good for the planet and whether this food is accessible to participants in their daily lives. Admittedly, it's hard to check off all these criteria and it becomes a balancing act. When tasting new foods that may be not available or affordable for group participants, explain that this might be an occasional food or special treat.



Canadian children and youth are exposed to more food marketing than ever before, and over 90% of products advertised during children's TV programming are high in sugar, salt or fat. Vii Unhealthy foods and beverages are also being advertised on kids' websites, video games, magazines, radio, and packaging. The majority of food advertisements targeting children in Canada are for pre-prepared meals, restaurants, and grain products such as white bread and sugary cereals; by contrast, whole fruits and vegetables are rarely advertised at all. Viii The impact of marketing unhealthy food to children has been related to high levels of childhood obesity, which has tripled since 1981 with almost 1 in 3 children being overweight or obese. Currently in Canada, the marketing of food and beverages to children is largely unregulated, however in Quebec, a ban on unhealthy food and beverage advertisements that target children has resulted in fewer children eating fast food.



LEARNING OBJECTIVES

Kids will learn that advertising is often misleading and explore the power of corporate food brands in our society.



SPECIAL MATERIALS NEEDED

- · Pencils, markers
- Grocery flyers, food cards
- Examples of food advertising
- Sharing Food Traditions questionnaire (in preparation for session 7)



SAMPLE TIMING AND FLOW

10 min Name that Brand

10 min Kids are the Target

20 min Getting Excited About the Good Stuff

25 min Garden Activity

40 min Meal Preparation

15 min Meal Sharing

5 min Clean-up

Before this session ends, handout the "Sharing Food Traditions" questionnaire for the next session

ACTIVITIES

NAME THAT BRAND

What you'll need:

In preparation for this session, collect a series of flyers that are advertising brand name foods, as well as menus from fast foods restaurants. Use post-it notes or black permanent marker to cover the name of the brand and part of their logo, leaving just enough to give a hint as to whose logo it might be. Also collect a number of pictures of vegetables, fruits, grains, kitchen tools from a grocery flyer, or use our **food cards**. Try to find some less common foods and cooking tools. These should be individually cut out.

What to do:

Begin this activity by explaining to the group that the challenge is to "Name that brand." Instruct kids to raise their hands if they think they know the answer. As you make your way through the different brands and foods, keep a mental tally of which items kids recognize correctly. In our experience, fast food logos and common convenience foods are most likely to be recognized.

After you've quizzed the group on all the brands and foods ask: which brands or foods were most easily recognized?

Encourage a discussion around why we are able to recognize brand name logos so easily (even when they are partially hidden).

Suggested Dialogue:

Why were the logos, brands and convenience foods more easily identified?

- Very visible: TV, billboards, internet ads, strategic placement on store shelves
- Eat these foods most often

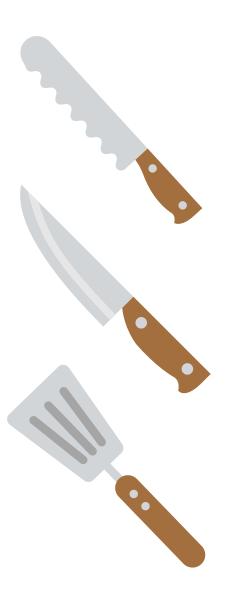
Food companies spend millions on advertisement. Why is it so important that people recognize their logos?

- Choose foods we recognize, and know what to expect
- Sometimes we want to eat foods because everyone else is (peer pressure)





Extend the branding theme to the garden and make your own garden signs by painting rocks.



Why can it be more difficult to recognize the "whole foods" and the tools needed to prepare whole foods?

- We may choose pre-prepared foods more often compared to cooking from scratch
- Pre-prepared foods are designed to be convenient for cooking and cleanup, which means they don't require many kitchen tools. These may be less used and less familiar.

Food companies spend millions directing their advertising to kids your age. Do you think you're being affected by their ads? Can you think of ways they influence what you eat?

- More likely to purchase brands you recognize
- Incentives like toys, access codes to online video games

KIDS ARE THE TARGET

Direct your conversation towards food advertising focused on kids. Here are some questions to guide your discussion.

How much do you think fast food restaurants spend yearly on advertising to children and youth? A) 10 million B) 100 million C) over 1 billion?

 In 2012, US fast food restaurants spent \$4.6 billion on advertising to children and teens.xxi

*Note: we are using American statistics since our Canadian government doesn't require food companies to report on their child-targeted advertising spending.

What kinds of food do you most remember seeing ads for? Are they healthy foods?

- Approximately 95% of food ads are for unhealthy foods.
- Snacks and candy > cereal > fast foods > dairy > fruit juices. No fruits and vegetables!

What are some of the tricky ways that advertisers are trying to get kids attention? Not just flashy colours, they are getting really high tech.

- Attractive packaging
- Strategic placement on shelves (at kids' height)
- Sponsoring kids' camps or sports teams
- Product placement in movies and TV shows
- Ads on Facebook, and other social media that encourage kids to share, join, invite friends.
- Many food and beverage companies create branded video games, quizzes and contest.

Why kids?

- Brand Loyalty: Advertisers know that if they get children to want to buy their product from a young age, these kids are more likely to buy their product for the rest of their lives.
- Children influence their parents' purchases. Children influence more than \$1 trillion of spending in North America per year. Advertisers call this "pester power."

Who here has nagged their parents to buy something for them? Did it work?

 Food companies know this, so they are trying to make their food look as good as possible to YOU so that you help them sell their foods and drinks to your parents.



GETTING EXCITED ABOUT THE GOOD STUFF

Imagine if the same amount of time, effort and money were put towards advertising healthy food. As a group, brainstorm strategies not to fall victim of advertising.

Inspect those packages: What are they doing to make you want their foods? What are they trying to hide from you? Are they targeting you especially?

Expensive is not always best: Often you'll pay more for certain brands of food or drink, but they won't always be better (in taste, texture or nutrition).

Because WHO said so? Just because a celebrity or cartoon or movie character is featured on a package does not mean they actually like or eat this food. They are being paid lots of money to do a job!

Trust your taste buds: Don't let others influence your food choices just because something is "cool" or "trendy."

Scrap the Package! Avoid foods with packaging. Shop on the outside of the grocery store; this is where the less processed food can be found.

Ask: What if vegetables and fruits were advertised in similar ways? How can we get vegetable snacks to look more appealing to kids?

Here are two examples of veggies ads: Broccoli vs. Kale and Baby Carrots

Now that we know that unhealthy snacks are the main foods that are being advertised to kids, then how can we change this? One way is to learn how to make your own healthy and delicious snacks at home.

Split the group into teams. Introduce the challenge: Make a healthy snack and come up with the best way to sell your snack to the group. Encourage participants to work together and strategize the best way to sell it. Create a paper ad with flashy colours, association with celebrities/TV shows/movies, fancy packaging, catchy slogan or improvise a TV commercial. After making your ads and preparing your snacks, ask the different teams to present their healthy snack ad to the whole group.



EXTRA RESOURCES

- Visit the Stop Marketing to Kids Coalition and educate yourself on the realities of food marketing that targets children.
- Watch this Food MythBusters video and learn more on the sneaky tactics of food marketers.





RECIPE SUGGESTIONS

Healthy snacks that can be the subject of the "healthy ads" described to the left. Try hummus, kale chips and green smoothies.



FOOD FUN FOR ALL!

Be sensitive to group dynamics. Friends are great, but being able to connect and get along with different types of people is an important skill and also creates a more positive group dynamic. Encourage group mixing and different partnering. Break down barriers with silly games (get them laughing!), "Get to know you" icebreaker and shared group goals or challenges.

Much of the knowledge and practices that inform cooking and eating are shared through cultural and family traditions. Traditions can influence how and when food is prepared, which foods are selected, the emotional connection to certain meals, and our personal and cultural identities. Research has shown that cooking skills—such as transforming raw ingredients into complete, culturally appropriate, and nutritious meals—are often transferred by observing parents cooking within the home environment. Furthermore, as families move away from traditional cooking and food preparation methods towards pre-prepared foods, this skill transfer is reduced.**xiii In many cultures, food and eating are valued as major social activities, community bonding practices and celebrations.**xiii



LEARNING OBJECTIVES

Kids will learn more from their elders and peers about what food means to them, along with the culture and traditions surrounding food in their families.



SPECIAL MATERIALS NEEDED

- Markers/pencils/crayons/ pens
- Large sheets of paper (Mural size)
- My Food Memory, Family Food Tradition Interview, circle diagram



SAMPLE TIMING AND FLOW

10 min My Food Memory

10 min Learning from Parents and Elders

15 min Food in the Family

35 min Meal Preparation

15 min Food Traditions Mural
Can be done during cooking
time following food preparation

20 min Garden Activity

10 min Meal Sharing

5 min Clean-up

Before: In the previous session, hand out Sharing Food Traditions questionnaire. Tell kids that they are to be detectives! They must find an older person in their life and ask them this series of questions about what their relationship to food was like when they were young.

ACTIVITIES

MY FOOD MEMORY

Pass around the **My Food Memory sheets** and ask kids to draw a picture or write a description of a memorable moment in their lives where food was involved. Who was there? What was the occasion? What food was being made, or eaten? What were colours, flavours, smells?

When everyone is finished, ask: Would anyone like to share their food memory with the group? Are you noticing any similarities between the different memories?

Explain that in today's session, we are going to look at food traditions and how our culture shapes how we interact with food.

Ask: Does anyone have any food traditions in their families?

Some of these rituals, or patterns, are things we do every day, such as a snack before bedtime, a certain treat for recess, or pancakes on the weekend. Other rituals we have are so automatic we don't even realize we're doing them, like certain meal times, table manners, setting the table, and grocery shopping.

Ask: When you think about supper-time, are there rituals or patterns that take place every day? What are they?

Food traditions and rituals go beyond our everyday. Food reminds us of our pasts, like family recipes and customs that have been passed down through generations. Food events play an important role in bringing us together and in celebrations. Events like Christmas dinner, an Indian wedding, Chinese New Year, all have particular foods associated with them.

Things never stay the same forever, and we are seeing many food traditions changing, too. For example foods from other cultures, such as sushi and tacos, have become increasingly popular. Some families might have a taco or sushi night now, whereas in the past they would have had chicken and potatoes.

Ask: Have you noticed any "new" food traditions appearing?



SHARING FOOD TRADITIONS, LEARNING FROM PARENTS AND ELDERS

This is a sharing activity, to review what kids found out from their Elders during the **Sharing Food Traditions questionnaire**. This sharing activity can be done between pairs or, for more rambunctious groups, try this version. For each question, have kids circulate in the group, surveying others and finding others with similar answers to their own. Keep track of the number of similar answers.

Open it up to a group discussion (if you started with partners or the game). If the group did not discover many differences, then ask them what kind of differences would exist if they were able to ask these questions of a family member who lived a hundred years ago. Write these differences down so all can see; we'll use them later.

FOOD IN THE FAMILY

Break participants up into pairs and pass out the Family Food Tradition Interview sheets, which they'll use to interview their partners. Have them discuss the questions together and write their answers on the paper within a circle diagram. The middle will show what traditions they both share, with their own traditions on each side. Explain to participants the importance of being respectful of other people and their cultures/rituals. Ask everyone to return to the circle and encourage pairs to share any interesting similarities or differences they found. What are the reasons for these similarities or differences?

FOOD TRADITIONS MURAL

Using a marker, divide a large piece of paper (e.g., mural paper) into two sections: "Then" and "Now". Set out colouring tools and encourage kids to draw a picture of something that has changed between "Then" and "Now." Use your list from the "Learning from Parents and Elders" activity to give the group ideas. Think about differences in what we eat and how we eat it. Consider differences in where our food is coming from.

This is a useful activity to fill the gaps while waiting for food to cook and a fun way to review the conversations from the day. For example, one participant drew a family sitting around a table in "Then" and a person eating sitting in front of a TV for "Now." Another participant drew an apple below "Then" and an orange and banana below "Now."



EXTRA RESOURCES

- The British Library has a collection of **food stories** that highlight changes in eating habits.
- The Ecology Action Centre has step-by-step Canning and Fermenting Toolkits. Recipes included!



Select recipes that highlight a cultural tradition of those in your group or perhaps something new from another culture! Think stuffed turkey, vegetable curry or chicken fajita or try preserving food through canning or fermenting!



SUGGESTED GARDEN **ACTIVITY**

If it's late summer or fall, then connect the theme of traditions by trying a seed saving activity. Although most people buy their seeds these days, in the past, people depended on saving their own seeds to be able to grow food the following season.



FOOD FUN FOR ALL!

Celebrate diversity. Highlight and celebrate the different cultures and food traditions in your group. For many kids, being different may bring unwanted attention, so avoid singling participants out if they don't volunteer. In groups where there may be less cultural diversity, consider inviting a special guest to share their culture and a recipe.



We think of maps as illustrating the relationship between people and land, however, maps are also used to mark relationships, cultural landmarks, and the history of a region. Food mapping is the process of plotting points on a map that relate to how a community grows, eats, accesses, and enjoys food. A food map can have a specific purpose, such as helping understand where and how people are accessing food or, more broadly, can include a variety of points that reflect how a community interacts with food.** Food mapping helps to visualize food systems and identify gaps. For example, food mapping may determine that there are no grocery stores within walking distance in a neighbourhood.



LEARNING OBJECTIVES

Kids will explore their local food system and identify food assets in their communities.



SPECIAL MATERIALS NEEDED

- Map of your region
- Food mapping symbols, or materials to make your own
- Food access symbols



SAMPLE TIMING AND FLOW

20 min Food Mapping

20 min Food Access

40 min Meal Preparation

20 min Garden Activity

15 min Meal Sharing

5 min Clean-up

ACTIVITIES

FOOD MAPPING

Ask: Does anyone have an idea of what we mean when we say food environment?

Our food environment consists of the foods that are available in our neighbourhoods, towns and schools. Food environments also includes the social environment, such as the messages we receive about food (e.g., food advertisements) and what we see others eating.

As a group, you're going to "Map your food community" by putting pictures of all the places where participants can get food on the map. Use a map of your town, city or school neighbourhood, or draw a rough map on a piece of chart paper with main streets and landmarks. Use our **food mapping symbols**, or post-its (or blank paper with tape) and create your own!

Examples of "food community locations" include: grocery store, corner store, breakfast programs, home, vending machines, restaurants, school, food bank, gardens, friends, markets, wild foraged foods, community kitchens.

Take a closer look at the food map you've created. Have the kids mark where they live on the map. Are many of the food community locations around their homes? Can they walk there? What kind of food can they buy within walking distance?



SUGGESTED GARDEN ACTIVITY

One of the keys to having a strong community is being able to work together and the willingness to help others. Continue this theme by trying a group-building activity. Or, in the autumn, pass on a gift to next year's gardeners and plant garlic.



GETTING HEALTHY FOOD

For advanced or older groups, you can take mapping one step further. Explain that despite food being available in lots of places; quite often our food environments don't always make eating healthy easy or the default choice. Certain factors can make it easier for us to make healthy food choices, while others can make it very difficult, such as: money, transportation, time, social support, knowledge and skills, access to a garden, and available kitchen space can all affect whether you are able to eat healthy food.

Using the **food access symbols** and the food graphics below as examples, ask kids to group factors in the "Help" category (things that make it easier for them and their families to eat healthy or supports) and the "Harder" category (things that make it more difficult or barriers). Some factors may appear in both categories – that's okay!

Ask: Why did you decide to put certain factors in the Help category and others in the Harder?

The pictures below show examples of factors that might help or make it harder to access food.







EXTRA RESOURCES

- To learn about Food Mapping, check out Food Matters Manitoba Food Mapping Toolkit and Food Secure Canada's Food Mapping Resource (which has a section on Food Mapping with kids).
- A natural extension of a food mapping is diving deeper into the topic of food justice and empowering young people to be agents of social change. Create an account on the Pod Knowledge Exchange and gain full access to the Stop's Sustainable Food Systems Guide that explores these themes.



Make a soup based on the **Stone Soup story**. This story talks about the importance of sharing food, so everyone has something to eat. Try making a connection between factors that help and make it harder for us to get food in our communities to the important role people and community play so no one goes hungry. Having a strong community means being able to help each other, learn from one another and work together.



TIP

To shorten the activity, try using "dotmocracy". Create two identical sheets, one for "Helps" (or supports) and one for "Harder" (or barriers). Give each participant three stickers and have them "vote" on which factors on each sheet are most significant.



FOOD FUN FOR ALL!

Roles around food have a long history of gender biases and we want to be careful to avoid them. Check you assumptions and be mindful of how you talk about cooking at home. For example, avoid only referring to just mom cooking, but include dad, too! Try to have clean-up duties, like washing and drying dishes and removing compost, recycling and garbage, shared equally by everyone.

The Ecology Action Centre's food work





WHO WE ARE

Since 1971, the Ecology Action Centre (EAC) has been working to build a more sustainable Nova Scotia. The EAC's Our Food Project aims to build a healthier, more just and sustainable food systems by strengthening communities' relationship with food, including creating positive food environments. Positive food environments are the physical and social spaces that help make it easier to grow, sell, and eat good food. We work at the individual, community and systemic level to increase the availability of nutritious food as well as our access to it. In doing so, we actively involve people in the development of more localized food systems.

The *Plants to Plates* program is the result of over five years of program development and educating kids about how to grow, cook and choose foods. We've found this program to be very versatile and have used it in programs across Nova Scotia, with kids for ages 5 - 18 and in different settings, such as after-school programs and summer camps.

CONTACT

ourfood@ecologyaction.ca @ourfoodproject ecologyaction.ca/ourfood



CREDITS

This guide was developed by Georgia McNeil, Food Program Coordinator, Ecology Action Centre

Photo credits:

All photos in this guide were taken by Georgia McNeil, with the exception of the following: Cover, bottom right, Our Food Project volunteer Page 3, bottom, Our Food Project Staff Page 26, top right, Miranda Cobb Page 27, top left, Marla Macleod Page 31, bottom, Our Food Project Staff

Special Thanks to:

Jen Organ, Jamie Serran, Claire McNeil and Satya Ramen for proof reading and editing support

Gabby Mills for support in developing *Background* for *Educators*

Dean Gallant, Pinwheel Communication Design, for design and layout

The *Plants to Plates* guide was developed with support from **Community Food Centres Canada** with funding from **the Lawson Foundation**.





Appendix A: Garden activities



GARDEN WELCOME ACTIVITIES

- 1. Scavenger hunt
- 2. Name that plant
- 3. Mystery of the senses

GROUP BUILDING ACTIVITIES

- 4. Herb spiral
- 5. Raised bed and coldframe construction

SEASONAL ACTIVITIES

- 6. Seed starting (spring)
- 7. Seed saving (late summer/fall)
- 8. Planting garlic (fall)
- 9. Harvesting

MORE GARDEN ACTIVITIES!

- 10. Seed matching game
- 11. Follow your nose-herb guessing game
- 12. Rock garden signs
- 13. Composting



GARDEN WELCOME ACTIVITIES

1. Scavenger hunt

A fun way to get to know a new space. You can customize your scavenger hunt to suit what you have in your garden. After kids complete the scavenger hunt, tour around as a group to review their answers. Find a scavenger hunt activity sheet **here**.

2. Name that plant

Slightly more advanced than a scavenger hunt, kids match plant names on their sheet with numbered stakes placed next to mystery plants (find Name that Plant activity sheet **here**). Before beginning this activity, try reviewing with a few **plant pictures**.

3. Mystery of the senses

This activity gets kids using their different senses to become acquainted with a variety of fruits and vegetables. This matching activity can be done inside and at any time of year, with this **activity sheet**.

Before you start:

- Set up stations spread out around a room.
- Taste/feel/smell stations should have foods put into separate brown paper bag to hide their identity.
- Smelling stations: item should be cut in half and paper bag should have small holes in it.
- For mystery taste, get kids to use blindfolds.

STATIONS	SENSE	MYSTERY FOOD ITEMS
Station 1	Smell	Apple vs. Pear
Station 2	Feel	Carrot vs. Parsnip
Station 3	Smell	Garlic
Station 4	Taste	Cucumber while holding nose closed.
Station 5	See	Match the squash variety with its name (written on pieces of paper). Try butternut, buttercup and spaghetti squashes
Station 6	Feel	Beet
Station 7	See and Taste	Apple matching game. Match the apple name (written on piece of paper) by looking at and tasting pieces of apple. Try: McIntosh, Granny Smith, Cortland and Russet apples.

What to do:

Using the *Mystery of the Senses* Activity Sheet, get kids to cycle through the stations and make guesses on what they are smelling, tasting, feeling and seeing.

GROUP BUILDING ACTIVITIES

4. Herb spiral

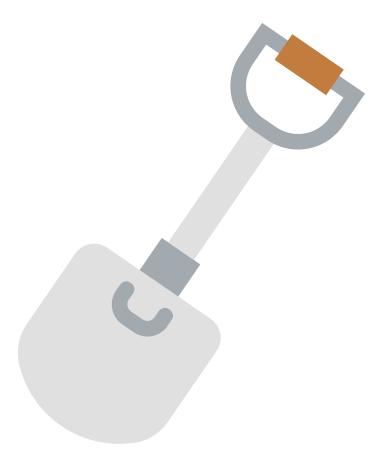
An herb spiral is a beautiful, aromatic and functional way to accommodate many plants in one small space. Because of their spiral design, they create microclimates that suit the various needs of the herbs.

This activity combines learning about herbs with a group-building project and requires you to gather the necessary materials beforehand. For more details on how to make an herb spiral, **refer to this blog post**.

5. Raised bed and coldframe construction

Light construction activities can be very nice team builders for older kids. Raised beds are a simple design, and boards can be cut to length beforehand. Raised beds are a good option for areas with poor soil fertility. You can find many designs online, but remember that you'll need to be able reach across the box for harvesting. A 4'x8' box is a common size. Avoid using pressure treated wood for growing food; the chemicals used in the treatment aren't safe. Try naturally rot-resistant woods like cedar or tamarack instead.

Coldframes are similar to raised beds but with a glass or plastic lid on top. They allow you to extend your growing season by protecting plants in early spring and late fall from frost. These are more complicated to build, and you will need more time. Read more about coldframes and how to build them on the **Adventures in Local Food blog**.



SEASONAL ACTIVITIES

6. Seed starting (spring)

Get your hands dirty with a seed starting activity! Generally, most seeds started indoors are the long to mature-cold sensitive types, like tomatoes. Consult a growing calendar for your area to see when in the spring seeds should be started. For all the details on how to run a seed starting activity and care for growing seedlings, check out this **Seed Saving resource**.

7. Seed saving (late summer/fall)

Start by asking: "Where do seeds grow?". Tour the garden looking where the seeds grow on each plant, starting with the obvious: beans, peas, sunflower. Explore how different plants grow their seeds in different ways. For a very thorough description on how to save seeds, review Seeds of Diversity Seed Simple Seed Saving Instructions. For fun and informative seed saving activities, check out the Green Thumbs at School Guide (page 44).

8. Planting garlic (fall)

Planting garlic is a rare *planting* activity that you can do in the fall. Typically, garlic is planted about three weeks before the ground freezes. Explain that garlic is a bulb and has a very long life cycle. The garlic we plant now will be ready next summer. To plant garlic:

- Break the bulbs apart into separate cloves. With the skin on, insert the cloves point up, root end down at a few inches into the ground, six inches apart in the row. Cover with soil.
- Cover with about four inches of mulch (straw, hay, grass clippings) to protect the garlic from freezing temperatures during the winter.

9. Harvesting

One of the easiest and fun garden activities you can do with kids is to harvest your crop. The best way to learn how and when to harvest vegetables is to become familiar with what your plants look like as they grow. Incorporate a garden walk into every session and point out changes. Keep track of when you planted, and the approximate days to maturity of your plants, so you know when they should be ready to pick. Take scissor and bags with you.

Before you pick, ask: Does it look like what you might see in the grocery store? Is it big enough? Right colour?

Next step, try it! If it doesn't taste quite right, then give it a few more days. After harvesting, store your veggies in a cool place as soon as possible.

MORE GARDEN ACTIVITIES!

10. Seed matching game

This game is an excellent introduction to seeds and a good accompaniment to seed starting or seed saving activities. Kids are shown that seeds come in all shapes and sizes and that you can often tell which vegetables are related by looking at their seeds! All the details, including handy pictures, can be found at **Green Thumbs at School Guide** (page 43).

11. Follow your nose-herb guessing game

Herbs are plants that we use in small amounts to flavour our food. Some herbs have a history of being used to treat illnesses and have health benefits. For more information, including a list of 11 common herbs and how to use them, check out this workshop by **Roots Cellars Rock** (page 56).

What you'll need: Collect handfuls of at least four or five herbs that are found in your garden. Using a hole punch, make holes in paper bags and label each bag with a number. Place the herbs in the bags. You should be able to smell them. Chopping or tearing them up increases their fragrance.

What to do: Start this activity by going over some common herbs and how we use them in cooking (e.g. basil tastes great in tomato sauces). Then tell your group they are going to use their noses to uncover the identity of a collection of mystery herbs. For younger or less experienced groups, keep herbs in garden labeled; remove the labels for an added challenge. Have the kids find and compare the smells of the mystery herbs to the same herbs they find growing in the garden. They can check back with the bagged herbs and the garden. If they are unable to guess even once seeing the plant, then give them hints from your introduction (e.g., this type of herb is used a lot in spaghetti sauce). If you don't have herbs in your garden, then have kids compare the smell of the mystery herbs to herbs from the kitchen.

12. Rock garden signs

Bring a little art into the garden. Garden rock signs are pretty, useful and fun to make. All you need are some smooth rocks (big enough for a name to be written on them), a variety of colours of non-toxic acrylic paint, paint brushes, and water for cleaning brushes. Have kids decorate and paint plant names on the rocks and then place the rocks in the garden as signs.

13. Composting

Compost is a fundamental component to having fertile soil and productive gardens. Making sure kids understand the basics is important for any garden program. If your area has roadside compost pickup, then look up what is allowed in the program and what is not. Be sure to distinguish between backyard composts and municipal composts. After going over what should and shouldn't be put into compost, try a compost activity like Food Share's **Compost Cake**, and for younger kids a **Compost Game Show** (both resources found towards bottom of webpage).

Appendix B: References

- https://www.canada.ca/en/health-canada/services/food-nutrition/healthy-eating/children/improving-cooking-food-preparationskills-synthesis-evidence-inform-program-policy-development-government-canada-2010.html
- http://www.kindercare.com/blog/kids-in-the-kitchen-learning-through-cooking
- https://www.ncbi.nlm.nih.gov/pubmed/27825941
- http://www.health.gov.on.ca/en/public/publications/pubhealth/init_report/favc.html
- http://www.heartandstroke.ca/-/media/pdf-files/canada/2017-position-statements/vegetableand-fruit-consumption-ps-eng.ashx
- https://www.heartandstroke.ca/get-healthy/healthy-eating/reduce-sugar
- https://beta.theglobeandmail.com/life/health-and-fitness/health/canadian-children-are-consuming-five-times-more-sugar-thanthey-should/article35207835/?ref=http://www.theglobeandmail.com&
- http://www.cbc.ca/news/health/lower-sugar-intake-to-less-than-5-of-daily-calories-who-says-1.2560639
- http://www.ctvnews.ca/health/two-thirds-of-packaged-foods-sold-in-canada-have-added-sugar-study-1.3238315
- http://www.albertahealthservices.ca/assets/info/nutrition/if-nfs-sugar-shocker-kit.pdf
- http://www.cbc.ca/news/health/lower-sugar-intake-to-less-than-5-of-daily-calories-who-says-1.2560639
- http://www.cbc.ca/news/health/children-added-sugar-intake-aha-1.3731277
- http://www.cbc.ca/news/health/sugar-canada-food-label-1.3899324
- https://foodsecurecanada.org/sites/foodsecurecanada.org/files/fm-july4-_final_long_report.pdf
- http://www.chgeharvard.org/sites/default/files/resources/local_nutrition.pdf
- https://www.novascotia.ca/nse/egspa/docs/EGSPA-2014-15-Progress-Report.pdf
- http://policyoptions.irpp.org/magazines/july-2017/targeting-kids-unhealthy-food-marketing/
- https://www.dietitians.ca/Downloads/Public/2010-DC-Advertising-to-Children-Position.aspx
- http://stopmarketingtokids.ca/the-health-context/
- http://globalnews.ca/news/209938/ad-bans-lead-to-less-fast-food-eating-in-quebec-study-says/
- http://fastfoodmarketing.org/fast_food_facts_in_brief.aspx
- https://www.canada.ca/en/health-canada/services/food-nutrition/healthy-eating/children/improving-cooking-food-preparationskills-synthesis-evidence-inform-program-policy-development-government-canada-2010.html
- xxiii. http://ideas.ted.com/what-americans-can-learn-from-other-food-cultures/
- xxiv. https://foodsecurecanada.org/sites/foodsecurecanada.org/files/Mapping_food_matters.pdf



THEOUR® Ecology Action Centre FOODPROJECT

ecologyaction.ca/plantstoplates