



Activity Book



HEALTHY
LIVING
INITIATIVE

My Plate
and the **Planet**

Acknowledgements

My Plate and the Planet offers youth across Canada the opportunity to learn about healthy living, the Zero Hunger United Nations Sustainable Development Goal, and the role we play in supporting food security. This unique learn-at-home program would not be possible without the dedicated support of our partners.

Healthy Living Initiative Partners



Activity Kit Partners



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4-H *at*
HOME

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You'll notice there are links to videos and other information throughout this activity guide. Please download the digital version of My Plate and the Planet for easy access to these links!

Download and learn more at 4-h-canada.ca/healthyliving

Introduction

Hello!

We're so excited that you are joining us for My Plate and the Planet, a 4-H at Home initiative for 4-H members, families, and clubs! This is an opportunity for you to learn about the food we eat and the world around us, participate in hands-on activities, and have some 4-H fun in your own home.


My Plate and the Planet is part of 4-H Canada's Healthy Living Initiative, launched in 2019 to support the well-being of 4-H youth members and volunteer leaders. It covers topics related to mental health, physical health, and foods, and provides resources to the 4-H community to get hands-on with these topics.


In this activity book and its accompanying activity kit, you will find everything you need to know about food security at home and around the world, along with hands-on activities, and the supplies to grow and make your own salad! By participating in this initiative, we hope that you will achieve these learning goals:

- Learn about food security and why it is an issue.
- Learn about the Sustainable Development Goals (SDGs) and their impact on the world.
- Identify actions you can take to address food security challenges at home, in your community, or around the world.
- Develop skills that help you grow your own food and have fun in the kitchen.
- Become a food security champion by creating awareness about this issue.

This activity kit contains:

- My Plate and the Planet Activity Book
- Supplies to grow your own salad, including:
 - > Seeds
 - > Trowel
 - > Planting pots
 - > Gardening gloves
 - > Growing calendar
 - > Plant markers
 - > Gift card to purchase soil
- Zero Hunger SDG magnet

This year, we wanted to expand the opportunity for youth to get involved in 4-H programming, by making this kit available across Canada to 4-H members, families, and even youth who aren't members yet! New to 4-H? Well, we are a national youth organization that supports youth to be responsible, caring, and contributing leaders, making positive change in their communities! We support hands-on learning for 23,500 youth members across Canada, with the support of 8,700 dedicated volunteer leaders. Check out 4-H's programs at  4-h-canada.ca.

We can't wait to see what you learn, grow, and eat! Take a minute to share it with us by tagging  [@4hcanada](#) on Instagram, Facebook, or Twitter.

The 4-H Canada Team

What are the Sustainable Development Goals?

The Sustainable Development Goals (SDGs) are a set of 17 global goals developed by the United Nations. The United Nations is an international organization that encourages nations to protect peace and security and work well together.

The SDGs are a call to global action, with the support of 193 nations, including Canada. Each nation is working to achieve these 17 goals which deal with poverty, health, education, and the environment.

When setting a goal, it is always valuable to look to the future. The United Nations did just this by asking, "What will it look like when these goals are achieved? How long will it take?" So, in 2015, the United Nations developed these goals and laid out what they wanted the world to look like in 2030.

Explore the 17 SDGs

You can learn more about what the 17 goals are at

 sustainabledevelopment.un.org

Food for Thought

What is a long-term goal you've achieved for yourself? Maybe it was to develop a new habit or achieve something that is important to you. How did you work toward that goal? Did you take little steps, or was it a big effort all at once? How did you know when you achieved it?

.....

.....

.....

Consider the SMART template for setting your own goals! (source: *abundancedefined.com*)

Specific S G	Measurable M O	Achievable A A	Realistic R L	Timely T S
What do you want to do?	How will you know when you've reached it?	Is it in your power to accomplish it?	Can you realistically achieve it?	When exactly do you want to accomplish it?

United Nations' Sustainable Development Goals:

SUSTAINABLE DEVELOPMENT GOALS



For My Plate and the Planet, we are focusing on SDG 2, Zero Hunger. This SDG has a goal to end hunger, achieve food security and improved nutrition, and promote sustainable agriculture.



END HUNGER, ACHIEVE FOOD SECURITY AND IMPROVED NUTRITION AND PROMOTE SUSTAINABLE AGRICULTURE

While there have been many positive steps forward to fix global hunger, the number of people who suffer from hunger has started to increase. Hunger is when people don't have access to nutritious food, don't get enough food, or don't have access to safe food. It is estimated that nearly 690 million people are hungry, or 8.9 percent of the world population – and this number is going up by 10 million people each year¹. If we don't all continue to work towards Zero Hunger as a global goal, the number of people affected by hunger could increase beyond 840 million by 2030.

Did you know?

Food insecurity and hunger are issues in Canada too. **4 million Canadians, including 1.4 million youth, struggle to access healthy food**². Explore this global issue, and travel the world to see where hunger exists on this interactive globe: www.fao.org/state-of-food-security-nutrition/2-1-1/en/

According to the World Food Programme – the food-assistance branch of the United Nations and the world’s largest humanitarian organization addressing hunger and promoting food security – **135 million people suffer from severe hunger because of conflicts, climate change, and poverty**³. While the global population continues to rise, we need to look for ways to increase the amount of food we can produce in a sustainable way, while also decreasing the amount of food wasted. This will reduce the number of people who are currently hungry in the world, and make sure that there is enough food for future generations!

Food for thought

Food deserts are areas where people can’t access or afford nutritious food in their communities. Like when we think of a real desert being empty and barren, these are areas where people have to travel long distances to get groceries or struggle to afford the high cost of food in the area. People living in food deserts can be at risk for food insecurity because not everyone has a vehicle or public transportation available to access nutritious food and even if there is food close by, the high cost may mean people are forced to choose cheaper, less nutritious food options.



Planting ideas

Want to learn even more? Check out this article about food security and global hunger:

 [fao.org/hunger/en](https://www.fao.org/hunger/en)

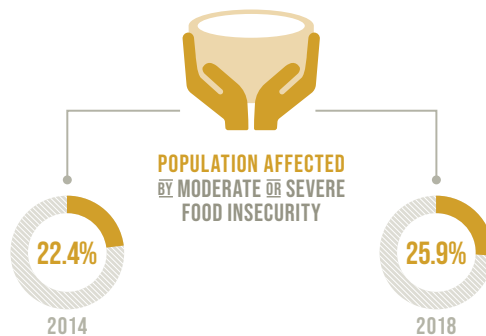
2 ZERO HUNGER



END HUNGER, ACHIEVE FOOD SECURITY AND IMPROVED NUTRITION AND PROMOTE SUSTAINABLE AGRICULTURE

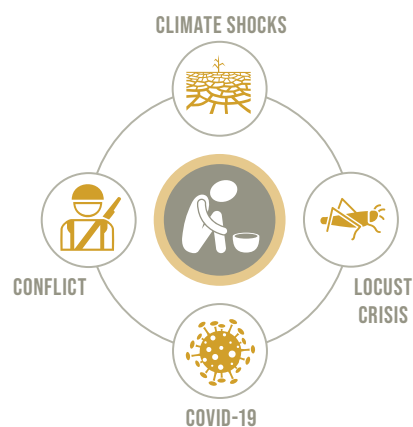
BEFORE COVID-19

FOOD INSECURITY WAS ALREADY ON THE RISE

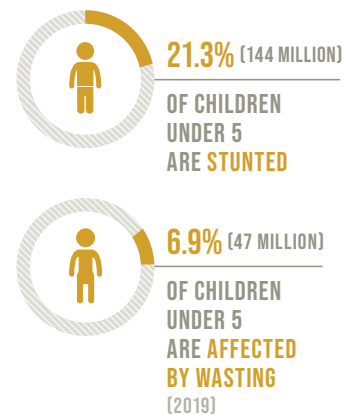


COVID-19 IMPLICATIONS

THE PANDEMIC IS AN ADDITIONAL THREAT TO FOOD SYSTEMS



STUNTING AND WASTING AMONG CHILDREN ARE LIKELY TO WORSEN



SMALL-SCALE FOOD PRODUCERS ARE HIT HARD BY THE CRISIS



COMPRISING 40%-85% OF ALL FOOD PRODUCERS IN DEVELOPING REGIONS



SUSTAINABLE DEVELOPMENT GOALS

ACCESS MORE DATA AND INFORMATION ON THE INDICATORS AT [HTTPS://UNSTATS.UN.ORG/SDGS/REPORT/2020/](https://unstats.un.org/sdgs/report/2020/)

Food Security 101

When learning about SDG 2 on Zero Hunger; food security, sovereignty (which means the freedom to make choices), and safety, you might notice a few terms that are used frequently.

But what do they mean?

Food security – when everyone has equal access to food that is nutritious and meets their dietary needs. Access not only means food that is close by, but also food that is affordable.

Food sovereignty – focuses on the food choices people have, including where their food comes from, the conditions of where it is produced, and how it is distributed. Is it safe for everyone involved? Is the production sustainable for the environment and the producers? Do we have strong food production and access in our own communities, provinces, and country? Within Canada, this also includes Indigenous communities and the rights people have to access healthy and culturally appropriate foods, produced sustainably through their own food and agriculture systems.

Food safety – deals with the safety of our food – including production, labelling, storage, and eating. In Canada, the Canadian Food Inspection Agency works to make sure our food safety regulations are some of the safest in the world⁴.

Unfortunately, **food insecurity** – which means not having access to secure, sovereign, and safe food – is an issue around the world, even here in Canada! Food insecurity refers to situations where people don't have reliable access to nutritious food. These are some of the reasons that food insecurity is rising:

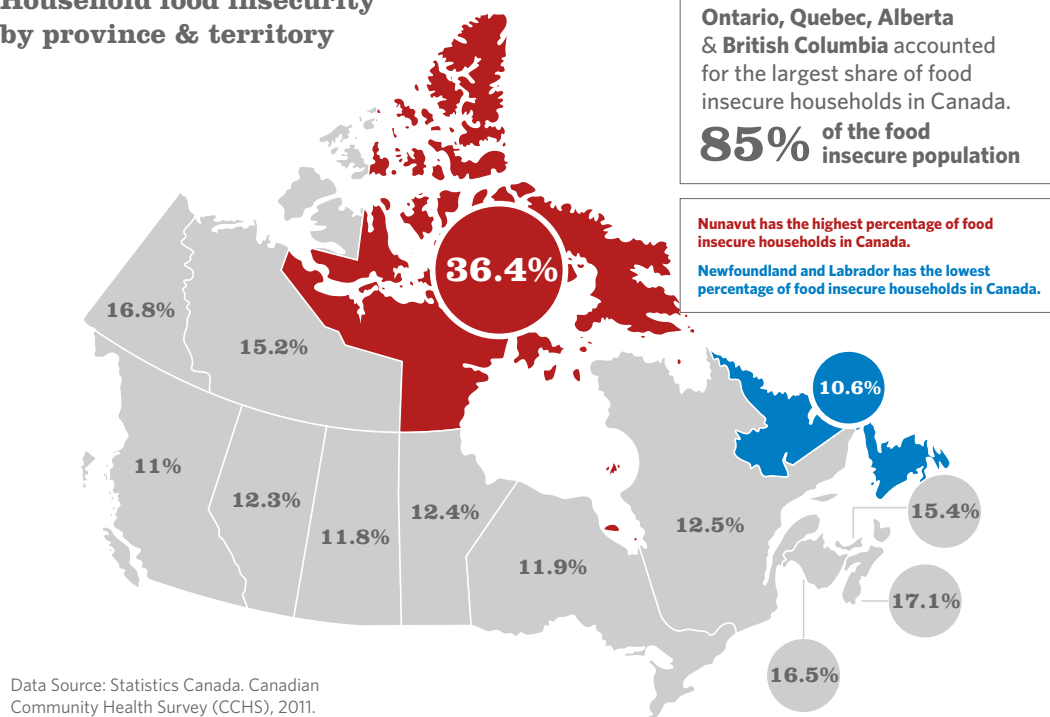
- There isn't enough food being produced
- Food that is produced is wasted
- People don't have enough money to buy food
- People don't have access to transportation to get to the places where food is sold

Over time, food insecurity can lead to hunger, malnutrition – a lack of proper nutrition – and in extreme cases, starvation.

As you start to learn more about food security and sovereignty, you are also increasing your **food literacy**! What does it mean to be food literate? Being food literate means having the skills and knowledge related to food that help you to be confident about your food choices! Did you think about where it came from, or the influence it can have on the local economy or the environment? How about what it looked or tasted like?



Household food insecurity by province & territory



Not only can food literacy help answer these kinds of questions about our food, but it can also:⁵

- Give us the nutritional knowledge to help guide our decisions.
- Give us an understanding of how to use food wisely and reduce waste.
- Give us the cooking skills needed to prepare and enjoy the food.
- Help us see the impact food choices can have on our health.

Food for Thought

Think back on the last snack you had. What was it? Did you think about where it came from, or the influence it can have on the local economy or environment? How about what it looked or tasted like?



GLOBAL SNAPSHOTS India

Knowing how important it is to have a nutritious meal during a day of learning, the Mid Day Meal Scheme was set up to feed 120 million elementary school students a free lunch every school day. It is the largest school meal program in the world.⁶

Look it up! Do some research about food and agriculture in India and share what you've learned below:

National dish:

Something unique about the food or agriculture from this country:

Recipe you'd like to try from this country:

Facing Up to Food Waste

After learning about how food insecurity is a real problem facing millions of people around the world, it might shock you to find out that one of the biggest food issues in Canada is food waste.

Food for thought

- Nearly 60% of food produced in Canada – amounting to 35.5 million metric tonnes – is lost and wasted annually ⁷.
- 11.2 million metric tonnes of this lost food is waste that could be avoided and represents edible food that could be redirected to support people in our communities. This wasted food (that could be rescued!) is estimated to be worth \$49.46 billion⁸!

Food Waste can occur at every stage of the food chain



Food Loss vs. Food Waste

Food loss: when food is thrown out during the production to processing phase. Examples of food loss include foods that could be eaten but do not meet customer specifications (e.g. too small, not a perfect shape), or a lack of labour on the farm (e.g. causing fruits and vegetables to not be picked).

Food waste: when food is thrown out during distribution, at the store, or at home. Examples of food waste are when products are thrown out at grocery stores because they have passed their best-before date, and people buying too much food that they don't end up eating.


Did you know?

Food labelling in Canada is controlled by the Canadian Food Inspection Agency. Food labelling includes nutritional information, ingredients, and best-before dates. **Best-before dates** are the dates when prepackaged foods are no longer at their best level of freshness, taste, and nutritional value. For food with a shorter shelf life, you'll see **packaged on dates**, letting you know when the food was packaged.

It can be difficult for us to fight food loss because it happens before the food even reaches the store or our plates. But we can address the food waste that happens in our homes! How can you fight food waste in your own home? What are ways you can preserve food and make it last longer? Do you have the opportunity to buy food from a farmer's market, or directly from a producer? This can help to reduce the food waste between producer and consumer (that's you!).

Wondering how you can make the most of the fresh fruits and vegetables you have in your home? Check out this great resource that provides loads of ways for you to avoid wasting fresh foods.

 lovefoodhatewaste.ca/a-z/

Get some inspiration from 4-H Alberta member, Amanda Hardman, who participated in the 4-H Canada Science Fair with her project Crickets for Lunch. She wanted to address food waste, and with an increasing market for alternative protein sources (like cricket flour!), she found a way to feed household food scraps to crickets that can then be milled into a protein flour. Interested in exploring challenges and finding solutions to issues just like this? Check out the 4-H Canada Science Fair at  4-h-canada.ca/sciencefair - your project can be about any topic you're passionate about!



Food for Thought

Take the food waste quiz to see how much food you might be wasting!

 foodwastemovie.com/quiz-js



Planting ideas

Is there wasted food in your fridge right now? Go and look in your fridge – even right at the back – to see if you have any expired or rotten food... eww!

- If you find something close to going bad but is still safe to eat, what can you do to save it? Freeze it? Make a plan to eat it today? If it's uncooked, could you cook it in a soup or casserole?
- If you find something rotten, think: How you could make an effort to avoid wasting that food in the future?
- If you find something, how will you get rid of it? Does your community have green bins, or do you have a composter in your garden? Composting is a great way to return nutrients to the soil and contains important elements that promote soil health – carbon, nitrogen, and phosphorus.
- Want to learn more about how to reduce the impact of food waste through composting? Check out 4-H Canada Steeped in Soil resources for more information and fun activities about soil health at

 4-h-canada.ca/steepedinsoil.



GLOBAL SNAPSHOTS Kenya

Growing a variety of crops can help to improve food security, so the government provided farmers with a mixture of seeds – peas, sorghum, potatoes, cassava, sweet potatoes – to increase the diversity of crops grown.⁹

Look it up! Do some research about food and agriculture in Kenya and share what you've learned below:

National dish:

.....

Something unique about the food or agriculture from this country:

.....

.....

Recipe you'd like to try from this country:

.....

Let's Have Fun with Food!

We all need to eat, every single day. So, it is important to know about things like food security, food waste, and how we can make positive changes in our own kitchens and communities. But it's also important to have fun with food, and enjoy cooking with friends and family!

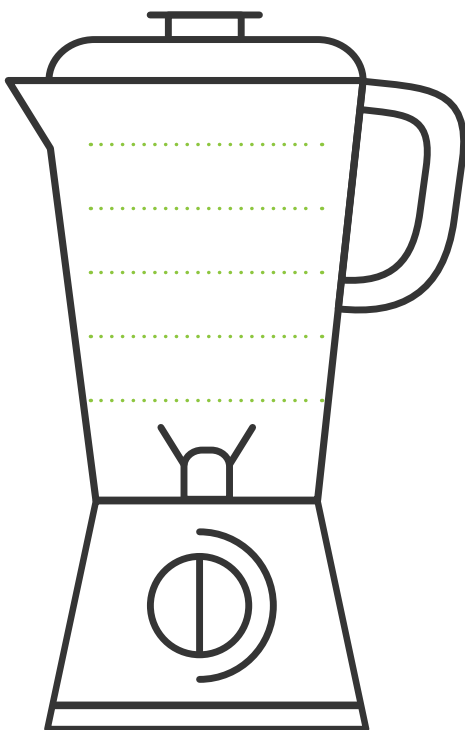
Cooking 101

- Wash your hands thoroughly with hot water and soap before preparing food for yourself or others.
- Make sure you have an adult on hand if you'll be using a knife, stovetop, or oven.
- Fruit and veggies need to be washed in clean water.
- If you're cooking with any proteins that need to be cooked (e.g. meat, eggs, lentils) before eating, get an adult's help to make sure they are cooked safely and to a proper temperature.
- Do you have dietary needs or allergies? If so, make sure to avoid those ingredients, and look up alternative ingredients you can substitute.

Blend it up!

Homemade smoothies can be a great way to create a healthy and delicious treat! You can keep it simple by putting fruit in a blender, or you can add to it by including dairy (milk, different flavours of yogurt) or dairy alternatives, protein (dairy, nut butters, soy), and fibre (flax seeds, chia seeds, hemp hearts, bran flakes). Consider this: are the fruits you are using in season? Which fruit combinations taste best together – experiment and see!

Fill up the blender with your tasting notes!



Sample Recipe

- ½ cup yogurt
- ½ cup liquid (milk, water, dairy alternatives)
- 1 banana
- 1 cup seasonal fruits
- 4 ice cubes (if the fruit isn't frozen)

Add the yogurt and liquid to a blender, then add the fruit. Put the lid on securely and blend until smooth. You may need to add more liquid, or carefully push the fruit down (only when the blender is stopped). Pour it into a glass, and either drink, or eat with a spoon or paper/reusable straw!

Tips and Tricks

- Using frozen fruits or vegetables will make a cold smoothie, similar to a milkshake
- It's easier if you add the liquid first
- If you like a thicker smoothie, add less liquid and more frozen fruits/vegetables. If you like a runnier smoothie, add more liquid

Taste the Rainbow!

Challenge yourself to see how many different coloured fruits and veggies you can include in one meal. Write them down here in our foods rainbow!

Red	Orange	Yellow	Light Green	Dark Green	Purple

Food for Thought

Getting ready to cook and want to learn more about safe food handling? Check out:

 canada.ca/en/health-canada/topics/food-safety.html

To make or not to make? How to judge a recipe.

There are loads of cookbooks out there, and even more online recipes and cooking blogs. It's exciting to have so many recipes available at the click of a button, but not every online recipe (and even some printed cookbooks) are recipe tested. This means testing a recipe over and over to make sure that the instructions are easy to follow, and give you the same results every time.

Look for recipes that are highly rated, have step-by-step photos or even a video. Check out the comments to see if people are having any issues with the recipe, and read through the recipe instructions to make sure they make sense to you. This should help you identify recipes that are the most likely to be successful when you try them!





A-Z Menu

Are you up for a challenge?

- On a piece of paper, write down the letters A to Z, leaving space beside each.
- At your next family dinner, challenge yourself (and your family!) to see if you can find something in the meal for each letter of the alphabet. How many did you find?

Are you up for an even bigger challenge?

- Design a menu that includes an ingredient for each letter of the alphabet.
- Remember, this is a challenge to explore new foods in a fun way, but without being wasteful. Consider using leftovers, or food in your fridge that's about to go bad!
- Have fun, but make sure you don't make more than you can eat!
- We'd love to see what you cook up - share your menu or finished meal with us by posting a photo to social media and tagging [@4hcanada](#))

To build upon what you are learning and exploring with this activity book, check out these past 4-H resources from different provinces across Canada, available for download at [4-h-learns.org](#):

- Ontario's Tasty Fruits and Vegetables - 4-H Ontario
- Discover Jams and Jellies - 4-H Manitoba
- Fun with Foods - 4-H Saskatchewan
- And many more!

Activities

ACTIVITY 1

Grow Your Very Own Salad

This is your chance to grow your own food, learn about the growing process, and taste the delicious results! If you received an activity kit, you've been provided with a variety of seeds to plant, that you'll grow into your very own salad.

**Follow these directions for planting your veggies and read the directions on the seed packets.
Let's get growing!**

Lettuce



Planting

Lettuce is a cool weather crop, plant the seeds as soon as the soil can be worked in the spring then every two weeks thereafter to ensure a continuous supply. Plant the seeds 1/8 inch deep and 18 inches apart. When they have sprouted, thin the lettuce to 12 inches spacing.

Growing

Choose an area with loose well-drained soils in sunny locations. An even supply of moisture during the entire growth period is imperative for success.

Harvesting

Harvest lettuce by either pulling the entire plant or by cutting leaves from the main stem at least 1 inch from the base - this will allow the plant to sprout new leaves.

How long until you can eat them (approx.)

45 - 50 days

Tomatoes



Planting

Plant seeds indoors about 6-8 weeks before last spring frost date. Keep in a warm area (21-24 degrees C) When the seedlings are 4 cm (1.75") high, transplant each into individual peat pots (reduce temperature to 15 - 18 degrees C) until planting in the garden - about late May. Plant approx. 24 inches apart.

Growing

Tomatoes need warmth, direct sunlight & a steady supply of water. Keep plants well-watered. Tip - apply the water to the soil rather than showering down over the plants.

Harvesting

Pick fruit when the fruit is firm and turning red. Overripe tomatoes rot quickly.

How long until you can eat them (approx.)

70 days Indeterminate growth pattern (individual fruits ripen successively over many days)

Cucumbers



Planting

Plant 6-8 seeds per pot. Plant seeds ¾ inch deep. When they sprout through the soil, transplant them to 2 - 4 plants per pot, and eventually plant them outside (once the soil has reached a temperature of about 18 degrees C) in mounds of soil about 6-8 inches high and 12-24 inches across. Space the cucumber plants about 4 inches apart.

Growing

Protect the plants from any late spring/early summer frosts and keep the plants evenly watered through the growing season. Even soil moisture is very important as cucumbers become very bitter if the plant becomes moisture stressed by hot dry weather. Cucumbers grow best in compost of compost manure.

Harvesting

Pick cucumbers when they are 8 - 9 inches long (for slicing) but you could pick them when they are smaller.

To prevent damage to the plant, harvest the cucumbers by cutting them from the vine with a sharp knife - do not pull or twist them from the vine.

How long until you can eat them (approx.)

65 days

Green onions



Planting

Start seeds indoors in a soil-less growing medium anytime in January through February. The seedlings can then be transplanted outside in April through May - transplant the seeds to ¼- ½ inch deep and ½ inch apart.

Growing

Onions do best in a sunny site with fertile, well drained soil. Tip - bend over any flower stalks that start to grow so the plant's energy goes into building the bulb.

Harvesting

Bunching onions are used when young and green.

How long until you can eat them (approx.)

65 days

Sweet peppers



Planting

Start indoors mid-February to late March. Use a soil-less growing mix and plant the seeds ¼ inch deep. Peppers love warmth so try to find a spot under bright light that maintains a temperature of 16 - 21 degrees C. Transplant after hardening off in late May. When moving outside, plant 12 inches apart in rows 24 inches apart.

Growing

Plant in full sun and well-drained soil and keep them regularly watered.

Harvesting

Begin harvest when peppers are large enough, and the colour you'd like (green → red). Cut rather than pull from the branch.

How long until you can eat them (approx.)

57 days to green, 77 to red

Carrots



Planting

Plant the seeds in potting soil, in compostable pots, or if it is warm enough (once soil temperature rises above 7.5 degrees C) you can start growing outside. Plant seeds $\frac{1}{4}$ – $\frac{1}{2}$ inch deep, in rows 18-24 inches apart. Plant seed at 5 day intervals over several weeks.

Growing

Keep the soil nice and moist during the 2 week germination period. Tip – avoid crusting over the soil as this will reduce the number of seedlings that emerge. Thin the carrot plants during the early stages of growth until they are 2 inches apart. Keep the plants evenly watered and weed free.

Carrots are best grown in full sun but will tolerate light shading.

Harvesting

Harvest any time after the carrot roots develop good colour. Grab the green stem firmly and pull up!

How long until you can eat them (approx.)

70 - 80 days

Follow along with the Growing Calendar, provided in your kit, to know when to plant each type of vegetable. That way, they'll all be ready to harvest around the same time (give or take a few days).

You can get even more gardening tips from Ontario Seed Company

 oscseeds.com/resources/how-to-grow-guides

Growing Calendar

Follow along with this guide to planting your salad veggies! Post this growing calendar somewhere visible to help remind you to tend to them. Start planting seeds indoors a couple of weeks before the last frost in your area, to make sure that when you do move them outside the soil will be warm enough.



Harvest time!

While everyone's salad will grow at a slightly different rate, depending on soil, temperature, sunlight, and water, hopefully, your lettuce, tomatoes, sweet peppers, cucumbers, carrots, and green onions are all ready to harvest around the same time.

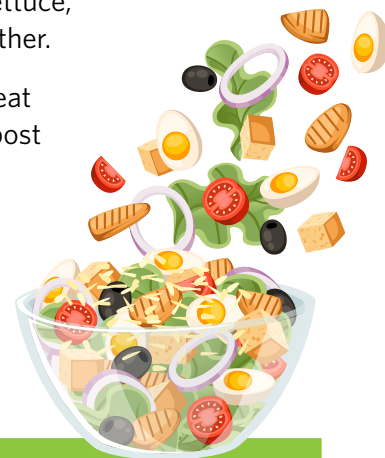
Check out the *Cooking 101* on page 12 for general cooking tips!

When they're ready to harvest, pick them from your garden, bring them inside, and give everything a good wash – make sure any trace of soil is gone. Dry the lettuce, and compost any that is wilted or rotten. Tear it up into bite-sized pieces, use a salad spinner or kitchen towel to get them dry, and put them into a big bowl. With adult supervision, cut up the tomatoes, sweet peppers, cucumbers, carrots (you can peel them first, but if you clean them well, you can keep the skin on), and green onions. Add to the big bowl with the lettuce, and using two big spoons, toss everything so the lettuce and veggies are mixed in together.

Time to celebrate the salad you grew all by yourself! Invite your family to join you and eat this fresh, delicious salad together! We would love to see your salad too, and you can post a photo of it to social media and tagging [@4hcanada](#)

Load up your salad!

Salad doesn't have to end with lettuce! Check out the following ingredients to pack a healthy flavour into your salad. We've provided some examples of salad toppings that go well together, but have fun with it and let your favourite flavours guide you! These toppings are all produced in Canada.



PROTEINS	DAIRY	VEGGIES	FRUIT
<ul style="list-style-type: none">• Grilled chicken• Steak slices• Sliced roast pork• Salmon• Hard- or soft-boiled egg• Chickpeas• Nuts and seeds• Tofu	<ul style="list-style-type: none">• Cheddar cheese• Goat cheese• Feta• Cottage cheese• Blue cheese (if you like strong flavours!)	<ul style="list-style-type: none">• Tomatoes• Sweet peppers• Carrots• Cucumber• Green onions• Mushrooms• Snow peas• Red onion• Radishes• Beets• Corn	<ul style="list-style-type: none">• Apple slices• Strawberry slices• Raspberries• Blueberries• Peaches• Dried cranberries

Sample salad topping combos:

- Grilled chicken, goat cheese, sliced strawberries, blueberries, cucumber, pumpkin seeds
- Steak slices, cheddar cheese, tomatoes, sweet peppers, mushrooms, snow peas, red onion
- Hard-boiled egg, cottage cheese, tomatoes, cucumber, sweet peppers, green onions, radishes
- Peaches, cucumber, grated beets, blue cheese, nuts

Salad dressing recipe

While you can certainly dress your salad with a dressing bought at the store, you might be surprised to know how easy it is to make your very own! You only need three major ingredients and then some seasonings. Easy-peasy! (Plus, you'll even get a mini arm-workout when you shake it up!)



1 In a jar or container with a well-sealing lid (so it doesn't go everywhere)

2 Choose your oil

½ cup

- Canola oil
- Sunflower oil
- Olive oil*

3 Choose your acid

¼ cup

- Apple cider vinegar
- Balsamic vinegar
- Lemon juice
- Orange juice
- Lime juice
- Raspberry vinegar
- Rice vinegar*

4 Choose your Emulsifier (the thing that keeps the oil and water – in this case, the acid – together)

1 tsp.

- Mustard
- Honey
 - Dijon
 - Grainy

*This is such a small amount of mustard, you shouldn't be able to taste it in the final dressing. If you like the flavour, add a bit more!

*Did you know? The coating around mustard seeds allows oil and water (the acid in this recipe) to emulsify, or bond together, creating a well-mixed salad dressing!

5 Choose your seasonings

A pinch, to taste. Add a bit, shake, taste, and add more if needed

- Salt and pepper
- Garlic (powder or fresh, finely chopped)
- Basil (dried or fresh, chopped)
- Ginger (powder or fresh, finely chopped)
- Maple syrup
- Honey

6 Put the lid on tightly and shake it all together!

7 Pour over your salad, and enjoy!

*Olive oil and rice vinegar are not Canadian-produced products

Check out this recipe and video for an easy dressing recipe:

 canolaeatwell.com/recipe/diy-salad-dressing/#directions

Crouton recipe

We've talked about the issue of food waste, and here is a quick way for you to 'rescue' any stale bread (even tortillas, pitas, or buns). And by 'rescue' we mean season and toast to become a delicious addition to your salad!

- Preheat the oven to 250F, with adult supervision.
- Take whatever stale (or soon to be stale) bread you have, and with adult supervision, carefully cut it into 1 cm cubes. If using a tortilla or something very flat, cut it into little bite-sized strips.
- Put the cubes or strips onto a cookie sheet, and drizzle with some cooking oil, and then sprinkle with the seasonings of your choice. Salt, pepper, dried basil, garlic powder, and paprika all go well together, but think about what flavours you like! Maybe rosemary? An Italian seasoning mix? Curry powder? Have fun with it!
- Once seasoned, pop the tray into the oven for 30-40 minutes. Check on them after 20 minutes. If they are all hard, dry, crunchy, and a bit brown, they are done! If they are still a bit soft, you'll want to keep them in until they are dry all the way through (this takes the moisture out of the bread and prevents them from going mouldy like fresh bread does).
- When they are fully dry and toasted, pull them out, let them cool to room temperature, and then scoop them into an airtight container or plastic bag. They should keep for at least a month.
- Sprinkle onto any salad (or soup) for added flavour and crunch, and enjoy your efforts to reduce food waste in your home!

Food for Thought

Want to see what different farms look like across Canada? Check out these virtual farm tours that you can view from the comfort of your own home! farmfood360.ca



GLOBAL SNAPSHOTS Serbia

Small farms can turn small support into large successes! Serbia has offered \$200 million in small grants to farmers to increase their production and success. These small investments will support producers of milk, meat, fruit, vegetables, and other crops, along with developing rural tourism opportunities.¹⁰

Look it up! Do some research about food and agriculture in Serbia and share what you've learned below:

National dish:

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Something unique about the food or agriculture from this country:

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Recipe you'd like to try from this country:

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ACTIVITY 2

Create a Crop Calendar

We live in a time where it is possible that many people can walk into a grocery store at any time of the year and find fruits and vegetables that are completely out of season – strawberries in the winter, and apples in the spring. Some of this is thanks to technology, better storage techniques, and longer growing periods. But often it is because these foods are coming from outside Canada, and travelling large distances to reach our plates.

To understand what is in season in your area, search online and either draw or write down what you discover in the diagram below. Provincial agriculture websites, farmers markets, pick-your-own businesses and other local growers are great at posting what's in season!

When you've found out all of the different fruits and vegetables for each of the seasons, the next step is to find a recipe for your favourite fruit or veggie for each season! Flip through cookbooks, talk to your family, or search online. Make the recipe, and share it with us on social media by tagging @4hcanada – we'd love to see your seasonal cooking adventure!

Planting ideas

Explore ways we can enjoy these foods all year through canning, pickling, freezing, dehydrating, and other preservation techniques. Try your hand at canning leftover tomatoes, pickle some of the cucumbers you've grown, or try dehydrating some fruit!

IN-SEASON RECIPE

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SPRING

What is in season in your area?

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IN-SEASON RECIPE

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WINTER

What is in season in your area?

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SUMMER

What is in season in your area?

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AUTUMN

What is in season in your area?

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IN-SEASON RECIPE

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IN-SEASON RECIPE

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ACTIVITY 3


Travel Around the World...In Your Pantry!



We've discussed how our food can travel long distances to reach us, but what if you try thinking of your pantry at home like a passport to global agriculture? Check out the foods your family keeps on-hand, and look closely at the labels. Items that contain a single ingredient (e.g. oats, canned tomatoes, canola oil) should say "Product of" somewhere on the label. Just be aware that foods with many ingredients (e.g. granola bars, sauces, mixes) will still say where they are 'made', but that doesn't always mean that every ingredient in them comes from that country. A salad dressing may say "Product of USA," but contain oil from Canada, vinegar from Italy, and spices from Mexico. It can be tricky to know! That said, do your best, and you might be surprised to find out all of the different countries represented in your pantry!

Remember, food security is about the ability for everyone to have equal access food, and to strengthen food production in our own communities, provinces, and country. Some foods just don't grow in Canada, and that is okay! Some foods are cheaper for other countries to produce, and so just like Canada sells its agricultural products internationally, other countries sell their products to Canada. However, it is important for everyone to be aware of where their food comes from, so we know the impact of transporting certain foods, and the opportunities to support local producers where we can.

Challenge:

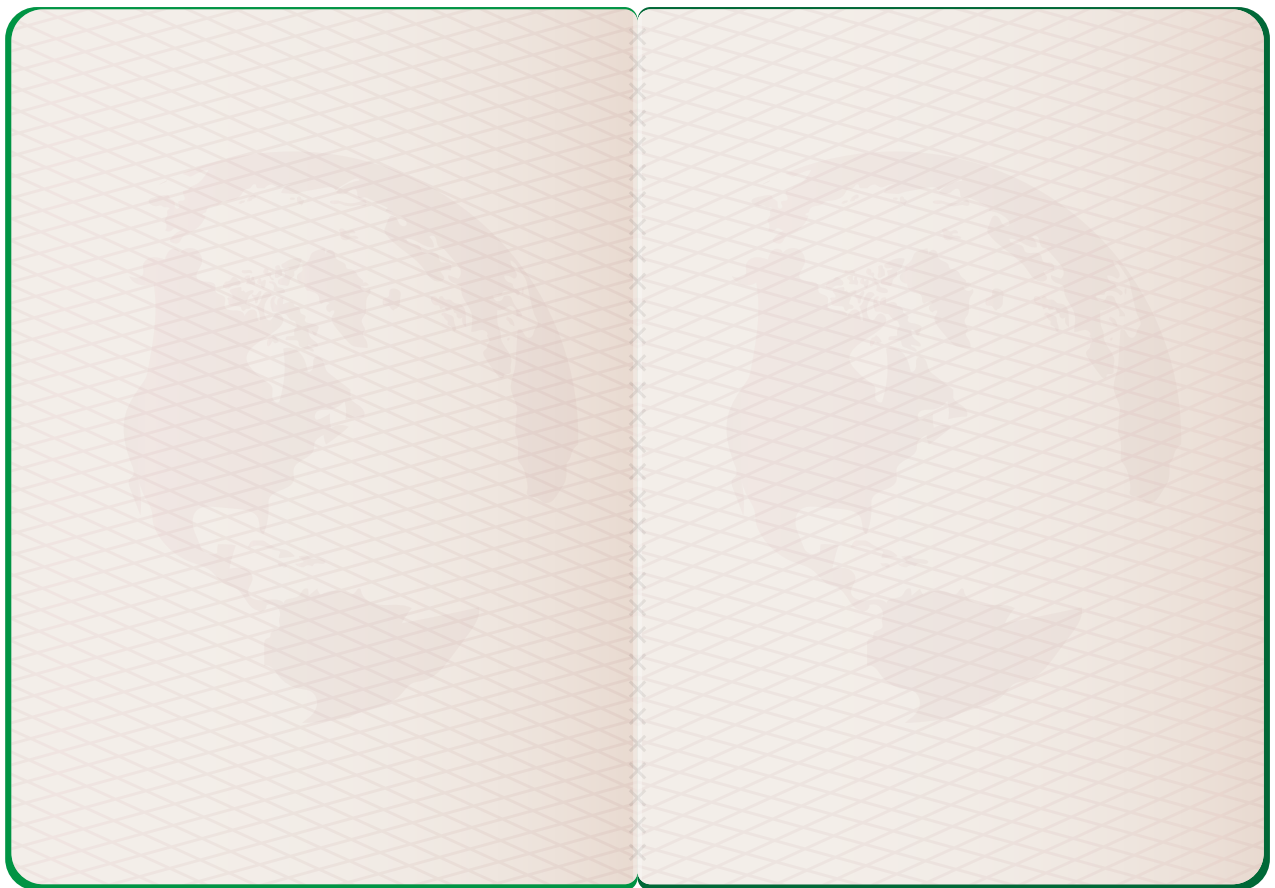
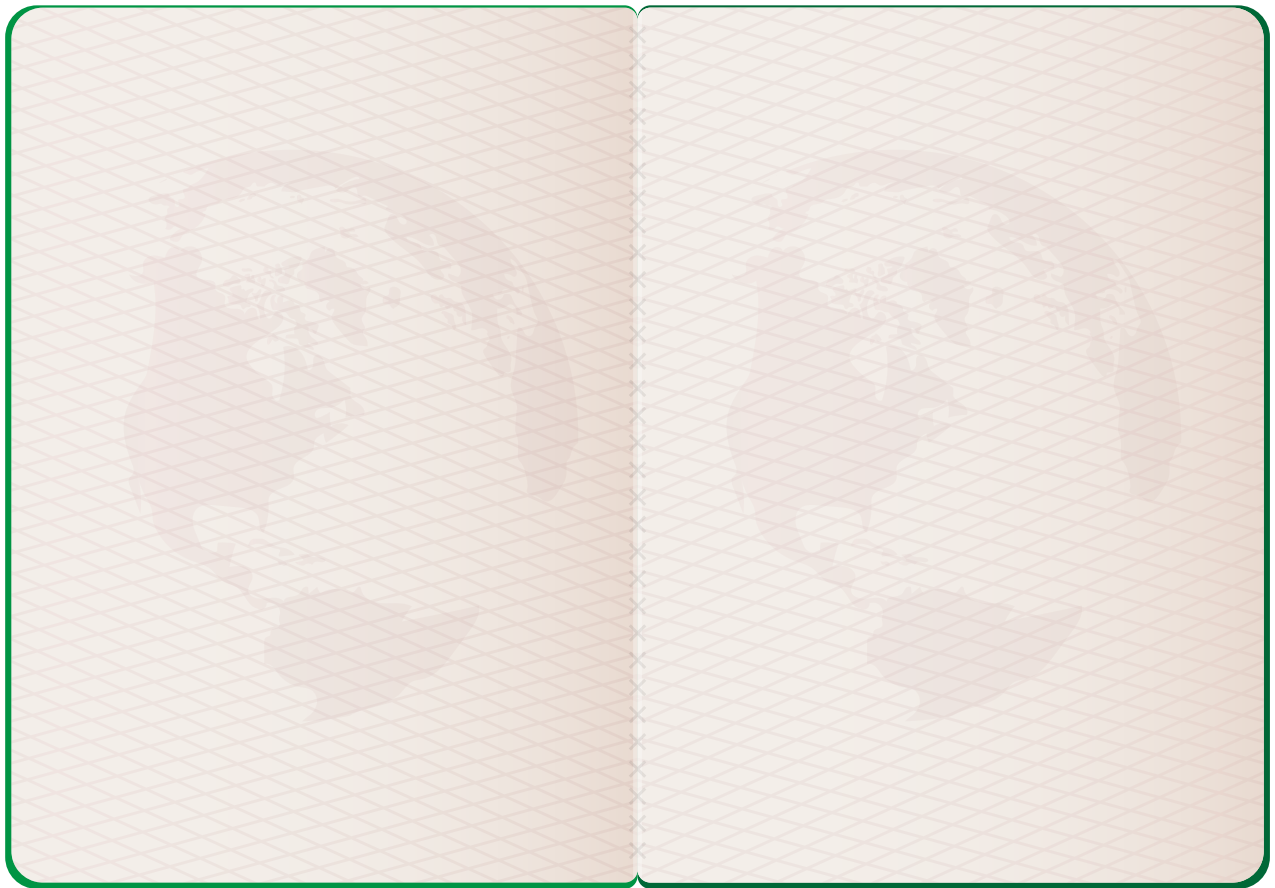
- Find the food that is most local to you.
- Find the food that has travelled the furthest to your pantry.
- Travel the world – can you find a food in your pantry from:
 - > Asia
 - > South America
 - > Europe
 - > Africa
- Find a food from another province.
- You can also check ingredients and how far they've travelled to get to your kitchen:  foodmiles.com

Download, print and fill in the 4-H Food Security Passport as you travel around the world! Write down the country names, or draw your very own stamp for each country

E.g. A jar of pesto – basil and garlic, could be very local, grown right in my garden; pine nuts – can be grown in Canada, but often come from Russia or China; olive oil – typically produced in Europe, Northern Africa, or California; Parmesan cheese – traditionally comes from Italy; salt – can be mined in Canada; black pepper – typically grown in Vietnam and India.

Food for Thought

Map out your favourite meal – where do all of the ingredients in your favourite meal come from? First make a list of all of the different ingredients in your favourite dish. Then go through the list, and ask yourself where does each ingredient come from (feel free to Google it)? Is it further away or closer than you thought? Are all of the ingredients produced in Canada? How far might your favourite food travel to get to your plate? Did you discover any local producers of certain ingredients that you didn't already know about?



Did you know?

While nuts and seeds are often lumped together, seeds have a significantly lower carbon footprint than most nuts – meaning they've travelled a shorter distance to reach your plate – while still being a tasty, crunchy snack.

Make your own granola

This homemade granola recipe is easy to make and customize, and has an ingredient list that keeps things as low-impact and local as possible!

Ingredients – all can be produced in Canada:

2 cups rolled oats	¼ cup honey or maple syrup, or a mix of both
¼ cup sunflower seeds	¼ cup seed butter (pumpkin seed, sunflower seed, tahini, peanut, etc., or a mix of any)
¼ cup pumpkin seeds	¾ tsp salt
¼ cup hemp seeds	1 tsp cinnamon
¼ cup peanuts (technically a legume!), optional	
¼ cup oil (sunflower, canola, etc.)	

The options are endless – add in or swap out any seeds, dried fruit, or other spices you like!

Instructions:

- With adult support, preheat your oven to 325F. Mix together the oats, seeds, and salt in a large bowl.
- In a small pot, melt together the oil, seed butter, honey or maple syrup, and cinnamon.
- Pour the melted ingredients into the dry ingredients and mix well.
- Pour the mixture onto a baking sheet and press down evenly.
- Bake for 20-35 minutes, stirring every 10 minutes to ensure nothing burns. You want everything to be an even golden colour.
- Remove from oven and allow the granola mixture to cool on the baking sheet, undisturbed. This helps create big granola clusters!
- Once cooled, store the leftovers in a clean, reusable jar. Enjoy!¹¹



Recognizing the importance of access to land, and empowering women farmers, *Hambre Cero* (Zero Hunger) is a program that provides livestock, seeds, building materials, and land to women in rural areas. The program has improved food production and the family diet and has benefited over 150,000 families, or 1 million people.¹²

Look it up! Do some research about food and agriculture in Nicaragua and share what you've learned below:

National dish:

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Something unique about the food or agriculture from this country:

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Recipe you'd like to try from this country:

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ACTIVITY 4

Your Backyard Bounty

Food security comes when everyone has equal access to healthy food, and we live in a country with strong food production, but what food can you find in your very own community? Take a pen or pencil and this page, and walk around your neighbourhood to see what edible things are growing.

*Note: this activity works best when things are growing, so spring to fall will give you the most success. You might want to do a community walk each season to see what differences you notice!

Watch out for:

- Fruit trees like apple, crab apple, pear, plum, peach, chokecherries, cherry, etc. – if they aren't in bloom or don't have fruit on them, they may be harder to identify
- Garlic scapes – grow in the spring and early summer
- Dandelions – did you know their leaves and stems can be used in salads or to make tea?
- Kale and other hardy, leafy greens – some communities plant these as nice-looking greenery in community planters, and more people are growing these as garden 'filler'
- Wild grapes – grow wild along fence lines
- Mushrooms – while these can be beautiful, and weird-looking, these should not be touched or picked, as some mushrooms are toxic. Only people properly trained in wild mushroom identification and harvesting should pick mushrooms.
- Fiddleheads – often found in wooded areas by streams. Because these can be confused with some toxic species, these should only be harvested by people trained in identifying fiddleheads.
- Nasturtiums – edible flowers that are often found in people's gardens
- Raspberries – grow wild along fence lines
- Blueberries – grow wild in acidic soil, around coniferous trees
- Saskatoon berries
- Chestnuts and walnuts – watch for these big trees and look up!
- Cattails – found in wetland areas, the core of the stem tastes similar to cucumber and can be eaten raw, boiled, sautéed, or fried!

Snap photos and share what you find in your area by tagging [@4hcanada](#) on social media.

Food for Thought

Are there any community gardens in your neighbourhood? Search online to see if there is one in your community. If not, what might it take to start one with your friends? Consider reaching out to local gardening groups to see if they would be able to support you in setting up a community garden in your area!

Planting ideas

When thinking about food in your community, consider local food banks and centres, and how you might be able to support their work. Search for the organizations in your area, send them an email or give them a call, and see how you can volunteer to reduce food insecurity! It may be collecting donations, helping to sort cans, or helping to promote their work!

Community walk observations

Caution: just because you find things that could be edible, don't harvest anything. It could be on someone else's property, have been contaminated with something, or not be exactly what you think it is and be unsafe to eat.



ACTIVITY 5

Be a Food Security Champion!

**YOUNG PEOPLE
MAKING THINGS
HAPPEN**



With everything you've learned about SDG 2: Zero Hunger, and food security, this is your chance to share it with your friends, family, and the world! This is a global issue, and we all have a part to play in raising awareness and encouraging others to join in reducing hunger in our communities, countries, and world!

GIVE THESE SOME THOUGHT:

What was the most interesting thing you learned from My Plate and the Planet?

What was something that surprised you as you went through the guide and activities?

How has your understanding and thoughts about food and access to food changed?

What was something new that you cooked or tasted?

What is one area of food awareness, security, and/or waste that you could work to improve in your own life?

Now take action – challenge yourself to make a big impact!

- Post on social media. If you have an account, share:
 - > What you've learned!
 - > Track the growth of your salad veggies and share updates.
 - > Journal your efforts to reduce your household food waste.
 - > Invite others to join you in learning more, growing their own salads, and discussing food security!
 - > And remember, we love to hear from you and support your learning, so share your posts with us by tagging [@4hcanada](#) on Facebook, Twitter, or Instagram.
- Talk to your friends and family about what you've learned, include them in these activities, or encourage them to read the guide too!
- Choose three of your favourite foods, or the most common ingredients your family uses, and see if there is a way for you to get them from local producers!
- Post a sign in your window, or on your lawn, encouraging others to support SDG 2 of Zero Hunger.
- Volunteer with your local community garden, or talk with your family about starting one!
- Volunteer with your local food bank or food centre, not only to help reduce food insecurity, but to learn more about food insecurity in your own community.
- Your own idea of how to make change:

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Reflection

You have just completed a series of activities about food and food security, and we hope you feel like you've achieved the goals we mentioned in the beginning! When we learn and do something new, one of the key steps is to reflect at the end of it all. How did it go? What did you achieve? What would you do differently next time?

Consider the following questions and see how they link up to the skills you've developed in My Plate and the Planet:

REFLECTION QUESTION	OUTCOME
How have you advocated for food security or supported others in their learning?	Leadership development
What skills have you learned by going through these activities?	Skill mastery
What positive change can you make by supporting the Zero Hunger SGD?	Positive values

<p>What responsibility do you feel you have in supporting food security efforts?</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p>	<p>Responsibility</p>
<p>What goals have you set for yourself to continue to learn about and support food security efforts?</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p>	<p>Planning and decision making</p>
<p>How will you make your mark as a member of your community, and as a global citizen?</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p>	<p>Sense of purpose</p>
<p>What was the most fun part of this kit? What was something you learned in a hands-on way? Did anyone help you with your learning - acknowledge them here.</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p>	<p>Learn to do by doing</p> <p>Fun</p> <p>Supportive adults</p>

Thank you for joining 4-H Canada, and youth across the country, in learning more about food security, gaining skills, and having fun with food as you explored My Plate and the Planet. We look forward to seeing what you've accomplished. Remember to share it with us by tagging [@4hcanada](https://twitter.com/4hcanada) on social media and hope you'll try out some of the other opportunities available through 4-H Canada!

Learn more about 4-H Canada's Healthy Living Initiative

My Plate and the Planet is a part of 4-H Canada's Healthy Living Initiative – a series of resources and activities available to 4-H's 8,700 volunteer leaders, 23,500 youth members and their families, as well as youth and families beyond 4-H to support their health and well-being. These resources and activities support youth and adults in navigating challenges they may face and provide opportunities to develop their strengths to focus on healthy living.

To learn more about the initiative and access its resources, visit 4-h-canada.ca/healthyliving.



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Photos

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Endnotes

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