

10. Eating According to Season

Increasingly, the food we eat is being imported using energy intensive modes of transportation and is travelling greater and greater distances to reach our plates. This has a major impact on the environment, society and our health. In this activity, the students will cook according to season using locally grown fruits and vegetables, and will learn that it is indeed possible, even though food crops may vary, to enjoy delicious meals made from local produce in every season of the year.

Learning Objectives

Have students:

- Learn about, identify and illustrate the wide variety of fruits and vegetables that grow in Quebec.
- Learn the social and dietary importance of eating local seasonal foods.
- Discover some recipes and cooking techniques using fresh, local ingredients.

- Recipe books or other cooking idea resources (websites, etc.).
- A copy of Quebec Fruits and Vegetables by Season (Appendix 2).
- 1 copy per student of Eight Good Reasons for Eating Food that's Organic, Local and In-Season (Appendix 3).
- 1 copy of the Encyclopédie visuelle des aliments (visual food encyclopedia) (optional – see References).
- A kitchen and cooking equipment (optional).

Areas of Learning

English, science and art.

Materials

- 8 photocopies of the Seasonal Produce Calendar (Appendix 1).
- 4 large posterboards.
- Painting materials and colouring pencils or felt pens.

Did you know?

- Strawberries from California are transported around 5,000 km before arriving in Quebec supermarkets, compared to 50 km for strawberries from Quebec. This transportation generates an additional 25 kg of greenhouse gases per 500 g box of strawberries.
- Local produce sold in farmers markets (public markets) is often harvested at maturity the same day as their delivery, or the day before, thereby ensuring a maximum of flavour.

Presentation

Ask the students questions about the kinds of food they usually eat and where it comes from. *Were our grandparents able to eat the same foods as us and buy it the same way? Is everyone from every different country in the world able to do the same as us? What are the effects of this kind of food consumption (impact on the environment and on food quality and freshness, etc.)?*

Main Activity

- Make four teams, assign a season to each team, and give each team a posterboard and two copies of the Seasonal Produce Calendar (Appendix 1).
- Ask the students to draw pictures on their posterboard of the various fruits and vegetables available in the season they represent. As needed, suggest that they refer to the *Encyclopédie visuelle des aliments* (visual food encyclopedia) (optional).
- Give them 20 minutes, then ask each team to put its posterboard up on the blackboard and to comment on how they found the activity: *Was it difficult to draw a picture of each food, were they familiar with all of them and do they know how they all taste?*
- Using Appendix 2, look over each season and check to see that pictures have been done for all of the fruits and vegetables.
- Now, the whole group looks at the posterboards together. What do they think of the amount of variety shown? Do some seasons offer more choices? Which seasons offer the least choices?

- Tell the students that they are now going to learn how to cook seasonal food using the fruits and vegetables that they have illustrated. Each team must choose a seasonal fruits and vegetable, and find recipes in which the fruit or vegetable chosen is a main ingredient, by looking in cook books or searching on the Internet.
- Give the students 20 minutes, then ask each team to present its recipes to the group and to explain why they are local. Which recipes use the most local ingredients?

Integration

Review the activity in class: *What did the students learn? What did they like? Is it really possible to eat seasonally in Quebec? How? Are they interested in cooking seasonal food at home? (e.g., once a week)?*

- Discuss the benefits of local, in-season consumption: *What are the advantages of eating local produce, for the environment, our health and society (Hand out Appendix 3 to the students for them to take home)?*
- For their homework, ask the students to bring to school and to illustrate an interesting recipe featuring a fruit or vegetable that they are less or not familiar with, for the purpose of creating a collection of recipes based on foods from Quebec (The recipes found in class can be included in the collection).



Enrichment

- In a subsequent session, look for unfamiliar food plants on the calendar and their sources and characteristics, so that the teams representing each season can illustrate them on their board – if not already done. Why not hold a little surprise food tasting activity?
- Suggest to the group that they make a seasonal recipe for the current season. If the necessary facilities are not available, some parent volunteers could attempt some culinary masterpieces!
- Make a list of the traditional menus for the various occasions celebrated by the students and their families (e.g., turkey and cranberry, pumpkin, etc.) and see how these match the local seasonal calendar and season of the place of origin of the celebration. Think how certain menus from other regions or countries could be adapted locally (e.g., replace a sweet potato purée with a white potato purée).

Take Action!

To encourage the students to eat local in-season fruits and vegetables, suggest that the students and their families:

- Choose menus containing at least one local seasonal food item for their lunches and snacks.
- Adapt their favourite recipes so that they feature local produce (e.g., replace sugar with honey or maple syrup, lemon with apple vinegar, etc.).
- Experience the freshness of in-season produce by consulting the calendar showing the availability of Quebec fruits and vegetables (Appendix 1).

References

- Jacques Fortin (2005), *Encyclopédie visuelle des aliments*, (visual food encyclopedia), Chariot d'or, 688 pages
- Recipes of Quebec: <http://www.recettes.qc.ca/index.php>
- Équiterre website (directory of "organic and local" recipes featuring less common vegetables: <http://www.equiterre.org/agriculture/cc/cuisinezBio/recettes.php>
- Quebec vegetable farmers website (information on Quebec vegetables and their season, plus a youth section): <http://www.legumesduquebec.com/>
- Recipe websites for children:
<http://www.marmiton.org/recettes/selections.cfm>
<http://www.teteamodeler.com/cuisine/recettes-cuisine.asp>
<http://www.saveursdenfants.com/>
<http://www.parents.fr/parent/vie-pratique/recettes>

Appendix 1 🍎 Seasonal Produce Calendar

	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Apricot 							×	×				
Asparagus 					×	×	×					
Eggplant 							×	×	×	×	×	
Swiss chard 						×	×	×	×	×		
Beet 	×	×	×	×	×	×	×	×	×	×	×	×
Blueberry 								×	×	×		
Broccoli 							×	×	×	×	×	
Cranberry 									×	×	×	×
Cantaloupe 								×	×			
Carrot 	×	×	×	×	×	×	×	×	×	×	×	×
Celery 							×	×	×	×	×	
Celery root 	×	×	×	×	×					×	×	×
Cherry 						×	×	×				
Cape gooseberry 								×	×			
Mushrooms 	×	×	×	×	×	×	×	×	×	×	×	×
Cabbage 	×	×	×	×	×	×	×	×	×	×	×	×
Brussels sprouts 								×	×	×	×	×
Cauliflower 								×	×	×	×	
Pumpkin 									×	×	×	
Cucumber 			×	×	×	×	×	×	×	×	×	
Squash 	×	×				×	×	×	×	×	×	×
Chicory 	×	×	×								×	
Spinach 					×	×	×	×	×	×	×	×

* This list is not exhaustive. Seasonal fruits and vegetables vary according to region and climate.

Appendix 1 🍅 Seasonal Produce Calendar

	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Fennel 						×	×	×	×			
Strawberry 						×	×					
Raspberry 							×	×	×	×		
Bean 							×	×	×	×		
Lettuce 								×	×	×		
Corn 							×	×	×	×		
Melon 								×	×	×		
Onion 	×	×	×	×	×	×	×	×	×	×	×	×
Parsnip 	×										×	×
Peach 							×	×	×			
Leek 	×	×	×	×	×	×	×	×	×	×	×	×
Pear 	×	×	×	×			×	×	×	×	×	×
Pepper 							×	×	×			
Apple 	×	×	×	×	×	×	×	×	×	×	×	×
Potato 	×	×	×	×	×	×	×	×	×	×	×	×
Plum/ Prune 							×	×	×	×		
Radish 				×	×	×	×	×	×	×	×	
Grape 								×	×	×		
Rhubarb 	×	×	×	×	×	×	×	×				
Rutabaga 	×	×	×	×	×	×	×	×	×	×	×	×
Tomato 			×	×	×	×	×	×	×	×	×	
Sunchoke 	×	×			×						×	×

Appendix 2 🍅 Quebec Fruits and Vegetables by Season

WINTER

Beet, carrot, celery root, mushroom, green and red cabbage, winter squash, shallot, chicory, hydroponic and greenhouse lettuce, yellow onion, parsnip, leek, apple, potato, white turnip, black radish, rutabaga, greenhouse tomato and sunchoke.

SPRING

Asparagus, beet, carrot, celery root, mushroom, red cabbage, greenhouse cucumber, chicory, spinach, fine herbs, strawberry, hydroponic and greenhouse lettuce, leaf lettuce, yellow onion, parsnip, apple, potato, radish, rhubarb, rutabaga, greenhouse tomato and sunchoke.

FALL

Garlic, eggplant, beet, broccoli, cranberry, carrot, celery, celery root, cape gooseberry (ground cherry), mushroom, Chinese cabbage, Brussels sprouts, green and red cabbage, pumpkin, squash, shallot, chicory, hydroponic and greenhouse lettuce, Spanish and yellow onion, parsnip, hot pepper, leek, sweet pepper, apple, pear, potato, white turnip, black and red radish, grape, rutabaga, field and greenhouse tomato and sunchoke.

SUMMER

Garlic, artichoke, eggplant, Swiss chard, beet, blueberry, broccoli, carrot, celery, celery root, cape gooseberry (ground cherry), mushroom, Chinese cabbage, Brussels sprouts, cauliflower, green and red cabbage, cucumber, fresh pickle, squash, zucchini, shallots, chicory, spinach, fennel, fine herbs, strawberry, raspberry, yellow and green bean, many varieties of lettuce, sweet corn, watermelon, blackberry, cantaloupe, onion, parsnip, parsley, green pea, hot pepper, leek, snow pea, sweet pepper, pear, plum, apple, potato, white turnip, radish, rhubarb, rutabaga and tomato.

Appendix 3 🍅 Eight Good Reasons for Eating Food that's Organic, Local and In-Season

For the Health of the Environment!

1. Less Transportation: The food that we eat is transported an average of 2,400 km before reaching our plates. This transportation alone causes huge quantities of greenhouse gases to be released into the environment, which contributes to global warming. Contrarily, the locally produced food that we buy travels short distances and causes much less damage to the planet.

2. Less Energy and Packaging:

In addition to its transportation, food that travels long distances requires more energy to preserve it. It requires refrigerated trucks, which release harmful gases, as well as packaging (and overpackaging), processing, additives and wax, etc. Fresh, local food that we buy directly from the farmer often requires no preservatives or packaging at all.

3. Better for the Ecosystem: Organic farming uses production methods that are not harmful to the environment, and that protect the soil and water. It comes as no surprise then that there are more birds, mammals, insects and micro-organisms on organic farms than on conventional farms.

For Your Health!

4. Less Pesticide: There is no pesticide residue on organically grown food. So you can eat it worry-free after giving it a good rinse. You can also have peace of mind knowing that the environment and the farmers were not exposed to pesticides.

5. Nutritional Value: Local, organic fruits and vegetables often contain more nutrition and vitamins. They have spent less time being transported, they were harvested at maturity, they are fresher and they grow in richer soil.

6. No antibiotic residue or genetically modified organisms (GMOs): GMOs are not allowed in organic farming, and animals on organic farms are not given antibiotic supplements. Organic food is, therefore, better for your health.

For the Health of Local Farms!

7. More local farms and better income for our farmers: Small local farms contribute to the well being of the environment and the vitality of rural communities. In the present economic situation, however, it is difficult for small farmers in Quebec to make a living from their trade. So when you buy your fruits and vegetables directly from a small local farmer, you are helping that farmer receive a fairer price for his or her produce and, therefore, earn a better income from farming!

For the Joy of Eating!

8. Better taste! Local, organic produce is often harvested at maturity and delivered the same day, which gives it more freshness and flavour! Yummy!

