

1. Inspector Veggie!

Sunchoke? Celery root? Black tomato? White beet? Even though grocery stores now offer an impressive array of fruits and vegetables, there are still many kinds that they don't carry. There are, for example, more than 4,000 different varieties of potatoes in the world, 160 of which grow in Canada. The following activity will give students the opportunity to explore and discover, with the help of their senses, the wide variety of fruits and vegetables that are grown in Quebec!

This is a two-part activity:

- **GAME 1 - The "Golden Apple":** A two-part game to learn more about our own health, the environment and local farms, and to visually identify different fruits and vegetables.
- **GAME 2 - "Looking for Clues":** A game to discover new and intriguing varieties of fruits and vegetables, using four of our five senses.

Learning Objectives

Have students:

- Recognize various fruits and vegetables.
- Discover new varieties of fruits and vegetables by using four of their five senses.
- Be able to distinguish the varieties that may be grown in Quebec.
- Learn more about their own health, the environment and local farms.

Subjects

- English Language Arts
- Science and Technology
- Geography, History and Citizenship Education
- Moral Education
- Health Education

Materials

GAME 1: The Golden Apple

- One copy of Appendix 1.
- One copy of Appendix 2.
- Scarves or bandanas (1 per team).
- Numeric projector connected to a computer and the PowerPoint presentation (in File A) or the presentation printed in large format (printable version).
- Several fresh, tasty tomatoes (in winter, greenhouse tomatoes offer good flavour).

Did you know?

- Since 1900, 75% of the world's crop varieties have disappeared.
- Today, more than 85% of the food we consume comes from only 15 different animal and vegetable species. Rice, corn, wheat and potatoes alone provide 50% of the calorie intake worldwide.
- A varied diet is essential to good health. In Quebec, child obesity more than doubled between 1978 and 2004.
- 1.9 million Canadians have diabetes and a growing number of young people are affected by this disease. By 2025, the rate of diabetes is predicted to double in Quebec.

Suggestion: Do this activity in fall during a farm visit (see a list of farms to visit in the "Other Useful Documents" section of the kit or visit the French-only "Agriculture soutenue par la communauté" list: www.equiterre.org). Most of these farms not only produce common vegetables, but also a wide range of lesser known varieties.

Materials

GAME 2 : Looking for Clues

- 12 Quebec-grown vegetables, such as *:

Fall: 2 yellow tomatoes, 2 red tomatoes, 2 red beets, 2 white beets, 2 heads of red cabbage, 2 heads of green cabbage.

Winter: 2 butternut and 2 pepper squashes, 3 purple and 3 yellow carrots, 2 rutabagas and 2 turnip.

- Reusable knives and plates.
- Scarves or bandanas for blindfold.

Preparation

- Buy fresh vegetables **.
- Rinse and prepare the foods needed for the activity. For the second game, cut up one vegetable from each variety (pieces big enough for a child to hold, smell and taste), but **leave the other vegetables whole**.

Presentation (5 min.)

Ask the students these initial questions:

- What fruits and vegetables do you usually eat?
- Which do you like the best? Which ones don't you like?
- How do you buy them?
Fresh? Frozen? In cans?
- Do you eat a lot of fruits and veggies every day?
- How do you eat them? Raw? Cooked?
- Do you know where do they come from?

Main Activity

GAME 1: The Golden Apple (25 min.)

Part 1:

1. **Show** the class the **PowerPoint presentation named "Introduction"** (File A) that provides information on the relationship between food and **healthy eating, biodiversity, and the environment**. Use **Appendix 1** to give further details.

Part 2:

2. **Divide** the class into **four teams**. **Give a scarf or bandana** to a member of each team.
3. Using the beginner or expert **PowerPoint presentation (File A)**, show a **picture of a vegetable** and ask students to **identify** it. The **first student to wave** his or her scarf or bandana **gets to answer**. If the **answer is right**, the team **wins a point**. If the **answer is wrong**, the **other participants** will have a chance to offer an answer.

Bonus Points: Once each vegetable is correctly named, ask the student who answered if the **vegetable can be grown in Quebec**. One point is given for each correct answer (see answers in **Appendix 2**)*.



* We leave it up to you to choose which vegetables you want your students to taste. We strongly recommend putting the emphasis on unusual varieties as well as on local seasonal products.

** Why not try shopping at the public market or at a farm kiosk and choose unpackaged Quebec-grown organic produce supplied directly by the farmer. This way, you'll be able to follow the 3N-F concept ('Naked', 'Near', 'Natural' and 'Fair', see activity #7) and to make more responsible food choices.

4. The game continues with another team member and another vegetable.
5. Once all the vegetables have been identified, move on to the "fruit" category.
6. When the activity is finished, the students get to **taste the "golden apple"**, which is a fresh **tomato** (called "pomodoro" in Italian, from "pomi d'oro").

GAME 2: Looking for Clues (25 min.)

1. Divide the class into **groups of 6** students. The game is played **one team at a time**, but **can also be played simultaneously** by all teams if several adults are present. Each team will consist of:
 - Two **"touchers"** who will describe **what they feel** when they touch the vegetable (WITHOUT NAMING IT): smooth, prickly, hard, soft, bumpy, etc.
 - Two **"observers"** who will describe the **appearance** of the vegetable (WITHOUT NAMING IT): colour, big, small, long, short, round, etc.
 - Two blind-folded **"sniffer-tasters"** who must **guess** what the vegetable is and name it without seeing it.

2. **Give** the first team a **whole fruit or vegetable**. If all the teams are **playing at the same time**, give a **different** fruit or vegetable **to each team**.
3. **First** ask the **"observers"** **then** the **"touchers"** **to describe** the fruit or vegetable **to** their **"sniffer-tasters"** teammates.
4. Then **give a pre-cut piece** of the same vegetable to the **"sniffer-taster"**, who will have to **guess** what the food item is based on the previous descriptions and **by tasting it**.
5. **Repeat** the activity, until each team has one turn. If all the teams are playing at the same time, you can rotate the roles within teams each time you give out a new vegetable.
6. **After** each group has identified their fruit or vegetable or each student has had the chance to play all three roles, it's **food tasting time!** Wash the uncut vegetables again. Cut and serve them with the pre-cut veggies!**



* In the PowerPoint presentation, the origin of each imported product was determined using Industry Canada's Trade Data Online and represents the country from which Quebec bought the most in 2008 for each item.

** Find out if any students have food allergies before the tasting.

Integration (5 min.)

When the activity is completed, ask the students the following questions:

GAME 1: Golden Apple

- Were you familiar with all the fruits and vegetables that were presented?
- Which ones didn't you know?
- Which ones do you eat most often at home?
- Which ones grow in Quebec?
- Why can some foods not be grown in Quebec? Make them aware that more vegetables than fruits can be grown in Quebec because of our climate.
- Is it possible to find substitutes for produce not grown in Quebec? Give some examples: replace a nectarine with a pear or a plantain with a turnip (for more examples, see the "Quebec-Grown Substitutes for Fruits and Vegetables" document in the "Other Useful Documents" section of the kit).

GAME 2: Looking for Clues

- Where can we buy these unusual vegetables?
- Have you ever seen any of them at the grocery store?
- Do they taste like any other food that you know?
- Were they better, not as good, the same?
- Can you name an imported fruit or vegetable that you like? Can you describe it?

Remind students of the **importance of eating Quebec-grown fruits and vegetables**, not only for their own **health** and that of the **planet**, but also to **preserve our farms**. Remind them to:

- Buy **local** products.
- Look for **unpackaged** products.
- Choose **natural** foods.
- Eat a wide **variety** of **healthy** foods.



Enrichment

- Redo the “The Golden Apple” game using the expert version of the PowerPoint presentation (see File A).
- Compile a list of fruits and vegetables vocabulary (see Appendix 3). Use it for the weekly dictation or any other writing assignment or exercise that you might have.
- Together, create a picture of the different varieties of the same fruit or vegetable (or ask each team to do a picture of one type of fruit or vegetable, and then put all the pictures on display for everyone to see).
- With your students, research where different fruits and vegetables come from and discuss whether or not they are commonly found in our grocery stores and supermarkets.

Take Action!

To encourage students and their families to eat local fruits and vegetables more often and to discover new varieties, invite them to:

- Add raw vegetables, fresh and/or dried fruit to their school lunches and snacks.
- Try a new “exotic” vegetable from Quebec every week (sunchoke, kohlrabi, etc.) and, to make it tasty, try some simple and fun-to-make recipes: www.equiterre.org (in French only).

References and Resources:

- Online food encyclopedia: www.passeportsante.net/fr/Nutrition/EncyclopedieAliments/Index.aspx (in French only)
- www.mangezquebec.com (especially the “Did you know?” section).
- François Fortin and Serge d’Amico (1996), *The Visual Food Encyclopedia*. Macmillan, 688 pages.

Appendix 1 🍏 The “Golden Apple” Game

Use the following document to further explain slides in the «Introduction» PowerPoint Presentation (File A).

1. The Golden Apple; Introduction
2. Eat at least **5 portions of fruits and vegetables every day**; it's important!
3. Ideally, **half of your plate** should be filled with **fruits and vegetables**.
4. Fruits and vegetables provide almost all the vitamins that you need to be in **good health**. Ask students: What does it mean to be in good health? To be in good health, you have to eat well and exercise.
5. Also, you have to eat fruits and vegetables of all colours! Think of the rainbow: **the more colours you have in your plate, the better it is for your health**. That's what DIVERSITY is all about!
6. ● Diversity is not only important in our plate, it is an essential component of our planet. **The more diverse our planet, the healthier it is!**
 - Can you **name different living things** that make our planet such a beautiful place? Trees, flowers, vegetables (carrots), fish and whales, birds, insects (bees), human beings and worms are all living things!
 - Every living thing has its own unique **role to play** and is part of the **cycle of life**. For example, insects help fruits and vegetables grow. Animals and people eat these fruits and vegetables. Insects are therefore very useful to the cycle of life.
7. When we use **chemical products** to grow fruits and vegetables, it **kills certain living things**, such as insects and plants. **Even vitamins!** By choosing **organic foods**, which have **no chemical products**, we make a **healthy difference in our life** and in the **life of our planet !**
8. Unfortunately, even though many fruits and vegetables can be grown in Quebec, we often **buy them from other countries**. To get to us, our food travels long distances in trucks, airplanes, trains and boats. All this travelling causes a **lot of pollution!** This pollution is responsible for different **diseases, health and environmental problems** (e.g. death of some birds and fish, global climate change, etc.).
9. ● Eating fruits and vegetables that are **grown close to home** is a smart choice and it helps **reduce the effects of pollution!** It can also help **provide work for Quebec farmers** and keep their farms alive.
 - Do you know which of the fruits and vegetables that you eat can be grown in Quebec?



Appendix 2 🍅 Pictures of Fruits & Vegetables

Here is a list of the fruits and vegetables, sorted based on where they can grow, whose images are shown in the «Beginner» and «Expert» level PowerPoint presentation in File A.

FRUITS AND VEGETABLES THAT GROW IN QUEBEC		FRUITS AND VEGETABLES THAT GROW IN OTHER PARTS OF THE WORLD
<p>Beginner</p> <ul style="list-style-type: none"> Apple Asparagus Blueberry Broad bean Broccoli Cauliflower Celery Corn Garlic Green cabbage Green pepper Leek Pear Plum Red onion Spanish onion Sugar pea Watermelon White mushroom Yellow bean Yellow pepper 	<p>Expert</p> <ul style="list-style-type: none"> Black radish Bok Choy Brussels sprouts Butternut squash Cantaloupe Cape gooseberry (ground cherries) Celery root Green zebra tomato Napa cabbage Pattypan squash Pink beet (Italian beetroot) Purple eggplant Radicchio Red carrot Red radish Salsify White beet White eggplant White radish Yellow carrot 	<p>Beginner</p> <ul style="list-style-type: none"> Avocado Banana Clementine Lemon Lime Peach* Plantain <p>Expert</p> <ul style="list-style-type: none"> Apricot Cactus pear Kaki Kiwi Mango Okra (gumbo) Papaya

* This fruit was once cultivated in Quebec (e.g., on the slopes of Mount Royal, by Serres Décarie). Now, it comes to us mainly from southwestern Ontario and the U.S.



Appendix 3 🍅 Vocabulary list

Here is a vocabulary list of fruits and vegetables you can use to make dictation more tasty!

SOME PLANTS THAT CAN GROW IN QUEBEC		SOME PLANTS THAT GROW IN OTHER PARTS OF THE WORLD
<p>Vegetables</p> <ul style="list-style-type: none"> Garlic Artichoke Broccoli Celery Cabbage Brussels sprouts Wild cabbage Cucumber* Spinach Turnip Radish Onion Parsnip Hot pepper* Sweet pepper* Leek Eggplant* Zucchini Pumpkin Chicory Lettuce Tomato* Potato 	<p>Herbs</p> <ul style="list-style-type: none"> Basil Thyme Rosemary Chives <p>Fruits</p> <ul style="list-style-type: none"> Cantaloupe Watermelon Honeydew Cranberry Apple Strawberry Raspberry Pear Plum 	<p>Vegetables</p> <ul style="list-style-type: none"> Avocado* Cassava/yuca Sweet potato <p>Fruit</p> <ul style="list-style-type: none"> Pineapple Lemon Kiwi Grape Banana Clementine Cherry Pomegranate (granada) Nectarine Orange Peach

* Botanically, these plants are considered to be fruits, but are often seen as vegetables from a culinary standpoint. In fact, generally speaking, and when cooking, a fruit is considered to be a food that is rich in sugar and vitamins and is generally eaten raw as a dessert. Meanwhile, in botany, the fruit is the part of the plant that protects the seeds; it comes after the flower through the transformation of the pistil.

