

# Let's Salsa!!

Foods and Nutrition 9



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Available for download at [aitc.ca/bc](http://aitc.ca/bc)

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## Synopsis

In this unit students will understand the importance of eating locally and supporting BC agriculture. Students will learn the growing regions of BC and what is grown within these areas, why they should be compelled to buy local and support local agriculture, recognize how important this land is for agricultural purpose, understand more about Hot House farming, recognize the consequences and repercussions of consuming foods that are produced afar (economic, environmental, food quality and freshness). Finally, this unit will culminate with the opportunity for students to enjoy and appreciate preparing locally grown food. As well, local foods just darn right taste better.

Also, this unit will link elements of Social Studies as students will increase their understanding of the various areas within BC and learn tangible facts that will connect them to these communities within our province. Not only will students understand more about BC food but more about BC's dynamic climate, elevation and geography.

This lesson is intended for a Grade 9 Foods and Nutrition class.

## Rationale

British Columbia is a major food producer and for a variety of reasons it is vital that young people become more aware of what is grown in BC and where exactly within this province food comes from. Although we have an enormous province there is limited space that provides optimal growing conditions. When students understand how this space is then in a sense very limited, they will more likely appreciate how precious our prime agricultural land is and they are more likely to care how its treated and used. Only 1.1% of BC's land base is prime agricultural land (1), This awareness will then connect them to the land and move them along the continuum towards healthier eating and living. Learning about BC's bountiful food production will encourage them to bring this food into their own homes.

Sustainable systems are those which can remain in a healthy state indefinitely (Babineau, 2013). Therefore supporting local BC agriculture is a key component to creating sustainable, healthier communities and ultimately healthier kids and families. There is tremendous value to eating local and in this unit students will be able to describe these benefits; economic, nutritional, environmental, better wages and working conditions for those that grow and pick the food, and better flavour and freshness. Further to this discussion, students will learn about the challenges that face agricultural land such as urbanization. This is an imminent threat to the system and ultimately, will compromise and if left unchecked will eliminate our ability to eat local foods. If we lose prime agricultural land to urbanization, we do not just lose the ability to choose local foods but we also lose the ability to know for certain how it has been grown and under what conditions the food has been cultivated.

Creating space for students to make these connections is vital to living healthy lives. When students learn that there are economic, environmental and health benefits to buying and using local BC food they are more likely to appreciate it and in turn more likely to support it. As well, creating opportunities in the classroom for students to learn that they may want to ask questions about their food, such as where does it come from, who has grown it, how has it has been cultivated, what sprays have been used or avoided, what type of working conditions do the farmers and labourers face, what have workers been paid, how fresh is the food and how close to your own home food has it been grown. This unit will help students to begin to ask these key questions about the food they consume and hopefully move them towards making more sustainable food choices. Asking questions about food is a powerful step in understanding food systems and the impacts they have on the world around us.

Another component of coming to understand the merits of local food production involves a shift in thinking about the impact of highly processed foods on our health. When students begin to ask questions about their food, such as, how and where it is produced, it is inevitable that they will begin to question the value and moreover, the harm of processed food. When students understand more about food systems they are more likely to appreciate food and recognize the effort that must be invested to make quality food.

In a sense, a central purpose of a Foods and Nutrition classroom is to teach and inform students of the benefits of creating their own food rather than buying processed. As students become more comfortable preparing food, supporting local food will be nearly inevitable. They will see that their best final food products are done with the freshest of foods.

Further to this, as students continue to ask questions about the food they consume they will begin to make connections and recognize that supporting BC agriculture contributes to sustainable living, a sovereign BC food system and perhaps even create jobs for themselves and their neighbours. Foods and Nutrition classrooms are about connecting to food, seeing the value in creating a dish with your own ingredients and sharing these delights with friends and family. Our classrooms are about reinforcing or in some cases recreating the culture of eating food. That is, putting the culture into agriculture.

For me, agriculture in the classroom is more than just a unit. It is a way of being and the concepts will integrate into all my future lessons. I have the fortunate perspective of truly knowing agriculture and the world of farming as my husband and I organic farmed for 5 years in the Similkameen Valley. We learned that farming is exceptionally challenging, relentless, diverse and a back breaking craft where in the end, despite your very best efforts, you are extremely vulnerable to conditions you cannot control. A poor spring and summer with too little or too much rain, clouds, wind, farm hands, weeds, insects, birds, deer, market fluctuations and ultimately the economics of supply and demand will make you or break you.

Despite our departure from large scale organic farming, I clearly see the value of unadulterated organic food and since meeting my husband, my life has changed

dramatically with respect to eating whole and beautiful BC food and avoiding highly processed products. BC agriculture lives not only in our minds but in our cupboards. Within my classroom, I have been moving towards emphasizing these points regularly but now it is obvious that Agriculture in the Classroom belongs in every lesson I teach.

## Let's Salsa!

**Subject:** Foods and Nutrition 9

**Topic:** Learning the importance of supporting our local agricultural industry

**Objectives:** The students will...

- Gain an appreciation for what foods are produced in BC
- Become aware of the importance of supporting local agriculture
- Develop an understanding of the environmental costs associated with transporting food great distances
- Gain a sense of accomplishment by producing their own food
- 

**Prescribed learning outcomes:** This unit fits well within the current IRP for Foods and Nutrition 9. Students will have the opportunity to reinforce a number of PLOs such as:

A4: demonstrate the ability to follow a recipe

A6: demonstrate organization and co-operation in partner and group work

B1: apply cooking principles to prepare healthy dishes and simple meals

D1: describe factors that influence food choices

E1: identify food-related occupations and careers

**Objectives:** To Introduce the BC agriculture industry

**Teaching Activity 1** – What foods are grown in BC?

**SWBAT:**

- Label on a map the 8 regions in BC. They will mark gross farm receipts in each region to determine where the majority of agriculture exists.
- Compare BC's agricultural regions using gross farm receipts
- Compare what is grown in each region by studying a map of BC agriculture.
- Describe where the majority of vegetables are produced in BC and indicate this on their map.

**Materials:**

1. Regional map of BC [http://www.aitc.ca/bc/uploads/growbc/5\\_regions.pdf](http://www.aitc.ca/bc/uploads/growbc/5_regions.pdf)



2. AITC presentation on regions  
[http://www.aitc.ca/bc/uploads/growbc/5\\_regions.pdf](http://www.aitc.ca/bc/uploads/growbc/5_regions.pdf)
3. Map of BC agriculture. You can pre-order a map or you can download  
<http://www.aitc.ca/bc/index.php?page=general-resources>. One map per each



kitchen unit.

4. Enough space to put all students' chairs in a circle minus one chair or take students outside to a paved area and use a piece of chalk to create small circles for each student to stand on - minus one space. You will be playing a game with one student always in the center of the circle!
5. Small scraps of paper, perhaps from the photocopy room, for exit slips.

**Procedure:**

1. Introduce this lesson by asking your class 'What foods are grown in BC' Ensure they understand that we grow just more than apples and cherries. Bring their attention to the vast agriculture industry. Blueberries, raspberries, endive,

broccoli, peppers, canola, beef, dairy, garlic, eggplant, brussel sprouts, honey, etc. See map! <http://www.aitc.ca/bc/index.php?page=general-resources>

2. Hand out the regional map of BC.
3. Show presentation [http://www.aitc.ca/bc/uploads/growbc/5\\_regions.pdf](http://www.aitc.ca/bc/uploads/growbc/5_regions.pdf) on the various regions of BC and what is produced in each. As the different regions are presented, get students to mark on their map gross farm receipts from the various regions. Note: The census definition of **gross farm receipts** <http://www.statcan.gc.ca/ca-ra2006/articles/finpicture-portrait-eng.htm#receipts> (before deducting expenses) include: receipts from all agricultural products sold and program payments and custom work receipts. Students will also mark 2 examples of agricultural items found in each region.
4. Hand out the map of BC agriculture <http://www.aitc.ca/bc/index.php?page=general-resources> (one map per group of 4) Students will discuss the map with their table and include one more resource found in each region. This is another way that students will be able to connect with the food that is produced in BC.
5. The “I like...” game. Have everyone form a big circle of chairs. Now remove one chair. Ask for a volunteer to start in the center. They are to state one thing they like to eat that is grown in BC. Those in the classroom that like the same thing must all get up out of their chairs and find a new one (including the person in the center - he/she must find a chair to sit in). You will now be left with a new student in the center. The teacher can decide how long to allow the game to last. Hopefully each student gets a chance in the center.
6. Have students head back to their tables. Once they return, summarize the fact that BC offers an array of agricultural items. Hand out the small pieces of paper and get the students to answer the following: “List 2-3 foods that you did **not** know is grown in BC?”, or “List 2-3 foods that you did **not** know are produced in BC?” Once they have completed their exit slip, they hand it to you and then they are dismissed.



## Possible Follow Up Activities:

- Invite a local farmer to come in and describe what he/she grows and what life is like as a farmer.
- Visit a local farmers' market to see what is being sold

## Suggestion for assessment:

## Teacher References

Agricultural Map:

<http://www.aitc.ca/bc/uploads/resources/Grow%20BC%20Map%20Colour.pdf>

Regional Agricultural Presentation:

[http://www.aitc.ca/bc/uploads/growbc/5\\_regions.pdf](http://www.aitc.ca/bc/uploads/growbc/5_regions.pdf)

Stats Canada. Information on Gross Farm receipts: <http://www.statcan.gc.ca/ca-ra2006/articles/finpicture-portrait-eng.htm#receipts>

**Objectives:** To Introduce the benefits of buying local

## Teaching Activity 2 – Why buy local?

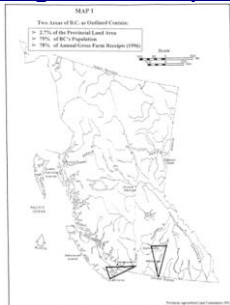
### SWBAT:

- Explain what foods are grown in BC hot houses
- Describe the environmental and economic benefits of buying local
- Discuss where the majority of prime agricultural land exists within BC
- Discuss where the majority of the population of BC resides

### Materials:

1. Map of BC indicating majority of population and majority of gross farm receipts:

[http://www.alc.gov.bc.ca/publications/planning/planning\\_for\\_agriculture/Image](http://www.alc.gov.bc.ca/publications/planning/planning_for_agriculture/Image)



[s/map1lg.gif](#)

2. BC GreenHouse Growers's Association website 'Quick Facts' page:

[http://www.bcgreenhouse.ca/quick\\_facts.htm](http://www.bcgreenhouse.ca/quick_facts.htm)

3. Hot House Virtual Tour:



[http://www.bcgreenhouse.ca/virtual\\_tour/virtual\\_tour\\_01.htm](http://www.bcgreenhouse.ca/virtual_tour/virtual_tour_01.htm)

4. Jigsaw exercise materials: Why buy local handout:  
[http://www.aitc.ca/bc/uploads/buy\\_local.pdf](http://www.aitc.ca/bc/uploads/buy_local.pdf) by Katie Leikermoser. Make 6 copies of each. 12 envelopes. Cut out each heading and separate the joining paragraph. In one envelope place the 10 Reasons to Buy Local. In another envelope put the paragraphs that match the reasons. Do this 5 more times so each table/group has 2 envelopes: one of headings and one of explanations.

## Procedure:

1. Start class by asking “Who has a garden in their backyard?” or “Who knows someone with a garden in their backyard?” Ask questions like “What is grown in the garden?” Sharing personal stories or experience may help initiate conversation. Once students have shared their experiences ask them “Who knows a farmer/rancher?” “What do they grow/produce?” No matter where in BC, gardens can exist. Some places are of course better than others but the possibility of local food does exist throughout BC. Let’s look deeper into where all the prime agricultural land exists.

2. Have students take out their map from yesterday. On the overhead, display the BC agricultural map indicating where majority of gross farm receipts are generated

[http://www.alc.gov.bc.ca/publications/planning/planning\\_for\\_agriculture/Images/map1lg.gif](http://www.alc.gov.bc.ca/publications/planning/planning_for_agriculture/Images/map1lg.gif) Go over information on map explaining that roughly 80% of gross farm receipts come from the Okanagan and Lower Mainland and 80% of BC’s population live in these areas. Explain that it is difficult to grow such abundance of food in other parts of BC. Over 90% of the province is covered by mountains or has an elevation over 1,000 metres.

([http://www.alc.gov.bc.ca/publications/planning/Planning\\_For\\_Agriculture/Chapter01/0101reference.htm](http://www.alc.gov.bc.ca/publications/planning/Planning_For_Agriculture/Chapter01/0101reference.htm))

3. Have students discuss at their table what happens to the agricultural land when more people move into these desirable areas? There is less room for farmers to grow food. Ask students where will we get our food from if we continue to use such prime land? California, China, Mexico, etc. Ask “Why could this be a concern?” Discuss the environmental impact and the energy used to transport foods from such distances (food miles - distance your food travels from where it is made to where it is eaten), having limited to no control to the way in which it is grown example, pesticides, fertilizers, GMOs, having no control over working conditions or wages.

4. Hand out Jigsaw exercise to each table. See **Materials** for an explanation. Explain to students that they must piece together/match the heading to the appropriate paragraph. Go over the answers with the students. For more information on local and potential questions students may have to refer to <http://www.aitc.ca/bc/uploads/What%20do%20you%20say%20when.pdf> - this is an excellent resource!

5. Now time to explain ways to extend our growing conditions so we can continue to buy local - Introduce greenhouses here in BC. Ask students “Why can’t we grow tomatoes and peppers and the like all year long? (The answer hopefully is

obvious to students...we have winter!) Ask the students “How can we extend our growing season?” - By growing food in green houses. Explain to students that BC green houses exist throughout the lower mainland

6. On projector show students the BC Greenhouse Grower’s Association ‘Quick Facts’ page and virtual tour.

[http://www.bcgreenhouse.ca/virtual\\_tour/virtual\\_tour\\_01.htm](http://www.bcgreenhouse.ca/virtual_tour/virtual_tour_01.htm)

7. For closure and assessment students will write a reflection. They must answer this question: “Which reason from your jigsaw activity (choose from the top 10 list) compels you to make a change and buy local? Explain.

### Possible Follow Up Activities:

Further research Food Miles:

[http://lifecyclesproject.ca/initiatives/food\\_miles/tutorial\\_intro.php](http://lifecyclesproject.ca/initiatives/food_miles/tutorial_intro.php)

Try planting herbs, lettuce or other vegetables that could grow at your school.

Spuds in Tubs is a great way to grow vegetables in your garden

<http://www.aitc.ca/bc/index.php?page=spuds-in-tubs-2>

### Teacher References:

[http://www.alc.gov.bc.ca/publications/planning/Planning\\_For\\_Agriculture/Chapter\\_01/0101reference.htm](http://www.alc.gov.bc.ca/publications/planning/Planning_For_Agriculture/Chapter_01/0101reference.htm)

<http://www.aitc.ca/bc/>

<http://www.aitc.ca/bc/uploads/What%20do%20you%20say%20when.pdf>

Objectives: To provide students with the opportunity to taste local foods. Students will be able to recognize the importance and value of decreasing food miles.

### Teaching Activity 3 – How Far Food Travels and What This Entails

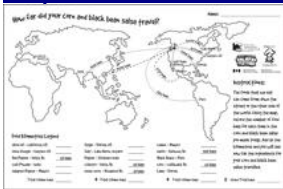
#### SWBAT:

- explain the benefits of eating local
- explain the health benefits of eating whole unprocessed foods
- explain the steps in making salsa
- describe factors that influence their food choices

#### Materials:

1. Order Corn and Black bean Salsa Map from AITC:

<http://www.aitc.ca/bc/index.php?page=resource-order-form>



2. Gather all ingredients for recipe on back side of map for demonstration.
3. Video “Put Your Money Where Your Mouth Is”  
<http://www.aitc.ca/bc/index.php?page=general-resources>

#### Procedure:

1. Ask students what salsa means? Salsa simply means sauce. And there are many varieties of salsa. Some salsas are made with neither chilies nor tomatoes. Each region in Mexico has its own signature salsa. But even within the category of spicy, vegetable-based sauces that we know as "salsa," there are many different kinds that use a broad variety of ingredients—not only with chilies and tomatoes but also with peaches or mango and can include interesting ingredients like radishes or cucumber. Each Latin American country has its own signature salsa as does each region in Mexico.
2. Hand out Corn and Black Bean Salsa Map  
<http://www.aitc.ca/bc/index.php?page=resource-order-form>

3. Following the steps on the recipe, prepare the salsa. Review proper cutting techniques and importance of washing the vegetables. As you demonstrate the salsa, explain to students the nutrients found in freshly picked fruits and vegetables. Describe the nutrient loss that happens as they travel from farm to fork. Fruits and vegetables begin to decompose once they leave the plant/ground. Scientists have discovered many ways to keep the vegetables fresh. Ask students if they can think of ways in which fruits/vegetables are kept from rotting/decomposing as they travel great distances. Food is picked before it ripens, refrigerated trucks are used to slow down the process (explain the energy needed for these specialty trucks), special packaging is used, growers use controlled atmosphere (in which oxygen is kept at about 5 percent and carbon dioxide at 1 to 3 percent, while temperature is held at a level best suited to the particular fruit or vegetable) and of course processing - example canning. As students come up with the answers explain further that buying local or growing vegetables in a garden and eaten fresh will ensure that the fruits and vegetables are packed with the vitamins and minerals they are meant to have, moreover, their quality and freshness is top notch.
4. Serve salsa with plain nacho chips or grate cheese over the chips and either microwave or bake in oven. If using cheese, of course buy BC made cheese! What a great way to introduce the dairy production here in BC.
5. Bring students up to sample and enjoy the salsa and chips.
6. Have students calculate the miles the ingredients have travelled. This map is geared towards living in the Lower Mainland. If you are not from this region, alter accordingly. Students can use their smart phones to calculate distance. Students must also answer the questions on this sheet.
7. Go over answers with the class. Discuss as a group the last question on the sheet "How does food traveling great distances affect the health of our planet?"
8. Watch the video "Put Your Money Where Your Mouth Is" <http://www.aitc.ca/bc/index.php?page=general-resources>. This video touches upon many reasons why the decisions we make in the grocery store impacts much around us. This is a very informative video - have students list 3-5 interesting facts as host Ryan explores the hothouses and highways of agricultural production, distribution and marketing in BC. Have students share the facts with their neighbour and then with their kitchen unit.

## Possible Follow Up Activities:

1. Explore BC's dairy industry. Have students work in pairs to develop a list of products made from milk. Visit the BC dairy foundation link for other resources to bring into the classroom. <http://bcdairyfoundation.ca>
2. Do the next cooking demonstration on other ingredients found in BC. Highlight perhaps the poultry industry and make a quiche. Eggs, dairy, and vegetables that go into this recipe can all be grown/produced in BC. For possible ideas visit <http://bcegg.com/news/?tag=made+with+eggs+bc>
3. Go on a field trip to the local grocery store and document what foods come from BC. Students can also document what fruits and vegetables the store is selling and where these foods come from.

## Teacher References:

[http://www.thenibble.com/fun/polls/giveaway/delightful-salsa.asp#sg\\_wrapper](http://www.thenibble.com/fun/polls/giveaway/delightful-salsa.asp#sg_wrapper)

<http://www.aitc.ca/bc/>

<http://www.aitc.ca/bc/index.php?page=general-resources>

Objectives: To provide students with the opportunity to taste local foods. Students will gain a sense of accomplishment by successfully producing a simple yet amazing product. Students will continue to develop confidence in the kitchen by practicing their food preparation skills

### Teaching Activity 3 – Preparing Local Food

#### SWBAT:

- use a variety of cutting methods to prepare salsa chopping, mincing, dicing
- demonstrate the ability to follow a recipe
- demonstrate organization and co-operation

#### Materials:

1. Enough ingredients needed for students to make the salsa.
2. Lab evaluation mark sheet

#### Procedure:

1. Before students come up to gather their supplies, connect all the previous lessons by playing a review game. Use the review questions listed below. First student to answer the question correctly will be awarded **extra cheese!** (If you are not using cheese, choose an appropriate award system). Students can only answer once but they can assist other members at their table so everyone benefits from extra cheese!



Questions	Answers	Questions	Answers
1. Where does 80% of BC's population reside?	Lower Mainland and the Okanagan Valley	6. Describe one reason how food traveling so far affects the health of our planet	increase CO2 emissions, pollution, poorer air quality, other countries that are not as regulated as ours may use chemical/pesticides that are bad for the environment
2. Where are the majority of our fruits and vegetables produced?	Lower Mainland and the Okanagan Valley	7. Describe another reason how food traveling so far affects the health of our planet	see answers above
3. List one reason to buy local.	refer to <a href="http://www.aitc.ca/bc/uploads/buy_local.pdf">http://www.aitc.ca/bc/uploads/buy_local.pdf</a>	8. List a fruit or vegetable that starts with the letter 'p' that is grown in BC	peas, peppers, peach, pear, plum
4. List another reason to buy local.	refer to <a href="http://www.aitc.ca/bc/uploads/buy_local.pdf">http://www.aitc.ca/bc/uploads/buy_local.pdf</a>	9. List a fruit or vegetable that starts with the letter 't' that is grown in BC	Tomatoes, turnips,
5. List another reason to buy local.	refer to <a href="http://www.aitc.ca/bc/uploads/buy_local.pdf">http://www.aitc.ca/bc/uploads/buy_local.pdf</a>	10. What is grown in your town/community?	Answers will vary.

2. Have students come up and gather ingredients needed for preparing salsa.
3. Begin lab. Evaluate lab.
4. Check kitchens for thorough cleanup before leaving.

### Possible Follow Up Activities:

Students could learn the steps involved in processing local food; they could learn how to can salsa.

## References:

1. Government of Canada. Retrieved on August 3, 2013 from

[http:// www.alc.gov.bc.ca/publications/planning](http://www.alc.gov.bc.ca/publications/planning)

[Planning\\_For\\_Agriculture/Chapter01/0101reference.htm](http://www.alc.gov.bc.ca/publications/planning/Planning_For_Agriculture/Chapter01/0101reference.htm)

2. “Sustainable systems are those which can remain in a healthy state indefinitely.” In a lecture on July 22, 2013, EDCP 329 class, Lindsay Babineau