

NUTRITION VOYAGE:

THE QUEST TO BE OUR BEST

TREK 3 Grade 8

From Farm to You

Time Required:

Three 40-minute sessions

Sample timing:

First Session – **Investigate**

Second Session – **Challenge: Get Fresh!**

Third Session – **Evaluate** and **Reflect**

Field Trip – Full or partial day

Supplies:

Notebooks, pens, pencils, laptops or computers (optional), Student Printable: **Favorite Food Scavenger Hunt**, atlas or digital mapping tool.

Standards:*

Students will...

English Language Arts

- Conduct short research projects to answer a question, drawing on several sources and generating additional related, focused questions. (8.W.7)
- Write arguments to support claims with clear reasons and relevant evidence. (8.W.1)
- Present claims and findings, emphasizing salient points in a focused, coherent manner. (8.SL.4)
- Integrate multimedia and visual displays into presentations to clarify information, strengthen claims and evidence, and add interest. (8.SL.5)

Science

- Understand that populations of organisms can be categorized by the function they serve in an ecosystem. (National Academy of Sciences, Content Standard C)
- Present claims and findings, emphasizing salient points in a focused, coherent manner with pertinent descriptions, facts, details, and examples. (8.SL.4)

*Sources: Science education standards: National Academy of Sciences, Math and ELA education standards: Common Core.

Subject Focus: English Language Arts

Lesson Overview:

Where does our food come from? Your average middle schooler might tell you it comes from the supermarket, corner store, or restaurant. In this lesson, students will learn about local agriculture, determine if any of the fruits and vegetables they consume regularly are locally grown, and write a report.

Learning Objectives:

Students will be able to:

- Identify local agricultural operations (school/community garden, farmers market/co-op, farm, greenhouse) in their community.
- Discuss when fruits and vegetables grown in their area are available (i.e., seasonality).
- Explain the benefits and challenges of local, regional, and imported sourcing.

Questions for This Trek

1. What foods do I like to eat? Where do these foods come from?
2. What foods grow in our area? How does this vary through the seasons?

Instructional Steps

1 Investigate

- 1. What foods do I like to eat? Where do these foods come from?** Talk with students about some of their favorite fruits and vegetables. Do students know where these foods come from? Not just where they are purchased, but also where they are grown? Explain that food can travel a long way to reach us. A food may need specific growing conditions that are not available where you live all year long. It may be grown somewhere else within the United States or imported from other countries. But many foods can be grown locally, meaning closer to where you live. Local foods do not have to travel as far to get to you. Sometimes people can buy directly from local farmers, such as at a farmers market or pick-your-own farm. Ask students to share their ideas about steps a food may take to get from a farm to their plate. After students have offered their suggestions, write down the following on the board: Farm → processing plant (such as to turn apples into applesauce) → packaging plant → distribution plant → supermarket/grocery store → consumer → plate. Can students think of any additional steps or factors? (For example: restaurants and schools may provide food to the consumer; not all foods are packaged and processed.)

Give students their challenge: Find out where 10 of their favorite fruits and vegetables come from. Distribute the **Student Printable: Favorite Food Scavenger Hunt** for students to complete. Ask students to think about how they can find out where food is originally grown or raised. After hearing their ideas, explain that one can find out where a food comes from by looking at its sticker, the food package, or a sign at the store. Students can also use the following resource to get more information about where their food comes from:

http://www.nass.usda.gov/Charts_and_Maps/index.asp

Students may want to use a digital mapping tool or atlas to help them calculate distances. Discuss students' findings. What was the most surprising thing they discovered?

- 2. What foods grow in our area? How does this vary through the seasons?** Have students explore local gardens, farmers markets, greenhouses, or farms. You and your students can find local agricultural sources by doing a search online. For a list of farmers markets, visit <http://search.ams.usda.gov/farmersmarkets>. Students might use an online digital mapping tool to plot these nearby resources. Then, plan a visit to one of the agricultural sources students researched. Ask students to prepare questions for farmers and others they meet. Visit the local agricultural source and encourage students to note what crops are grown, how this varies through the seasons, the steps taken to bring the crops to consumers, and the costs involved. Chart which locally produced foods are available at different times of the year. What are some ways schools might be able to use foods grown locally during the summer, during the school year (for example, purchasing locally grown broccoli that has been frozen)? Can any of the nonlocal foods students discovered in the Scavenger Hunt also be grown closer to home? If so, why do students think they didn't encounter a local option for that fruit or vegetable during the Scavenger Hunt? Compare the distance and paths some of the fruits and vegetables take compared to those from a local producer.

Lesson Alternative: If it's not possible to visit a local agricultural source due to time or location, try your local greengrocer or supermarket. Interview a grocery or market manager. Or, invite a local farmer or supermarket manager to visit the school. For an additional resource to help you and your students learn about local agricultural sources, visit <http://www.usda.gov/knowyourfarmer>.

2 Challenge: Get Fresh!

- 3. Examine the benefits—and challenges—of consuming locally grown produce.** Invite small groups to share reflections from the **Favorite Food Scavenger Hunt** and agricultural source visit. What

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are some of the benefits and challenges of eating locally? How does it impact the ecosystem, the job market, and students' own lives? For example, eating local food creates and supports jobs in the community. However, there may be fewer local choices, depending on the climate and time of year. Cost can also be a factor. Local food is sometimes cheaper because the transportation cost is less. However, sometimes local food is more expensive than nonlocal because it is coming from a small grower with a limited supply.

- 4. Consider a taste test!** If desired, invite students to conduct a taste test comparing nonlocal fresh fruits and vegetables to those recently picked by a nearby grower. Try tomatoes, lettuce greens, carrots, apples, and berries. Have students record their findings in their journals.

3 Evaluate

- 5. Raise awareness about consumption of local produce.** Challenge students to use the results of the **Favorite Food Scavenger Hunt** and exploration of local agriculture to convince people in the community of the benefits of eating locally grown produce. Have them create a multimedia presentation (for example: a blog, video, or slideshow) to share

with their community, summarizing what they've learned about local produce and the journey food takes to arrive at their tables. Encourage them to focus on easy action steps that organizations and individuals can take to increase their consumption of local fruits and vegetables. They should include links and resources the community can use to learn more about eating local produce.

4 Reflect

- 6. Journal.** Have students reflect in their journals about eating local produce and their efforts to spread the word. Did they inspire change? How will what they've learned about local produce influence their own eating and that of others?

End of Trek

Extension Ideas

- Visit a supermarket and meet with the produce manager to discuss available produce and where it comes from (unless you have already completed the Lesson Alternative in Part 1: Investigate). What foods are locally grown? Are there cost factors related to local versus nonlocal produce? Challenges with buying local? As a reflection, students will write a news report and share on the class blog or e-newsletter.
- Invite students to chat with your school's food service director about incorporating locally grown produce on the cafeteria menu or having a "locally grown day" where all of the fruits and vegetables at lunch come from nearby growers.
- Start your own school garden. Even a small container garden can offer students the chance to put what they've learned into action.
- Create a Public Service Announcement video to share with school, local community, and/or media to promote the consumption of fruits and vegetables.

Favorite Food Scavenger Hunt

Your final challenge is to choose your **10 favorite fruits and vegetables** from the cafeteria, your refrigerator, or pantry at home.

- List your favorite fruits and vegetables in the chart to the right. Add a descriptive word about the flavor, or texture too. (For example: sweet, crunchy, tangy, crisp.) Where do these foods originally come from? Where were they packaged — and before that, grown? Write down as much information as you can find about where they came from.

Hint: Use the food label to find out where it originated. For fresh produce, check the sticker or information posted in the display case, or ask the merchant about the food's origins. You can also research online http://www.nass.usda.gov/Charts_and_Maps/index.asp or ask food service staff!

Food item	Descriptive word	Where does my food come from? (Origin / miles to my house)
Sample: Clementine	Sweet, juicy	Spain (produce sticker) / 3,600 miles
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		

- How far does your food have to travel from where it was grown until it reaches your plate? List each food item, and the number of "food" miles it traveled from where it was grown to where you are, under the appropriate distance column below. Use an atlas, an online mapping tool, or a search engine to help you measure the distance your food travels. Was it what you expected? What would you define as being "regionally" or "locally grown" within the State, grown within 400 miles, or something else? Does your school food service have a definition for "locally grown"? Is its definition different than yours? How does the availability of "local" fruits and vegetables change based on various definitions of "local"?

Less than 10 miles:



10 to 50 miles:



51 to 100 miles:



101 to 500 miles:



More than 500 miles:



Sample: Clementine (3,600 miles)
