

Food Miles Activity Guide

Objective:

Understand the number of food miles associated with the common meals we consume.

Materials Needed:

- **Whiteboard and markers***
- **Printed food production maps (page 3)**
- **Printed recipe cards (pages 4-6)**

Note: These recipe cards are also used in the lesson 2 activity.

***Choose a recording method that allows the whole class to view each group's individual contributions. Using a whiteboard is just a suggestion.**

Preparation:

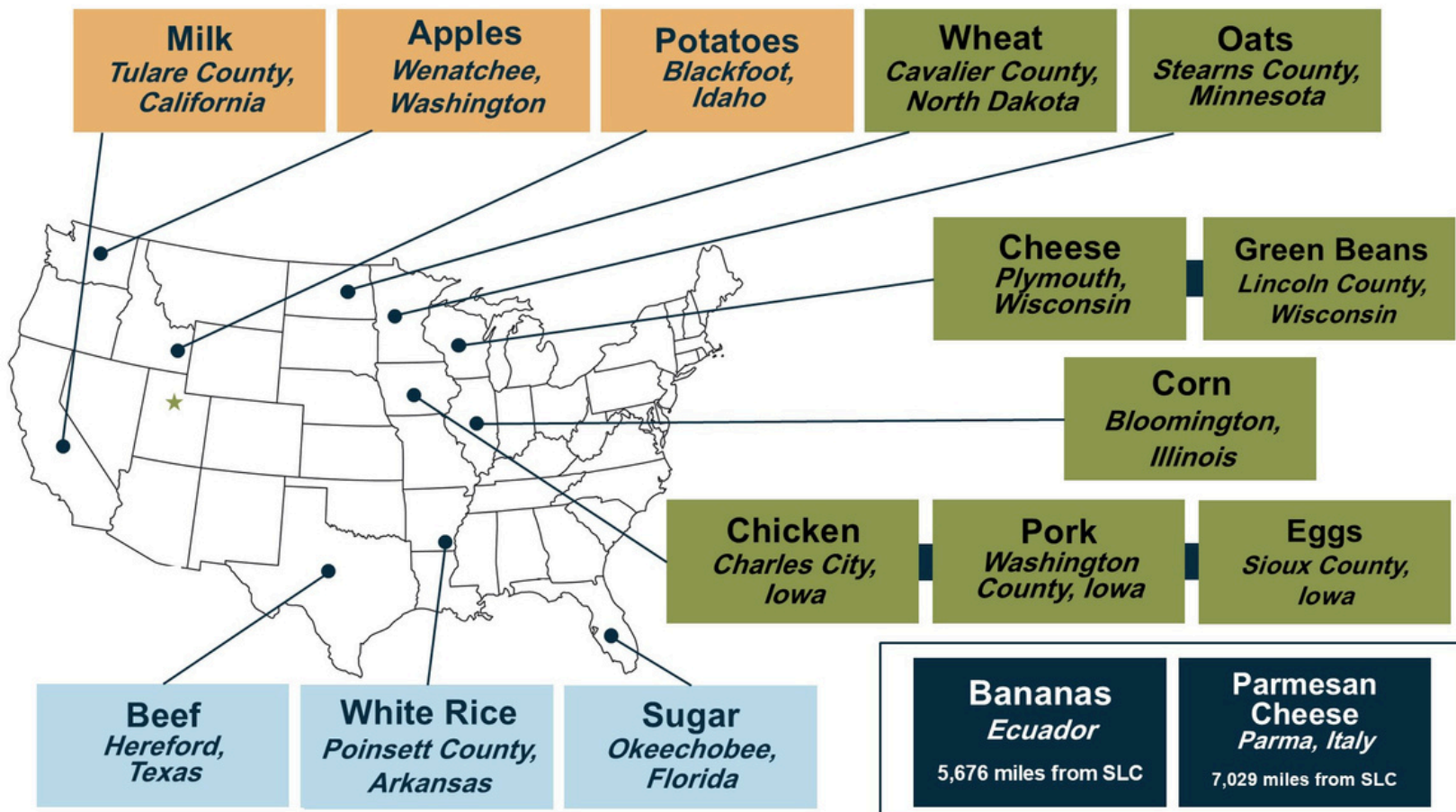
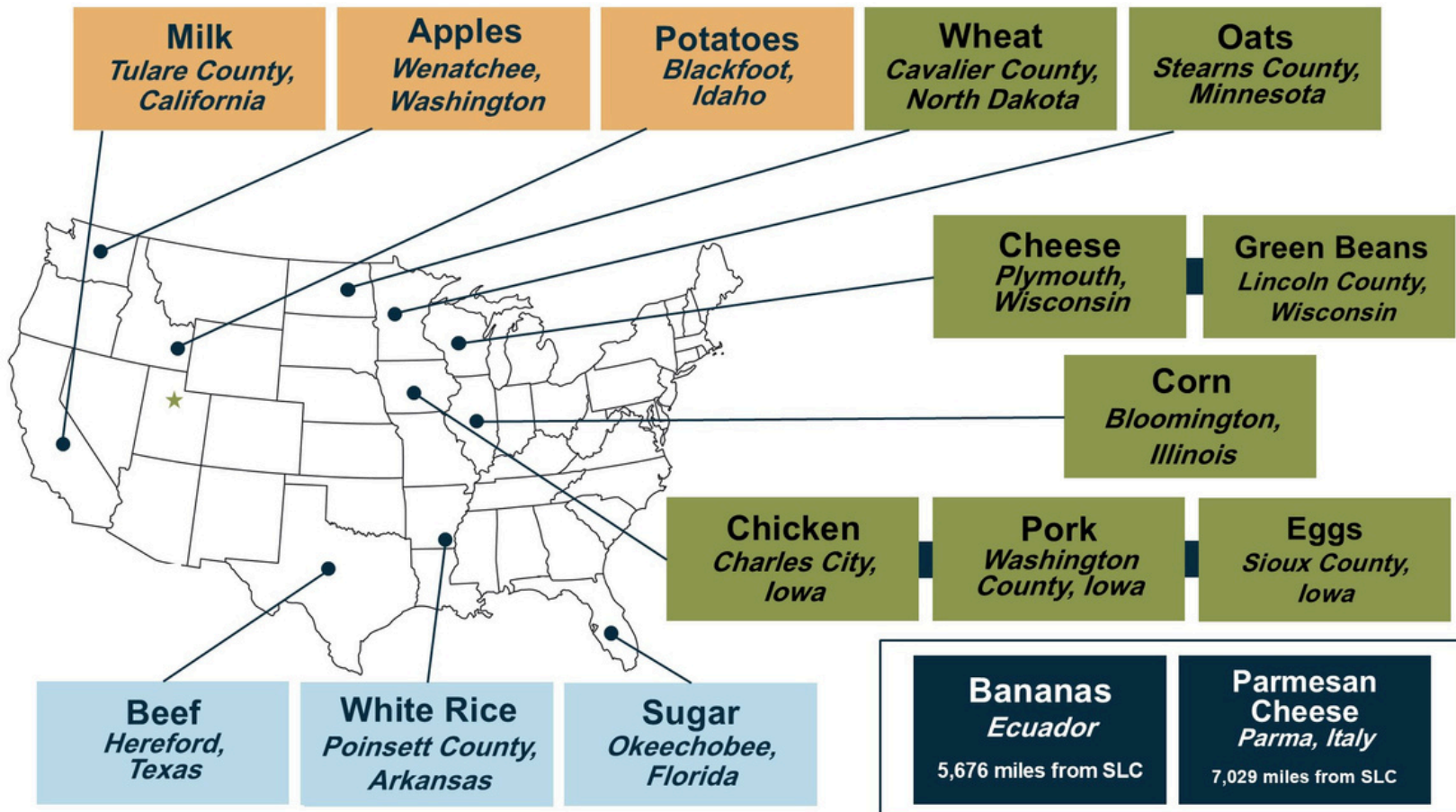
Print enough food production maps and recipe cards for each group to have one to refer to. Please consult the instructions for guidance on the number of groups and copies required before starting.

Instructions

1. If using the lesson 1 PowerPoint, display slide 10.
2. Divide participants into small groups of 4–5 people, though you can adjust the size as needed. If you have more than six groups, you may need to print extra copies of the recipe cards to ensure each group has a recipe.
3. Once the groups are formed, explain the activity's objective (as stated above) and share this definition of food miles: “The distance food travels from where it is grown to where it is purchased or consumed.”
4. Read the following: “Food transport accounts for nearly 20% of total food system carbon emissions”. Explain that as food miles increase, so do carbon and greenhouse gas emissions accelerating climate change.
5. Explain that each group will receive a food production map and a recipe card for this activity. They will work together to determine the food miles associated with the ingredients on their recipe cards. Please review the notes about each handout and explain the following details:
 - a. **Recipe cards (display slide 11 of lesson 1 PowerPoint):** These cards contain different recipes for use in this activity. Groups should refer to each listed ingredient and the accompanying map to calculate the recipe's food miles.
 - b. **Food production maps (display slide 12 of lesson 1 PowerPoint):** This map shows the locations where different foods are most produced in the United States. Participants will use it as a reference for this activity. While the map focuses on these primary production areas, it does not account for the possibility that some foods may come from other locations, both closer to and further from Salt Lake City. The different colors represent various regions: Orange = West; Green = Midwest; Light Blue = South; Dark Blue = International.

6. Distribute the materials from step 5 to each group. Provide a way for groups to record information related to their assigned recipe cards. If a large whiteboard is available, consider partitioning it so each group has a designated space to write. Choose a recording method that allows everyone to see what each group has documented.
7. Explain that each group needs to look up the food miles for the ingredients in their recipe. Using the food production map, they should find the driving distance from Salt Lake City, Utah, to the specified location for each ingredient using Google Maps. The distances for international ingredients are already calculated and recorded on the map. Have them do this for each item listed on their recipe card.
8. Give participants 5–10 minutes to look up the distances and record their answers to the following questions using the whiteboard or another preferred recording method. (**display slide 13 of Lesson 1 PowerPoint**):
 - i. Where is each food item produced in the largest quantities? How far did it travel to reach Salt Lake City, UT?
 - ii. What is the total milage that all the ingredients traveled to reach Utah?
 - iii. Is the total milage comparable to the distance from the East coast to the West coast of the United States? (The distance from New York to Los Angeles is 2,800 miles.)
 - iv. What are actions you can take to reduce food miles?
9. Give each group 1-2 minutes to present the answers to these questions to everybody else.
 - When groups answer question iii, emphasize that many of these recipes involve large food miles and that this is just a sample of some meals we consume. Other ingredients are also shipped from different states and countries around the world. Highlight that this activity provides an estimate of food miles, and the actual distances are likely greater than what is shown here. Many foods travel from where they are grown to processors or manufacturers before reaching consumers.
 - When groups answer question iv above, refer to the following list of actions that can be taken to reduce food miles:
 - Eat locally produced foods. You could attend farmers markets or visit a farm that sells produce.
 - Eat in-season foods. Try eating foods that are in-season, if possible.
 - Grow your own garden with the fruits and vegetables you love.
 - Try to consume more whole/minimally processed foods. Processed foods must be sent to manufacturers before reaching you, increasing the overall food miles traveled.
10. Close the activity by emphasizing that individuals have the power to reduce food miles and help the environment by being more conscious of their food choices. Encourage participants to consider how their decisions can make a positive impact on local communities and the planet.





Chicken Enchiladas

Primary Ingredients

- Tortillas (4 oz wheat flour)
- Chicken (4 oz chicken)
- Mexican rice (4 oz white rice)
- Sour Cream (4 oz milk)
- Cheese (4 oz cheese)



Burger and Chips

Primary Ingredients

- Buns (4 oz wheat flour)
- Beef (4 oz beef)
- Sliced cheese (4 oz cheese)
- Potato chips (4 oz potato chips)



Apple Pie

Primary Ingredients

- Flour (4 oz wheat flour)
- Egg wash (4 oz eggs)
- Apples (4 oz apples)
- Ice cream (4 oz cow's milk)
- Sugar* (4 oz sugar cane)

*Requires about 6 gallons of water to produce 4 oz



Overnight Oats

Primary Ingredients

- Oats (4oz oatmeal)
- Apples (4 oz apples)
- Bananas (4 oz bananas)
- Milk (4 oz cow's milk)



Carbonara Pasta

Primary Ingredients

- Noodles (4 oz wheat flour)
- Bacon (4 oz pork)
- Eggs (4 oz eggs)
- Parmesan cheese (4 oz cheese)



Shepard's Pie

Primary Ingredients

- Beef (4 oz beef)
- Green beans (4 oz green beans)
- Corn (4 oz corn)
- Shredded cheese (4 oz cheese)
- Mashed potatoes (4 oz potatoes)



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