

Food Miles

by
Chasity Curtis

Grade 3: Health/Nutrition, Social Studies

Duration: Introductory lesson: 30 minutes, On-going investigation: 1 week

Materials:

- World and state maps for each student
- **Food Miles Recording Sheet** (included with this lesson)
- Book: *The Food We Eat* by Gail Gibbons
- Various food items marked with place of origin (example: tomato with a sticker from Mexico)
- Access to internet

Lesson Objectives / Outcomes:

The students will:

- Calculate the food miles of various food products.
- Discover that very little of the food we eat is produced locally.
- Learn that choosing local or home-grown fruits and vegetables is a more nutritious way to eat.
- Be able to identify various states and countries on a world map.
- Use the internet to calculate the distance from one location to another.

Vocabulary / Key Words / Terms:

import
export
local
food miles

Introduction: In this activity, students will track the food miles (distance from farm to plate) of many of the fruits and vegetables they eat. The goal of this lesson is to inform students of the benefits of eating self-grown or locally produced fruits and vegetables.

Whole Group Engagement Activity:

To build background knowledge, read *The Vegetables We Eat* by Gail Gibbons. After reading, revisit the section of the book that discusses 'Great Big Vegetable Farms.' Inform students that most of the food in grocery stores comes from vegetables on these



Bonnie Plants 3rd Grade Cabbage Program
www.bonniecabbageprogram.com

great big farms. Also explain that most of these farms are far away from where they live. Some vegetables even come from farms in other countries!

Activity:

1. Tell students that over the next week they will be learning all about food miles. Food miles is the measure of how far food has traveled from the farm to the plate. Inform students the average vegetable travels 1,500 miles, and is on average 5 days old when it arrives at the grocery store! Unfortunately, many of the nutrients and much of the flavor can be lost during this time. The increase in food miles also produces a lot of pollution which is very harmful to our Earth.
2. Using various food items, show students how you can read containers and the stickers on fruits and vegetables to find out where it came from. Explain that they will be doing the very same thing in order to learn more about food miles.

3. Distribute the **Food Miles Recording Sheet**. Demonstrate how to use this sheet by recording the name of a food item and the state or country of origin.

Food Miles Recording Sheet

Food Item	State or Origin (Name of state or country)	Miles Traveled
Example: Tomato	Illinois	1400 miles

4. Next, find the location on the world or state map, and color or mark it.
5. Finally, calculate the approximate food miles by visiting <http://www.organiclinker.com/food-miles.cfm>. (Note: This site calculates an approximate food miles measurement.) Write this down for each food product on the **Food Miles Recording Sheet**.

After students have spent a few days collecting and recording their food miles data, ask if they can think of any ways to reduce their foods’ food miles. By now, students may be able to offer up some suggestions like shopping locally or growing their own food. If not, you will want to tell students that these are options that provide fresher and more nutritious food.

Inform students that much like the cabbage plants they are raising, many of the fruits and vegetables they enjoy can be grown in their own gardens. Ask students, “*What would happen to the food miles if you grew the food yourself?*” Students should be able to articulate that the food miles would be greatly reduced or nonexistent, thus providing better quality and more nutritious food.

**Management Tips:*

- *Begin this activity right before lunch to generate interest.*
- *Have students work in pairs to locate food miles on the computer.*



- *Use a class world map to help students locate geographic points of interest.*
- *Get a more accurate food miles measurement by calculating the distance of your location from Washington, D.C.*
- *Assign this activity as a homework assignment.*

Assessment:

- Students will create a brochure, commercial, or poster informing others about food miles.

Extension Activities:

- Find the important import / export crops of various countries.
- Start a school vegetable garden.
- Write letters to your school's food nutrition director to request that locally produced food be served in the cafeteria.

Internet Resource:

<http://www.organiclinker.com/food-miles.cfm>



Bonnie Plants 3rd Grade Cabbage Program
www.bonniecabbageprogram.com

