



Life Story of a Lunch

Objective: Students will think about the processes and products that go into producing food and fiber.

Summary: Students will select an object from their lunch and analyze the processes, energy and products that went into producing it.

Time: 40 minutes

Student Grouping: Individuals or groups of four to five

Materials: Large pieces of paper and colored pens, crayons or pencils, and the 24"x36" laminated classroom map of Marin County Farms and Ranches, provided to all Marin public schools by the Marin County Office of Education (or contact Marin Agricultural Land Trust (MALT) at 415-663-1338).

Background Information: In this exercise students will begin to see what is involved in the products we use every day. The point is to realize how much goes into products. Consider a hard-boiled egg. The hen had to eat. Her feed came from a feed factory that had lots of big equipment which probably operated on electricity or fossil fuels. Hen houses have people working in them. What do they eat, and how do they get to work? The eggs are put into cartons made from Styrofoam or from paper, which came from trees. There is a factory that makes the cartons and prints labels on them. There is a lot of transportation involved, from packaging and processing to shipping the finished product to the store. The customer probably drives to the store in a car on city roads. The egg is cooked, using more fuel.

Students can come up with many steps of processing and transportation without having a sophisticated understanding of food processing and distribution. The typical mouthful of American food travels 2,000 kilometers (1,250 miles) from farm to dinner plate.

Marin Ag. Facts: Marin's largest agricultural industries, Dairy and Livestock production thrive in Marin due to our green rolling hills which grow grass for much of the year. Marin has been famous for the quality of its milk products for generations. Marin milk and cheese have won awards locally, nationally and internationally. Much of the milk for sale in the Bay Area is produced in our own county. Marin grown beef is primarily shipped out of the area for processing but more ranchers are marketing their natural and grass fed beef directly to the consumer. Marin also specializes in growing excellent organic vegetables.

Produce at the local Farmer's Markets is often grown locally. That's one of the great advantages of buying at the Farmer's Market: genuinely fresh produce. Some of the gourmet organic greens and hormone-free beef, and delicious shell fish served in finer Bay Area restaurants are grown here in Marin county as well. Using locally grown produce not only helps ensure the freshness and quality of the product, but it can also reduce costs and the amount of energy used for shipping. Of course, the shortest route for food transport would be from the backyard to the table; but, gardening isn't for everyone. Buying local produce supports local agriculture, reduces air pollution and green house gases and provides some really tasty food all at the same time!





Preparation:

1. Decide how you will group students.
2. Gather paper and drawing implements.
3. Review *Amazing But True... Facts about Marin County Agriculture*.
4. Review the Marin County Farms and Ranches map with the students.

Procedure:

1. Break students into groups.
2. Distribute paper and crayons.
3. Ask each student or group of students to agree on one lunch food item. Have them draw a picture of that food item on their paper, leaving lots of room for what's to come.
4. Now ask each group or student to think about and discuss how that food item came to be and how it got from its natural state to their lunch. Ask them to draw pictures on their paper that depict that process.
5. While students are drawing, circulate around the classroom asking questions. At first, students may only consider ingredients and forget about transportation, packaging and marketing. How did it get to your house? What kind of package was it in? What is the package made of?

Students will discover that it is impossible to fit everything on the page, unless, for instance, their object is a homegrown organic apple (see Extensions).

6. Have students circle the food products from Marin County.
7. Have students circle the food products that could have been grown or produced in Marin County.
8. Once everyone has filled their page and realized how extensive the process is, have each group (or several volunteers) share their drawing and explain it to the class.

Questions for Discussion:

- Is it possible to figure out all the factors that went into your food item? Why or why not?
- Think of some lunch items that would be simple to describe in this way.
- What item had the most complicated picture? Which cost more, the complicated food or the simpler ones from the second question, above? It can be either.
- Does everyone eat lunch (see “World Feast” activity on page 53)?

Extensions:

- Have students repeat the experience with a parent, describing a dinner, clothing or household item.
- Select one of the drawings and act out the object's life story.
- Compare a home or locally grown apple (or other food item) to a commercially produced one.
- Using the Marin County Farms and Ranches map, a USA map, and a world map have students trace miles traveled by their lunch item. Compare mileage. How long did it take to travel? Which item used most fuel for transportation?
- Have students place removable stickers or pictures on the Marin County Farms and Ranches map representing each item from their lunch that could have been grown in Marin.

4th grade State Standards:

- Life Sciences: 2.0, 3.0
- Writing strategies: 1.1, 1.3
- Listening and Speaking: 1.0, 1.1, 1.2, 1.10, 2.0, 2.2
- Social Studies: 2.0, 2.2

Idea from “Conserve and Renew, Energy Education Activities for Grades 4-6.”