



Food Miles Project

This project is designed for use with the following episode:

- **e² transport — Food Miles**

Objective: To determine the number of food miles associated with a typical meal in your home.

TIMING: 1 – 3 class periods (not including episode discussion); students will have 2 – 3 weeks to complete the assignment.

THE ASSIGNMENT:

- 1) Follow the teacher’s guide for discussion of the **e² transport** episode “Food Miles”.
- 2) Each student will conduct research to determine the origins of each food and beverage item in a typical meal at his or her home. The findings will be written up in a report including the following:
 - a. List of each food and beverage item (at least 3 items required)
 - b. Evidence of the research efforts made to determine the origins of each item (i.e. websites visited, persons spoken to at food distributors/manufacturers, etc.), which can be in the form of notes.
 - c. A detailed description of each item
 - i. Physical aspects - fertilizers, treatment of animals, size of farm
 - ii. Distance traveled to arrive at your home
 - iii. Mode(s) of transportation used, including the trip from the store to your home, and the approximate carbon footprint of that travel.
 - d. A reflection on what you learned in the process. Be sure to include a rationale for why you will or will not change your eating habits based on your findings.

QUESTIONS TO CONSIDER

- 1) Did you have difficulties determining the origins of the food items? If so, how do you feel about eating foods with unknown origins? How is buying an item with an unknown origin different from taking food from a stranger? How is it similar?



- 2) Are there farms near your city or town? Where does the food from those farms go? Do they supply to any markets near your home?
- 3) Is it feasible for you to grow your own food? Is that something you may consider doing in the future? Why or why not?
- 4) Did any of your findings surprise you? If so what was surprising about what you discovered? What did you expect?

SOME HELPFUL RESOURCES

Web sites

Eat Well Guide - www.eatwellguide.org

A search tool to find suppliers of local, sustainable and organic food.

Emissions Calculators - There are several emissions calculators online. Below are two. It is best to use several to determine the most accurate number.

Single Trip Emissions Calculator

www.bankserv.com/greenbanking/calculator2.html

An online calculator to measure the environmental impact of a single car or truck trip.

Flight Emissions Calculator

www.carbonplanet.com/shop/flight_emissions_calculator

An online calculator for flights with an explanation of the different factors involved.

Interactive market - www.pbs.org/strangedays/interactivemarket

Test your green shopping skills as you walk the aisles of this virtual supermarket.

King Corn - www.pbs.org/independentlens/kingcorn

An independent film in which two recent college grads get an inside look at where our food comes from when they plant an acre of corn and follow it from seed to dinner plate.



www.pbs.org/independentlens/kingcorn/more.html

This section of the King Corn website includes links to articles about all aspects of the corn industry, from biofuels to policy to sustainable farming, as well as a list of sources.

**United States Department of Agriculture [USDA] -
www.usda.gov/wps/portal/usdahome**

Sections include Agriculture, Food and Nutrition, and Marketing and Trade.

Articles

Callaway, Ewen. "Food miles don't feed climate change - meat does." 18 Apr. 2008. New

Scientist. 10 Aug. 2008 <<http://environment.newscientist.com/article/dn13741-food-miles-dont-feed-climate-change--meat-does.html>>.

Hill, Holly. "Food Miles: Background and Marketing." ATTRA - National Sustainable Agriculture Information Service. 2008. 10 Aug. 2008

<http://attra.ncat.org/farm_energy/food_miles.html>.

Kwok, Roberta. "Is local food really miles better?" Salon.com. 24 June 2008. 10 Aug.

2008 <www.salon.com/mwt/food/eat_drink/2008/06/24/food_miles/>.

McWilliams, James E. "Food That Travels Well." New York Times 6 Aug. 2007. New York Times. 6 Aug. 2007.

<<http://www.nytimes.com/2007/08/06/opinion/06mcwilliams.html>>.

Stacey, Caroline. "Food Miles." BBC. Feb. 2008. 10 Aug. 2008

<http://www.bbc.co.uk/food/food_matters/foodmiles.shtml>.



Books

Pollan, Michael. In Defense of Food : An Eater's Manifesto. New York: Penguin P HC, The, 2008.

Pollan, Michael. The Omnivore's Dilemma : A Natural History of Four Meals. New York: Penguin (Non-Classics), 2007.

Robbins, John, and Joanna Macy. Diet for a New America : How Your Food Choices Affect Your Health, Happiness, and the Future of Life on Earth. Danbury: H. J. Kramer Incorporated, 1998.

Robbins, John. The Food Revolution : How Your Diet Can Help Save Your Life and Our World. York Beach: Red Wheel, 2005.

Schlosser, Eric. Fast Food Nation : The Dark Side of the All-American Meal. New York: HarperCollins, 2005.

Shuman, Michael H. The Small-Mart Revolution : How Local Businesses Are Beating the Global Competition. New York: Berrett-Koehler, Incorporated, 2007.

FOR THE TEACHER

Students will likely have difficulty when trying to determine where food, especially packaged dried goods, comes from. They should be encouraged to contact the manufacturer via letters, e-mail and/or phone and record those attempts to be included in their reports.



OPTIONAL CLASS PERIODS (50 minutes each)

- Depending on how much experience they have had, students may need some help developing their research skills. They can practice formal letter writing by finding examples to use as models. Below are some tips for being an investigative journalist that may help.
 - Make sure you do as much research as you can before you contact anyone. Show that you are knowledgeable and professional when you make contact by including specifics about the industry and the company's role within it.
 - Have questions ready to find out what motivates companies or people to make certain choices. Have they considered alternatives (i.e. less travel, better treatment of animals, etc.)?
 - When writing a formal request for information, always use proper grammar and check your spelling!
 - When using statistics, always consider the source. Are your sources unbiased? Can you find statistics that are in opposition to those you have found?
- Students can be given a period to go to the library or online to do research and/or work on writing letters/e-mails.
- Students can make posters including interesting facts about each item in their meals. Each student can present his or her poster and then the class can discuss all of the items.
 - Which item traveled the furthest distance? The shortest distance?
 - Which item involves the most sustainable and equitable production practices? Consider the following factors in your answer: the consumer, the farmer, the natural environment, the animals, and the world economy.
 - How many items traveled to several countries?
 - How many items have unknown origins?