



Lesson Plan: U.S. Agricultural Subsidies and Nutrition

THE FILM

This lesson plan utilizes the film and POV's website resources for **Food, Inc.**, a documentary that examines food in the United States and the industry that produces it. Classrooms can use these materials to investigate how agricultural subsidies influence food choices, health and the economy.

POV documentaries can be recorded off-the-air and used for educational purposes for up to one year from their initial broadcast. In addition, POV offers a lending library of DVDs and VHS tapes that you can borrow any time during the school year — FOR FREE! Get started by joining our Community Network:

www.amdoc.org/outreach/events/

Please visit our Film Library at http://www.amdoc.org/outreach_filmlibrary.php to find other films suitable for classroom use.

OBJECTIVES

By the end of this lesson, students will:

- Examine the factors that influence their families' eating habits.
- Use viewing skills and strategies to understand and interpret a film clip.
- Determine how U.S. agricultural subsidies affect the prices of certain foods and the result this has on nutrition, health and the economy.
- Use reading skills and strategies to understand and interpret informational text.

GRADE LEVELS

6-12

SUBJECT AREAS

Economics, Civics, U.S. History, Health, Current Events

MATERIALS

- Method of showing the entire class online video
- Handout: Viewing Guide (PDF file)
- Handout: Reading Guide (PDF file)

ESTIMATED TIME NEEDED

One or two 50-minute class periods, depending on the amount of time spent on class discussion and whether the Reading Guide is completed in class or for homework.

FILM CLIP

Clip 1: "The Dollar Menu" (length 4:56)

The clip starts at 38:53 with a man placing an order at a drive-thru and ends at 43:49 with teens sitting in a circle and raising their hands.

ACTIVITY

1. As a warm-up, ask students to write an answer to this question: What factors influence my family's choices about what to eat?
2. Ask students to name some of these factors and then capture their ideas on the board. Possible responses might include price, convenience, what types of food are readily available, taste preferences, nutritional content, habits, cultural influences and so on.
3. Distribute the viewing guide and instruct students to complete it as they watch the video entitled Clip 1: "The Dollar Menu" (http://www.pbs.org/pov/foodinc/video_dollar.php). Then, show the clip.
4. Discuss the key term and questions from the viewing guide as a class. Incorporate the following charts into your discussion:
 - When discussing their responses to the second discussion point, show students a line graph (<http://economix.blogs.nytimes.com/2009/05/20/whats-wrong-with-this-chart/>) from *The New York Times* that illustrates changes in food prices since 1978, when a number of New Deal-era farm support programs were re-engineered to encourage farmers to increase production of crops like corn. Ask students to describe any patterns they see in the data. Which foods are the most/least expensive today? Which are made with ingredients subsidized by the government? How does this information relate to what the Gonzalez family describes in the video?
 - Show students the bar graph, "Cost Burden of Obesity-Related Conditions to Society and Health Industry" (<http://www.getamericafit.org/statistics-obesity-in-america.html>). Remind students that Mr. Gonzalez, featured in the clip, is just one of many Americans with type 2 diabetes. Point out that such health issues have a significant impact on the U.S. health care system, and that the government-funded programs Medicare and Medicaid paid approximately half of the expenses represented in the chart. Ask students how U.S. farm policies could positively or negatively impact America's health care costs.
5. Have the class look more closely at the economics of U.S. farm subsidies after providing students with a copy of the reading guide and the information from PBS Teachers: The Cultivation of Agricultural Subsidies: Instant Expert (<http://www.pbs.org/teachers/access-analyze-act-economy/curriculum/sugar-supply/the-cultivation-of-agricultural-subsidies#instant-expert>).
6. Collect the Viewing and Reading Guides.

ASSESSMENT SUGGESTIONS

Students can be assessed on:

- Thoughtful completion of the Viewing and Reading Guides.
- Providing written responses on an exam to this question: "Why does broccoli cost more than a hamburger from the dollar menu?"

EXTENSIONS AND ADAPTATIONS

- **Look more closely at the connection between crop subsidies and obesity.** Read Michael Pollan's *The Omnivore's Dilemma: A Republic of Fat* (excerpt) (<http://www.pbs.org/pov/foodinc/omnivores.php>) on the POV website. Then, ask students to write persuasive essays that explain their views on the proper role of government in determining how food is grown, processed and eaten.
- **Learn more about type 2 Diabetes.** Conduct the informal poll shown at the end of the clip with your students: "How many of us have one family member with diabetes? Two family members? Three?" How do the results in your class compare with those in the video? What could account for any similarities or differences? Then, have students conduct research and create information sheets about type 2 diabetes that describe what it is, list risk factors for the disease and explain how choices about food and exercise can help to prevent or control type 2 diabetes. Ask students to distribute these sheets and discuss them with at least five people.
- **Investigate obesity rates for your area.** Refer to maps illustrating state obesity statistics (<http://www.getamericafit.org/statistics-obesity-in-america.html>) and county obesity rates (<http://www.pbs.org/newshour/rundown/2010/02/patchwork-nation-county-obesity-rates-show-hard-work-ahead.html>) to determine the prevalence of obesity in your area. How do the statistics for your community compare with those for other areas? Is the obesity rate increasing or decreasing? What accounts for this trend? Then, have students develop personal eating and exercise plans to improve their health. The class can find helpful tips for eating (http://www.pbs.org/pov/foodinc/pollan_foodrules.php) from Michael Pollan on the POV website.
- **Explore different perspectives on U.S. farm policy.** Ask students to research and identify four major groups affected by U.S. farm policy (i.e., U.S. farmers, fast food restaurants, families, farmers in foreign countries) and create a visual display that outlines their respective positions on the most recent farm bill passed by Congress. Then, discuss who benefits the most and the least from agricultural subsidies.
- **Decide who is responsible for the growing obesity problem in the U.S.** Ask student groups to discuss who or what could be blamed for rising obesity rates among children and adults in the United States: U.S. food policy? Individuals? Parents? Fast food restaurants? Portion sizes? Video games and other sedentary activities? Cultural norms? Advertising? Something else? A combination of factors? Have each group determine who or what is responsible and why and then present its thinking to the rest of the class.
- **Research the accessibility of healthful foods in your community.** Read and discuss, "The Grocery Gap: Who Has Access to Healthy Food and Why It Matters" (PDF file) (<http://www.thefoodtrust.org/pdf/GroceryGap.pdf>). Then, determine how accessible healthful foods are in your community. One way to do this would be to input the address of your school in Google Maps (<http://maps.google.com>) and use the "Search Nearby" feature to map

“grocery stores” in the surrounding area. What types of foods are sold at the stores that come up in the search results? Are there any “food deserts” in the community? What can be done to ensure that everyone has local access to nutritious foods? Tell students to write up their findings and recommendations.

RESOURCES

The (Agri)Cultural Contradictions of Obesity

<http://www.nytimes.com/2003/10/12/magazine/the-way-we-live-now-10-12-03-the-agri-cultural-contradictions-of-obesity.html?sec=health&pagewanted=all>

This *New York Times* article by Michael Pollan (also featured in the film) explains in layman’s terms the economics of farm subsidies and their connection to obesity.

The Cultivation of Agricultural Subsidies

<http://www.pbs.org/teachers/access-analyze-act-economy/curriculum/sugar-supply/the-cultivation-of-agricultural-subsidies>

In addition to the “Instant Expert” information featured in the main lesson activity, this resource includes a brief animation to explain the term “subsidy,” additional teaching strategies and a glossary of key terms.

Farm Subsidies Over Time

<http://www.washingtonpost.com/wp-dyn/content/graphic/2006/07/02/GR2006070200024.html>

This *Washington Post* graphic illustrates levels of U.S. farm subsidies from 1960 to 2005.

Farm Subsidy Database

<http://farm.ewg.org/farm/summary.php>

This database from the Environmental Working Group tracks who receives farm subsidies and how much they are paid.

It’s Not Just Genetics

<http://www.time.com/time/magazine/article/0,9171,1813984,00.html>

This *TIME* magazine article describes a variety of factors that may contribute to obesity in the U.S.

STANDARDS

These standards are drawn from “Content Knowledge,” a compilation of content standards and benchmarks for K-12 curriculum by McRel (Mid-continent Research for Education and Learning) at <http://www.mcrel.org/standards-benchmarks/>.

Agricultural Education

Standard 1: Understands the connections between agriculture and society.

Behavioral Studies

Standard 1: Understands that group and cultural influences contribute to human development, identity and behavior.

Civics

Standard 21: Understands the formation and implementation of public policy.

Economics

Standard 3: Understands the concept of prices and the interaction of supply and demand in a market economy.

Standard 6: Understands the roles government plays in the United States economy.

Family/Consumer Sciences

Standard 12: Understands how knowledge and skills related to nutrition and food affect the well-being of individuals, families and society.

Health

Standard 6: Understands essential concepts about nutrition and diet.

Standard 7: Knows how to maintain and promote personal health.

Standard 8: Knows essential concepts about the prevention and control of disease.

Language Arts

Standard 4: Gathers and uses information for research purposes.

Standard 7: Uses reading skills and strategies to understand and interpret a variety of informational texts.

Standard 9: Uses viewing skills and strategies to understand and interpret visual media.

U.S. History

Standard 31: Understands economic, social and cultural developments in the contemporary United States.

ABOUT THE AUTHOR

Cari Ladd, M.Ed., is an educational writer with a background in secondary education and media development. Previously, she served as PBS Interactive's director of education, overseeing the development of curricular resources tied to PBS programs, the PBS TeacherSource website (now PBS Teachers) and online teacher professional development services. She has also taught in Maryland and Northern Virginia.