

Lesson Overview

Many factors contribute to a person's food choices, from geographic location to culture to socioeconomic status. Students will explore the many external factors that affect why we eat what we eat.



Learning Objectives

- Explain what a **food environment** is.
- Analyze how food environments influence food choices.
- Identify how changing food environments could promote healthier diets.



Essential Questions

- Why do we eat what we eat and why does it matter?
- How much are individuals responsible for their own food choices?
- How can we promote healthier food environments?



Materials

- Student handouts
- Presentation slides
- Dietary Change Signs
- FoodSpan Infographic
- Optional: Tape



Resources

- Diet and Health primer (www.foodsystemprimer.org/food-and-nutrition/ diet-and-health/)
- Food Environments primer (www.foodsystemprimer.org/food-and-nutrition/food-environments/)





Warm-up: Take a Stand: Diet & Choice [5 minutes]

Label opposite ends of the classroom with signs that say Agree and Disagree. Pose the statement: "Individuals are responsible for their own food choices." Have students go to the side of the room that represents their opinion. Undecided students may stand in the middle of the room. Ask for volunteers to justify their position.

Ask: If individuals are not fully responsible for their food choices, who or what is? Students will revisit this question later in the lesson.

This activity can be repeated at the end of this lesson to explore how students' views may have changed.

Main Activity: What Does Healthy Eating Look Like? Health, FACS [15 minutes]

Display the *Healthy Eating Plate slide* and distribute the *Blank Healthy Plate Handout*. Ask for volunteers to briefly summarize the healthy plate model. Then instruct students to use this model to draw or describe a healthy lunch: a meal that provides your body with the nutrients it needs for growth, maintenance, and repair; supplies energy for daily activities; and reduces the risk of illness. Then ask volunteers to share their illustrations and encourage others to provide feedback. Ask: *Is this meal complete? What is missing? What is excessive? What barriers prevent people from eating healthy meals?*



Why do we eat what we eat?

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Is this what healthy eating looks like?

Photo credit: MIa Cellucci, CLF



Teacher Note: Students might only think of meat when considering protein sources. Remind them to also consider plant-based proteins such as beans.





Main Activity: Why Do We Eat What We Eat? Social Studies, Health, FACS [10 minutes]

Students will explore factors that influence food choices. Explain that although we may know what constitutes a healthy diet, our environment may not support healthy eating. Distribute the Influences on Food Choice Handout. Ask: Why do we eat what we eat? List students' responses on the board and group them using the categories on the handout. Have students take notes on their handouts. Refer to the **Influences on Food Choice Teacher Guide** for examples.

Explain that our food choices are influenced by factors such as taste preferences and knowledge (individual factors), people and culture (social environment), food availability and food marketing (physical environment), and government policies (policy environment). For the rest of the lesson, students will focus on the outer three circles, which constitute the food environment.

Main Activity: Food Environment Scenarios Social Studies, Health, FACS [10 minutes]

Distribute the **Food Environments Handout** and have students work in pairs to analyze two food environment scenarios. As a class, discuss: What kind of meals would John and Lydia eat? What barriers might prevent them from eating healthy meals? What are the differences between the two food environments? What could be done to improve each food environment?

Main Activity: Assessing the Food Environment at School Social Studies, Health, FACS [10 minutes]

Ask students to describe the food environment at their school, using these questions as a guide:

- What foods are prepared through the school lunch program?
- Does your school have vending machines, and do they have healthy options?
- Does your school have vegetable gardens?
- Do students buy food from nearby stores or restaurants?
- What food advertisements do you see near your school?

Working in small groups, have students brainstorm how changing their school's food environment could promote healthier diets.



Teacher Note: Clarify that the word "environment" can refer not only to the natural world, but also to people, buildings, and other parts of our surroundings.





Optional Activity: Changes in Health and Diet Social Studies, Health, FACS [15 minutes]

To understand how food choices and food environments have changed over time, students will identify major trends in U.S. eating habits. Display the American Diets slide. Ask for student reactions: What does this chart tell you about Americans' eating habits?

Tape the four **Dietary Change Signs** around the room: Decreased, Increased by Up to 50%, Doubled, and More than Doubled. Call out the items and timespans below. For each item, ask students to move to the station they think most accurately represents how consumption of that item has changed in the U.S. over the timespan. After students have chosen their positions, reveal the information in the third column.

Discuss:

- Which dietary trend was most surprising to you?
- Do you or your friends and family try to avoid or monitor your intake of these foods?
- What might make it hard to avoid these foods?
- What do these statistics tell you about how food environments in the U.S. might have changed over the last few decades?

Wrap-up: Reflecting on Individual Choice [5 minutes]

Revisit the question from the beginning of the lesson: Are individuals responsible for their own food choices? Why or why not? Has your answer changed since the beginning of the lesson? If time allows, have students share their responses.

> "Eat food. Not too much. Mostly plants."

- Michael Pollan

Item	Timespan	Change
Calories	1970 - 2000	The average number of daily calories per capita in the U.S. food supply increased by over 500 ¹ —the equivalent of adding a quarter-pound cheeseburger, 365 days a year, to the diet of every U.S. citizen.
Sugar	1970 - 2010	Added sugar intake increased by 11 percent. While this may not seem like a large increase, added sugar intake was already high in 1970 — as much as two 12-ounce cans of soda.
Soda	1950 - 2000	Soda consumption more than tripled, while milk consumption nearly halved. ²
Snacks	1977 - 2006	Children's snack consumption doubled. ³ By 2006, nearly one-fifth of calories consumed by 2- to 18-year-olds were in the form of grain desserts, pizza, and soda. ⁴
Fruits and vegetables	1970 - 2010	Vegetable intake increased by 12 percent and fresh fruit intake increased by 28 percent, but the average American still falls short of dietary recommendations.





Warm-up Main Activities Wrap-up Extensions

Extensions:

Revisiting the Infographic (Social Studies)

Distribute copies of the FoodSpan Infographic (students may already have their own from previous lessons). Ask students to identify parts that represent food environments. Ask: Do these accurately represent what we learned about food environments? If not, what could we add to make the infographic more accurate? Working individually or as a class, have students draw their own versions, create a collage, or add images to the existing infographic. Share photos of students' work on social media and tag #foodspan.

Food Environments in Film (Health, Social Studies)

The Center for a Livable Future's original short film, *Food Frontiers* (36 minutes, www.foodspanlearning.org/films/food-frontiers.html), showcases six projects from around the U.S. that are transforming food environments in ways that increase access to healthy food. A discussion guide is provided.

Alternatively, students can watch and analyze a film about trends in the American diet (e.g., Supersize Me, Fed Up) or a different film about food environments (e.g., Baltimore Food Ecology Documentary). Discuss: What was most surprising about the film? What did it show you about Americans' eating habits and/or food environments, and how they could be improved?

Community Food Mapping (Social Studies)

Have students create maps of their own communities, noting all food sources (e.g., grocery stores, restaurants, farmers' markets, community gardens) and the distances between them and where people live. Students may additionally include information about sidewalks, bus routes, income levels, or any other features or data that may affect access to (or availability of) healthy food. Based on this information, have students write a paper or give a presentation about the food environment in their community. Students should make note of any additional information they would need in order to better measure and improve their food environment.



Share Your Knowledge: How do food environments affect people's food choices? Ask students to tweet what they've learned and tag **#foodenvironment** and **#foodspan** to join the conversation.

- 1. USDA Economic Research Service. Loss-Adjusted Food Availability. 2014.
- 2. USDA Economic Research Service. Food Availability (Per Capita) Data System. 2013.
- 3. Popkin BM, Duffey KJ. Does hunger and satiety drive eating anymore? Increasing eating occasions and decreasing time between eating occasions in the United States. Am J Clin Nutr. 2010;91(5):1342-1347.
- 4. Reedy J, Krebs-Smith S. Dietary sources of energy, solid fats and added sugars among children and adolescents in the United States. J Am Diet Assoc. 2010;110(110):1477-1784.



