



YCS Farm to School Committee

School Garden Curriculum

Food Deserts: Causes, Consequences & Solutions

Overview

This lesson explores the concept of food deserts and the relationship between food deserts, poverty and obesity. Students are encouraged to examine their personal access to a healthy diet; compare prices of common staple items among different retail options; and analyze the causes and consequences of food deserts locally and nationally. Finally, students are asked to come up with solutions to help the food desert that is closest to their school.

Grade Level

9 - 12

Time

2, 1 hour classes

Subjects:

Social Studies, English

Objectives:

- define and examine the characteristics of food deserts
- identify the causes and consequences of food deserts
- determine if their community is a food desert
- research the closest food desert to their school
- design solutions to help residents who live in food deserts

Essential Questions

- How does our neighborhood influence the choices we make about our health?
- How would not having a grocery store near your home affect you?
- What are the causes of obesity?
- What does it mean to have a healthy diet?
- What criteria might supermarket chains use to decide where to build stores?

Materials

- Access to the Internet
- [Food Desert Statistics](#)
- [What's in Store?](#)

- Flip chart paper
- Four signs, with one of the following phrases written on each: Strongly Agree, Agree, Disagree and Strongly Disagree

Source Acknowledgment

Adapted from Teaching Tolerance Food Deserts Lesson Plan

<https://www.tolerance.org/lesson/food-deserts-causes-consequences-and-solutions>

Background Information

Studies show that certain racial groups are disproportionately affected by obesity. These problems may be worse in some U.S. communities because access to affordable and nutritious food is difficult. This is especially true for those living in low-income communities of color and rural areas with limited access to supermarkets, grocery stores or other food retailers that offer the large variety of foods needed for a healthy diet such as fresh fruits and vegetables, whole grains, fresh dairy and lean meat products. Instead, individuals in these areas may be more reliant on convenience stores, fast food or similar retailers, or they may not have enough money to afford the higher prices. These areas of limited access are called “food deserts.”

Vocabulary:

- **disparity** [dih-spare-i-tee] (noun) lack of equality, inequality, difference
- **food desert** [food dez-ert] (noun) a neighborhood where there is little or limited access to healthy and affordable food such as fruits, vegetables, whole grains, low-fat milk and other foods that make up the full range of a healthy diet
- **food insecurity** [food in-si-kyoor-i-tee] (noun) lack of access to a sufficient amount of food because of limited funds. More than 49 million American households are considered food insecure and are vulnerable to poor health as a result.
- **obesity** [oh-bee-si-tee] (noun) the condition of being very overweight

Procedure

1. (Note: Place the four signs— Strongly Agree, Agree, Disagree, Strongly Disagree—in separate corners of the room. Then read the following statement and directions to students.)
 It's easy to eat healthy food.
 Limited access to a supermarket can be linked to obesity.
 Supermarket chains should be forced to build in urban and rural areas, not just suburban areas.
2. Walk to the sign that represents your feelings or beliefs about this statement. Talk with the other students who chose to stand by the same sign and discuss your position. One group at a time, share your group's position with the class. If you agree more with another group after hearing their position, feel free to switch corners. If you switch corners, be ready to defend your choice.
 (Note: When the groups have finished reporting their positions, repeat the activity with the following two statements.)

3. Write the term “food desert” on the board. As a class, discuss what you think the term “food desert” means. A food desert is an area (neighborhood, community, etc) where healthy, affordable food is difficult to obtain.
4. Distribute the [Food Desert Statistics](#) handout and have students read it. In pairs, choose three of the following questions to answer. Then report your answers to the class:
 - Why might healthy, affordable food be difficult to obtain in certain areas?
 - In which types of areas/communities do you think food deserts are most prevalent: urban, rural or suburban?
 - How do you think living in a food desert could affect a person/family’s food choices?
 - Other than grocery stores/supermarkets, where else could you purchase food?
 - How might food options in convenience stores or fast food establishments be less healthy and/or more expensive?
 - How could living in a food desert relate to food insecurity (hunger)? Conversely, how could it relate to obesity?
5. Review answers to the questions as a class. What conclusions can you draw about the relationship between food deserts and obesity? If there is a direct relationship, which groups might be most often affected? Write down one or two ideas you think could help those who live in food deserts. Save them for later in the lesson.
6. [What’s in Store?](#) asks you to fill out information about three different types of places you could purchase food in your community and to research costs at these retailers for select staple items. With your original partner, pair up with another set of students and complete the handout. Then compare answers with the rest of the class. What surprised you about your community, food costs or other information you researched?
7. Where do you think the closest food desert to your school/community is? Write your prediction. Then go online to the [United States Department of Agriculture’s \(USDA\) Food Desert Locator](#). When you enter the locator, you will see a map of the United States with food deserts highlighted in red. A food desert is defined on the site as a “low income census tract where a substantial number or share of residents has low access to a supermarket or large grocery store (at least 33% of the population resides more than one mile from a grocery store or more than 10 miles for a rural census tract). Share an observation with a partner about the patterns on the national map. Are they concentrated in a particular part of the country? In urban areas? Rural areas? Do any patterns emerge? Compare observations with another group of four.
8. Enter your school’s address into the locator and see if you were correct about the food desert closest to your school. Click on the area highlighted in red to see information about the Food Desert, including the number and percentage of people with low access; the poverty level and the number and percentage of people without a vehicle. What story does the statistics tell?
9. *Note* This is a good pausing point
10. Divide into two groups, one to brainstorm about the causes of food deserts and the other to brainstorm about the consequences. You can find additional information in the sites/reports listed above. The causes group should think about why supermarkets, convenience stores, and fast food restaurants might build or develop in a certain area;

how geography and distance play a role; why a business may not want to build in a certain neighborhood; economics; and demographics. The consequences group should think about personal, economic, national, health-related and social consequences. Each group should present to the other, with the opposite group adding any new information.

11. Pair up with two or three other students from your group to form a smaller group. Imagine that you and your group have been assigned one of the tasks below to assist those who live in the closest food desert to your school. Or refer back to the ideas you generated earlier in the lesson to see if you'd rather use one of those. In order to complete your task, you will need to research information about the neighborhood or community. Try to learn economic and racial statistics, along with other distinguishing factors of the community.

Task 1: You have been asked to present information to a large grocery chain that would persuade them to build a supermarket closer to the food desert you have selected. Information could be about the community itself, including the number of children; general health/wellness statistics; the benefits to the supermarket of building here; and common good that a supermarket can bring to a community.

Task 2: You have been asked to come up with an idea, other than a standard grocery store/supermarket, that could give those in the food desert you've selected access to healthy and affordable food. Write a white paper describing your idea, what would have to happen to make the idea a reality, any related costs and why you think it would work in this community.

Task 3: You have been asked to design an education campaign to help those who live in the food desert understand the importance of eating healthy foods and tips for accessing healthy foods and selecting affordable healthy foods when on a budget.

12. Present your project—justifying how you think it could help the food desert you have identified—to the class.

Evaluation

Go back to the statements you heard at the beginning of the lesson and determine if you feel the same or if your opinion has changed. Justify your answer using what you've learned in the lesson.

Extension Activity/Adaptations

As a class, select one (or more) of the project ideas relating to food deserts that you could truly implement. Design a plan that could turn the idea into a reality, identify the stakeholders and implement the plan.