

Fall 2016

Food Deserts

Mary Sprow

Cedarville University, mcspro@cedarville.edu

Martha Morton

Cedarville University, memorton@cedarville.edu

Emily Fisher

Cedarville University, ejfisher@cedarville.edu

Bethany Anderson

Cedarville University, bethanylanderson@cedarville.edu

Follow this and additional works at: http://digitalcommons.cedarville.edu/public_health_posters



Part of the [Pharmacy and Pharmaceutical Sciences Commons](#), and the [Public Health Commons](#)

Recommended Citation

Sprow, Mary; Morton, Martha; Fisher, Emily; and Anderson, Bethany, "Food Deserts" (2016). *Introduction to Public Health Posters*. 2. http://digitalcommons.cedarville.edu/public_health_posters/2

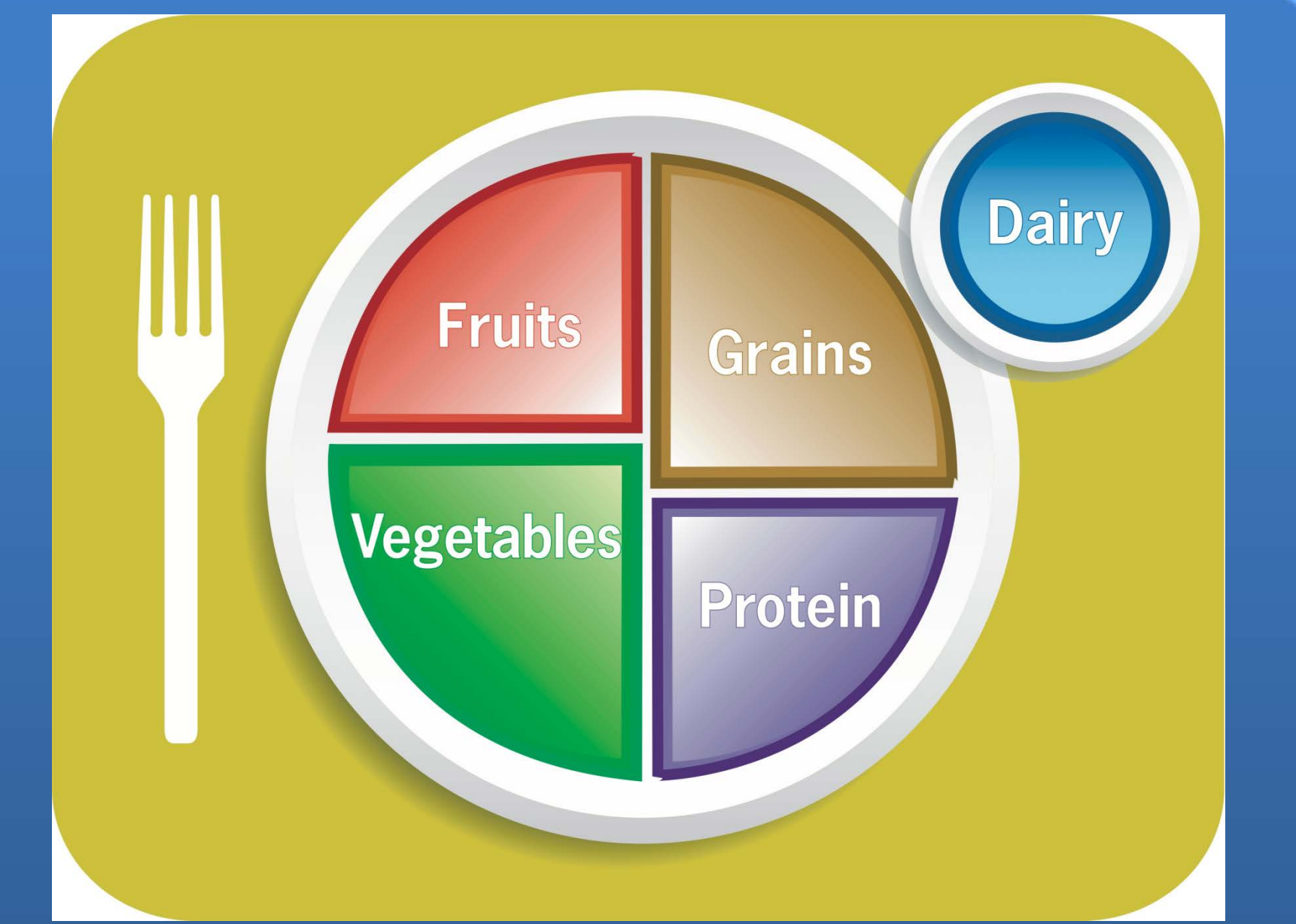
This Poster is brought to you for free and open access by DigitalCommons@Cedarville, a service of the Centennial Library. It has been accepted for inclusion in Introduction to Public Health Posters by an authorized administrator of DigitalCommons@Cedarville. For more information, please contact digitalcommons@cedarville.edu.



Food Deserts

Mary Sprow, Martha Morton, Emily Fisher, and Bethany Anderson

Cedarville University School of Pharmacy



What is a Food Desert?

A food desert is a geographical area in which there is not easy access to fresh, healthy, and affordable food.

Qualifications of a Food Desert

1. Low-income communities: a poverty rate of 20% or a median family income at or below 80% of the area median family income (Agricultural).
2. Low-access communities: At least 500 persons and/or at least 33% of the census tract's population live more than one mile from a supermarket or large grocery store (Agricultural).

America's 9 Worst Urban Food Deserts

According to Goldschein's article 10 American Food Deserts Where it is Impossible to Eat Healthily (2011) and the article, America's Worst 9 Urban Food Deserts (2011), these are the nine worst urban food deserts of the United States.

- **New Orleans, Louisiana**
 - 60% of the residents say they have to choose between buying food and paying utility bills
- **Chicago, Illinois**
 - Estimated 600,000 people live in food deserts
- **Atlanta, Georgia**
 - Atlanta's more affluent neighborhoods have more than three times as many supermarkets as its poor neighborhoods
 - High income citizens have equal access to fresh food and fast food, while only half of low income people enjoy that access.
- **Memphis, Tennessee**
 - Tennessee: second in the nation for states lacking access to healthy foods in low-income neighborhoods
 - Memphis ranked #1 for hunger in the country
- **Minneapolis, Minnesota**
 - Food deserts cover about one-half of Minneapolis and one-third of St. Paul
- **San Francisco, California**
 - A fairly large food desert located in the Bayview, Hunter Point and Visitation Valley neighborhoods
 - 150,000 people, 20% of the city's population neglects buying food in order to pay their bills
- **Detroit, Michigan**
 - Has 155 full-service grocery stores, compared to its more than 1,000 convenience stores
 - 550,000 Detroit residents live in areas defined as food deserts
- **New York City, New York**
 - 3 million New Yorkers live in communities without enough access supermarkets
- **Camden, New Jersey**
 - 900,000 or more than 10% of New Jersey's population lack adequate access to supermarkets with fresh produce, meat and dairy products
 - Only has one major supermarket

USDA Food Access Research Atlas (interactive map)



Who and What does this Effect?

While it seems like food (especially healthy food) is readily available, we are in a small area where food has been made available for us. It is interesting to know that even cities near Cedarville, Ohio have food deserts.

According to an article titled, *Identifying and Measuring Food Deserts in Rural Ohio*,

- 23.5 million people live in food deserts, half of these people are low income
- 2.3 million households in U.S. live 1+ mile away from a supermarket and have no transportation
- 3.4 million U.S. households live between 0.5 to 1 mile and have no means of transportation
- 4.4% of U.S. households in rural areas live more than 1 mile from the supermarket, with no access to transportation.
- 22% of U.S. households in low-income urban areas live 0.5 to 1 mile from a supermarket with no access to transportation

As supported above, the individuals that are most impacted by this issue are in low income urban areas or secluded rural areas.

Health Indicators

Food Deserts affect mortality rates, which is used as a health indicator. Without access to healthy food, people are more likely to have poor diets which lead to chronic health problems. The following information was found in the article, Food Deserts and how they impact North Dakota (2014) and a paper by Whalen & Seserman entitled, Looking for an Oasis in a Food Desert (2011).

Diabetes

- Difficult to prevent or manage with a lack of access to healthy foods.
- The foods that are available only make the problems worse.



Heart disease

- Typically requires the patient to make significant changes to their diet, which may not be feasible if they are living in a food desert.

Obesity

- Obesity affects both children and adults
- Childhood obesity rates are so high that life expectancy may become shorter in the future.
- Children who grow up in food deserts never learn how to achieve a healthy diet, therefore having a higher risk of obesity in adulthood.
- Obesity plays a factor in other chronic diseases as well and a healthy diet decreases the risk for such diseases.

Indirect Impacts

It is common knowledge that what you put into your body, by eating, is very important in determining how you will function in day-to-day activities. If you are not receiving the sufficient nutrients needed for energy to carry out your daily activities that will bring upon issues. Some indirect impacts that are tied to food deserts are that people who live in these areas are not able to perform as well in simple tasks.

- **Students living in food deserts and how that could affect their studies.**

- Study in New York State School District by Seth E. Frndack. Study performed on 232 suburban and urban school districts in New York state (Frndack).

- **Athletes living in food deserts and how that could affect their performance.**

Determinants of Health

Social Factors...

Transportation

- Access to a private vehicle plays a large role in determining the ease of obtaining sufficient, healthy, and affordable food (Dutko)
- Comparisons between food desert tracts and other areas suggest that the disadvantaged status of food deserts is also reflected in lower vehicle access rates (Dutko).
- 25 percent more of all occupied housing units report having no access to a vehicle in rural food deserts than in most rural tracts (Dutko).
- For urban food deserts, the percentage of households without access to vehicles is anywhere from 24 to 38 percent higher than in other urban areas (Dutko).
- USDA's Economic Research Service study



Individual Behavior Choices...

Diet

- People in food deserts do not have the resources to eat healthy.
- If someone escapes from a food desert environment, they will more than likely not have the skills to prepare healthy, balanced meals.
- They will also not have the knowledge to make healthy food choices.

Call to Action

The following information came from Food Deserts: A Visual Study

Community

- Grow food locally through community gardens
- Develop alternative retail outlets like farmers markets

Access

- Increase stock and variety of healthy food in local grocery stores
- Build more grocery stores where there any not any
- Improve transportation to grocery stores and farmers markets

Empowerment

- Provide cooking classes to teach people how to make healthy and inexpensive meals.
- Teach classes on nutrition
- Participate in Target Dayton



Target Dayton:
A way to be involved locally.



Pharmacy and Food Deserts

- Due to the fact that individuals living in a food desert environment do not receive the nutrients and vitamins that they need from their diet, they may turn to supplements and medications to account for these missed components.
- Individuals may require more medicinal help due to the chronic conditions. that stem from an unhealthy diet. These include, but are not limited to, diabetes, cardiovascular diseases and obesity.
- In areas classified as food deserts, there is a high probability that it could also be part of a pharmacy desert, because pharmacies typically reside in or around grocery stores.

Reference List

- America's Worst 9 Urban Food Deserts. (2011, September 22). Retrieved November 3, 2015, from <http://newsone.com/1540235/americas-worst-9-urban-food-deserts/>
- Agricultural Marketing Service - Creating Access to Healthy, Affordable Food. (n.d.). Retrieved October 28, 2015, from <https://apps.ams.usda.gov/fooddeserts/fooddeserts.aspx>
- Dutko, P., Ver Ploeg, M., & Farrigan, T. (2012, August 1). Characteristics and Influential Factors of Food Deserts. Retrieved November 3, 2015, from <http://www.ers.usda.gov/media/883903/err140.pdf>
- Eliminating Food Deserts and Improving Food Access. (n.d.). Retrieved November 3, 2015, from <http://www.dccentralkitchen.org/eliminatingfooddeserts/>
- Food Deserts. (2015). Retrieved October 28, 2015, from <http://www.foodispower.org/food-deserts/>
- Food Deserts and how they impact North Dakota. (2014, March 1). Retrieved November 3, 2015, from <http://www.ndcompass.org/trends/ask-a-researcher/karen-ehrens-food-deserts--march14.php#Vjk-APmTIW>
- Food Desert Solutions. (n.d.). Retrieved November 3, 2015, from http://brownisthewpink.files.wordpress.com/2014/05/fooddeserts_solutions_final.jpg
- Frndak, S. (2014, December 9). An Ecological Study of Food Desert Prevalence and 4th Grade Academic Achievement in New York State School Districts. Retrieved November 3, 2015, from <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4274497/>
- Goldschein, E. (2011, October 12). 10 American Food Deserts Where It Is Impossible To Eat Healthily. Retrieved November 3, 2015, from <http://www.businessinsider.com/food-deserts-urban-2011-10?op=1>
- Identifying and Measuring Food Deserts in Rural Ohio. (n.d.). Retrieved November 3, 2015, from <http://www.joe.org/joe/2012june/a6.php>
- Social Determinants. (2014). Retrieved November 3, 2015, from <https://www.healthypeople.gov/2020/leading-health-indicators/2020-lhi-topics/Social-Determinants>
- Whalen, MD, E., & Seserman, MPH, RD, M. (2011, October 1). Looking for an Oasis in a Food Desert. Retrieved November 3, 2015, from <https://www.cancer.org/acs/groups/content/@eastern/documents/webcontent/acscp-031472.pdf>

Overview of the Impact of Food Deserts

The following information came from an article titled Food Deserts (2015):

Health

- Food deserts lead to poor diet and higher levels of obesity and other diet-related diseases (ex. Diabetes and heart disease).
- Food at convenient stores are loaded with processed, sugar, and fat laden foods.

Financial

- In the short-term unhealthy eating may be economically cheaper but is one of the main reasons minority and low-income populations suffer from health conditions because of diet.
- From 1989 to 2005 the price of fruits and vegetables increased by almost 75% while the price of fatty foods dropped by over 25%.

Spiritual

- 1 Corinthians 10:31
-We should do all things in a way that is pleasing to God, especially eating.
- 1 Corinthians 6:19
-Knowing that the Holy Spirit resides within us, we should strive to make a healthy place for Him by glorifying Him with our bodies.