

Food Deserts and Food Swamps: Initiatives Towards Nutritious Food Availability

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Introduction

In the US, food deserts are a phenomenon that have silently spanned over many regions, especially those that house low-income, and oftentimes marginalized racial groups, especially Hispanic and African-American communities. Food deserts are urban regions with nearby infrastructure that do not provide accessible and affordable access to healthy food; They typically consist of fast food restaurants, corner shops, and other convenience stores. Because there is minimal access to fresh and healthy food for these regions, the people living in these food deserts are negatively affected, which shows a strong correlation between living in food deserts and negative health outcomes. “Neighborhoods where economically disadvantaged and minority populations reside were more likely to have abundant sources of foods that promote unhealthy eating” (Wright et al., 2020). Obesity, heart disease, diabetes, and high blood pressure are associated with the poor diets that food deserts promote. Similarly, food swamps are another type of region that causes difficulty in accessing healthy and fresh food, however, they slightly differ from a food desert: A food swamp is an area where accessibility to nutritious foods is significantly low, but also has a disproportionately overabundance of fast food restaurants and convenience stores as compared to a food desert. Therefore, when looking at food deserts and food swamps that target marginalized populations, and lead to many nutrition-related chronic diseases, the government needs to take greater action on both funding nutrition accessibility and taxing corporations that offer less healthy foods, if the government is to address nutrition-related diseases in these marginalized populations.

Food Swamps and Deserts: Financial Disparities

Oftentimes, when looking at food deserts there is a correlation between those who live in low-income communities and those who live in food deserts. These communities also tend to represent racial minorities. “Environmental conditions have been extensively explored as contributing factors in promoting health disparities. It is widely accepted that racial/ethnic minority neighborhoods are disproportionately affected by increased rates of morbidity, mortality and adverse health outcomes” (Walker et al., 2010). Less government work is done in the cities and infrastructure does not support its community. Sidewalk infrastructure, while not the main focus of a food desert, is still a component that affects accessibility to grocery stores, and is quite common in food deserts in the US. “Two miles on a well-maintained stretch of road – with wide, clear sidewalks, good lighting, and high visibility for safety – doesn’t seem like

much. With a reliable vehicle, even less. But these are luxuries that people living in food deserts often don't have" (Feed the Children, 2025). Sidewalks are an important piece to food accessibility because a household that might not own a car, is unable to use roads to get to grocery stores, and without a sidewalk, their access could be very limited, making daily shopping harder, and could possibly cut off access completely to grocery stores. But, even with sidewalks, distance is a great issue. In an interview by the Guardian, Michelle Williams (2019), a citizen living in a food desert, speaks about her difficulties reaching the grocery store, "The journey to the grocery store takes, I'd say, an hour and a half if the bus comes on time. Having to take two buses is stressful and it's frustrating."

While receiving less help from the government, convenience stores and fast food restaurants notice these communities in need, and tend to take advantage, particularly with their enticing prices and convenient, physical placement. However, they provide convenient processed foods over fresh and local to make quick and consistent profit. Compared to convenience stores, regular grocery stores that provide healthier food options and fresh foods are less likely to place their stores there because they might make less profit and decide to build in more affluent areas, perpetuating the disparities between low-income, racial minorities, and white communities. "Further, racial and economic disparities in food access persist across the country, with approximately 30 percent more non-white residents facing limited access to food retail than their white counterparts," and, "...many are left to do their grocery shopping at convenience stores where nutritious food is less available" (Karpryn et al., 2019). This means that food desert and swamp residents exclusively will purchase and consume all their meals from convenience stores and fast food restaurants.

Health Effects of Food Swamps and Deserts

When a nutritionally balanced diet is unavailable and not affordable for low-income communities living in food swamps, adverse effects are introduced. Nutrition-related chronic diseases and conditions such as colorectal cancer, obesity, heart disease, and high-blood pressure are the common health conditions that arise when living in a food swamp or desert. A study conducted by the American Cancer Society found that, "census tracts with low healthy food accessibility were predominantly concentrated in the Southeast and West, where an excessive number of tracts with lower life expectancy were located as well" (American Cancer Society, 2023). And when referring back Michelle Williams, who lives in a food desert in Memphis, the

wealthier portion of the neighborhood on average lives 13 years longer compared to those who live in the poorer part of the city that lives in a food desert (The Guardian, 2019). This means that there is a growing necessity for government involvement to resolve and improve these conditions.

Government Solutions

Food stamps have been introduced since 1961, and support a significant amount of the population in the US and impoverished communities by lightening the financial burden of food, and allows for a greater range of the types of foods that could be purchased. Working in tandem with food stamp funds, local farmers markets are able to thrive more and place themselves in food swamps and deserts because they are able to accept the food stamps that many of the communities use for their monthly food budget. This means that those living in food deserts and swamps have greater access to fresh, healthy, and local foods. Farmers markets are a good source for communities to get nutritious foods because these markets do not require a building to sell their goods, and can be placed in locations as common as a parking lot, showing up around once or twice a week. But are farmer's markets enough to fight against the issues that food swamps and deserts present?

Although farmers markets offer a variety of solutions to the marginalized communities, there is more that can be done, especially since there are not always farmers markets available. Another perspective is looking at how, rather than offering more options to choose from, local governments are limiting what is already available. When looking at highly processed foods, a common popular item is soda. And so rather than directly limiting processed foods from the providers—fast food restaurants, and convenience, corner, and dollar stores—the “Soda Tax” is a tax that adds an additional 1-2 cents per ounce of sugar-sweetened carbonated drinks, which in theory will make the consumer look for cheaper alternatives, and turn towards healthier choices. Currently, the Soda Tax is a tax that is not implemented state-wide, but rather local, and oftentimes rare. According to UW News, “Researchers found that after the tax was introduced, lower-income households decreased their purchases of sweetened beverages by nearly 50%, while higher-income households reduced purchases by 18%. Since previous studies have shown that lower-income individuals consume sweetened beverages at a higher-than-average rate, these results suggest the taxes could help reduce health disparities and promote population health” (Kirschman, 2024). Therefore, to increase the healthful benefits of this initiative, the government

needs to implement this tax state-wide to make an impact. However, while in theory, this policy fights for a cause pushing for less consumption of unhealthy food, it can negatively target low-income minorities who are only able to purchase these goods, and affect their ability to get anything at all. “Lower-income households spend a greater share of their disposable income on sugary drinks, bearing a disproportionate burden of the tax” (Hoffer et al., 2025). With that in mind, these reformations should be paired with another solution that counters the negative effects of the Soda Tax. Because, in a study about obesity rates in food deserts and swamps, it’s mentioned that, “by simultaneously increasing availability of healthy food and decreasing availability of unhealthy food, policymakers can maximize the potential of the food environment to reduce obesity and promote health equity” (Cooksey-Stowers et al., 2017).

Government Subsidies/Grants on Health Foods

Subsidies for fresh groceries with an addition of taxes implemented could guide consumers to make easy and affordable choices that benefit their wellbeing. For example, in California, a bill, the Food Desert Elimination Grant Program, “will help California families struggling with accessing affordable food,” and, “...authorize the department to award grants that encourage and support grocery store operators seeking to locate a grocery store in a food desert community” (Hurtado, 2025). In a study where new grocery stores opened, “Results showed that nearly half of the respondents switched their main food store location to the new store,” which allows them to experience more variety in healthful foods and possibly to purchase them as well (Walker, 2010). However, even then, there are difficulties to persuade grocery stores to build their stores in these food deserts and swamps. Therefore, a smaller step is the government awarded a program that has corner stores implement mini-fridges in their stores that offer healthy and fresh foods, where “CDFA today announced \$9 million in grants for 103 projects through the Healthy Refrigeration Grant Program, which helps address food deserts by funding energy-efficient refrigeration and freezer equipment for corner stores, small businesses and food donation programs in low-income or low-food access areas.” (Governor Gavin Newsom, 2023).

Addressing the Counter Argument

Do food deserts even exist, or is it just a correlation? According to U.S. News, “Food Deserts Aren't the Key Cause of Nutritional Inequality.” In their study, a sample of 10,000 households experienced over 1,000 new grocery stores and markets built in their food swamps, and the calculated healthy eating in households only had a difference of 1.5% between low and

high income households (Allcott et al., 2019). This points towards the multifaceted issue that food deserts present. While an increase in grocery stores allows for better access to healthier foods, those purchasing from those stores may not recognize what they might need to better support their bodies, and may continue to shop for the same ingredients and food items as they did from the convenience stores and fast food stores. Because of that, food deserts present a great issue, but additionally food education also needs to be taken into consideration. Community nutrition education is a necessity and a right, and can be taught from within all education levels within schools, and through programs for adults. As reported by UChicago News, “...policies aimed at nutrition education may be more effective at closing the nutrition gap than subsidies and grants meant to encourage building more supermarkets and farmers markets in food deserts” (Jones, 2018). Along with that, not only does placement of grocery stores and nutrition education need to be improved, but also the prices of healthy foods in comparison to junk foods, “The findings of this study suggest that it may be important to offer better prices for healthy foods compared to junk foods and actively market healthy food choices simultaneously, while also enabling consumers to resist the influence of junk food marketing” (Ghosh-Dastidar et al., 2014).

Conclusion

The chronic concerns with food deserts need to be addressed through multiple solutions in order to make an impact that is helpful for a majority of minorities suffering from their physical circumstances, whether it be from distance from a grocery store, too much access to foods that aren't nutritionally beneficial for their bodies, less government attention to infrastructure, or lack of education regarding basic nutrition needs. Thankfully, there are strides to improve these issues, and can only improve from where they have started. Food stamp programs are pushing for healthier purchases, such as those at farmer's markets, as well as food taxes guiding those to pick a different, healthful food option in grocery stores, and government grants for grocery store and refrigerator placement. And while the government is a main target to make the strongest impact, I believe that volunteering in programs that teach communities about nutrition is a start that can improve even one life. Good nutrition is a necessity everyone deserves.

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