

Community Quicksand: How Food Swamps Negatively Affect Adolescents

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Introduction

Food swamps are areas that have a high concentration of unhealthy food without access to nutrient dense food, which negatively takes its toll on children in these areas.

Research Question:

How do food swamps impact the physical and intellectual development of children in low-income communities?

Thesis Statement:

Food swamps can create health issues for the young people who live in them, such as childhood obesity, change in brain chemistry, and early development of chronic diseases.

Methodology:

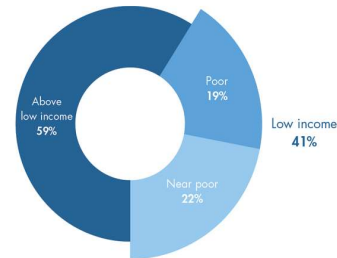
I chose this topic because I wanted to bring awareness to this situation that is not thought about as much, but a large amount of people experience. Adolescents are not usually a large focus even though they are the future, which is why I did my research on children in these situations. I began my research with the academic search engine "JSTOR" to find more articles about Food Oppression in general and to also find articles that go in depth on food swamps. I used Google Scholar to find studies researching the physical and neurological effects of junk food from living in food swamps. For the demographics of children who live in low-income communities, I went to the National Center of Children in Poverty (NCCP) for my data.

Background

- **Food Oppression** is institutional, systemic, food-related action or policies that physically weakens a socially subordinated group. This can be in terms of race, wealth, etc. (Freeman,2007).
- A **food swamp** is a form of food oppression where an area has limited access to affordable and nutritious food but has plenty of fast-food restaurants and convenience stores. Food swamps typically occur in lower-income communities.
- Food swamps are often confused with food deserts, which are also areas where lack of food is also an issue. However, food swamps have more access to foods that are not healthy, and food deserts lack access to food in general.
- According to the CDC, **chronic illnesses** last longer than a year and affect daily living. Chronic illnesses can be treated, but not cured.
 - Ex. Heart disease, stroke, cancer, diabetes, arthritis
- **Dopamine** is a neurotransmitter in the brain that is known as the feel-good chemical. Producing too much dopamine can lead to anxiety, excessive energy, insomnia, and hallucinations. (Abbott ,et al.2023)

Data Analysis

Figure 1: Children by family income, 2016

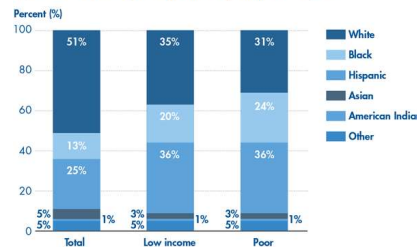


Percentages may not add up to 100 due to rounding.

Koball, Jiang, H., Yang. (2016, January). *Children by family income*. The National Center for Children in Poverty.

According to the National Center for Children in Poverty (NCCP), Out of the 72.4 million children under 18 as of 2016, 41% of those kids were low income.

Figure 5: Race/ethnicity among children by family income, 2016



Percentages may not add up to 100 due to rounding.

Koball , Jiang, H., Yang. (2016, January). *Race/Ethnicity among children by family income*. The National Center for Children in Poverty.

According to the data, 65% of children who were low-income as of 2016 were not white. Most children were Black or Latinx in this data set.

- Physical Health + Environmental Effects
 - Counties with food swamp environments had higher chances of obesity related cancer mortality. (Bevel, 2017)
 - A study done in Baltimore on Early Adolescent girls shows that girls living in food swamps consumed more junk food than girls that did not live in food swamps (Hager, et al. 2017).
- Neurological effects
 - Children who frequently consume fast food with excess salt, sugar, and saturated fats, lead to issues such as stress and anxiety, as well as a decrease in concentration, attention and memory (Gautam 2023).
 - Overconsumption of junk food can lead to increasing dopamine levels, which can be overstimulating to the dopamine pathway. (Abbott ,et al.2023)

Results

Food swamps do negatively affect children in low-income communities. According to data from the National Center for Children in Poverty, the majority of children living in these areas are children of color. These children are most likely to be exposed to food swamps, which then causes them to consume more junk food than someone who does not live in a food swamp due to the lack of access to healthier food. (Hager, et al. 2017). This can be due to lack of transportation, lack of access to grocery stores, and greater access to convenience stores such as Dollar Tree or Dollar General, which most often sell junk food.

This malnourished environment can cause physical health issues to occur at a more common and faster rate. A recent study showed that people who lived in food swamps had higher odds of obesity related cancer mortality (Bevel, 2017).

The overconsumption of junk food also has negative intellectual effects as well. Children who consume fast food frequently lack food with nutrients they need, which can lead to nutrient deficiencies. Nutrient deficiencies have been tied to mental health issues (O, Neil, 2014). Children who eat food that are high in excessive salt, sugar, and saturated fats can have problems with stress, anxiety, and a decrease in concentration, attention, and memory (Gautam, 2023). Too much fast food can also affect dopamine levels in the brain, which is still developing for a child (Abbott, et al.2023).

These are just some of the effects that the overconsumption of junk food can have on adolescents. However, if there are children who are more exposed to fast food due to them living in a food swamp, these effects can be more common in these areas.

Conclusion

In conclusion, food swamps have a negative impact on children of color in low -income communities. Due to their circumstances, if they do not have the ability to drive out of the food swamp to get food, they have no choice but to eat the food around them. This can cause many issues physically and intellectually that can cause problems in adulthood.

Visual Depiction of Food Swamps



("Sabotage" print created by Aniah Satterfield, May 2023)