

Health Concerns for People Who Depend on Food Assistance

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On my honor as a University Student, I have neither given nor received unauthorized aid on this assignment as defined by the Honor Guidelines for Thesis-Related Assignments

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Introduction

Exacerbated by the COVID-19 pandemic, there were an estimated one in eight people in the United States facing food insecurity in 2020, which is considered to be a lack of consistent access to enough food for an active, healthy lifestyle (*What Is Food Insecurity in America?*, n.d.). Food insecurity in children and the elderly is especially concerning because of the risk of chronic conditions that can lead to high healthcare costs if not taken care of. Food assistance programs attempt to alleviate the burden of purchasing nutritious foods by providing benefits that can be used at qualifying grocery stores. My research question is in what ways do food assistance programs contribute to a nutrient-rich diet? Because food assistance programs have changed and evolved since their inception, they can be viewed through the lens of technological momentum as described by Thomas Hughes. In the socio-technical portion of this paper, I will argue that those receiving food assistance through the Supplemental Nutrition Assistance Program (SNAP) are able to have nutrient-rich diets due to the system builders and lack of reverse salient technology that the program enforces.

Methods

To conduct this research, a policy analysis of the SNAP will be performed. This will be done through examining the United States Department of Agriculture policies to determine what can be purchased by individuals and families who are utilizing the SNAP. Additionally, background information of who qualifies for the SNAP, how many people are affected by food insecurity in the United States (U.S.), consequences of not addressing food insecurity, what families can buy using the SNAP, as well as some guidelines for what are considered nutrient-

rich foods will be provided to adequately inform readers about necessary information for considerations of food assistance programs. Using the information from the policies researched and the background information on what food is nutrient-rich that can be purchased by participants, it can be determined whether or not food assistance programs, such as the SNAP, contribute to nutrient-rich diets for those who are food insecure.

Supportive Background on Food Assistance Programs and Nutrient-Rich Diets

Food assistance programs were first established in the U.S. in the late 1930s to help reduce surplus foods as well as alleviate food insecurity in Rochester, New York following the Great Depression (Klein, 2019). However, the first nationwide food assistance program did not begin until 1964 with the U.S. government's passage of the Food Stamps Act (*PL 88-525 - Food Stamp Act of 1964 | Food and Nutrition Service, 1964*). In 2020, there were nearly 44 million people in the United States receiving benefits from food assistance costing nearly \$90 billion (Evich, 2021). The Supplemental Nutrition Assistance Program helps families have the ability to afford adequate food, which means no meals have to be skipped, and also helps to reduce poverty (*Chart Book, n.d.*). People who qualify for food assistance through the SNAP must have a gross monthly income at or below 130% of the poverty line, net income at or below the poverty line, and total assets below the set limits (*A Quick Guide to SNAP Eligibility and Benefits, 2021*).

Nationally, food assistance programs, like the SNAP, benefit many families, especially those with children (Hall, 2021). There are many negative effects related to food insecurity in young children such as increased hospitalizations, poor health, iron deficiency, developmental risk, and behavior problems (Black, 2012). Children who do not consume sufficient nutrients are

also at a substantially higher risk for anemia and asthma than children who are well-nourished (*Child Hunger in America | Feeding America, 2021*).

The goal of The Food Stamp Act of 1964, the first nation-wide food assistance program in the U.S., was to provide eligible households with “an opportunity more nearly to obtain a nutritionally adequate diet through the issuance to them of a coupon allotment which shall have a greater monetary value than their normal expenditures for food” (*PL 88-525 - Food Stamp Act of 1964 | Food and Nutrition Service, 1964*). In other words, it had goals of ensuring that families in poverty were now able to eat a more nutritious diet. In 2008, food stamps were renamed to the Supplemental Nutrition Assistance Program (*SNAP, WIC, EBT — What’s the Difference? | DCentric, 2011*). The SNAP can be used to purchase fruits, vegetables, meat, poultry, fish, dairy products, breads, cereals, snack foods, non-alcoholic beverages, seeds, and plants to grow your own food (*What Can SNAP Buy? | Food and Nutrition Service, 2021*).

To determine whether food assistance programs contribute to a nutritious diet, it must also be known what the essential parts of a healthy diet are. Nutrient-rich diets contain many vitamins, minerals, and few calories while also being low in sugar, sodium, starches, and bad fats (*Definition of Nutrient-Dense Food - NCI Dictionary of Cancer Terms - National Cancer Institute, 2011*). To consume a diet with all of these qualities, it is recommended to eat a variety of fruit and vegetables; choose whole grains over processed grains; select healthy sources of protein, mostly from legumes and nuts, fish or seafood, low-fat or nonfat dairy, and lean cuts of meat; and limit red and processed meats, sodium, added sugars and alcohol (*How Can I Eat More Nutrient-Dense Foods?, n.d.*).

Technological Momentum: System Builders and Reverse Salient Technology

I will analyze this topic using the framework of technological momentum as described by Hughes (Hughes, 1987). Hughes coined the term technological momentum to describe the relationship between technology and society over time by illustrating that their relationship is reciprocal and time-dependent so that one does not determine the other but instead that they influence each other. Reverse salient technologies are the components of a technological system that impede on its own growth and fulfillment of goals set for it. System builders can be defined as an entity or group that invents, develops, and innovates artifacts along with technological, organizational, and social infrastructure for the purpose of solving a problem.

The most prominent and known example of a reverse salient technology is the development of Thomas Edison's direct-current electric system. This occurred because in order to supply electricity to a defined region, they had to fix the sub-systems, such as the direct current generators which had too low of voltage transmission distance (Hughes, 1983). The system builder in this example of the electric current system was Thomas Edison himself as he was trying to solve the problem of gas lighting companies having no competition (Nix, 2019).

The technological system in the example I will be researching is the food assistance programs. The quality and nutritional value of the food that participants are able to obtain through food assistance programs can be analyzed through the lens of a reverse salient technology because although the food assistance programs are meant to help people who cannot afford to purchase food for themselves and their family members, if it does not provide foods which are nutrient-rich, it would be impeding itself by causing more health issues down the line. It would also not be allowing for greater access to nutrient-rich meals for those who cannot afford it otherwise, which is the main goal of having food assistance programs. People who created food assistance programs can be viewed as system builders because they set up a

program to reduce food waste with the goal of providing higher quality food at a lower cost to those who otherwise could not obtain it.

Results and Discussion

My research question is in what ways do food assistance programs contribute to a nutrient-rich diet? I will argue that those receiving food assistance through the SNAP can have nutrient-rich diets due to the system builders and lack of reverse salient technology that the program enforces.

Those who created food assistance programs for others who were struggling with food insecurity worked as system builders with a goal of generating a standardized way to receive help in getting food at lower cost or free. The most common reason that people report not eating more nutritious foods is the belief that healthy foods cost more than highly-processed foods that are typically less nutritious (Carlson & Frazão, 2012). However, when you measure food costs per typical portion, many healthy foods are much less expensive than unhealthy foods.

Unhealthy diets, such as those containing high amounts of sugar, saturated fat, sodium, and calories, are linked to higher rates of chronic diseases such as overweight and obesity, heart disease, high blood pressure, and type 2 diabetes, as well as many other conditions (Savoie-Roskos, et al., n.d.). By allowing individuals and families who need food assistance to afford nutritious foods, creators of food assistance programs are also helping these people later in their life, so they have a lower chance of being diagnosed with chronic health issues. In this way, the creators of food stamps and the SNAP work as system builders by reinforcing how the SNAP is beneficial and lowers costs down the line for other issues that might arise if malnutrition is not taken care of.

Food assistance programs began as a way for farmers and suppliers to both benefit by farmers selling what they normally wouldn't have sold in surplus at a lower cost to consumers that had bought food stamps (*A Short History of SNAP* | *Food and Nutrition Service*, 2018). This is an example of system builders in the scheme of technological momentum because both the farmers and low-income individuals were benefiting from this program, so it kept building upon itself into a larger program that became nationwide.

The SNAP improves food security and offers benefits that enable families to purchase healthier diets (Carlson & Keith-Jennings, 2018). Because the program reduces food insecurity by as much as 30 percent and is most effective among the most vulnerable, it is not a reverse salient technology because it allows quality food in ample amounts which leads to more nutrient-dense diets in these at-risk populations.

The SNAP substantially reduces food insecurity and therefore is critical to reducing negative health outcomes (Gundersen & Ziliak, 2015). The SNAP is not working as a reverse salient technology because it is both providing individuals who qualify with more food while also improving their health because negative health outcomes associated with malnourishment have been reduced. The SNAP can also help people buy more fresh produce, grains, meat, and dairy products (*Virginia Hunger Solutions Supplemental Nutrition Assistance Program*, n.d.).

The SNAP staple food groups include fruits or vegetables; meat, poultry, or fish; dairy products; and breads or cereals (*SNAP Staple Foods*, n.d.). Based on information presented in the background information section of this paper, it can be seen that these food groups contain many foods that are considered nutrient-rich. Thus, the SNAP, as an example of food assistance programs, does not work as a reverse salient technology because it is both helping people afford

more food than they would otherwise be able to, and it is allowing them to access greater quality of food that will contribute to a healthy diet.

The limitations of this project are due to the fact that it was focused on policy analysis for the SNAP. People facing food insecurity obtain food from other ways as well, such as at food banks; the women, infant, and children program; the national school lunch program; free food programs for seniors; and more (*Food Assistance | USAGov*, n.d.). To fully understand and be able to analyze whether people facing food insecurity can have a nutrient-rich diet, it must be considered what types and quality of food this group is receiving from the SNAP, food banks, and other sources.

Conclusion

In conclusion, those receiving food assistance through the SNAP can have nutrient-rich diets due to the system builders and lack of reverse salient technology that food assistance programs have built into their technological system. As the evidence presented in the paper has shown, individuals who are receiving food assistance through the SNAP are much better off because of the reduced chronic health conditions and poverty. The lack of a reverse salient of technological momentum in the system of food assistance programs shows that there are many ways in which the program reinforces the good it does, so it does not impede itself. The creators of food stamp programs as system builders, such as the way that it began to benefit farmers with surplus food and those who could not afford food, show how the system has built upon itself to expand into something larger. This research is significant because it shows that the United States as a whole, along with individual state governments, should continue to invest in food assistance entitlement programs because it allows for low-income individuals and families to access more

nutritious food and decreases the prevalence of other chronic conditions that can arise when people do not have a nutrient-rich diet. This will help to lower other costs such as healthcare costs including government- and state-sponsored Medicaid.

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