



THE
SAMUEL DUBOIS COOK
CENTER ON SOCIAL EQUITY

**Hank & Billye Suber Aaron Young Scholars
Summer Research Institute**

3rd Year Cohort

Research Papers

Summer 2018

Samuel DuBois Cook

The Samuel DuBois Cook Center on Social Equity (Cook Center) was named after Dr. Samuel DuBois Cook, a distinguished political scientist, scholar, educator, author, administrator, civil and human rights activist and public servant. Dr. Cook, a professor in the Duke University political science department became the first African-American to hold a regular and/or tenured faculty appointment at a predominantly white southern college or university. He went on to serve 22-and-a-half years as president of Dillard University in New Orleans.

Samuel DuBois Cook Center on Social Equity

The Duke University Samuel DuBois Cook Center on Social Equity is an interdisciplinary research center within Trinity School of Arts and Sciences that is comprised of faculty and scholars from across Duke and a diverse international group of affiliated universities, research centers and non-governmental organizations. Its mission is to promote equity, across all domains of human interactions, through interdisciplinary research, teaching, partnerships, policy, and practice. The Cook Center seeks to employ the innovative use of new and existing data, develop human capital, incorporate stakeholder voices through civic engagement, create viable collaborations, and engender equity-driven policy and social transformation at the local, national and international levels.

Hank & Billye Suber Aaron Young Scholars Summer Research Institute

The Samuel DuBois Cook Center on Social Equity's Hank and Billye Suber Aaron Young Scholars Summer Research Institute is a three-week educational enrichment program that provides middle and high-school students enrolled in Durham Public Schools (DPS) in Durham, North Carolina, with training to enhance their writing, research, and presentation skills. The program is sponsored by the Samuel Cook Center on Social Equity at Duke University in partnership with Durham Public Schools (DPS). In keeping with the Samuel DuBois Cook Center's central mission as a community of scholars engaged in the study of the causes and consequences of inequality, participants will explore curriculum related to the economic, political, social, and cultural dimensions of inequality.

During the Hank and Billye Suber Aaron Young Scholars Summer Research Institute, students receive instruction from distinguished middle and high-school teachers, university professors, and leaders from community organizations. The program's main focus is on the development of students' research, writing, presentation, and critical-inquiry skills around issues of social justice. Students design and prepare original research presentations, posters, and papers focused on policy issues that affect inequality. Program material is selected by the teaching faculty in collaboration with Cook-Center scholars, focusing on various inequalities and their intersections. Emphasis is placed throughout the program on mentoring students in research, writing, and presentation skills. During the Hank and Billye Suber Aaron Young Scholars Summer Research Institute, students participate in workshops at Duke University's Perkins and Rubenstein Libraries and the Nasher Museum of Art.

Oluwatobi Adio



Oluwatobi Adio is a rising senior at the City of Medicine Academy. She likes to read and binge watch Nigerian movies with her mom. Adio wrote her research to raise awareness on the underlying issues of sexual assault on college campuses.

Kollin Brown



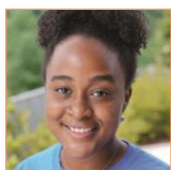
Kollin Brown is a rising senior at Hillside High School, where he held a conference about Social Equity for students in Durham Public Schools. Kollin has done research about housing Inequities. Watching Durham and Chicago firsthand, change over the years through gentrification has inspired him to do research about housing at the Young Scholars Institute. Upon graduation, Kollin plans on attending Morehouse College.

Ayden Lawrence



Ayden Lawrence is a participant in the third year cohort of the Aaron Young Scholar Summer Research Institute and is a rising sophomore at J.D Clements Early College. He is interested in the development of food deserts because they are contributing to the rise of health diseases in communities of color.

Akanke Mason-Hogans



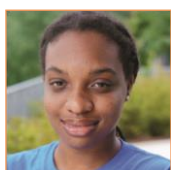
Akanke Mason-Hogans is a rising senior at Josephine Dobbs Clement Early College High School, and is a 3rd year student in the Aaron Young Scholars program. She has a passion for creative expression, social justice, and pepperoni pizza, and hopes to empower others through her research and advocacy. Akanke was inspired to write about the effects of colorism on education after witnessing it firsthand, with hopes that her research will enlighten educators on how to better serve their students in the future.

Sandra Santillan



Sandra Santillan is an Aaron Scholar, Durham native, and rising senior at Hillside High School. Over the course of three summers at the Young Scholars Research Institute, Sandra has researched and worked on issues of gender inequity, mental illness, and incarceration. She has worked alongside her peers, generating research products on issues of inequity. Sandra hopes to continue her research and widen her understanding of social inequities, as well as spreading valuable lessons and finding potential solutions related to her research interests.

Jenny Uba



Jenny Uba is a rising senior at City of Medicine Academy and is a part of the 3rd year cohort in the Aaron Young Scholars Institute Program. Her interest in food disparities was sparked when she learned about the inequities that exist in access to healthy food. Jenny hopes to further her research and expand her knowledge on the food supply chain in order to improve health outcomes in communities of color.

Examining the Fast Food Industry and its Effects on Food Swamps

By: Jenny Uba

Abstract

Even though restaurants in the fast food industry are transforming their menus and culture to appeal to different diets, this solution has proven to be ineffective in countering the negative health effects of food swamps. As fast food restaurants are changing their menus to selections that they state are healthier like salads, grilled chicken wraps or burrito bowls, this method of providing alternative healthier choices does not resolve the issue of people's unhealthy eating habits due to the fact that some of the foods that appear healthier have the same or more calories as the unhealthy foods. Most food options like salads, which are considered healthy actually contain more calories than the standard Big Mac from McDonalds. A different solution to the problem could be implementing gardens or farmers markets in communities that are considered food swamps.

Introduction

Food insecurity is an issue many face in America, and living in a food swamp can be part of the problem. Food swamps are areas with an abundance of fast food, relative to healthier food options. Many people living in food swamps are minorities and those with low-income. People are also consuming a lot of fast food, since that is what generally surrounds them. The problem with Americans consuming fast food is that too much of it can cause obesity, diabetes, and even heart disease. Many areas in the U.S. are designated as food deserts because they lack supermarkets filled with affordable and nutritious food, as well as food swamps which have an

abundance of fast food.¹⁴⁶¹⁴⁷ While food swamps have access to healthy food retail, they also contain unhealthy foods and an abundance of fast food restaurants. Studies and research show that the presence of food swamps are stronger predictors of obesity rates than the absence of full-service grocery stores.² Due to the bad health effects of food swamps which include, obesity, diabetes and heart disease, Americans are seeking alternative food options.³ People are advocating for healthier meals in school, healthier food selections in restaurants, as well as more food choices for vegans and vegetarians to choose from. If these solutions are proven effective then a decline in the rates of obesity and diabetes among people living in these communities should be evident.

Low-income areas or communities are usually found in these circumstances, where close neighborhood stores containing healthy food are absent.¹⁴⁸ Not only do people have unhealthy food and find it problematic to access supermarkets, but the food that is available can also be costly.⁵ Due to these high prices people have to leave the area just to shop for cheaper prices.⁶ In addition, some low-income residents lack the necessary transportation to access supermarkets where they can purchase affordable, fresh groceries.⁷ According to the article ‘Access to Affordable, Nutritious Food is Limited in “Food Deserts”’ by Michele Ver Ploeg, “Just over half of all people in low-income neighborhoods have incomes that are below 200 percent of the

¹⁴⁶ Cooksey-Stowers, Kristen, Marlene B. Schwartz, and Kelly D. Brownell. "Food swamps predict obesity rates better than food deserts in the United States." *International journal of environmental research and public health* 14, no. 11 (2017): 1366.

¹⁴⁷ Ibid.

Ibid.

¹⁴⁸ Ploeg, Michelle V. "Access to Affordable, Nutritious Food Is Limited in "Food Deserts"." USDA ERS - Sharing the Economic Burden: Who Pays for WIC's Infant Formula. March 1, 2010. Accessed July 26, 2018. <https://www.ers.usda.gov/amber-waves/2010/march/access-to-affordable-nutritious-food-is-limited-in-food-deserts/>.

⁵ Ibid. ⁶ Ibid. ⁷ Ibid.

Federal poverty level. Thus, 11.5 million people, or 4.1 percent of the U.S. population, have low incomes and live in low-income neighborhoods that are more than a mile from a supermarket.”¹⁴⁹

Thesis Statement

Although restaurants in the fast food industry are transforming their menus and culture to appeal to different diets, this solution has proven to be ineffective in countering the negative health effects of foods swamps.

Research Question

Has the transformation of the fast food industry positively affected health outcomes of people living in food swamps?

Terminology

- Food Desert: Geographic areas that have limited access to healthy food. ¹⁵⁰
- Food Swamp: A geographical area with adequate access to healthy food retail, but that also features an overabundance of exposure to less healthy food and beverages.¹⁵¹

Methodology and Literature Review

The data gathered in this paper was generated through secondary sources. The bodies of literature used for analysis in this paper are related to health and food industrial/ organizational structure. This paper fills a gap in the literature by shedding new light on the ineffectiveness of

¹⁴⁹ Ploeg, Michelle V. "Access to Affordable, Nutritious Food Is Limited in "Food Deserts"." USDA ERS - Sharing the Economic Burden: Who Pays for WIC's Infant Formula. March 1, 2010. Accessed July 26, 2018. <https://www.ers.usda.gov/amber-waves/2010/march/access-to-affordable-nutritious-food-is-limited-in-food-deserts/>.

¹⁵⁰ T, Chen, and Gregg E. "Food Deserts and Food Swamps: A Primer." *Food Deserts and Food Swamps: A Primer*, October 17, 2017. doi:<http://www.nccch.ca/documents/evidence-review/food-deserts-and-food-swamps-primer>.

¹⁵¹ Ibid.

the fast food industry and food swamps, as well as introducing new solutions that are more adequate in addressing the needs of people living in these areas.

Limitations of Study

The purpose of this study is to examine caloric intake as a measurement for investigating unhealthy diets. The author recognizes there are other negative outcomes to an unhealthy diet such as high sodium or increased amounts of starches that correlate to high blood pressure, heart attacks and other health problems. These additional areas can be examined in future research.

Data Analysis

Do Healthier Menus Make a Difference?

Lacking healthy food options can lead to health problems such as obesity and diabetes. Americans used to cook more meals at home, whereas now they purchase half of their meals already made. Not only is that an issue but Americans are overeating or eating too much of the same foods which causes numerous health concerns including heart disease. Fast food restaurants are altering their menus to selections that they state are healthier like salads, grilled chicken wraps or burrito bowls. Nonetheless, this method of providing alternative healthier choices is not effective because some of the foods that appear healthier have the same caloric intake as the unhealthy foods, if not more. For example the Red Robin Crispy Chicken Tender Salad contains 1,348 calories per serving whereas a Big Mac from McDonalds usually contains around 530 calories according to the information provided by the Graphiq and healthgrove.com.¹⁵² In addition, people tend to indulge in foods they believe are healthy thus overeating and not exercising portion control which is part of a healthy weight management lifestyle.

¹⁵² Morin, Natalie. "25 Salads That Have More Calories than a Big Mac." WTOP. February 02, 2016. Accessed July 26, 2018. <https://wtop.com/food-restaurant/2016/02/25-salads-calories-big-mac/>.

People are now purchasing healthier fast food options however there is no decline in the rate of obesity and diabetes. It is easy to blame Americans for their unhealthy eating habits, such as indulging in fast food for example, however that is all they have to eat if it is the only thing around. As stated in “Fast Food Industry Analysis 2018 - Cost & Trends”, “There are over 200,000 fast food restaurants in the United States and it is estimated that 50 million Americans eat at one of them every single day”.¹⁵³¹⁵⁴ And the fast food industry is also expected to grow by 2.5% in years to come.¹³ Since those living in food swamps are encompassed by fast food restaurants, and do not have healthier food options to choose from, many advocate to altering the menus to healthier options as a solution to the problem. Healthier food options include foods that have more nutritional value than caloric intake. Instead of eliminating all the bad fast food options, they could be replaced with healthier ones. Although, information in nutrition labels from healthgrove.com shows that the healthy food choices like salads that are being replaced with burgers still contain the same or higher amounts of calories even though it has greater nutritional value.¹⁴ Overall, healthy food options that are being replaced with unhealthy ones still have the same or a greater caloric intake.

Companies are adding healthier food options due to health issues linked to eating fast food

It is no secret that the consumption of unhealthy meals, comparable to fast foods, has adverse effects linked to health concerns such as obesity and diabetes. Companies are improving

¹⁵³ "Fast Food Industry Analysis 2018 - Cost & Trends." Fast Casual Industry Analysis 2018 - Cost & Trends. <https://www.franchisehelp.com/industry-reports/fast-food-industry-analysis-2018-cost-trends/>.

¹⁵⁴ Ibid

Morin, Natalie. "25 Salads That Have More Calories than a Big Mac." WTOP. February 02, 2016. Accessed July 26, 2018. <https://wtop.com/food-restaurant/2016/02/25-salads-calories-big-mac/>.

their menus due to various reasons, one being the decline of consumers consumption of eating fast food due to the health issues linked to them.¹⁵⁵ As stated in the article “5 Fast-Food Trends Transforming 2016 (#3 May Raise Concerns)” published in the ‘Alternative Daily’, “Many fast-food restaurants made a commitment to begin using cage-free eggs in five to 10 years; some became GMO-free, and a few pledged to use antibiotic-free poultry products. Taco Bell vowed to go “all-natural,” and McDonald’s recently opened a new concept restaurant in Hong Kong called McDonald’s Next, offering quinoa side salads and asparagus burger toppings, according to news reports.”¹⁶ Companies are making an effort to resolve the issue in order to prevent the decline in sales. Not only is the fast food industry improving their menus but restaurants are also improving their marketing and technology too. A new tech-savvy trend allows customers to order food using a mobile system. (Which also allows companies to access more customer information).¹⁷ Mobile apps are transforming the fast food industry. In general unhealthy food consumption leads to dietary health problems and tech-savvy trends allows customers to order food using mobile systems.

Also, fast food restaurants have added diversity to their food including Chinese, or Hawaiian to their menus, taking vegans and vegetarians into consideration as well. As mentioned in the article “The Radical Evolution of the Fast Food Industry”, “Fast foods have broadened their menus to include Chinese, Mexican, traditional, American, and Hawaiian foods. Also, this diversity has been expanded to include the type of foods served... These levels of diversity have been replicated across the board to ensure that the food joints are inclusive for everybody, vegetarians and non-vegans alike.”¹⁸

¹⁵⁵ Seifert, Stephen. "5 Fast-Food Trends Transforming 2016 (#3 May Raise Concerns)." The Alternative Daily. January 13, 2016. Accessed July 26, 2018. <https://www.thealternativedaily.com/2016-fast-food-trends/>.

¹⁶¹⁷ Ibid

Ibid

¹⁸ Jones, Rover. "The Radical Evolution of the Fast Food Industry." Negosentro. July 16, 2018. <https://negosentro.com/radical-evolution-fast-food-industry/>.

Potential Solutions

Part of the reason for people's unhealthy dietary choices is due to the fact that people uneducated about the outcomes certain foods have on their health. It is important for people to know the downsides of consuming certain foods in order for them to make their own decisions on whether or not they should be eating these food. People should always keep in mind of the calories they are consuming whether or not they are dining at a healthy restaurant, because some healthy food choices can contain many calories. The government should play a role in establishing gardens and farmers markets in these communities instead of approving the installment of new fast food restaurants. Small steps like these are important in bettering and advancing these communities for the better.

Conclusion

The misconception that altering fast food menus to seemingly healthier options improves the health outcomes of people is common. The method of seeking healthier food choices in order to be less prone to health problems is not effective because the foods that are considered healthy often have more or the same caloric intake as the unhealthy foods. Americans suffer from poor nutrition because they have limited access to good food. Encountered with unhealthy diet choices, such as fast food and convenience food in corner stores, and with minimal markets

offering fresh fruit and vegetables, the poor end up eating a less healthy diet. People living in communities of low income continuously experience higher rates of obesity due to the availability and affordability of calorically dense and nutritionally deficient foods resulting from the food deserts and food swamps that affect these neighborhoods. Research shows the presence of food swamps are stronger predictors of obesity rates than the absence of full-service grocery stores. The lack of good supermarkets around neighborhoods leads to poor overall health and various health issues including obesity, diabetes, and even heart disease. Especially to minorities and families living in low-income because that certain community is generally affected by food swamps. This is an important matter because people should not feel vulnerable because of the circumstances they are in, such as living in a food swamp. Those living in food swamps are surrounded by fast food restaurants and are limited to nearby grocery stores that supply relative food options such as fresh produce. For future research, additional explorations of these topics should be necessary in order to resolve the problem, such as educating people on the foods they eat and implementing gardens and farmers markets in communities.

Bibliography

- Cooksey-Stowers, Kristen, Marlene B. Schwartz, and Kelly D. Brownell. "Food swamps predict obesity rates better than food deserts in the United States." *International journal of environmental research and public health* 14, no. 11 (2017): 1366.
- "Fast Food Industry Analysis 2018 - Cost & Trends." Fast Casual Industry Analysis 2018 - Cost & Trends. Accessed July 26, 2018.
<https://www.franchisehelp.com/industry-reports/fast-food-industry-analysis-2018-cost-trends/>.
- Jones, Rover. "The Radical Evolution of the Fast Food Industry." Negosentro. July 16, 2018. Accessed July 26, 2018. <https://negosentro.com/radical-evolution-fast-food-industry/>.
- Morin, Natalie. "25 Salads That Have More Calories than a Big Mac." WTOP. February 02, 2016. Accessed July 26, 2018.
<https://wtop.com/food-restaurant/2016/02/25-salads-calories-big-mac/>.
- Ploeg, Michelle V. "Access to Affordable, Nutritious Food Is Limited in "Food Deserts"." USDA ERS - Sharing the Economic Burden: Who Pays for WIC's Infant Formula. March 1, 2010. Accessed July 26, 2018.
<https://www.ers.usda.gov/amber-waves/2010/march/access-to-affordable-nutritious-food-is-limited-in-food-deserts/>.
- Seifert, Stephen. "5 Fast-Food Trends Transforming 2016 (#3 May Raise Concerns)." The Alternative Daily. January 13, 2016. Accessed July 26, 2018.
<https://www.thealternativedaily.com/2016-fast-food-trends/>.
- T, Chen, and Gregg E. "Food Deserts and Food Swamps: A Primer." *Food Deserts and Food Swamps: A Primer*, October 17, 2017.
doi:<http://www.ncceh.ca/documents/evidence-review/food-deserts-and-food-swamps-primer>.



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