

CONSUMPTION PATTERNS AND GROCERY PURCHASE DECISIONS AMONG
MIDDLE AND WORKING CLASS FAMILIES IN SHREVEPORT, LOUISIANA

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CONSUMPTION PATTERNS AND GROCERY PURCHASE DECISIONS AMONG
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DEDICATION

This thesis is dedicated to the memory of Dr. Bernadette Palombo, my dear friend
and mentor, who is missed beyond words.

“A good teacher is like a candle, it consumes itself to light the way to others.”

- *Mustafa Kemal Atatürk*

ABSTRACT

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Extensive academic literature supports the finding that one's socioeconomic status has significant influence on the food consumption patterns of individuals and families. Further, the link between diet and disease has been well established. However, not all states are equal when it comes to health and diet. The southern states, and more specifically individuals who consume a southern diet high in saturated fat, sugar, and salt, have much higher incidences of heart disease, stroke, diabetes, and other dietary influenced health conditions. To better understand the decisions people make at the grocery store, this thesis explores the grocery shopping decisions for low and middle income residents in four different neighborhoods in Shreveport, Louisiana. Among the four neighborhoods examined, the nature of the available grocery stores differs significantly. The two middle income neighborhoods have access to nationally recognized grocery store chains while the lower income neighborhoods only have regional chains or local grocery stores. One hundred participants were interviewed in four locations: two middle income and two working class. Interviews revealed a major discrepancy between the participants' perceptions of eating healthy diets and the food products they actually purchased.

KEY WORDS: Socioeconomic Status, Accessibility, Consumption Patterns, Food Scarcity, Food Injustice, Food Insecurity

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PREFACE

The basis for this research stems from my fortuitous but lasting migration from Los Angeles, California to the Southern region of the United States, or the “Deep South” as it is often called. Almost immediately, I was struck by the difference in eating habits between the two locations. In Louisiana, I found a unique way of life often centered around interesting cuisine featured at crawfish boils, *cochon de laits* (whole pig roasted in the ground), gumbo cookouts, and fish-fry gatherings.

Food has a direct impact on one’s overall quality of life and arguably length of life. It can (with its added fats, preservatives, chemicals and ingredients) eventually cause or predispose to major health complications that worsen and shorten human life. When some individuals cannot obtain adequate nutrition in a practical way, they eventually suffer the cumulative effects physically and mentally with consequent costs for the health care system. Additionally, many might not be privy to what constitutes a healthy diet and not even realize they are making poor choices. Furthermore, as economic disparities between individuals widen, as they have in recent years, the practical availability of nutritious food to the underprivileged becomes more restricted than may be typically appreciated by the general public. It seems logical to study this, at least in a modest way, to gain a better insight into the food choices of the individuals in Shreveport, Louisiana. With education, further efforts can hopefully follow, to better combat the problem of poor food choices throughout the country and, thereby, avoid the serious health consequences that ruin lives and the cumulative costs shared by all, directly or indirectly.

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CHAPTER I

INTRODUCTION

"Tell me what you eat, and I will tell you what you are" declared Brillat-Savarin in 1826. This is as true today as it was over a century ago. In the past, the U.S. diet once largely consisted of whole, natural, and healthy foods. Furthermore, fresh produce, grains, and meats were typically grown and produced locally and were free of the many additives, pesticides, hormones, antibiotics, and preservatives that are found in food today. As food became less local, more processed, less expensive, and more convenient, consumption began to tilt towards processed foods and the average American's diet deteriorated. So-called "diseases of affluence" or diet-related diseases including obesity, cardiovascular disease, high blood pressure, type 2 diabetes, etc., linked to the American diet and sedentary lifestyle became more widespread and are among the leading causes of death in the United States (Lavie, Milani, and Ventura 2009).

Sweeping changes in food production, distribution, and consumption occurred over the twentieth century in the United States and elsewhere. As corporations assumed a more prominent role in food production, factory farms began to replace family ones. Driven by profit, fruits and vegetables (many genetically modified) are being grown for conformity to size and appearance, rather than concern for taste, nutrition, or health. Similarly, meat production transformed as well. Eric Schlosser (2012) provides a lurid journalistic account of the transformation to beef in his bestseller *Fast Food Nation* (2012); he details how fast food has become a fixture within the American landscape and states that the Golden Arches of Mc Donald's are now said to be "more widely recognized than the Christian cross" (Schlosser 2012). Douglas Constance (2008)

contributes an academic accounting of the transformations to the broiler (poultry) industry as the "first livestock commodity sector to adopt an industrial organizational model that has now expanded beyond national boundaries into a globalized system of production" (Constance 2002). Some of his work is centered just over the state line from Shreveport, Louisiana in East Texas. Constance (2008) concludes that "economic development initiatives can experience legitimization crises as local social movement groups resist development strategies" (Constance 2008: 31).

The Current Study

The research setting for this study is the City of Shreveport, located in the northwest part of Louisiana, in the southern region of the United States. Known to have a much higher incidence of atherosclerotic vascular disease (most commonly heart disease and stroke), individuals in areas like Shreveport also have an increased exposure to unhealthy food not only because of its widespread availability but also because of cultural norms that place food central to most life events.

The objective of this study is to explore the food choices and consumption patterns of individuals in Shreveport, Louisiana. If opinions vary based on neighborhood (or other factors), it is important to know why. In particular, this study explores **how the relationship between social class and proximity to grocery stores influence food purchases and consumption of individuals in Shreveport, Louisiana.**

In order to examine how consumption patterns contribute to the widening nutritional disparity among individuals, a review of the relationship between food accessibility and food consumption will be presented. Chapter II includes background

information and a literature review to explain the rationale and relevance of this study. This literature review is divided into three sections: 1) Challenges in obtaining proper nutrition, 2) Paying a higher price in lower socioeconomic areas, and 3) Distances consumers are able to travel. Each segment in the literature review provides a thorough explanation of a concept relevant to the research.

Chapter III outlines the four neighborhood groups with two distinct socioeconomic levels as measured by census data. These are as follows: 1.) Lower income neighborhood where a grocery store is accessible (SES), 2.) Lower income neighborhood where a grocery store is less accessible, 3.) Middle income neighborhood where a grocery store is accessible, 4.) Middle income neighborhood where a grocery store is less accessible. Demographic comparisons of the four research locations are provided along with a description of data collection procedures used during the face-to-face interviews process. This chapter concludes with an explanation of how the qualitative fieldwork for the study was conducted.

Chapter IV focuses on the results and findings of the research. Here the data is aggregated to illustrate whether different income levels impact consumption patterns. Additionally, what matters to individuals is discussed including any discrepancies noted between participant perceptions of eating healthy foods versus the observed reality of what they were actually purchasing to eat. This section also addresses the sociological significance of a healthy diet that applies to society at large and specifically as it pertains to this study. Chapter V is where the overall conclusions and discussions can be found.

CHAPTER II

BACKGROUND AND LITERATURE REVIEW

Processed Foods and Labeling

Processed foods are natural foods that have been transformed into packaged goods. A host of chemical additives and fillers are added to enhance the food's appearance and taste while prolonging its shelf-life. Hostess Twinkies are a prime example of a processed food. Twinkies are cream-filled sponge cakes that have an unusually long shelf-life (around 26 days) largely because Twinkies contain limited dairy products. Eggs have been replaced with polysorbate 60 derived from palm oil, corn syrup and ethylene oxide, monoglycerides and diglycerides sub in for milk, and diacetyl provides the butter flavor (Godoy 2013). "Pink slime" which is added to ground meat, is an ammonia-laden mixture designed to minimize dangerous food-borne bacteria like e-coli. The FDA does not consider additives like pink slime an ingredient but instead an aid to food processing and, therefore, does not require it to be listed on food labels (Geller 2012).

Even natural sounding foods can be deceiving in their level of processing and use of additives. Yogurt is a seemingly natural food but is, in fact, often highly processed. Starch is often added to Greek yogurt to create the appropriate texture that would have taken much more time and money to create organically; Yoplait Greek 100 contains the additive potassium sorbate, a substance that is commonly used to eradicate insects (Nestle 2018). "Flav-R-Bites" muffins imitate the flavor of blueberry muffins but contain less than six percent actual blueberries. As Warner (2014) explains, "counterfeit" blueberries are more profitable as real blueberries are too expensive (Warner 2014: 5).

“Pure Vermont Maple Syrup” is actually made from corn syrup, not maple syrup (Warner 2014). These are just a few examples out of thousands. The fact is, the average consumer is routinely and intentionally misled by names of foods and subtitles.

Food labeling can be deceiving. Marketing words are chosen to make products appear or sound healthier than they actually are (Nestle 2018; Warner 2013). Perhaps the most common misleading term used on packaging is the word "natural". The FDA has not formally defined terms like "natural" or "wholesome," and have added that they will not “restrict the use of the term ‘natural,’ except for added color, synthetic substances, and flavors” (Pomeranz 2013: 438). AriZona Iced Teas and Snapple products have been labeled as natural despite the fact they contain ingredients such as high fructose corn syrup and citric acid. Ben & Jerry's is currently facing a lawsuit for calling their ice-cream "all natural" and "organic" despite the fact alkalized cocoa is an ingredient. The Kellogg company was sued, and ultimately settled for \$4,000,000, after facing scrutiny over a falsified labeling and advertising campaign for a cereal that boasted Frosted Mini-Wheats were "clinically shown to improve children's attentiveness and other cognitive functions" (Pomeranz 2013: 437).

In short, the American diet has become one that consists of large quantities of processed foods. This is in part because processed foods are cheaper than whole foods and typically easier and quicker to prepare. Further, they are heavily marketed by food companies, often as healthy alternatives to whole foods, and have preferential shelf locations in grocery stores to influence purchase decisions. However, as discussed next, these food items have other costs not reflected in their cheap prices.

Links Between Diet and Health

The strongest linkage between diet, lifestyle, and health concerns atherosclerosis. Atherosclerosis is the damaging accumulation of plaques of fatty material in the inner aspect of arteries that takes its toll on heart, brain, kidneys, extremities, and other organs of the body (NIH 2018). The most serious manifestations are heart disease and stroke (Lavie, Milani, and Ventura 2009). Atherosclerosis is the leading cause of death in the United States and according to the American Heart Association, cardiovascular disease accounts for nearly 836,546 deaths in the US per year. Stroke affects about 795,000 people a year in the US (new or recurrent) and is a leading cause of disability. About 133,000 people die of stroke a year (AHA 2018).

Risk factors for atherosclerosis include diet, obesity, type 2 diabetes, hypertension, high cholesterol, smoking and inactivity. The Global Burden of Cardiovascular Diseases Collaboration listed diet first in the priority of risk factors in cardiovascular disease, followed by high body mass index (BMI), low physical activity, and other factors (Roth et al. 2018). Atherosclerosis starts to appear early in life. For example, autopsies of young soldiers (teenagers to 35-years-old) who were killed in foreign wars showed significant atherosclerosis of the coronary arteries (Joseph, Ackerman, Talley, Johnstone, and Kupersmith 1993). The implication is that dietary prevention must begin early.

Obesity is a result of excessive caloric intake and increases the incidence of heart disease, stroke, type 2 diabetes, hypertension, kidney failure, cancer, and is responsible for killing almost 300,000 individuals every year (Hinrichs, Jensen, and Schafft 2009: 153). As of 2005, 20.8 million Americans were estimated to have diabetes (CDC 2017).

Over the past forty years, new diabetes diagnoses have increased by approximately five percent each year (Hinrichs et al. 2009). It is estimated that since 2005, seven percent of the U.S. population has diabetes (Hinrichs et al. 2009).

In 1962 the Centers for Disease Control first documented eleven southeastern states where there was an age-adjusted stroke mortality rate more than 10% above the national average and a 34% higher incidence of stroke in general. These states were termed the “stroke belt” (NIH 2018). As for related form of atherosclerosis, heart disease, a similar preponderance was found in the southeastern United States. Figure 1 and Figure 2 (below) graphically show the excess per capita death rates from stroke and cardiovascular disease in the southeastern United States. This pattern of distribution was long considered a mystery culminating in the landmark study presented next.

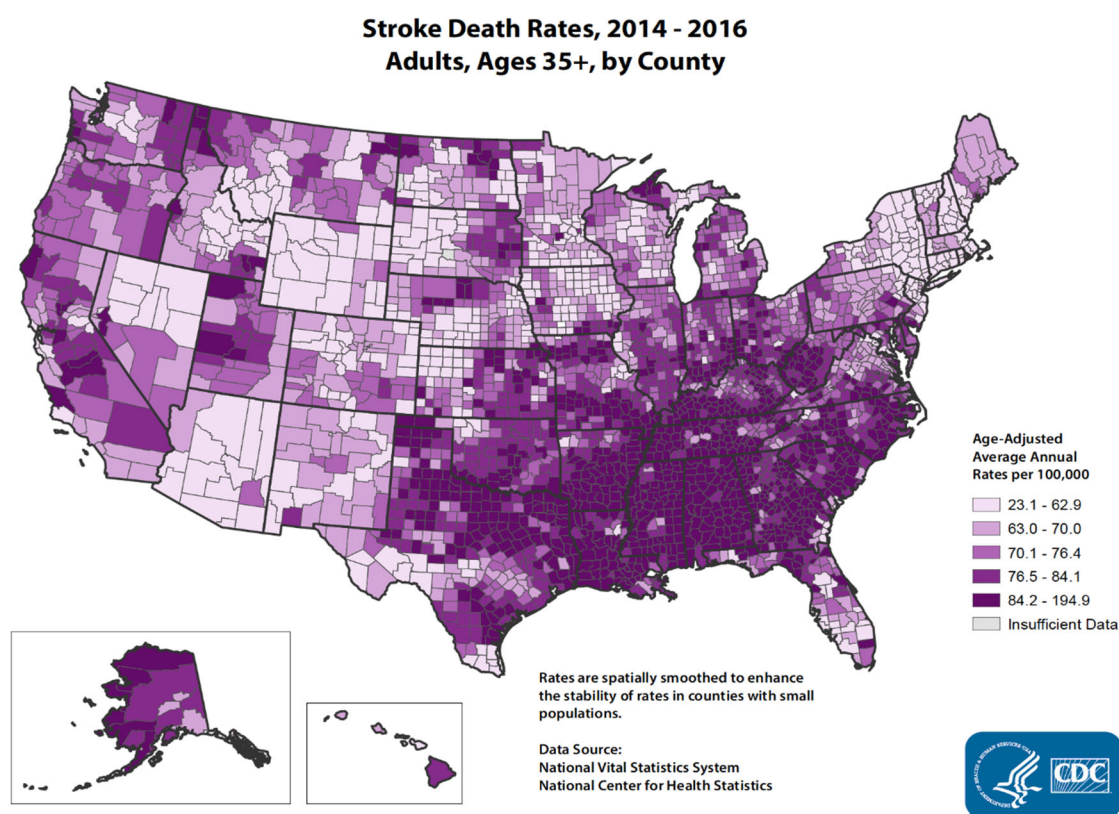


Figure 1. Stroke Death Rates in the United States from 2014-2016.

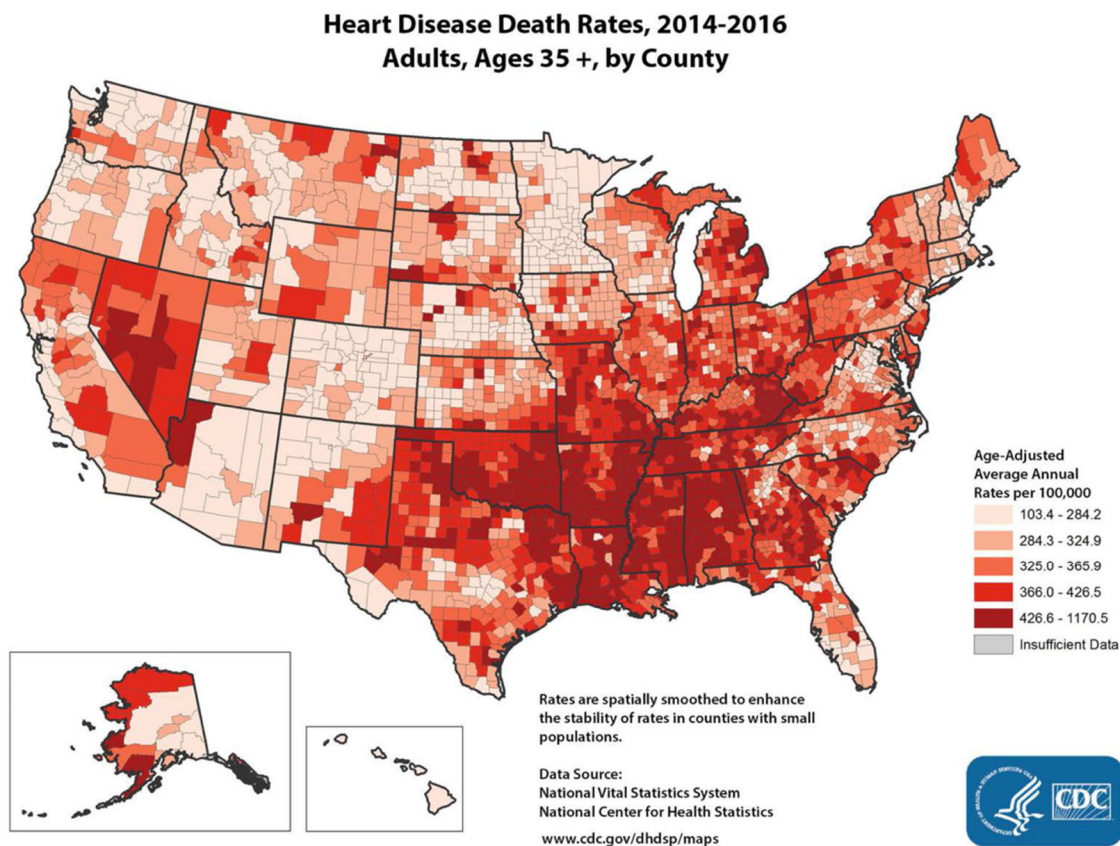


Figure 2. Heart Disease Death Rates in the United States from 2014-2016.

The National Institute of Neurological Disease and Stroke sponsored a large epidemiological trial to evaluate reasons for higher stroke deaths in the Southeastern U.S. especially and found strong relationship to consumption of the so-called Southern diet – namely fried, fatty foods, processed meats, salt and sugary beverages. “Participants with a higher adherence to the *Southern* pattern [of diet] experienced a 39% increased risk of stroke” (Judd, Gutierrez, Newby, Howard, Howard, Locker, Kissela, and Shikany 2013). This was even higher in black individuals who had a strong adherence to the southern

diet. On the other hand, participants eating a diet of lean poultry, fish, fruits, and vegetables had a 20 percent reduction of stroke incidence (Judd 2013).

The health values of adhering to a low-fat Mediterranean-type diet in helping prevent Atherosclerotic vascular disease have also been documented. The Mediterranean diet is plant-based and includes fruits and vegetables, whole grains, legumes, and nuts. Olive oil is used in place of butter, herbs and spices substitute for salt, and meats include fish and poultry rather than red meat (Gardener, Wright, Gu, Demmer, Boden-Albala, and Elkind 2011); (Estruch, Ros, Salas-Salvado, Covas, Corella, and Aros 2013).

In short, a diet high in saturated fats, sodium, and sugar – three ingredients key to the Southern diet – has been linked to heart disease and stroke. In contrast, those consuming plant-based diets like the Mediterranean diet have been lower incidences of both stroke and heart disease. While not absolute, the relationship of diet to health is a strong one. Unfortunately, in the highly unequal United States, these inequities play out at the grocery. We detail these patterns in the literature review next.

Literature Review

This review focuses on three topics: 1) Challenges obtaining proper nutrition with relation to social class, 2) Paying a higher price in lower SES neighborhoods (for food items), and 3) Distances consumers are able to travel (and what forms of travel are available/plausible). These factors have much in common as they are all inherently responsible for a sicker overall population with a lower life expectancy and a lesser quality of life. Plausible solutions exist that could remedy this problem, however, there must be incentives to assist less fortunate communities and reasons to change entrenched corporate decision-making policies.

Challenges in obtaining proper nutrition

Nutrition gouging is also more likely to occur in lower income areas as suppliers may intentionally raise the price of goods knowing that individuals have limited purchase options (Brewer 2007). Though price gouging is not illegal in many states, many find it to be “morally despicable” (Zwolinski 2008). Studies have compared grocery store prices of low- and middle-income neighborhoods while monitoring of consumer patterns (Chung and Myers 1999). In Minneapolis-St. Paul, individuals shopping at the larger chains located in lower income areas still paid slightly more for their purchases than middle-income areas. A study by Block and Kouba (2006) found that the prices of packaged items were more expensive at smaller independent stores compared to large chain supermarkets.

The fact that many food items which are beneficial to one’s health are often costlier and more difficult to obtain in poor neighborhoods, “explain[s] the lower adherence to health eating guidelines [that are] consistently reported in less affluent areas” (Coveney and O’Dwyer 2009: 697).

Racial composition seems to influence grocery store access and pricing. For example, an in-depth analysis of New York City revealed a strong correlation between ethnicity, social class, and the degree of severity of food deserts. East and Central Harlem and North and Central Brooklyn also had the highest proportions of black residents, the lowest median household incomes, and the least grocery stores. In contrast, the most favorable scores were on the Upper East Side which is a predominantly white, middle and upper-income area (Gordon, Purciel-Hill, Ghai, Kaufman, Graham, and Van

Wye, 2011: 696). The reasoning for higher pricing in lower SES [socioeconomic status] locales includes the absence of larger retailers that have the ability to charge less for products. Additionally, predatory influences may exist as smaller stores could certainly benefit financially by charging more for products that many residents do not have the resources to travel elsewhere to obtain.

Paying a higher price in lower SES neighborhoods

Certain neighborhoods have a reduced quality of life by making products not only harder to obtain, but more expensive as well. This puts those of a lower social class at a disadvantage concerning affording foods with nutritional value. The fact that many food items which are beneficial to one's health are often costlier and more difficult to obtain in deprived neighborhoods, might help "to explain the lower adherence to health eating guidelines consistently reported in less affluent areas" (Coveney and O'Dwyer 2009: 697).

Health issues are not only an issue of inner cities, as lower SES rural areas also suffer. Previous studies chart comparisons of low and middle-income neighborhoods while monitoring of consumer patterns (Chung and Myers 1999). In Minneapolis-St. Paul, individuals shopping at the larger chains paid only slightly more for their purchases in low-income areas compared to prices in middle-income areas. Higher prices in poorer neighborhoods were most likely because residents had less access to the larger low-cost chain stores that benefit from economies of scale (Chung and Myers 1999).

A subsequent study in Chicago by Block and Kouba (2006) revealed that the prices of packaged items were more expensive at smaller independent stores compared to large chain supermarkets. A comparison of an African-American (lower class)

neighborhood, to that of a suburban neighborhood with a mixed-race composition, illustrated food access to be dependent on store type and size, meaning that chains and larger stores offer greater variety at a lower cost compared to smaller, local retailers (Block and Kouba 2006). Research involving ranking neighborhoods devoid of adequate nutrition (food deserts) in the New York City area from least severe to most severe, revealed a strong correlation between ethnicity, social class, and the degree of severity of food deserts. Calculations reveal that the areas with the lowest scores within East and Central Harlem and North and Central Brooklyn also had the highest proportions of black residents, the lowest median household incomes, and were of a lower social class entirely; in contrast, the most favorable scores were on the Upper East Side which is a predominantly white, middle and upper-income area (Gordon, Purciel-Hill, Ghai, Kaufman, Graham, and Van Wye. 2011: 696). The reasoning for higher pricing in lower SES [socioeconomic status] locales includes the absence of larger retailers that have the ability to charge less for products. Additionally, predatory influences may exist as smaller stores could certainly benefit financially by charging more for products that many residents do not have the resources to travel elsewhere to obtain.

Distances consumers are able to travel

One can only travel so far in order to obtain necessary food items. In many cases, the lower priced chains do not exist in low-income neighborhoods which often forces lower class residents to shop at smaller, more expensive stores. Studies have found that low-income residents must travel on average eleven minutes out of their neighborhoods, in order to shop at a “decent” grocery store (Bell and Berlin 1993). Additionally, a study conducted at Kansas State University revealed that individuals from lower SES

neighborhoods are more confined in their ability to control their physical activity and, therefore, have limited access to larger lower-priced stores (Estabrooks, Lee, and Gyurcsik 2003). By comparing various types of individuals who lack regular access to a car or alternate mode of transport, obstacles to obtain food were revealed. A group of elderly individuals were too old or medically unable to drive. Several had some sort of assistance provided to them whether it be from a government program, volunteers, or family members. Either way, most interviewed had little difficulty obtaining desired food items.

In contrast, individuals that did not own a vehicle due to financial hardships, “were generally worse off, regardless of distance from home and shops,” and received no assistance concerning transportation to and from a grocery store (Coveney and O’Dwyer 2009: 696). Whereas some disadvantaged groups like the disabled or elderly people had programs and people to help them, the individuals of lower socioeconomic status had no help with transportation (Coveney and O’Dwyer 2009). The level of freshness of one’s groceries also correlates with shopping frequency. If a family does not have a reliable car or alternate mode of transport, frequent trips to obtain food become less feasible. As those of higher economic/social status are more apt to have reliable modes of transportation, access to specialty markets becomes easier. Farmer’s Markets, for example, are known for having fresh, pesticide-free, farm-raised products without preservatives often unavailable elsewhere in a city. Many of these markets have limited hours of operation meaning those without a steady mode of transport will likely miss out on these nutritionally superior shopping opportunities.

Discussion

Society's food distribution system is structured in a fashion that unfortunately results in the poor paying more for groceries and having less fresh produce options compared to packaged goods. When nutritious food is not evenly distributed, or available, numerous adverse social and physical implications become conspicuous. Since the subject of sociology aims to understand human social behavior and why people make certain decisions, it becomes imperative to examine the reasons behind consumption patterns, in addition to studying the patterns by themselves. If given the choice, most individuals in lower socioeconomic regions would prefer more affordable and nutritious options. As many individuals and families lack reliable modes of transportation, it is a major effort for them to obtain adequate food each day.

Nevertheless, there are solutions. Public-private partnerships and financial incentives to chain supermarkets who open stores in lower SES areas could address some of the nutritional deficits. "In these scenarios, governments may provide tax breaks or subsidies to companies who build markets in areas that are designated as food deserts (i.e. economic incentives) or they may make their economic intervention even more explicit in the form of direct partnerships or interventions" (University of Chicago 2016: 1).

This plan has yet to gain popularity among large scale grocery retailers. It seems concern for humanity or the welfare of those less fortunate are not sufficiently compelling when matched against corporate shareholder demands for profit. In 2015, a total of 1,500 stores vowed to open in needed locales by 2016, yet it is now 2018 and less than half of those stores have been opened (Ralph 2015). Though large chain retailers could afford to open the pledged locations that would certainly result in a monumental

boost in both health and well-being, “they won’t, [as] there’s no business incentive” (Ralph 2015: 1). This is a need and according to Tom Colicchio (2010), “This is what people don’t understand: obesity is a symptom of poverty [and social class]. It’s not a lifestyle choice where people are just eating and not exercising. It’s because kids - and this is the problem with school lunch right now - are getting sugar, fat, empty calories - lots of calories - but no nutrition” (Colicchio 2010: 1).

Having introduced the background of diet and health as it applies to the country and having subsequently presented the geographic areas most at risk (the Southeastern U.S.), it is now our modest goal to examine a specific community at the epicenter of this risk: Shreveport, Louisiana.

CHAPTER III

METHODOLOGY

The main objective of this study is to obtain a snapshot of food consumption patterns and food purchasing decisions from middle- and working-class individuals in Shreveport, Louisiana. Research participants were informed of the study's purpose and the goals, and all agreed to participate in this project.

In-person interviews were conducted at study locations that served the residents of four targeted neighborhoods -- two neighborhoods were in lower income areas while the other two were in middle income areas. Two of these locations -- one middle class and one working class -- are served by a grocery store that is within five miles of the neighborhood; the other two neighborhoods do not have a grocery store within five miles of them. At the two locations with better access to food, interviews were conducted with shoppers upon their exit from the grocery stores. Shoppers were asked about their grocery purchases that day and about their more general grocery shopping habits.

In total, one hundred individuals were interviewed during four nonconsecutive days; twenty-five people were interviewed in each of the four different locations. All interviews were conducted on weekdays between noon to 6pm and each lasted approximately ten minutes. Setting up in relatively busy foot-traffic areas such as parking lots with business nearby, every 5th person who walked by was asked to participate. The rationale behind the location selection was to interview individuals that were already in the mindset of shopping or running errands, thus encouraging participation rather than catching people off guard. This part of the study was dependent

on participation, thus, if someone did not wish to participate, the count resumed immediately with every 5th person being interviewed.

Subjects under the age of 18 were omitted from the process altogether. As to not anger or interrupt people, additional omissions occurred if the 5th individual walking by was talking on a mobile device. When this occurred, interviews continued immediately with the next consecutive person being interviewed. The last few questions on the survey included open-ended questions to elicit more in-depth responses. In order to encourage participants to be candid, a field-jotting method was instituted. Responses were verbally stated by the participants and then transcribed for analysis by the investigator.

Prior to the interviews, participants were asked to read and sign an informed consent form approved by the Institutional Review Board at Sam Houston State University. The IRB letter, informed consent form, and interview guide can be found in the appendices section. Upon consent, participants were then asked a series of closed and open-ended questions about their purchases during this current trip to the store and about their shopping decisions more generally.

Definitions

Key terms central to the research are as follows: 1.) The term *Social Class* refers to an individual's (or group's) position within a social system based on factors such as education, income, and wealth. Throughout the United States, food injustice/accessibility issues are often prevalent among individuals of a lower social class, particularly those of inner cities. 2.) *Proximity* appertains to the distance in which selected neighborhoods are to a grocery store. 3.) *Consumption Patterns* refer to the consistent habits or trends one displays regarding food and liquid ingested on a daily basis. 4.) *Availability* relates to

what is readily obtainable in an area (in this case food is the focus). This is a concern as many residents in lower income regions have an “increased exposure to energy-dense food (“empty calorie” food) readily available at convenience stores and fast-food restaurants” (Burke, Keane, and Walker 2010). 5.) *Accessibility* is defined as the degree of ease associated with obtaining food items. This is a principal component of this study as there are “areas where affordable, varied food is accessible [only] to those who have access to a car, or those able to pay public transportation costs” (Burke, Keane, and Walker 2010). 6.) *Implications* are the effects and possible consequences resulting from what one eats. This is important as food has a direct impact on one’s overall quality of life and serves as a major cause for health complications. As this is a qualitative study, certain items will be left intentionally vague allowing participants to describe them in their own words revealing their own experiences with food insecurity. Interview questions are located in the appendices section of this document.

Site Selection Process

Basic demographic information for the four research locations in Shreveport, LA are shown in Table 1. Location numbers for the following four sites were assigned based on income level and arranged in descending order of median household income. The study locations were: 1) Youree, 2) Bert Kouns, 3) North Market and 4) Lakeshore. The gender and racial breakdown of the four interview locations are shown in Table 2.

Table 1. Location and Demographic Data by Zip Code in 2015

Area Number	Interview Location	Zip Code	Race by % Black/White	Median Household Income	% Below Poverty Level
1	Youree	71105	12.0% / 81.1%	56,658	11.8%
2	Bert Kouns	71118	42.6% / 54.9%	50,025	12.9%
3	North Market	71107	52.4% / 45.6%	39,696	27.0%
4	Lakeshore	71109	95.3% / 04.1%	22,333	39.0%

Source: factfinder.census.gov

Table 2. Gender and Racial Breakdown of Interview Participants

Interview Location	Gender Female/ Male	Race Black/White
Youree	10 / 15	7 / 18
Bert Kouns	15 / 10	1 / 24
North Market	7 / 18	16 / 9
Lakeshore	6 / 19	22 / 3

Field Locations and Settings

Four study locations were chosen to satisfy different criteria central to the research each with attributes as discussed below. Location names indicate the physical street where individual surveys were conducted.

Area 1 is referred to as Youree as the survey was performed at 7141 Youree Drive, Shreveport, LA 71105 on Wednesday, February 22, 2017. This neighborhood was in a medium household income area and was located near a food store(s). The setting was a busy area of town with a wide variety of food stores nearby including Super Target, Kroger, Albertsons and Whole Foods Market. Youree has a median household income of \$56,658 and the neighborhood (zip code 71105) has racial composition of 12.0% black and 81.1% white.

Area 2, Bert Kouns, was selected for slightly different criteria as it was in a medium household income area, however, it was not located near a food store. All surveys here were done on Monday March 6, 2017, at the physical address 3105 W Bert Kouns Industrial Loop, Shreveport, LA 71118. This location was not near a food store meaning groceries were not immediately available nearby. Nevertheless, national and regional grocery stores such as Walmart Neighborhood Market and Brookshire's were still present in the area. Bert Kouns (zip code 71118) has a median household income of \$50,025 a more even racial composition of 42.6% black and 54.9% white. Of the 25 individuals interviewed, 22 were white, 2 were Hispanic, and 1 was black.

Area 3 was labeled North Market. Necessary attributes of North Market were that it was in a lower household income area and it was located near a food store. Surveys took place on Monday February 27, 2017 at the physical address of 1867 Nelson St.,

Shreveport, LA 71107. This location was within close proximity to County Market a small grocery store chain with the largest presence in the northern states of Illinois and Wisconsin. In Louisiana, County Market is in Shreveport, Ruston and Monroe. North Market has a median household income of \$39,696 and a racial breakdown of 52.4% black and 45.6% white. Of the 25 participants, 16 were black, and 9 were white.

Area 4, Lakeshore, was selected as it was in a lower household income area and it was not located near a food store(s). This final group of surveys was conducted at the 2700 block of Lakeshore Drive, Shreveport, LA 71109 on February 28, 2017. The grocery stores serving Lakeshore are predominantly local ones such as Cotten's Supermarket and Lakeside Grocery, although the national discount chain Save-A-Lot is in the vicinity. Lakeshore had the lowest average household income with \$22,333. Lakeshore (zip code 71107) had a racial composition of 95.3% black and 0.41% white. Of the 25 participants, 22 were black, and 3 were white.

CHAPTER IV

STUDY FINDINGS

Shopping Habits and Purchase Patterns by Social Class

Overall, the study revealed some interesting differences along social class lines although not uniformly across all categories studied. Middle-income residents in Youree and Bert Kouns were more vocal about their desire to maintain a balanced and nutritional diet and to express concern regarding the negative health impacts associated with a poor diet. One participant at Youree stated, “diabetes, heart disease, obesity, and liver disease” directly correlated to one’s diet. Another participant added that eating certain foods produced energy and eased digestive troubles, while other food might cause sluggishness and fatigue. An additional individual stated that certain types of fish, such as salmon, contain omega-3 oils that reportedly help lower one’s cholesterol levels. It was also noted that preservatives, certain sugars, and artificial additives could build toxins in the body and might predispose to depression and anxiety. Middle income residents appeared more knowledgeable about food terms including the meaning of organic and processed foods and were also more likely to make sheepish statements like “I know I should be eating better but...” or “I know it is not healthy, but I do drink sodas.”

That said, study participants across the study area appear to be cognizant of the importance of reading nutritional labels. Across all neighborhoods, only 30% reported never reading the labels although there are distinct differences across the neighborhoods (Appendix A, Figure 8 – Frequency of Reading labels). Slightly more than half of the respondents (28 of 50) residing in the middle-income areas (Youree and Bert Kouns)

reported reading food labels most of the time. However, almost a quarter of the residents (11 out of 50) report never reading food labels.

In the lower income neighborhoods fewer than half (21 of the 50 residents interviewed) report reading labels most of the time. A third of participants (17 out of 50) reported never reading food labels. When asked about their consumption of fresh fruits and vegetables, three of the four neighborhoods (crossing class lines) reported remarkably similar consumption patterns averaging four times per week. Residents in the highest income area in the study, Youree, report the highest frequency of fresh fruit and vegetable consumption averaging slightly more than five times per week.

Youree residents were the only area where organic food was consumed in any significant quantity averaging slightly more than three times per week (Appendix A, Figure 7 - Average Weekly Food Consumption). Organic foods were not consumed in any of the other three neighborhoods. Youree residents also consumed the least amount of soda compared to the other three areas and were the only neighborhood where soda was not consumed daily. Soda, including diet drinks, appears to be part of the daily consumption patterns in the other three areas where soda consumption averaged slightly less than six days per week in Bert Kouns and Lakeshore, and daily for North Market participants.

Consumption of fried foods was also remarkably consistent across three of the four neighborhoods. Here, North Market – the middle-income neighborhood without a grocery store conveniently located to it – reported consuming fried foods more frequently than the other three areas – 5 times per week compared to around twice a week for the other three areas.

If there are income and class differences, it is that residents of Youree (the only location served by Whole Foods Market) differs from the other three locations. Overall, Youree respondents report eating more fresh fruit and vegetables, drinking less soda, and eating more organic foods than the other three areas. Youree respondents were also more likely to report an adequate selection of healthy options in their neighborhood. Beyond that, consumption patterns were remarkably consistent.

Between cost, nutrition, taste, and availability, residents across the neighborhoods were remarkably consistent in valuing taste as the most important factor (Appendix A, Figure 3 – Rank of Factors When Purchasing Food Items). Lakeshore was an exception as cost was ranked as the most important criteria in making food purchase decisions. Lakeshore respondents were the most sensitive to price (cost). The middle-income areas ranked nutrition second behind taste; North Market ranked cost second to taste; and Lakeshore ranked nutrition third after cost and taste.

When participants were asked if food could negatively or positively impact one's health, lower income residents seemed unaware of food/health connections with three exceptions (Appendix A, Figure 9 – Health Effect Related to Diet). One Lakeshore participant worked at the new Whole Foods Market that recently opened in Shreveport. He was the only individual at this location to mention the presence of antibiotics and hormones used in certain foods that have been a subject of recent controversy (Baldwin 2018). Another participant at Lakeshore responded, "If it ain't good, it ain't good" while the third participant said, "Some s*** bad for you makin' you sleepy." These were the only participants at this location to note a food/health connection of any sort.

Proximity/Accessibility to Grocery Stores and Consumption Patterns

Middle income respondents drive their cars to the grocery store (49 out of 50) (Appendix A, Figure 5 – Mode of Transport Used When Obtaining Food). The one person that did not use a personal vehicle stated that she did not drive and was usually a passenger in someone else's vehicle. None of the individuals at either of the middle-income areas used any other means of transportation (such as a bicycle, public transport, or walking). Three quarters of the study participants in the low-income neighborhoods also drive their personal vehicle to the grocery, however, a significant one quarter of these residents rely upon other means primarily walking. At North Market (low-income, more accessible), seven of the twenty-five individuals reported walking to the store to obtain groceries.

In terms of distances traveled to the grocery store, 40% of residents interviewed reported traveling between one and five miles to the grocery store – a consistency reported among all four neighborhoods (Appendix A, Figure 4 – Distance in Miles Traveled When Shopping for Food). One quarter (12) of the respondents in the lower income neighborhoods (North Market and Lakeshore) reported traveling less than a mile to the store, compared to only 6 (of 50) respondents in the middle-income areas.

CHAPTER V

DISCUSSION AND CONCLUSION

Discussion

The literature presented earlier in this study focused on three main topics: 1.) Challenges obtaining proper nutrition with relation to social class, 2.) The prices people pay at the grocery store, and, 3.) Distances consumers travel to the grocery store (and what forms of travel were available/plausible).

Challenges in obtaining proper nutrition with relation to social class

As previously noted by Brown (2009), large chain grocery stores were often not located in areas of lower socioeconomic status. This was especially true of our lowest income neighborhood studied, Lakeshore, that did not have a single large chain grocery store. This region was predominantly black (95.3%). The other lower income neighborhood, North Market, was intentionally selected because there was a grocery store(s) nearby. That being said, there were very few grocery stores (two to be exact) in the lower SES areas compared to over a dozen grocery stores combined in the two higher SES, Youree and Bert Kouns. Additionally, the lower SES areas only had local and regional stores whereas the middle-income locations had a bevy of national chain retailers. This is consistent with literature findings previously reviewed.

Referring to the findings of Burke, Keane, and Walker (2010), food selections, parking, and security were often a problem in grocery stores in lower income areas. This was consistent with stores, such as County Market, in the lower socioeconomic North Market neighborhood. Here they offered fewer and limited food options, not on a par

with the offerings of grocery stores in the medium income neighborhoods like Youree. Additionally, County Market had problems with security as explained by a guard who advised that the area was not safe after dark. Even though County Market was not considered small in size, employees attested to the selections being limited and the meat selection being “less than fresh”. As pointed out by Chung and Myers (1999) large grocery chains with economies of scale have put pressure on smaller shops in lower class areas. This has put residents in North Market at a disadvantage when shopping for nutritional food at a reasonable price. The level of freshness of one’s groceries likely correlates with shopping frequency and available transportation. Our study was not powered to research how many individuals had assistance with transportation as evaluated by Coveney and O’Dwyer (2009). One limitation of this study would be the inability to clearly separate the effects of class inequality and racial inequality. A future consideration would be a subsequent study that could clarify this.

Paying a higher price in lower SES neighborhoods

Our study was not specifically intended to evaluate and compare prices of a multitude of different food products to the degree studied by Coveney and O’Dwyer (2009), however, the investigator and even participants from the Youree neighborhood, noted higher costs at Whole Foods compared with other chains (Coveney and O’Dwyer 2009). Though a study in Chicago by Block and Kouba (2006) revealed that the prices of packaged items were more expensive at smaller independent stores compared to large chain supermarkets, our findings seem consistent with this. For example, it was observed that the price of processed pasta item “Suddenly Salad” was almost thirty cents higher at County Market in the North Market neighbourhood than at Kroger (one of the many

stored located in the higher income Youree neighborhood). Youree also had a Sam's Club where additional savings were available for this middle income neighborhood. Regarding the predominantly black neighborhood, Lakeshore, there were no large chain grocery stores, and relatively few small ones. This is consistent with findings in other studies that link minority spaces with the fewest grocery stores.

Distances consumers were able to travel

As noted previously, one can only travel so far in order to obtain necessary food items. Literature indicates that many low-income residents will travel, eleven minutes on average, out of their neighborhoods, in order to shop at a chain grocery store (Bell and Berlin 1993). Statistical data from Kansas State University (Estabrooks, Lee, and Gyurcsik 2003) revealed that individuals from lower SES neighborhoods were more confined in their ability to control their physical activity because of mobility issues including lack of an automobile and insufficient public transportation. This limited the stores and grocery selections available within a close proximity.

Our study showed that challenges relating to transportation were significant in North Market and Lakeshore and consistent with literature that described challenges for lower socioeconomic families as previously reported by Bell and Berlin (1993), Drewnowski and Popkin (1997), Chung and Myers (1999), Brown (2009), and Keane, Burke, and Walker (2010). In the North Market neighborhood, a higher number of individuals traveled to purchase food items on foot than at any other location in the study. Seven of the twenty-five participants traveled on foot and two traveled via bicycle. Based on testimony, a few participants said they did not own a vehicle due to financial hardship. Without a car it would be hard for residents in low-income neighborhoods to

have access to fresh, pesticide-free, farm-raised products without preservatives and transport them home. In contrast, residents of the better off middle-income neighborhood, Bert Kouns and Youree, reported they only traveled by car, never on foot.

“Let food be thy medicine---or you will likely end up eating medicine as your food.” - Hippocrates 460-377 B.C.

Conclusion

Our study results from Shreveport, Louisiana support findings in the literature that lower socioeconomic areas had extra challenges obtaining proper nutrition.

In the two lowest socioeconomic areas, North Market had two smaller regional chain grocery stores and Lakeshore had none. Recall that Lakeshore, the poorest area, was 95.3% black, had a median income of \$22,333, and 39% of residents were below the poverty level (Chapter III, Table 1). Transportation was a limiting factor for residents in these areas who often did not have cars or the means to travel to stores with healthier and better selections. As illustrated in Figure 5 in Appendix A, 36% of participants at North Market (low-income-less accessible) did not use a vehicle to obtain groceries; 8% of participants used a bicycle while 28% walked. This is quite different from the experiences of participants in the higher income areas who used their own personal vehicles to get to and from the grocery store.

When it came to a heavily processed diet, all four neighborhoods did not diverge significantly (Appendix A, Figure 7 - Average Weekly Food Consumption). Participants in the upper income areas when questioned were generally more aware they were eating an unhealthy diet but elected to do so anyway. In all regions, the taste of food was rated

most important over cost and nutrition. As previously noted in our study findings, several participants in the North Market neighborhood when asked if they would be willing to pay more for healthier more nutritious food choices, gave answers like: “Nah,” and “Hell no, who would?” In the middle-income areas, respondents, while apologetic, admitted to their unhealthy eating habits as well. This is, after all, the “Deep South” and cultural tradition and habit influence food purchases seemingly more than any other factor.

It should be noted that Louisiana has more festivals per capita than any state in the country and many of these festivals center around food, usually the worst kind for maintaining healthy human arteries (Joiner 2015). Northwest Louisiana alone hosts the Gumbo Cook-off, the Bee Gum Festival, the Blueberry Festival, the Corndog Festival, Mudbug Madness, the Natchitoches Meat Pie Festival, the Peach Festival, the Poke Salad Festival, the Zwolle Tamale Festival, and countless other food festivals throughout the rest of the state. These draw throngs of hungry visitors ready for their next feast. The yearly Louisiana State Fair, held in Shreveport, offers a variety of fried pleasures including fried butter, fried cheesecake, fried mac and cheese, fried Oreos, fried Snickers, fried Twinkies, and even deep-fried Coca-Cola. It seems no food is off-limits to the deep fryer.

In this context we recall the maps by the CDC (Figures 1 and 2) that showed the highest per capita death rates of stroke and heart disease to be in the southeastern United States. Here the southern diet typically consisting of fried, fatty food, processed meats (high in salt), and sugary beverages. Epidemiological research on this was presented

previously in this paper. A lay article summarized the research findings with the catchy title, “Southern Food Is Delicious But Will Eventually Kill You” (Cabral 2015).

In summary, our findings are consistent with previously published studies as discussed earlier in this writing. Challenges obtaining proper nutrition are unfairly and disproportionately borne by the poor, the less educated, and minorities. In addition, our study questionnaire regarding the importance of nutrition, personal interviews and direct examination of participants’ shopping carts suggests that the diets of all classes in Shreveport, Louisiana, not just the poor, need better adherence to health eating guidelines. Group indulgence in unhealthy food consumption at local festivities is anecdotal but highlights a frighteningly unhealthy pattern that could be explored in future research. It would appear that a community-based program of dietary education based on science would be helpful for the entire local population but particularly for the lower socioeconomic areas in greatest need. The personal consequences of unhealthy diet are eventually tragic and there are also the staggering hidden health costs of poor diet that are silently passed on to every member of society in one way or another (Lateef 2015). After all, “Healthy citizens are the greatest asset any country can have” (Churchill 1943). Ultimately, all we have is our health and the welfare of the entire society depends on how we address this.

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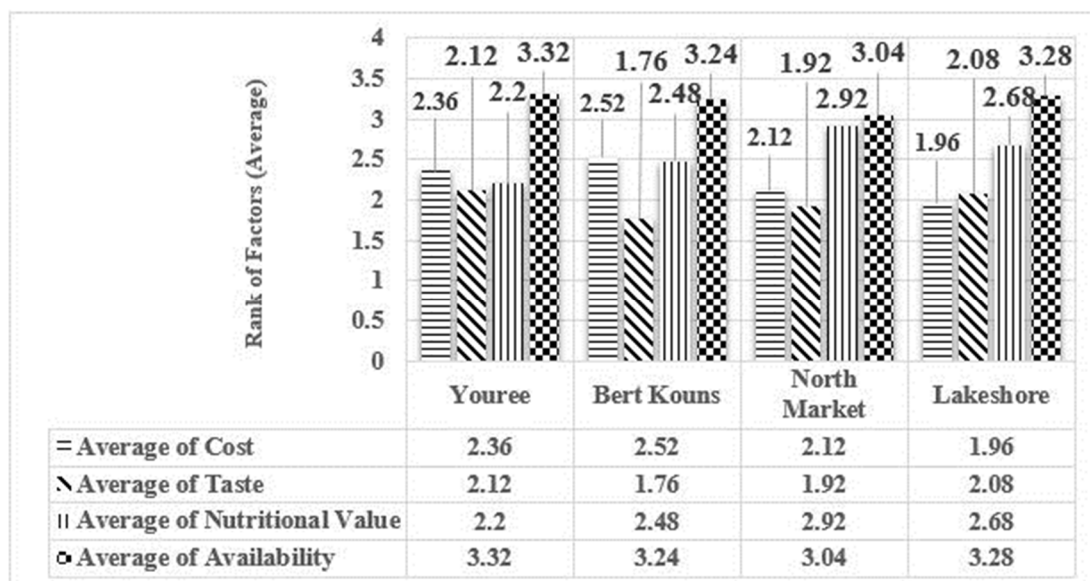
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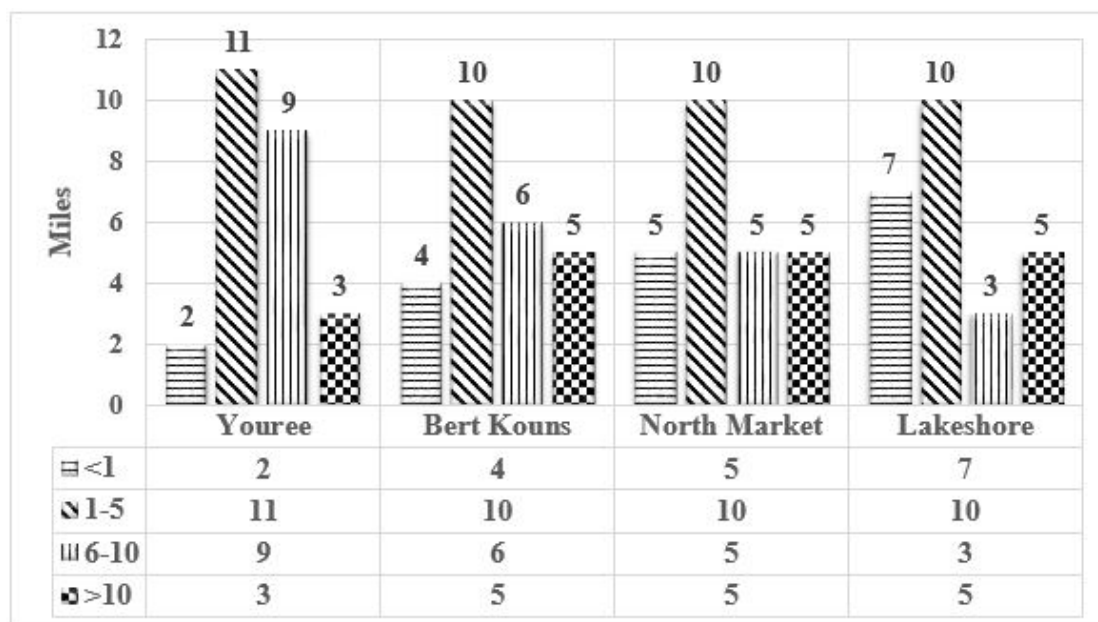
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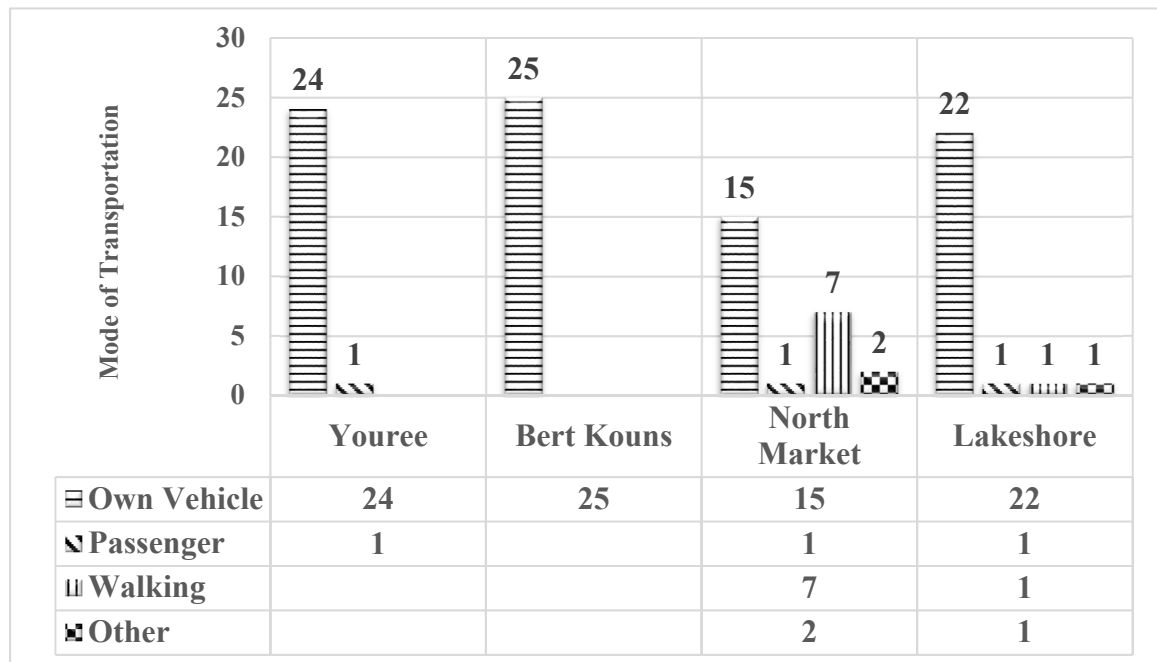
APPENDIX A



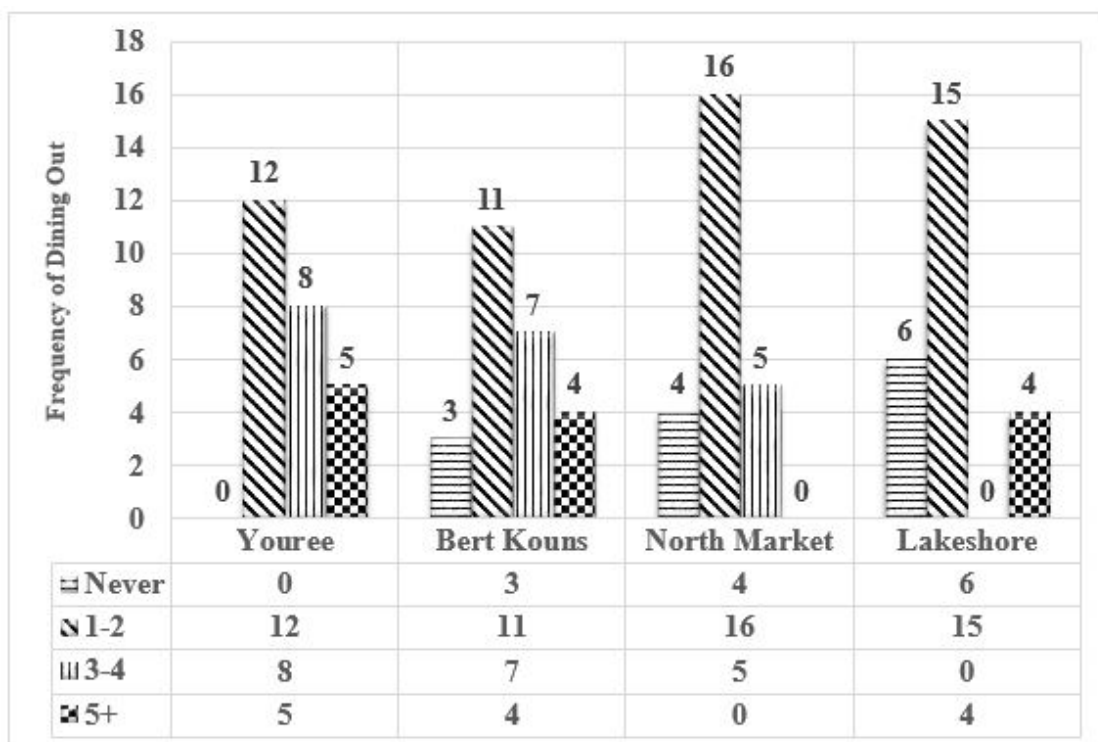
Rank of Factors When Purchasing Food Items.



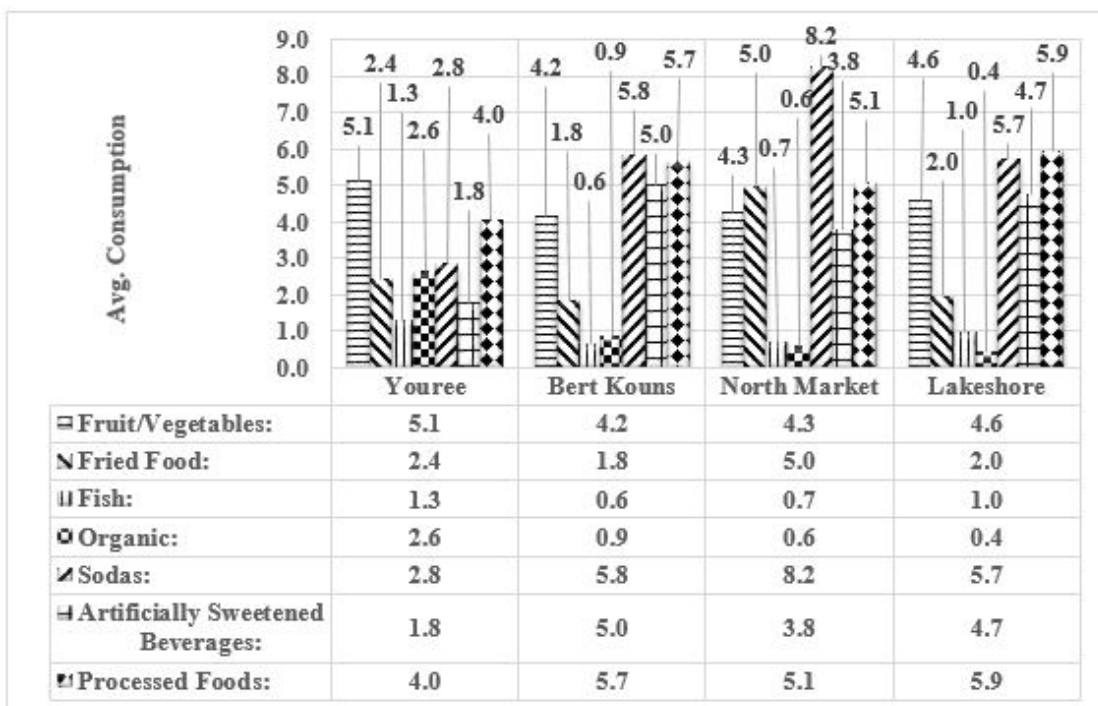
Distance in Miles Traveled When Shopping for Food.



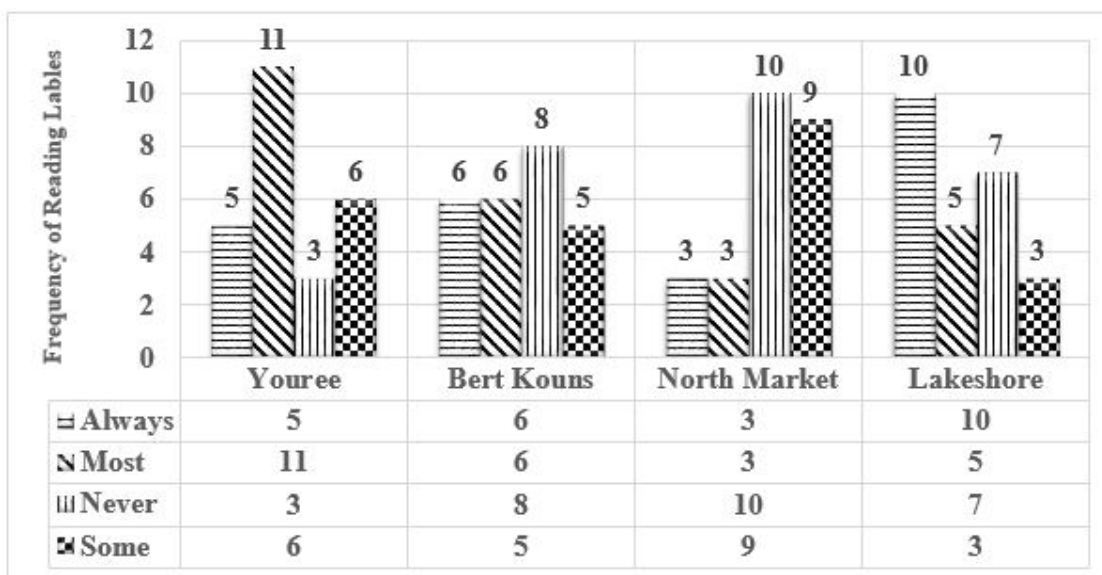
Mode of Transport Used When Obtaining Food.



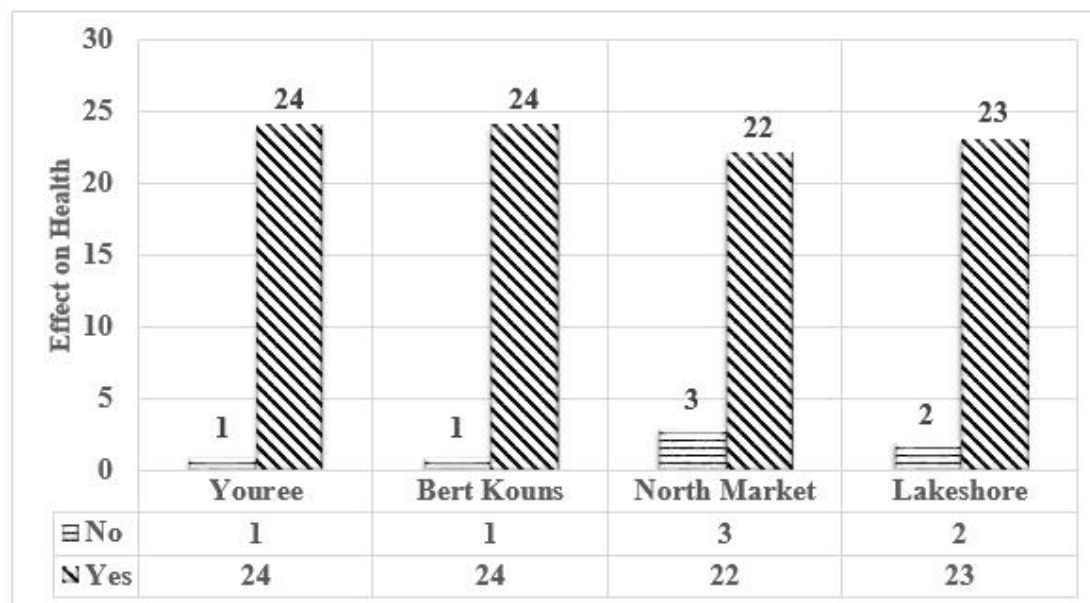
Frequency of Dining Out.



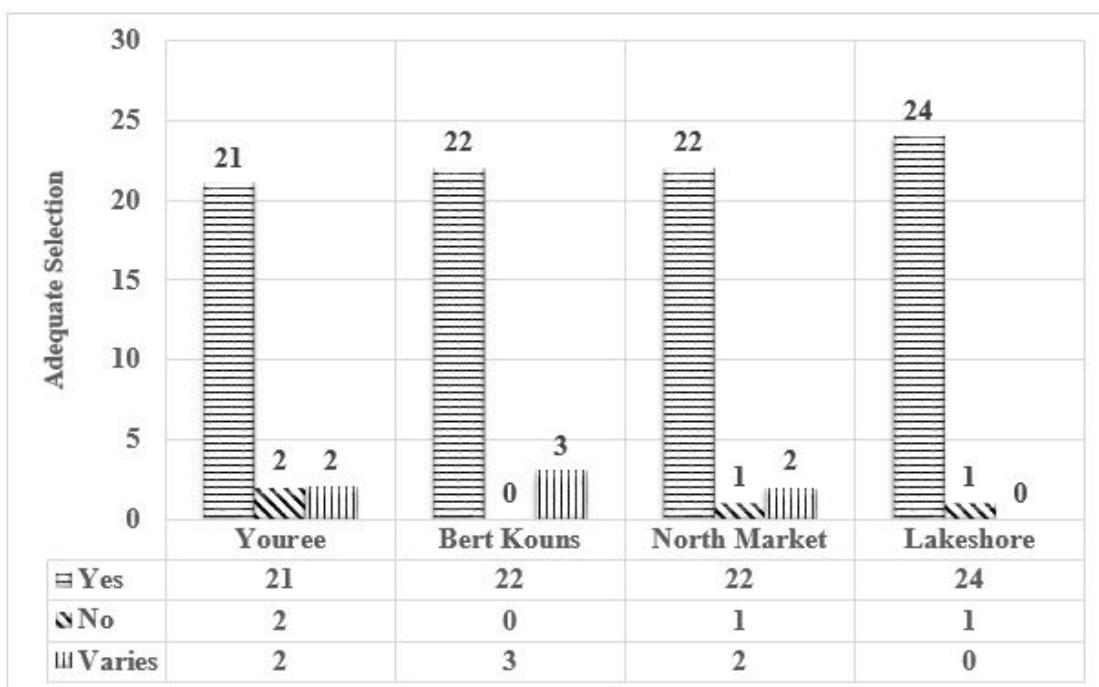
Average Weekly Food Consumption.



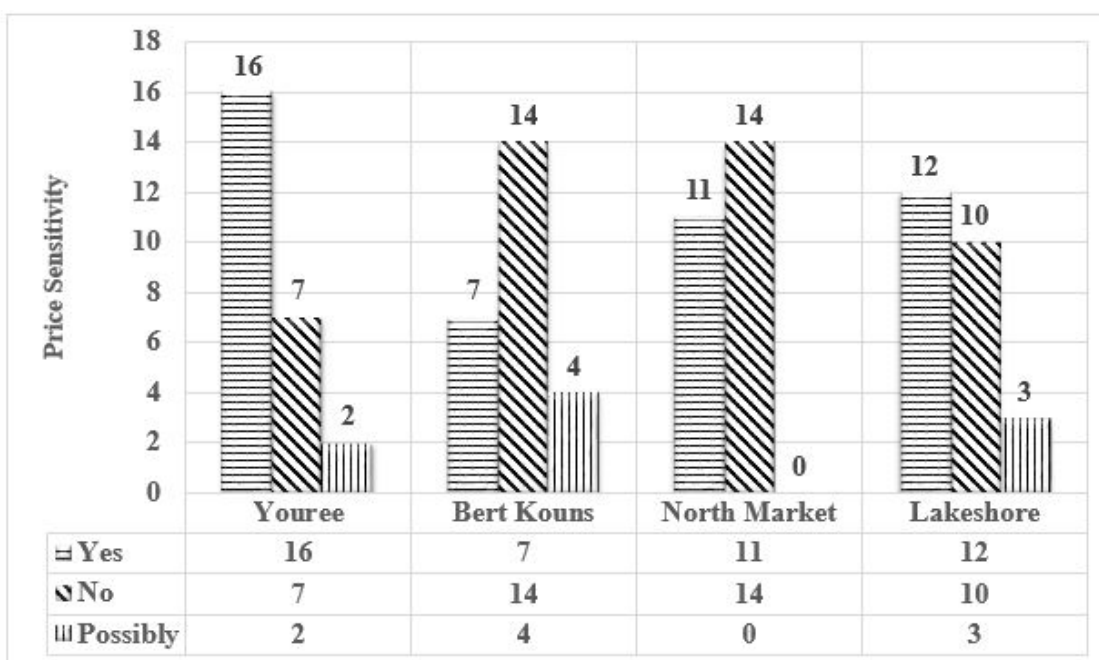
Frequency of Reading Labels.



Health Effect Related to Diet.



Adequacy of Food Selection.



Price Sensitivity of Participants.

APPENDIX B



Institutional Review Board
 Office of Research and Sponsored Programs
 903 Bowers Blvd, Huntsville, TX 77341-2448
 Phone: 936.294.4875
 Fax: 936.294.3622
irb@shsu.edu
www.shsu.edu/~rgs_www/irb/

DATE: February 20, 2017

TO: Kimberly Jensen [Faculty Sponsor: Dr. Michael Fortunato]

FROM: Sam Houston State University (SHSU) IRB

PROJECT TITLE: *Living in the Food Desert: The Implications of Food Availability on Individual and Family Consumption Patterns [T/D]*

PROTOCOL #: 2017-01-33771

SUBMISSION TYPE: INITIAL REVIEW—RESPONSE TO MODIFICATIONS

ACTION: APPROVED

APPROVAL DATE: February 19, 2017
EXPIRATION DATE: February 19, 2018

REVIEW TYPE: EXPEDITED

REVIEW CATEGORIES: 7

Thank you for your submission of your **Response to Modifications** for this project. The Sam Houston State University (SHSU) IRB has APPROVED your submission. This approval is based on an appropriate risk/benefit ratio and a project design wherein the risks have been minimized. All research must be conducted in accordance with this approved submission.

This submission has received **Expedited** Review based on the applicable federal regulation.

Please remember that informed consent is a process beginning with a description of the project and insurance of participant understanding followed by a signed consent form. Informed consent must continue throughout the project via a dialogue between the researcher and research participant. Federal regulations require each participant receive a copy of the signed consent document.

Please note that any revision to previously approved materials must be approved by this committee prior to initiation. Please use the appropriate revision forms for this procedure which are found on the Application Page to the SHSU IRB website.

All UNANTICIPATED PROBLEMS involving risks to subjects or others and SERIOUS and UNEXPECTED adverse events must be reported promptly to this office. Please use the

This letter has been electronically signed in accordance with all applicable regulations, and a copy is retained within Sam Houston State University IRB's records



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appropriate reporting forms for this procedure. All Department of Health and Human Services and sponsor reporting requirements should also be followed.

All NON-COMPLIANCE issues or COMPLAINTS regarding this project must be reported promptly to this office.

This project has been determined to be a Minimal Risk project. Based on the risks, this project requires continuing review by this committee on an annual basis. Please use the appropriate forms for this procedure. **Your documentation for continuing review must be received with sufficient time for review and continued approval before the expiration date of February 19, 2018. When you have completed the project, a Final Report must be submitted to ORSP in order to close the project file.**

Please note that all research records must be retained for a minimum of three years after the completion of the project.

If you have any questions, please contact the IRB Office at 936-294-4875 or irb@shsu.edu. Please include your project title and protocol number in all correspondence with this committee.

Sincerely,

Donna Desforges
 IRB Chair, PHSC
 PHSC-IRB

This letter has been electronically signed in accordance with all applicable regulations, and a copy is retained within Sam Houston State University IRB's records

APPENDIX C

Informed Consent Form

This informed consent form is for individuals invited to participate in a study in Shreveport, Louisiana titled: *Living in the Food Desert: The Implications of Food Availability on Individual and Family Consumption Patterns*.

Kimberly Jensen

Sam Houston State University

Dr. Michael Fortunato

Graduate Thesis

Introduction:

I am doing research to describe and understand how one's level of accessibility can impact their food consumption patterns.

Purpose:

Obstacles can prevent some individuals from obtaining adequate nutrition, therefore, certain areas have more people with health problems. I want to find ways to stop this from happening and believe that you can help by telling me about your consumption patterns and practices in general.

Type of Research:

This research will involve your participation in a verbal survey that will take about ten minutes.

Voluntary Participation:

Your participation in this research is entirely voluntary and it is your choice whether to participate or not. I will give you an opportunity at the end of the interview/discussion to review your remarks, and you can ask to modify or remove portions of those, if you do not agree with my notes or if I did not understand you correctly. You may also ask me any questions regarding the study both now and after the survey is administered.

Benefits:

Though there will be no direct benefit to you, your participation is likely to help me find out more about what can be done to remedy this problem in our community.

Confidentiality:

The information that I collect from this research project will be kept private. Any information about you will have a number on it instead of your name and only I will know that number.

I have read the foregoing information, or it has been read to me. I have had the opportunity to ask questions about it and any questions I have been asked have been answered to my satisfaction. I consent voluntarily to be a participant in this study.

There will be 100 participants in this study.

What are my rights as a research subject?

If you feel you have not been treated according to the descriptions in this form, or you have any questions about your rights as a research participant, you may call the Office of Research and Sponsored Programs – Sharla Miles at 936-294-4875 or e-mail ORSP at sharla_miles@shsu.edu.

Print Name of Participant _____

Signature of Participant _____

Date _____

Month/Day/Year

APPENDIX D

Interview Guide

Questions will be administered verbally and hand recorded by the interviewer.

Regarding question 1, participants will be shown the chart as a visual aid while ranking.

Food Shopping and Preparation

1. With 1 being the most important, please rank the importance of these factors when purchasing food items **from 1-4**: (use each number only once)

Rank from 1 - 4

Cost	
Taste	
Nutritional value	
Availability	

2. How many miles do you typically travel when shopping for food?
 - a. < 1
 - b. 1-5
 - c. 6-10
 - d. > 10

3. How do you get there?
 - a. Walking
 - b. Bus
 - c. Driving your own vehicle
 - d. Passenger in someone else's vehicle
 - e. Other
4. For whom do you usually shop?
 - a. Only yourself
 - b. For yourself and how many others [enter # in spreadsheet]
5. In general how many times a week do you eat out (any location outside where you live)? [Cannot control additives when not preparing your food at home.]
 - a. Never
 - b. 1-2
 - c. 3-4
 - d. 5+

Personal Food Consumption

6. How many times a week do eat the following (your best recollection):

- a. Fresh Fruit and/or Fresh Vegetables _____
- b. Fried food (fried potatoes, fried chicken, etc.) _____
- c. Fish (Not fried) _____
- d. Organic foods _____
- e. Carbonated sodas _____
- f. Artificially sweetened beverages (Gatorade, Snapple, SoBe, Kool-Aid, Gatorade
Sunny Delight, fruit drinks or punch) _____
- g. Processed foods (frozen, can, dry package, other) _____

Food and Health

7. How often do you read nutritional information/labels when you buy food?

- a. Never
- b. Some of the time
- c. Most of the time
- d. All of the time

8. Do you believe that eating certain foods can positively or negatively affect one's health?

- a. If YES, How and in what ways?

9. Does your customary food store have an adequate selection of healthy and nutritious food?
10. What kinds of foods would you like to see that your food store does not currently carry?
11. Would you consider shopping at a store with higher prices if the selections and nutrition were better? Why or why not?
12. What would you change about your diet or food consumption if you could? (add choices in spreadsheet based on the responses)

VITA

Kimberly C. Jensen

EDUCATION

Master of Arts student in Sociology at Sam Houston State University, January 2015 – present. Thesis Title: “Living in the Food Desert: The Implications of Food Availability on Individual and Family Consumption Patterns.”

Master of Science (2013) in Applied Geography, University of North Texas, Denton, Texas.

Bachelor of Science (2008) in Geography, Louisiana State University-Shreveport, Shreveport, Louisiana.

ACADEMIC EMPLOYMENT

Graduate Teaching Assistant, Department of Sociology, Sam Houston State University, August 2016 – present. Responsibilities include: assisting professors with the preparation and presentation of undergraduate courses, grading, researching, and preparing documents.

Geography Instructor, Department of History and Social Sciences, Louisiana State University-Shreveport, January 2012 – present. Responsibilities include: teaching World Geography, Cultural Geography, Physical Geography, Geography of Louisiana, and Freshman Seminar at the undergraduate level.

Geography Instructor, Department of Behavioral and Social Sciences, Bossier Parish Community College, August 2014 – December 2015. Responsibilities include: teaching Cultural Geography and Physical Geography at the undergraduate level.

ACADEMIC AWARDS

CHSS Scholarship Recipient, Department of Sociology, Sam Houston State University, Spring 2017.

Graduate Studies Scholarship Recipient, Department of Sociology, Sam Houston State University, Spring 2017.

Department of Sociology Scholarship Recipient, Department of Sociology, Sam Houston State University, Fall 2016 and Spring 2017.

LSUS Geography Award, Department of History and Social Sciences, Louisiana State University-Shreveport, 2005, 2006, 2007 and 2008.

Cum Laude Honor, Department of History and Social Sciences, Louisiana State University-Shreveport, Spring 2008.

PROFESSIONAL MEMBERSHIP

Alpha Kappa Delta International Sociology Honor Society, Department of Sociology, Sam Houston State University, Spring 2016 – present. (Life Member)