The Availability of Organic in Buffalo, NY

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Organic Food: Just For Hippies?

A Case Study Of Availability Of Organic In

Western New York

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Abstract

This article contributes to the growing body of literature on purchasers of organic products in the United States. There has been an abundance of research done about the psychological traits of organic consumers and the emerging trend of political consumerism. However, little research has been done on the lack of availability of organic products in low-income areas. Of those studied, people who identified themselves, as purchasers or fair trade and organic products were often motivated to purchase because of social pressure, beliefs about social justice, and perceived health benefits. My research will examine a relationship between price and availability and willingness to purchase organic products. It seems reasonable to believe that even if individuals are more than willing to purchase an organic item, they cannot if their income does not allow for it. Organic food is notably more expensive than its counterparts, and can be considered a luxury good. By gathering data about the amount of organic food sold in stores in both affluent neighborhoods and low-income neighborhoods it can be seen that there is a huge disparity in the availability of organic products that may change with new policy.

Keywords

Organic, political consumerism, consumer behavior, consumer attitudes
Introduction

The purpose of this paper is to add to the growing literature on ethical consumers and organic food, and the availability of healthy food in poor neighborhoods. I collected field data on shelf space afforded to organic food in both affluent and poor neighborhoods. After analyzing the data I have collected, I make policy implications based on theories I have constructed.

I hypothesize that the lack of availability and price of organic food in poor neighborhoods has a negative effect on low-income resident’s willingness to purchase organic. The literature delves into the demographics of organic consumers and the values that motivate them to purchase organic food such as age, gender, socialization, morals and trust, but I believe the most important factor deciding whether or not one is going to purchase organic is price and availability. If the food is not provided to them at a reasonable cost, or they are not educated they will not be able to purchase the products. Many low come residents do not own cars and cannot travel to more affluent neighborhoods to purchase healthy, organic produce. This problem is exacerbated in Western New York, where there is not efficient public transportation able to take residents from the city to the suburban areas where availability of fresh and organic produce is much higher.

This issue is important on many levels, and the discussion branches off into many different issues affecting Buffalo, NY and other small cities in the rust belt. Few stores offer reasonably priced organic goods in the poorest areas of the city. On the predominately African American East Side, few grocery stores can be located that sell organic food, but fast food restaurants are frequent. Urban gardens have been created by ambitious individuals looking to give back to the community, but gardeners cannot always legally sell their organic produce on the lots they lease from the government. This paper is only the beginning of a much larger investigation into consumer behavior and public policy.
Literature Review

Historically people have found ways to participate in politics unconventionally such as protesting, boycotting, bombing, etc. Recently a new form of unconventional political participation has come to the light, and that is political consumerism. From only purchasing organic to refusing to purchase anything not produced locally, to only purchasing vegan products and products not containing petroleum, political consumerism has taken the mainstream by storm. Consumerism has become an essential element of our lives, so it makes sense that people may use it as a means of political expression. According to Trentmann (2004) “if there is one agreement between theorists of modernity and those of post modernity, it is about the centrality of consumption to modern capitalism and contemporary culture.”

In the modern market, food choices are increasingly influenced by symbolic values. An increased market for organic food has much to do with increased public concern about the health of the environment, and themselves, and their values (Davies 1995). According to Grocer magazine, an executive at Natural Selection Foods calls the organic movement “one of the biggest consumer revolutions in history (Major 2003).”

The cultural shift towards organic food can be seen in cities such as Toronto, Los Angeles and even Buffalo. Popping up along main roads are restaurants promising to serve only the freshest organic and local foods that are much healthier than conventional eateries. A notable difference one will see once they pick up a menu at one of these modern restaurants is a price premium menu. One notable restaurant on Buffalo’s main strip is O3 Organic that features small, organic sandwiches for ten dollars each. It is very unlikely that a person living below the poverty level would be able to eat at such a restaurant when a sandwich at Wilson Farms costs two dollars.
A new phenomenon is the appearance of organic urban farming, succeeding at bringing fresh, organic produce to areas that may not have ready access to it. These not for profit organizations attract people from all demographics and are becoming a way to create a sense of community in otherwise destitute neighborhoods. In the city of Buffalo, NY, this can be seen in such organizations as the Massachusetts Avenue Project, an urban farm in the heart of the West side. This literature review focuses on the consumers of organic products; who they are, why they buy them, and the availability of organic products for people that may wish to buy them. In reviewing the literature written about the attributes of organic consumers around the globe, I explore if there are people who wish to purchase organic goods but cannot afford the luxury goods, and what are ways these goods can be made available to a wide variety of people, considering the potential health benefits that organic provides. I hypothesize that lack of availability has a negative impact an individual’s ability to purchase organic goods in low-income neighborhoods. Organic food is labeled organic when the farming process does not include the use of artificial fertilizers or pesticides, the produce is not genetically engineered or altered, and meat products do not contain antibiotics or artificial growth hormones. The USDA National Organic Program describes organic as “a labeling term that indicates that the food or other agricultural product has been produced through approved methods that integrate cultural, biological, and mechanical practices that foster cycling of resources, promote ecological balance, and conserve biodiversity. Synthetic fertilizers, sewage sludge, irradiation, and genetic engineering may not be used (USDA).” Research done on organic produce has conflicting conclusions on particular health benefits of organic food. According to a 2010 article in Alternative Medicine Review, organic produce is higher in vitamin C, contains more iron and omega 3s, and less pesticide and insecticide residue.
Although persistent consumers of organic are convinced that organic is always the healthier choice, there is conflicting data on how great a benefit organic food has for human health. A 2004 article in Nature magazine explains although organic has less fertilizers and pesticides, the nutrients contained in organic produce and conventional produce are about the same. The biggest difference can be seen in meat production, which requires the animals to have fresh air, have access to roam, and be free of antibiotics, which is quite costly, and unless the organic meat market continues to grow, farmers have no incentive to produce meat organically. Even though research is not yet definite about the health benefits, what is definite is that there is a large consumer base that faithfully buy organic because of its perceived health and environmental benefits. This in itself is interesting, since it contradicts the rational idea that people will seek out the most of something for the lowest price. However, purchasers of organic purposely purchase items at a higher price when they are aware they can get a similar product for much less money. Surveys and interviews show that people are interested in a more natural way of producing food that is sustainable and healthy for humans and the environment, given the rise of obesity and health problems in America and an increased concern for the environment and producers. The market for organic products has been growing year by year, and reached 10.4 billion dollars in 2003, a year after the USDA created specific guidelines for growing organically (Giffords 2006). The increasing sales can be attributed to an increased concern for the environment, health issues and food scares such as e-coli and salmonella outbreaks (Onyango 2007). The organic industry is also expanding rapidly to include not just fresh produce but also dairy, processed foods, grains and candy. Availability has become more widespread as about 73 percent of conventional grocery stores now carry organic products (Zepeda et al. 2004).
Many studies have been conducted about European consumers of organic food, but much less research has been conducted in North America, probably because only recently have organic products reached the mainstream. Most of the research conducted about consumers of organic food across the board, however, is that they are young, educated, and have a higher income, be it in Europe, Canada, or America. Much of this data has been conducted through surveys asking customers about demographics and their attitudes toward purchasing organic. Although surveying is a great way to reach people and get an idea of general attitudes, the survey is not a 100 percent accurate way to gather data about individual attitudes and incentives.

The research cites the reasons they purchase organic products are because of taste, appearance, environmental concerns, animal welfare concerns and social pressures. Some studies have found that age, formal education and income has an impact on willingness to pay a premium price for organic. Interestingly, according to Zepeda et al., their focus group consisting of African Americans were not familiar with organic products, or they did not have access, but when introduced to organic, they were much more apt to purchase it than the Caucasian focus groups (Zepeda et al. 2004).

According to Tomlinson (2008) organic food and farming can be said to represent a form of green resistance and a social critique of the hegemony of the agri-industrial paradigm. Consumers are becoming increasingly aware of the impact their actions have on the environment and are making purchasing decisions based on it. Socialization also seems to play an important role in determining if one is going to become a regular purchaser of organic products. Uzzell et al. (2002) argues people will not behave sustainably if they believe they are the only one doing it, but if behaving sustainably is socially accepted and promoted, they have more of an incentive.
Cheah (2011) argues that social environments such as family, friends and peer networks strongly influence buying decisions that involve environmentally friendly products. Pepper et al. stated that the rise of post materialism in the last few decades has contributed to an increase in interest in organic and other environmentally friendly products. Post materialists value environmental protection, self-expression, and freedom of speech. Materialists value economic growth, national security and law and order (Pepper et al. 2009). Regular purchasers of organic products can most likely be placed into the category of post materialist. In a study on socially conscious consumers by Pepper et al (2009) showed that socially conscious purchasing correlated positively with socio-political post materialism.

Organic produce does not only focus on the consumer as an individual, but attempts to link the consumer to the producer. Lundvquist (2000) in his study of Swedish organic workers noted some positives and negatives about the organic farming experience. Some positives noted by worker include a sense of well being from not using fertilizers and pesticides, and also a sense of well being from believing one is acting in an environmentally friendly manner. Some negative aspects include an increased workload and the uncertain crop yields. Since organic farming is done without the use of chemicals the crops require almost constant care. Much of the premium price paid by consumers for organic goods is used to pay for the increase in labor needed to tend to organic crops.

Organic food is seen as a “luxury good” to many given the price premium, which can range from one dollar to ten dollars more than the conventional counterpart. “Generally within the retail trade the conventional wisdom has been that the price premium on organic foods reflects the fact that they are more expensive to produce, and that all the handling, distribution and marketing costs do not enjoy the economies of scale associated with conventional high volume food lines
It seems likely that environmentally conscious people are willing to pay a higher price for organic goods, but if a consumer is experiencing financial hardship, their willingness to purchase “green” will decrease.

There are many reasons why a consumer will choose to purchase environmentally friendly products such as social pressures and ethical concerns, but if a consumer does not have enough income, they will likely attempt to spend the least amount of money they can on products they purchase. Often times people living in poor and urban areas cannot afford organic or locally grown food, so local stores are hesitant to provide such goods. In a 2001 New York Times article titled “Obstacles seen in poor areas for new farmer’s markets,” one garden organizer was told that “farmers don’t want to come to the Bronx because it’s dangerous, or poor people can’t afford organic products (Cardwell 2011).” But the city’s 60 Farmer’s Markets took in $500,000 in government nutrition coupons in 2009 and 2010, so some sort of demand appears to be there.

A telephone poll done in May of 2011 by Thomson Reuters and NPR shows that for all respondents under the age of 35, 56 percent claimed that the main barrier to organic products for them was price. Of all people surveyed the number was 54 percent. Twenty percent prefer to purchase non-organic food because it is more readily available (NPR 2011).

It is possible that since it has been shown education plays a role in organic purchases, perhaps those living below the poverty level and haven’t attended college or university are just less educated about and have misconceptions of organic products. In an intriguing 2003 article from the Berkeley Daily Planet, amateur farmer Joy Moore set up a booth in a low income neighborhood in Berkeley, and could not even give away free organic apples. The article quotes her as saying, “People just aren’t conditioned to appreciate fresh, organic produce. A lot of people have misconceptions about organic food. It has bugs, it doesn’t taste good, it doesn’t look...
right. It’s too expensive, it’s hippie food. It’s because we’ve been under the influence of conventional farming for 50 years.” Since then, Moore has been running a program called Farm Fresh produce which brings organic produce to low income neighborhoods at below retail price (Rowen 2003).

Aside from all the characteristics, values and social pressures that cause individuals to purchase organic food, if the individual cannot afford it or it is not available to them, they will not purchase it. My interest lies in policies that will enable individuals living in poor neighborhoods, such as the East side of Buffalo, to have access to fresh organic produce. Currently the rate of adoption of organic farming systems are highest in European Union countries (The European government has been extremely helpful in fostering organic production in Europe. According to Stolze (2009) “Organic farming here is considered as a land management concept that contributes to sustainable development and which is compatible with the need to preserve the natural environment and landscape and protect and improve natural resources (Stolze 2009).” California has been an innovator when it comes to providing organic, healthy produce to low-income neighborhoods. An article in from “The EcoTipping Points Project” discusses the concept of “food justice” to “address the social, political, economic and ecological barriers to food security.” The article discusses a grassroots organization that grows organic food and sells it too low come individuals within Oakland, California. The article discusses how lack of availability of organic food has lead to a lack of residents purchasing organic, but an increase in their purchasing of fast food since that is all that is available to them (Suutari 2004).

Policymakers are starting to look at the constructed environment and access to healthy and unhealthy food to understand how neighborhood food availability may contribute to racial and economic disparities in health problems such as obesity and diabetes. Research is showing that
“food deserts”, or areas with limited access to healthy and unprocessed food, are predominantly found in low-income and African American communities (Gordon et al. 2010). In the article, Gorden et al. create a “food desert index” to describe how much healthy and unhealthy food is available to residents in low-income areas of New York City. Using the data I collected I can assume that the city of Buffalo, mainly the East side of the city can be described as a food desert. In a study by Wrigley et al. (2003) of a particular food desert in a low-income area of the UK, it was found that the dietary patterns of residents improved after a readily accessible grocery store carrying healthy food was introduced to the area.

Little scholarly research can be found on the relationship between poor neighborhoods and organic food, presumably because poor neighborhoods have for a long time lacked access to an abundance of healthy, fresh food. The phenomenon of not for profit groups bringing organic produce to low-income neighborhoods is relatively new and deserves much research. The rest of my paper, however, will focus on the availability (or lack there of) fresh and organic produce in low-income neighborhoods in Buffalo, NY.

**Sample Selection**

For my sample selection, I chose to look at median income of several zip codes (gathered from city-data.com) in the city of Buffalo, and shelf space dedicated to organic goods in the city of Buffalo and Erie county suburbs. An article by Lee and Lim (2009) locates food deserts in the city of Buffalo and grocery stores in relation to them. Their study was meant to identify the areas in the city that are suffering from a lack of fresh, healthy food. In my research I attempt to take this a step further in analyzing the availability of organic food. For my sample selection, I chose
to look at median income of several zip codes (gathered from usa.com) in the city of Buffalo, and shelf space dedicated to organic goods in the city of Buffalo and Erie county suburbs.

Other than this information, the rest of my data is qualitative and based on analyzing scholarly articles, making observations about the city around me, and speaking to experts on the issue. The low-income areas I looked at have a median income of between 26,000 and 31,900 annually. The more affluent areas have a household income ranging from about 45,000 to 66,000. These include the West and East sides of Buffalo, and the surrounding suburbs of Williamsville and Amherst.

One issue that sticks out to me is the resource inequality that is present between the inner city and surrounding suburbs. This phenomenon is obviously not new or unique to Buffalo, but it is not going away. What are some reasons and solutions to these inequalities?

I decided to take a look at availability of organic products in the inner city as compared to the surrounding suburbs such as Williamsville, Amherst and Tonawanda.

It would be commonly assumed that low-income neighborhoods do not readily provide a large market for organic goods given the price premium. Following the data provided in many scholarly articles on the demographics of organic consumers, low-income, less educated individuals would be less inclined to want to purchase organic. I would argue that a negative feedback loop has been created in which lack of availability creates less demand, which creates lack of availability, and so on.

**Data Collection and Analysis**

My data collection came from a variety of sources, including first hand observations, speaking with sources and researching information online. After analyzing literature that has been written
about organic food and its implications for the public, I have decided that it has not quite answered all of my questions regarding the availability of organic food in low-income areas. I observed and recorded the amount of shelf space dedicated to organic products in several stores, some in affluent communities and some in poorer neighborhoods. The difference between affluent and poorer neighborhoods was distinguished using median incomes by zip code, which I collected from usadata.com (data is from 2000 US Census.)

The neighborhoods I collected information from were the West side of Buffalo, the East side of Buffalo, and two nearby suburbs of Amherst and Williamsville, all in Erie County. The West side of Buffalo has become very diverse because of an influx of refugees being settled there. The area is made up of individuals who are mainly Hispanic, Caucasian and African American, with an increasing number of Burmese, Somali, Iranian, etc. residents. The East side of Buffalo is predominantly African American. It has become severely underdeveloped, with an increasing number of vacant houses and lots. At the present time any new business is very reluctant to find a home there. Amherst and Williamsville are predominately home to white, middle class and upper class individuals.

It seemed obvious to be that there was more organic food available in stores in more affluent suburbs than in the lower income areas of the inner city, but I wanted empirical evidence. I estimated shelf space in feet provided in several stores. As I expected, there was much more shelf space dedicated to organic goods in more affluent neighborhoods and much less so in lower income zip codes in the city of Buffalo.

What I did not expect was that there is a growing number of organic farms on the East and West sides of Buffalo. There is also a growing number of restaurants on the West and Upper West sides of Buffalo but the price premium still seems a deterrent to many. For example, O3
restaurant which serves exclusively organic has an array of sandwiches for no less than $8.75 each.

The area that had the least amount of organic food available was the Eastern Side of the city, a mostly African American neighborhood. When I spoke to a woman who works at Grassroots Gardens of Buffalo, I was told that many urban, organic gardens are in progress on the East side, but the gardeners are unable to sell produce that they grow on land leased from the Erie County government. If the land can be tested for lead and other contents and declared safe, these gardens would create a great opportunity to provide fresh produce to this and other low-income neighborhoods.

Data

Although my sample size was quite small I was able to run some statistical analysis on the data I collected. The correlation between shelf space and median income is positive, but it is not statistically significant. At 90 percent confidence it can be said that the correlation implies a positive relationship between median income and shelf space dedicated to organic food. Also, as median income increases, distance from the front of a store and organic product decreases. From my data analysis I can tell that generally low-income areas have less shelf space dedicated to organic products than more affluent communities. Limitations made it difficult to find a statistically significant correlation in my data.

For my analysis, I am measuring my independent variable (availability) by measuring shelf space dedicated to organic products, distance from the front of the store to organic products, and the amount of stores carrying any organic products. I measure my dependent variable (willingness/ability to purchase) by measuring median household incomes for neighboring zip codes.
<table>
<thead>
<tr>
<th>Zip Code</th>
<th>Number of Stores</th>
<th>Median Income</th>
<th>Stores With Organic Products</th>
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<tr>
<td>14221</td>
<td>3</td>
<td>75,162</td>
<td>3</td>
</tr>
<tr>
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<td>2</td>
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</tr>
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<td>50,357</td>
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<td>0</td>
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<td>19,934</td>
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<tr>
<td>Store</td>
<td>Zip Code</td>
<td>Distance from Front to Organic</td>
<td>Shelf Space</td>
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<tr>
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</tr>
<tr>
<td>Co-op</td>
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<td>450</td>
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<tr>
<td>*Broadway</td>
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<td>NA</td>
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<tr>
<td>Trade Fair</td>
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<td>NA</td>
</tr>
<tr>
<td>Guercio</td>
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<tr>
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<tr>
<td>*MAP</td>
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<tr>
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*Broadway Market
*CFM – Community Food and Meat Market
*MAP- Massachusetts Avenue Project (An urban farm)
*SAL- Save- A- Lot stores
Policy Implications

The lack of availability of organic produce (or much fresh produce at all) in the lowest income areas of Buffalo is particularly troubling. Whilst not surprising, this continuing absence is not inevitable. By researching ways to make organic produce more available to more of the population rather than using it as a marketing tool, one can begin to make policy that will bring the products to the shelves of low-income neighborhoods.

When new generations of low-income residents are not even exposed to organic products, or any type of product, how can they know enough about it to demand it? There may be a lack of people purchasing organic produce, or any fresh produce, because there is nowhere to purchase it. And without a vehicle or adamant transportation to surrounding suburbs, an individual is forced to purchase only what is available to them. I have made a few recommendations pertaining to low-income areas in the city of Buffalo that can be generalizable to other small, impoverished cities.

First, I recommend that organic produce grown in gardens be sold in shops in the areas they are grown in. While there is at least one store in the city of Buffalo that sells organic food near Buffalo State College, there are no stores selling organic on the Eastern Side of the city. In fact, there are no stores on the Eastern side that sell organic produce. There is an abundance of liquor and corner stores that sell mostly processed food and no fresh vegetables.
**Limitations and Further Research**

I would like to use this paper to build a theory on the availability of organic food to low income neighborhoods. I am hoping it will be useful for further research and implementation of policy. If policy were implemented that provided organic products and produce to the low-income areas mentioned, an interesting statistical study to endeavor would be a T test for dependent means (M1 – M2). Using this method we would survey a random sample of individuals before and after organic food was made available to them, and decide if their willingness to purchase the organic food increased over time. This type of test would require random sampling and interval/ratio data. This method of course would have to take place over a long period of time and a policy change would have to be implemented, but it the results would be very interesting.

Insufficient funds and time made a survey impractical for the first part of my research. Further study will involve surveying residents on their willingness to purchase organic products, although surveys are only a pathway to understanding actual human behaviors. I am particularly interested in the attitudes of African Americans toward organic products, as this has not been thoroughly studied. In continuing my research I would like to mail surveys and provide an incentive to complete the survey.

The small amount of research that has been done however states that African Americans are more open to trying organic products and would buy if it were available to them (Zepeda 2006). Further research should also investigate the impact current public policy has on the availability of organic products to low-income Americans. Further research into the desirability of organic produce in unexplored areas may open up opportunity to invest in those communities.

My plan for further research is to survey a random sample of individuals from zip codes with low median incomes and zip codes with high median incomes.
An increasing amount of research is stating with confidence that there is a food and health disparity between low-income inner city areas and wealthy suburbs.

**Conclusion**

The phenomenon political consumerism is quite an intriguing topic and should continue to be explored. The change to a post modernist society in which individuals are becoming more socially, ethically and politically conscious about what they purchase is opening up new fields of research and implications for future policy.

This paper is meant to add to the discussion about consumers of organic products and the mechanisms behind the availability and marketing of it, and to suggest some methods of analyzing data. The theories I have created are generalizable to many different aspects of public policy.

It seems as if availability and price are prominent factors influencing consumer’s decisions and not exclusively values and attitudes towards products perceived as environmentally friendly. Research addressing ethical consumers has discovered, mostly through analyzing survey data, that prominate factors influencing consumers buying of organic goods is personal values, trust, education, income, age, socialization, and availability. I believe that all of those factors are important, but the most important is price and availability, because without availability of the organic goods the other contributing factors are arbitrary. I cannot claim that I have enough data to say with confidence that if low-income individuals had organic food available to them that
they would purchase. I have, however, built a theory about the lack of organic food in low-income areas and made policy implications based on it.

References


