

# The Impact of Grocery Stores' Marketing Strategies on the Purchasing Decisions of Consumers

Maria Chao<sup>1</sup> and Deborah Vajner<sup>1#</sup>

<sup>1</sup>Terry Sanford High School, USA

#Advisor

## ABSTRACT

What impacts people's food choices in the United States? Although unhealthy eating habits can be due to personal decisions, marketing strategies by grocery stores can ultimately influence consumers' decisions. Previous research has demonstrated factors that influence purchasing decisions and marketing strategies employed by grocery stores; however, research is limited in connecting consumers' purchasing habits with stores' marketing strategies. The aim of this research study was to determine if specific strategies by grocery stores influenced consumers' ultimate purchasing decisions. Qualitative and quantitative surveys were conducted to determine what factors influenced purchasing decisions. For the first survey, 140 adults and adolescents were randomly surveyed online to determine food choices and buying habits. In addition, grocery store managers were interviewed to determine various strategies implemented to influence consumers. For the second survey, 81 adult consumers took an online survey to state what marketing strategies influenced them. Responses were then analyzed to determine the connection between why consumers bought certain foods and how they were influenced by stores to purchase these foods. Findings show that price, taste, and convenience were the most influential factors. Consumers also shop at grocery stores based on the variety of products, the discounts, and the reputation of the stores. Stores with a wide variety of fresh and natural foods on sale could potentially steer consumers to healthier eating options and thus, impact obesity rates in the United States.

## **Introduction**

What impacts people's food choices in the United States? Although unhealthy eating habits can be due to personal decisions, various marketing strategies can ultimately influence diets. People in the United States have unhealthy eating habits which are due to the large presence of processed and fast food that is advertised to the population. Factors determine people's purchasing decisions including taste, affordability, convenience, availability and previous experiences with different food (Gundala and Singh, 2021). People are more inclined to eat certain foods based on habits and rarely think about the benefits of natural food or how junk food can harm their health (Almoraie et al, 2021). Unhealthy foods are often disguised as healthy by their packaging elements such as labels and words that capture the attention of consumers (Ares, 2021). Processed foods that lack essential nutrients come in different forms including packaged or fast food. Since processed foods are widely available, people are more influenced to buy them, increasing the risk for numerous health problems. For example, obesity has become a major health problem today, leading to other diseases (Cooksey-Stowers et al, 2017). Large companies including General Mills and Kellogg influence consumers to purchase a variety of convenient foods such as cereal, which is advertised on TV, commercials, and newspapers. (Ares et al, 2021). This can ultimately encourage and promote unhealthy diets and eating habits. So why do people purchase processed food when they can be harmful to their health? If natural foods were less expensive, would people purchase them, or do they buy processed foods based on taste and perceptions of the foods? Grocery stores recognize what factors are important to consumers and tailor their marketing strategies to influence more people to buy products (Moore, 2016). Therefore, it is important to understand what factors affect consumers' purchases, what

marketing strategies grocery stores use, and what strategies influence consumers to buy products. The following section will discuss the difference between natural and processed foods and the unhealthy eating habits that can lead to different types of diseases. In addition, the factors that contribute to certain purchasing decisions and the marketing strategies used by companies and grocery stores are important, because they influence people to buy certain food products and shape eating habits.

## Literature Review

### Background

There are different types of food in America today, whether it's natural or processed. Natural food, according to Gundala and Singh (2021), can be in the form of organic which are "foods that are cultivated without the application of chemical pesticides." The market of organic foods is growing in demand and has increased by 6.3% from 2017-2018, because consumers are implementing healthier and more nutritious eating habits. This is a good sign, but there is still a great demand for processed foods considering they are seen in most American diets (Gundala and Singh, 2021). Processed foods are "industrially manufactured or ready-to-eat formulations made mostly from substances that are derived from foods with little, if any, whole foods" (Juil et al, 2018). Examples of processed food are packaged frozen dishes and soft drinks, but also includes cereal, chips, crackers, and cookies (Dinu et al, 2020). These types of processed food account for about 50-60% of the energy and about 90% of added sugars in the average US diet. Processed foods are affordable, convenient, and widely available, but are less nutritious than natural whole foods. Even though they have some nutrients, there is an excessive number of sugars, salts, and fats which make them unhealthy (Juil et al, 2018). The types of food we eat everyday can have unintended consequences including health diseases and the choices we make are possibly influenced by marketing strategies of various companies.

### Obesity and Health Diseases

Obesity is an ongoing epidemic affecting over 40% of adults in the United States from 2017-2018 (Centers for Disease Control and Prevention, 2021). In addition, obesity in the youth population has tripled in the past three decades because adolescents aren't getting the recommended nutrients in their diets. Modifying adolescent diets and lifestyles would prevent the development of chronic health diseases in adulthood (Ruiz et al, 2019).

Having unhealthy eating habits can increase the amount of health issues, so it is important to understand why people have unhealthy diets in order to encourage healthier eating. According to Sogari et al (2018), adult obesity has increased over the years due to unhealthy eating habits when young. This study used focus groups and implemented participant observation and interviews to conclude that parents have a big role in shaping healthy eating for their children. If parents are knowledgeable about nutrition, they pass that knowledge onto their children through experiences with healthy food and encourage better diets. Children who are educated on nutrition and have healthy diets are more likely to continue healthy habits when they are adults (Sogari et al, 2018).

Researchers at Cambridge University observed that children aged 9-12 years were knowledgeable about how natural foods were mostly fruits and vegetables whereas processed foods were junk food and machine-made food (Bleiweiss-Sande et al, 2020). This study, from the Public Health Nutrition journal, used qualitative data from 10 focus groups which showed that these low-income minority children were educated about food processing and what foods were more nutritious and better for health. This contradicted the source by Ruiz et al because since children were knowledgeable about nutrition, you would think they would eat healthier, but in reality, the youth obesity rates are rising because of their eating habits. Enablers that lead to a healthy and balanced diet include food knowledge, healthy eating habits, and being portion aware. However, there are many barriers that prevent healthy diets including

lack of time, access to convenient food, unhealthy snacking, and high prices. There are barriers and enablers in people’s everyday lives that can influence their diets greatly (Sogari et al, 2018).

Companies and grocery stores make it difficult to eat healthier because of their advertising and strategies to encourage purchases (Ares, 2021). With the obesity epidemic, it is important to understand why consumers are purchasing the food that they do and how they are being influenced in order to encourage healthier diets for Americans.

### Factors that Affect Purchasing Decisions

The factors that influence consumers to buy food show why people have unhealthy diets and what can encourage healthier habits. An article from an international research journal found that consumers purchased food based on their previous experiences: price, taste, convenience, availability, knowledge, and familiarity. For example, when people have tried healthier foods or they were familiar with them, they were more likely to incorporate them into their diets (Fox et al, 2021). A 2021 study conducted by Elizabeth Fox and more authors used a mixed methods design with semi-structured interviews in Northern California and Southeastern Nebraska. They used participants over eighteen years old and who were college educated. These researchers discovered that it was important to understand what drives food decisions in order to shift towards healthier diets.

Table 1 showed the most frequent considerations that consumers had when purchasing food including price, health, and taste/preferences. This is important because it shows what factors were the most important for participants when purchasing food and how this contributes to their decisions and shapes eating habits (Fox et al, 2021).

**Table 1.** Considerations influencing what foods to purchase and eat.

Cited Considerations	Meaning	Frequency
Price	Sales and coupons, price/cost of foods, affordability of foods, food budget	25
Health	“Balanced diet”, caloric content, food and food content related to health (e.g., cholesterol, sugar, salt), dieting, weight maintenance	22
Taste and preferences	Flavor of food, preferred brands because of taste, visual appeal of foods, smells of food, texture of foods, food that other friends and families prefer	19

Another peer-reviewed research article by R. Gundala and A. Singh was similar because these researchers used a questionnaire with fifty participants. These researchers found that when people are more knowledgeable about different foods like organic foods, they are more likely to purchase them because they either grew up eating them or they know the benefits and nutrients that are in these types of foods. In addition, higher income communities usually have better and more resources, resulting in higher availability of organic foods and products. This leads to more people purchasing healthy foods, resulting in better diets (Gundala & Singh, 2021).

However, price played a big role in eating habits. In one qualitative study, 75% of the participants made less than \$2,000 per month, which caused them to get the best deal, spending less money on more food, even though those foods were probably less nutritious (Evans et al, 2015). This source, from the *International Journal of Behavioral*

*Nutrition and Physical Activity*, explained that these low-income communities have stores with less resources and a low variety of foods, resulting in less fresh food and more packaged foods. Since these low-income families were limited in their choices, sometimes natural foods were not available, or they were too expensive which made it difficult for these families to have a healthy and balanced diet. (Evans et al, 2015).

Obesity rates are higher in low-income communities because of either food deserts or food swamps. Food deserts are defined as “areas with limited access to affordable and nutritious foods,” whereas food swamps are “areas where fast food and junk food overpopulate healthy alternatives.” Food swamps are usually areas with a large number of fast-food restaurants, such as highway exits. When people are traveling and just want a quick bite to eat, they stop at a nearby fast-food restaurant because it is fast and affordable (Cooksey-Stowers et al., 2017). According to the U.S. Department of Agriculture, Cumberland County, NC has experienced an 11.69% increase in the number of fast-food restaurants. In 2011, there were 248 fast-food restaurants and in 2016 there were 277. In addition, the adult obesity rate from 2012-2017 increased by 8.45% in Cumberland County, NC (USDA, 2020). With more fast and convenient food available to consumers, obesity rates have continued to rise. Areas with food deserts or food swamps have made it difficult for people to access more fresh foods and only have processed food available. People are also more inclined to purchase items because of companies’ and grocery stores’ marketing strategies even though consumers may not think they are being influenced.

## Grocery Stores’ Marketing Strategies

Once there is an understanding of the influential factors that promote diets, grocery stores create strategies that align with these factors to influence consumers even more. An article from the American Journal of Nutrition showed that over 70% of the sources of junk food were from grocery stores (Liu et al, 2021). This is caused by the different marketing strategies that large companies and grocery stores use to promote processed foods. For example, companies such as General Mills target children through advertisements and commercials on TV using “brand mascots” and cartoon characters (Ares et al, 2021). An example of this would be the commercial for Cinnamon Toast Crunch cereal using the talking squares jumping into the bowl of milk or the Cap’n Crunch cereal games on the back of the box. Ares et al (2021) from the Food Quality and Preference journal found that children were the most attracted to these advertisements and could easily be persuaded by companies to convince their parents to buy processed foods. According to Ares et al (2021), “children create emotional bonds with the cartoon characters” which encouraged them to try these foods and buy them.

Another marketing strategy used by companies is the packaging elements and the perceived health benefits of different foods. According to Ares et al (2021), different nutrition labeling is often used to sway consumers regardless of the actual nutrition content. Therefore, companies have specific labeling techniques to encourage healthy eating habits, even if the product isn’t healthy like the company says it is. For example, companies label their products with pictures of fruits and vegetables, so people think they’re eating healthy or “no preservatives” on packaged food (Ares, 2021). According to Dwivedi et al (2017), processing is intended to extend shelf life, add color, taste, or flavor. Because of this, different components are added to processed foods including natural and/or artificial preservatives. Artificial preservatives are “produced by humans through chemical synthesis” and are added for flavor, color, to prevent bacterial growth, and to extend shelf life, but can be harmful when consumed often. This source explained why preservatives are used and although they can be harmful to the consumer, there are also more benefits for the producers. Companies influence children to consume their products using multiple packaging elements. Labeling can influence children by capturing their attention and leads to how they perceive the products. Once children associate something positive with the product, this leads to purchases and consumption of the products which results in their future health outcomes (Ares, 2021).

Grocery stores also have multiple marketing strategies that they use to sell their products. According to L. Moore (2016), “Supermarkets and supercenters are often designed to encourage impulse purchases.” Grocery stores try to use strategies for consumers to buy impulsively. When you go into a store and have a list of items to get, you

usually buy more than what you go in the store to get. This study, from the Journal of Community Health, found that in-store marketing strategies including coupons, availability, and labeling motivated people to purchase healthier foods (Moore, 2016).

The objective of this research was to see if the marketing strategies used by grocery stores aligned with the factors that influence customers to purchase. There are factors that play a role in purchasing decisions of consumers and what influences these decisions is important in understanding how better diets can be implemented. There was previous research on what factors influence purchasing decisions and the different marketing strategies grocery stores used. However, there is limited information about the connection between consumers' purchasing habits and stores' marketing strategies to influence their decisions. With this information, there is a gap in scholarly research concerning the impact that various grocery stores' marketing strategies have on the purchasing decisions of consumers in the Fayetteville, North Carolina area.

## Methodology

To address my gap and research question, I decided to employ a survey and interview approach. Implementing this approach allowed me to get perspectives from both consumers and managers of grocery stores. I chose to do a survey and interview method for my approach because it allowed me to gather information from consumers about what influenced them to buy products and how grocery stores played a role in consumers' purchasing decisions by using various strategies to influence. Both surveys used a combination of quantitative and qualitative questions with a mix of multiple choice and short answers (Appendix B). These answers were then analyzed to determine the connection between why consumers bought certain foods and how they were influenced by stores to purchase these foods.

The first survey was targeted to adolescents and adults regarding their food choices/habits and what factors potentially influenced them to buy. I gave this survey to both age groups so I could get a variety of answers regarding eating habits and what factors influenced the participants to buy. The first survey received 140 responses from various high school public school students & teachers, college students from a university, and adults from the general public in Cumberland County, NC. The interviews were in-person with three grocery store managers from the following stores: Food Lion, Sprouts, and Publix. The purpose of these interviews was to find out what effective marketing strategies those stores implemented. The second survey was given to adults ages 18+ to determine whether the strategies listed by the managers were effective in influencing consumers' food choices/purchases. Since adults usually shop at grocery stores, high school students were excluded from this survey. The second survey received 81 responses from college students at a university and the general public aged 18+ in Cumberland County, NC.

The responses from the first survey helped to develop the interview questions for the various grocery store managers. I chose these three stores because they specialize in different areas. Food Lion has an assortment of both fresh fruits and vegetables and packaged food. Sprouts has mostly fresh, natural, and organic foods because they mainly focus on their produce section which is the biggest area in the store. Publix, on the other hand, has more of a variety of processed and packaged foods with limited produce. The interview questions were intended to help me understand what marketing strategies these stores use in order to get their customers to buy products. The interview responses helped create the questions for the second survey to determine if these strategies were influential to consumers.

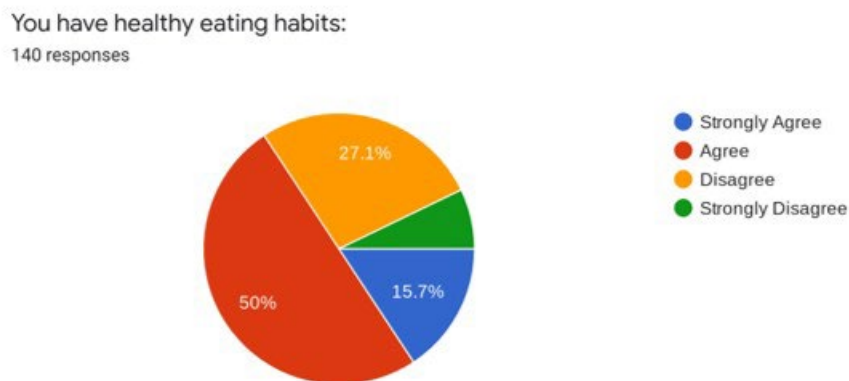
Several other researchers have used the survey or interview method to obtain quantitative and qualitative data including G. Sogari (2018), E. Fox (2021), R. Bleiweiss-Sande (2020), R. Gundala (2021), and A. Evans (2015). I decided that this method would be the most effective in gaining an understanding of consumers' purchasing behavior and the marketing strategies that grocery stores use to potentially influence consumers to purchase certain food products.

## Results

The first survey I conducted received 140 responses from teenagers and older adults in Fayetteville, North Carolina. It was important to know that 67.9% of the respondents were female and 61.4% of the participants were ages 13-19 which potentially influenced the responses. The answers to my first survey formed a basis for the questions I asked the grocery store managers in the interviews. The second survey I conducted received 81 responses and was targeted to adults ages 18+ in Fayetteville, North Carolina. I chose this age range because of how more frequent adults shop compared to younger teenagers.

### 1st Survey Data

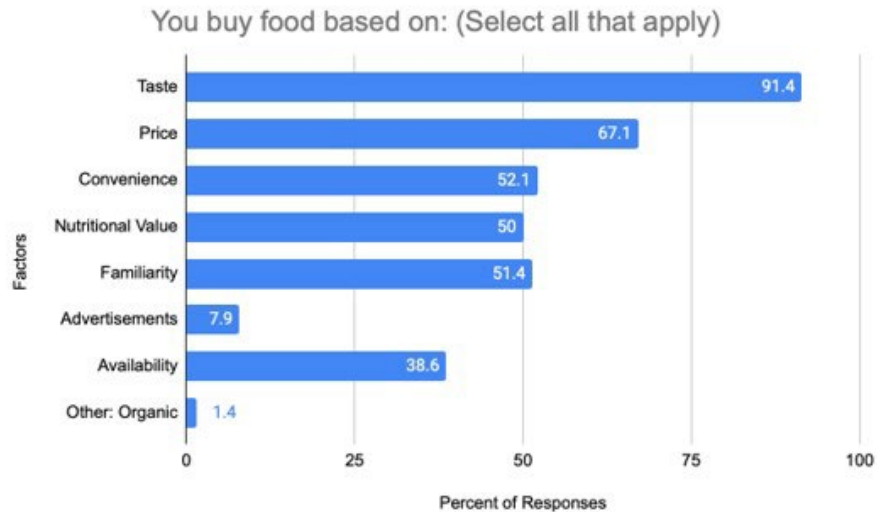
This survey was conducted to determine consumers' eating habits and food choices. When asked if the participants had healthy eating habits, 65.7% agreed or strongly agreed that they had healthy eating habits, as shown in Figure 1.



**Figure 1.** Percentage of participants (n=140) who stated they have healthy eating habits.

When determining how healthy people ate, it was important to know what factors contributed to what foods people bought. Figure 2 showed that the most important factors that the participants considered when purchasing food were taste and price. The graph revealed that 91.4% of respondents bought food based on taste and 67.1% bought food based on price.





**Figure 2.** Percentage of participants (n=140) who buy food based on certain influential factors.

### Manager Interview Data

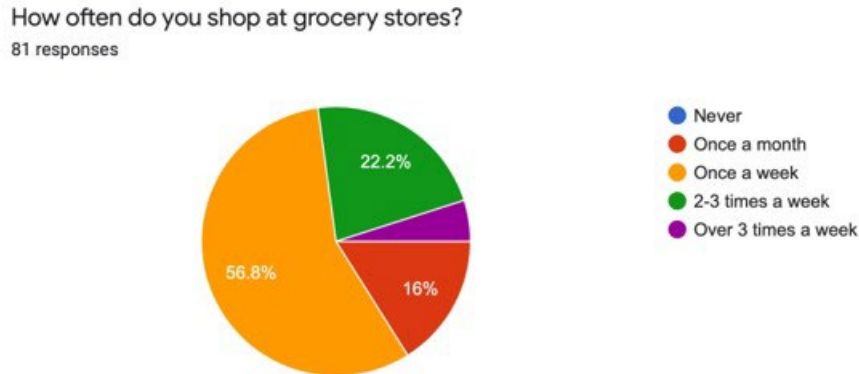
To see if the data from the first survey was consistent with the grocery store managers, I asked the managers, “What types of food do people purchase the most?” Although Food Lion and Publix said fast, dry, and quick foods were being purchased more often, Food Lion also said that it was shifting more towards organic because people were being more conscious of what they were putting in their bodies. Consumers at Sprouts purchased healthier foods since this store specializes in more fresh and natural foods. The produce section is the largest section in this store and there is a wide variety of natural products.

Since 91.4% of the participants chose taste as the main factor they considered when buying food, I asked three grocery store managers about food sampling as a marketing strategy. The question I asked to Food Lion, Sprouts, and Publix was, “Have you ever done free samples or taste testing in your store?” All three stores have tried taste testing either in the past or present. At Food Lion however, the corporation oversaw the new food items that were introduced and sampled instead of the individual stores. Publix, however, will allow you to try a chicken tender or sample wine if you are of age. The Sprouts manager believed that you never know if you will like the food product until you try it.

According to Figure 2, only 7.9% of the participants bought food based on advertisements, which was the smallest percentage. To see if the three grocery store managers thought advertisements were effective even though the participants didn’t think so, I asked, “Do you think that advertisements work the best to draw in customers?” The manager of Sprouts believed that it worked the best such as through online, radio, TV, and social media. The Food Lion manager agreed that social media drew in customers since almost everything is online now and that is how a lot of people got their information, but also just being a local store and having a well-known name helped attract customers. In contrast, the Publix manager disagreed with advertisements being the best in drawing in customers. The manager believed that their reputation is the most important by building the one-on-one customer relationships. The Publix manager gave an example of the necessity of a good reputation: “When I go to a new or unfamiliar town, I find a RaceTrac gas station because I am familiar with it and know that it is clean and safe.” With a positive reputation, more customers would continue to shop at Publix because of their good customer service and cleanliness.

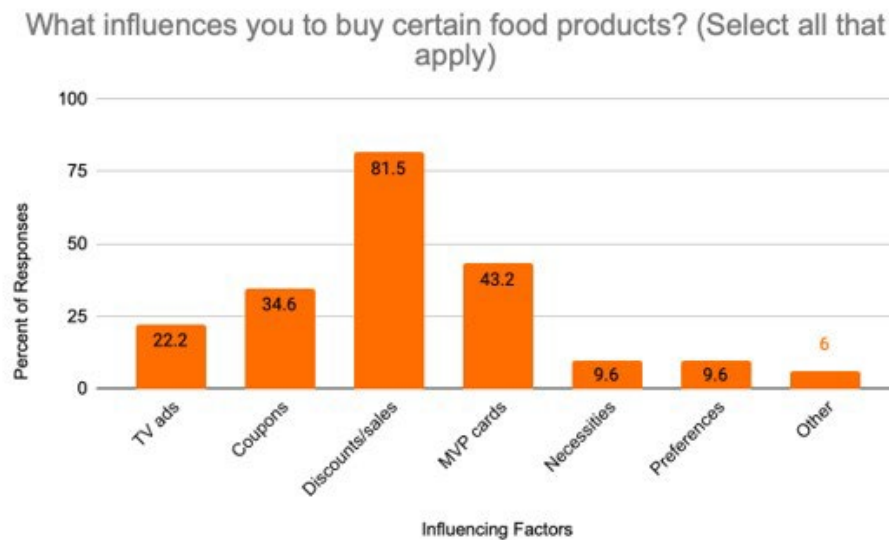
## 2nd Survey Data

After I interviewed the grocery store managers about their marketing strategies, I created an additional survey for adults to see if these marketing strategies that they listed were effective to consumers. Because 83.9% of the participants shopped at grocery stores at least once a week, as shown in Figure 3, marketing strategies frequently play a role in what they purchase.



**Figure 3.** The percentage of how frequent participants (n=81) shop at grocery stores.

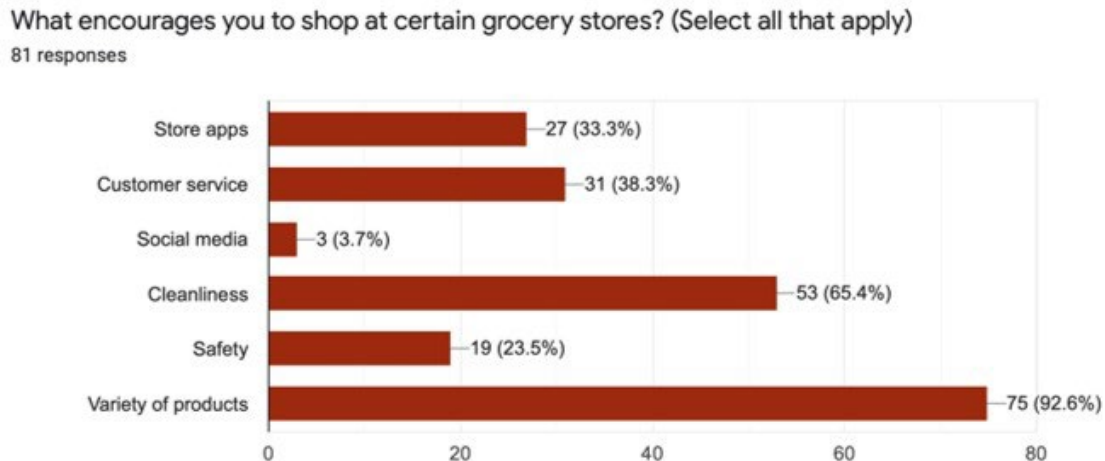
Figure 4 showed what factors influenced consumers to buy certain food products. The most frequent answer choice were discounts/sales which 81.5% of respondents chose. Member-saving cards (MVP cards) were the second most frequent factor (43.2%) and coupons were the third most influential factor (34.6%).



**Figure 4.** The percentage of participants (n=81) who are influenced by these factors to buy foods.

In Figure 5, when asked, “What encourages you to shop at certain grocery stores?” 92.6% of participants said the variety of products, 65.4% said the cleanliness of the store, and 38.3% said the customer service. Cleanliness and customer service contribute to the store reputation which were the main factors that were important to the responders.





**Figure 5.** The percentage of participants (n=81) who are encouraged by these options to shop at stores.

In addition, when asked the qualitative question, “Do you think grocery stores have an influence on your purchasing decisions? Why or why not?”, most of the respondents said yes and listed many ways including end caps, discounts, sales, placement of products on shelves, layout of store, and prices. Furthermore, one answer really stood out to me: “Yes, certain stores make eating healthy seem unrealistic because of pricing.”

## Discussion

The first survey responses gave me a good understanding of how different factors affected what people purchased and their reasoning behind these choices. Initially, I thought that the participants would say that they had unhealthy eating habits, however 65.7% of them said they either agreed or strongly agreed that they ate healthy (Figure 1). Even though the majority of participants said they had healthy eating habits and the store managers said that people were shifting more towards healthy food, consumers were still influenced by discounts which affected what they purchased (Figure 4). Since 65.7% of participants said they ate healthy, by discounting fresh fruits and vegetables, stores could encourage healthier diets and make it easier for people to have healthier lifestyles.

Figure 2 was consistent with Fox’s findings that people purchased food based on their previous experiences with taste, price, convenience, and familiarity. Since taste was one of the main factors that influenced people, grocery stores implemented food sampling in their stores which increased the sales of those food items. Figure 2 also showed that advertisements were not a factor that influenced people to buy food; however, according to Moore et al (2016), advertisements, coupons, and labels/signs were the most influential in consumers’ purchasing habits. My data contradicted the literature since advertisements didn’t influence the participants to buy food. Although coupons were in the top three as most influential in Figure 4, it wasn’t the most influential, so my data differed slightly from previous research. In Figure 5, social media was the least encouraging, so even though stores may think this method is effective, it isn’t that important to consumers. Since advertisements don’t influence the majority of consumers, grocery stores should focus more on other strategies that could possibly be more effective in the future.

Since 67.1% of the participants in the first survey said they bought food based on the price, I wanted to see if they were swayed by marketing strategies including coupons, sales, or advertisements in the second survey. Discounts/sales were the most influential to consumers, so this meant that grocery stores had an influence on what people purchased by using discounts and sales to influence their choices. Since fresh fruits and vegetables are usually more expensive than quick foods, consumers just pick the cheaper option, according to my data. It would be hard for consumers to eat healthier because of the promotions of unhealthy food choices by sales and discounts in grocery stores.

If stores discounted unhealthy and processed food for consumers to purchase, grocery stores would be promoting unhealthy eating habits, contributing to a rise in the obesity rates.

When interviewing grocery store managers, some examples of the marketing strategies they listed were advertising, labeling, accessibility, and the reputation of the store. At first, I didn't realize that the reputation of stores could be a marketing strategy, but that encouraged customers to continue shopping at the stores. In all the literature that I read, none of the sources included reputation as being a marketing strategy because even though it is very important in keeping customers, it is not something that I considered to be a strategy. Reputation as a marketing strategy surprised me because it was not in any previous literature which is interesting and should be researched further. Publix is big on their reputation as a store, so when the store manager said safety and cleanliness mattered to customers, they did matter to customers because 65.4% wanted a clean grocery store and 38.3% thought customer service was important (Figure 5). The cleanliness and customer service aspect contribute to the reputation of stores, which aligned with what the Publix manager said about how reputation was an effective marketing strategy. After I interviewed the store managers, it was necessary to conduct an additional survey to see if customers believed these strategies work and if they did, what can be done by grocery stores to promote healthier food options.

Consumers shop at grocery stores based on the variety of products, so stores with a wide variety of fresh and natural foods encourage healthier eating habits. Because Sprouts' biggest section is the produce, there is more variety of fresh fruits and vegetables, and people shop there for healthier options. With more availability of fresher foods, stores like Sprouts ultimately encourage healthier eating habits. However, since Publix has less options for fresher foods and more options for processed food, they encourage more unhealthy diets.

## Conclusion

Since marketing strategies influence consumers' purchasing decisions, I determined what factors influenced purchases and which strategies were the most effective to get people to buy products. My data from the first survey showed that the factors that were most influential to consumers were taste, price, and convenience. In order to promote their products, grocery stores considered these factors when implementing marketing strategies. According to consumers, the most effective marketing strategies were discounts/sales, MVP cards, and coupons. Even though advertisements might be effective to grocery stores, there are other strategies that could be more influential to customers. Grocery stores also use other strategies to target consumers including the variety of products, cleanliness, and the customer service in the store. I didn't think about how reputation would be a marketing strategy until the Publix manager said it was important. According to my second survey, consumers also thought the reputation of the store was important. It makes sense because people would continue shopping at a grocery store if it were clean and has good customer service.

This research addressed what factors affected people's purchases, what marketing strategies grocery stores use, and if these strategies influenced consumers. Even though people may not think about the marketing strategies that stores use every time they shop, these strategies still subconsciously influence consumers to buy specific food products. Grocery stores ultimately use multiple strategies to encourage unhealthy eating habits and contribute to more processed food consumption. Since stores know that people want the fast and quick option, advertising convenient food leads to more unhealthy diets. It is important to understand how companies and grocery stores promote their products and how they advertise these to the public. By promoting healthier food items, grocery stores can help shape healthy eating habits and decrease the obesity rates in the United States.

## Limitations

There were limitations while conducting my research which affected my findings and knowledge about my research question. One limitation I had was that I only interviewed three grocery store managers. This was mainly because

some managers didn't have the time or because the store company policy wouldn't allow me to interview. For example, the grocery store, Harris Teeter, wouldn't allow me to discuss the store's marketing strategies with the store manager because of their policy and how strict their corporation is. Although I addressed this problem by finding another store, interviewing more than three store managers would have been beneficial in getting more diverse perspectives and data to compare what marketing strategies they implemented. Another limitation was that 61.4% of the participants from the first survey were teenagers, but adults are usually the ones who shop at grocery stores more frequently. I targeted both teenagers and adults, but in future research, it would be beneficial to target more adults. Because of this limitation, the second survey with only adults was needed to see what marketing strategies influenced them.

## Future Direction

More research needs to be focused on how consumers are influenced by promotions and discounts of fresh and natural foods. Would consumers purchase these products if they were on sale? In addition, future research should consider how often consumers purchase processed foods that are on sale compared to fresh natural foods that are on sale. If stores had more discounts for natural food, would consumers purchase healthier foods? Some of the qualitative answers from my second survey said that the product placement on shelves and the layout of the store could have an impact on what people purchase. Future researchers could determine if these factors encourage consumers to purchase those products. Promoting products by the physical placement would be beneficial to research because of how certain products at eye-level shelves capture consumers' attention more than products at foot-level shelves. What products are being promoted at eye-level shelves that capture customers' attention compared to other shelves? Because of the large percentage of people with healthy eating habits, if grocery stores promoted healthier food choices, would people be more likely to purchase these products? Would people buy more natural food if it was discounted, and would the placement of healthier products encourage more purchases?

## Acknowledgements

I would like to thank several contributors who have made this research project possible. First, my teacher Mrs. Deborah Vajner, Cumberland County Schools, and Fayetteville State University were very helpful in sending out the surveys to multiple people in the county to reach a larger audience. My peers, Mrs. Vajner, and my family members were also beneficial in the editing process by contributing their knowledge and feedback to my work.

## References

- Almoraie, N. M., Saqaan, R., Alharthi, R., Alamoudi, A., Badh, L., & Shatwan, I. M. (2021, July). Snacking patterns throughout the life span: potential implications on health. *Nutrition Research*, *91*, 81–94. <https://doi.org/10.1016/j.nutres.2021.05.001>
- Ares, G., Velázquez, A., Vidal, L., Curutchet, M., & Varela, P. (2021, August 21). *The role of food of food packaging on children's diet: Insights for the Design of comprehensive regulations to encourage healthier eating habits in childhood and beyond*. ScienceDirect. Retrieved October 30, 2021, from <https://www.sciencedirect.com/science/article/pii/S0950329321002482>
- Bleiweiss-Sande, R. (n.d.). Chemicals, cans and factories: how grade school children think about processed foods | Public Health Nutrition. In *Cambridge Core*. Retrieved September 14, 2022, from <https://www.cambridge.org/core/journals/public-health-nutrition/article/chemicals-cans-and-factories-how-grade-school-children-think-about-processed-foods/C983B6AF253D9875F15110445DA62DE7>

- Cooksey-Stowers, K., Schwartz, M., & Brownell, K. (2017). Food Swamps Predict Obesity Rates Better Than Food Deserts in the United States. *International Journal of Environmental Research and Public Health*, 14(11), 1366. MDPI AG. Retrieved from <http://dx.doi.org/10.3390/ijerph14111366>
- Dwivedi, S., Prajapati, P., Vyas, N., Malviya, S., & Kharia, A. (2017, November 19). *A Review on Food Preservation: Methods, harmful effects and better alternatives*. Asian Journal of Pharmacy and Pharmacology. Retrieved October 31, 2021, from <http://ajpp.in/uploaded/p79.pdf>
- Evans, A., Banks, K., Jennings, R., Nehme, E., Nemeč, C., Sharma, S., Hussaini, A., & Yaroch, A. (2015, July 27). Increasing access to healthful foods: a qualitative study with residents of low-income communities. *International Journal of Behavioral Nutrition and Physical Activity*, 12(S1). <https://doi.org/10.1186/1479-5868-12-s1-s5>
- Fox, E. L., Davis, C., Downs, S. M., McLaren, R., & Fanzo, J. (2021, October). A focused ethnographic study on the role of health and sustainability in food choice decisions. *Appetite*, 165, 105319. <https://doi.org/10.1016/j.appet.2021.105319>
- Gundala, R. R., & Singh, A. (2021, September 10). What motivates consumers to buy organic foods? Results of an empirical study in the United States. *PLOS ONE*, 16(9), e0257288. <https://doi.org/10.1371/journal.pone.0257288>
- Juul, F., Martinez-Steele, E., Parekh, N., Monteiro, C. A., & Chang, V. W. (2018, May 6). Ultra-processed food consumption and excess weight among US adults. *British Journal of Nutrition*, 120(1), 90–100. <https://doi.org/10.1017/s0007114518001046>
- Liu, J., Lee, Y., Micha, R., Li, Y., & Mozaffarian, D. (2021, May 21). Trends in junk food consumption among US children and adults, 2001–2018. *The American Journal of Clinical Nutrition*, 114(3), 1039–1048. <https://doi.org/10.1093/ajcn/nqab129>
- Moore, L. V., Pinard, C. A., & Yaroch, A. L. (2016, January 30). Features in Grocery Stores that Motivate Shoppers to Buy Healthier Foods, ConsumerStyles 2014. *Journal of Community Health*, 41(4), 812–817. <https://doi.org/10.1007/s10900-016-0158-x>
- Obesity is a Common, Serious, and Costly Disease*. (2022, July 20). Centers for Disease Control and Prevention. Retrieved September 14, 2022, from <https://www.cdc.gov/obesity/data/adult.html>
- Ruiz, L. D., Zuelch, M. L., Dimitratos, S. M., & Scherr, R. E. (2019, December 23). Adolescent Obesity: Diet Quality, Psychosocial Health, and Cardiometabolic Risk Factors. *Nutrients*, 12(1), 43. <https://doi.org/10.3390/nu12010043>
- Sogari, G., Velez-Argumedo, C., Gómez, M., & Mora, C. (2018, November 23). College Students and Eating Habits: A Study Using An Ecological Model for Healthy Behavior. *Nutrients*, 10(12), 1823. <https://doi.org/10.3390/nu10121823>
- USDA ERS - Go to the Atlas. (n.d.). Retrieved September 14, 2022, from <https://www.ers.usda.gov/data-products/food-environment-atlas/go-to-the-atlas>