



An Upgrade for Powerade

University of Louisville

## Table of Contents

Executive Summary	2
Introduction	3
Objectives & Hypotheses	7
Methodology	8
Results	11
Conclusions	20
Recommendations	21
Appendix	24
Works Cited	38

## **Executive Summary**

The sports drink market, which began in 1965 and has since grown to 77 million users, has 2 main competitors, Powerade and Gatorade. Powerade got involved in the sports drink market in 1988, aiming to replace electrolytes to aid athletes in their daily performances. This purpose is nearly identical to that of Gatorade who was not only the first to market, but is also the current leader in the industry.

The objective of this research is to determine why there is such a large, consecutive gap in sales between Powerade and their biggest competitor, Gatorade, year after year. Once identifying the possible main reasons for this gap, the goal is to create a solution for Powerade through data driven results gathered from primary and secondary research. Results produced by graphs, perceptual maps, and t-tests showed all five of our hypotheses were accepted.

From these results, it can be concluded that Powerade can increase its sales by improving its taste and expanding its product lines. Research has proven that the majority of consumers believe Gatorade tastes better than Powerade. Powerade's ingredient list contains high fructose corn syrup, which contributes to the strong, sweet, artificial taste of its beverages. Having a more natural combination of ingredients is crucial for Powerade to compete with Gatorade in the sports drink market.

Gatorade also currently offers 6 different sports drink product lines while Powerade only offers two. Our recommendation for Powerade is to add a new product line that uses more natural ingredients to improve taste, which will help increase Powerade's annual sales by 4%.

## **Introduction**

Sports drinks were created specifically for athletes to replenish electrolytes and carbohydrates in order to keep them energized and enhance performance. According to “Sports & Energy Drinks: Answers for Fitness Professionals,” Gatorade created the first sports drink on the market in 1965. It was made specifically for the Florida Gators when their football coach asked a physician to figure out why the heat had such a strong, negative effect on the athletes. After Gatorade, a Pepsico product, showed success in the market, other companies started to create their own sports drinks and advertise the restorative benefits. This generated competition in the market.

Over the last 30 years, the sports drink market has been steadily increasing, with an expected compound annual growth rate of 7.8% throughout the ten year period of 2015-2025, according to Grand View Research. This market growth is powered by increasing numbers of athletes and fitness centers, along with products’ advertising efforts. Although the category is threatened by the push towards more natural or organic products, companies are expected to combat this by adjusting product formulas to fit these descriptions. To be competitive in this category, products must keep up with these market trends and continue to add products or rebrand to fit the current climate. A successful product in the sports drink market will not only contain the necessary health benefits (electrolytes, B vitamins), but also have an appealing taste, many options that fit consumer preferences, a recognizable symbol, and the ability to advertise effectively.

“The Chemistry of Powerade” informs readers that, in 1988, Coca-Cola wanted to create its own sports drink to compete with Gatorade, leading to the conception of Powerade.

The competition between Pepsico and Coca-Cola has a long history with both companies each expanding into 200 countries. According to Investopedia, in 2018, Pepsico's net revenue reached \$64.7 billion, and Coca-Cola's net revenue was reported as \$31.86 billion. Over the years, Gatorade and Powerade have become the two top-selling sports drink brands, yet the sales of Gatorade are always significantly higher than the sales of Powerade. In 2015, Gatorade had an estimated market share of 71.2%, while Powerade held a market share of only 18.5%, according to a 2018 report from Forbes. The site also reports the size of the sports drink market that year as \$64.7 billion in sales. Furthermore, according to The Wall Street Journal, in 2018 Gatorade sales reached \$5.5 billion while Powerade only reached \$1.05 billion. The pattern holds true year after year - in 2016 Powerade sales were about 1 billion whereas Gatorade had sales of roughly 5 billion. In total, it is clear to see overall market preferences for Gatorade. This research study was conducted to determine why Powerade sales are consistently so much lower than those of Gatorade.

To begin analyzing the issue, it should be noted that the advertising spending for Gatorade in 2013 was \$108 million, while Powerade only spent \$17 million ("Sugary Drink Facts," 2013). Based on MRI data, the demographics of a typical sports drink consumer can be described as a male who did not graduate high school, between the ages of 18-24, with an average annual income ranging between \$30,000-\$39,999. Additionally, it can be concluded that the demographics of a typical Gatorade user can be described as a male who has graduated college and gone on for more education, between the ages of 18-24, with an average salary ranging between \$50,000-\$59,999 . A typical Powerade consumer can be described as a male who did not graduate high school, between ages 18-24, with an average annual income ranging

from \$30,000-\$39,999. Powerade consumers appear to fit the “typical” sports drink consumer description, while Gatorade consumers seem to be more affluent. For more demographic details, reference figures 1, 2, and 3 in Appendix A.

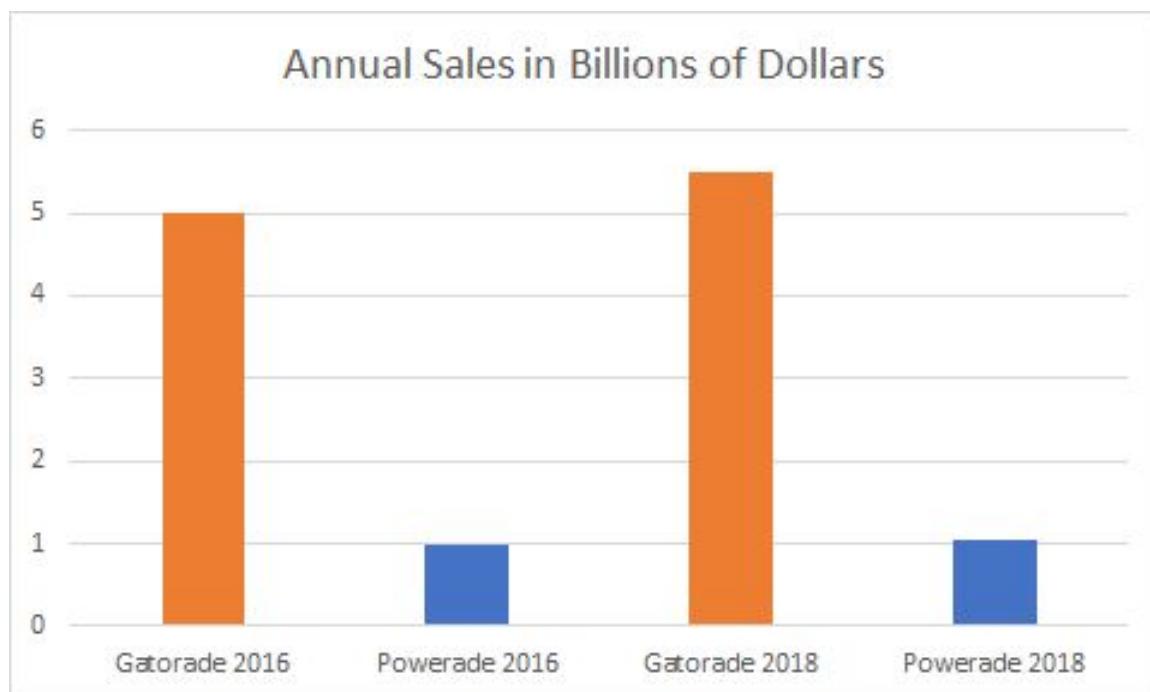
For a deeper analysis on Powerade’s issue, it is helpful to look at the products’ strengths, weaknesses, opportunities, and threats. As far as strengths, although Powerade consistently falls behind Gatorade, it is still the second most popular sports drink on the market. Powerade is more widely-recognized than BodyArmor, Muscle Milk, or any other sports drink brand besides Gatorade. Powerade is also a Coca-Cola product, which is one of the largest beverage brands worldwide. Additionally, Powerade is typically cheaper than Gatorade, meaning consumers who primarily focus on price would choose Powerade. For example, in November 2019, one 32oz bottle of Gatorade costs \$0.99 at Target and \$1.00 at Kroger, while a 32oz bottle of Powerade costs \$0.85 at Target and \$0.89 at Kroger.

One clear weakness Powerade displays is its lack of advertising spending, which falls more than \$90 million behind that of Gatorade. If people see more than 6 times the advertisements for Gatorade than for Powerade, it can be easily inferred that Gatorade would have higher sales. Additionally, Powerade is a Coca-Cola product, which has a lower net revenue than Gatorade’s parent company, Pepsico. Pepsico as a whole is not only doing more advertising, but they also have a wider variety of products. When looking individually at Gatorade and Powerade, Gatorade has more flavor options and 4 more brand lines (G2, Gatorade Frost, ect) than Powerade.

This leads to Powerade’s opportunity for more advertising, including using celebrity endorsements. This could help Powerade become more well-known; since their competitor

appears to have success with this technique, it would make sense for Powerade to put more effort into advertising. Also, Powerade has the opportunity to expand with the amount of flavors and the product lines. Adding a new, natural product line would allow the company to improve the taste of the product while advertising the increased health benefits, therefore competing with Gatorade's G Organic line and giving consumers more options.

Lastly, some threats may include the market growth of other competitors such as BodyArmor, as well as the emergence of newly branded electrolyte replacement drinks such as coconut water. Additionally, The Wall Street Journal speculates a decrease in sports drinks as a whole, with many people becoming concerned about chemical ingredients and questioning the true effectiveness of sports drinks. The clear market preference for Gatorade continues to threaten sales of Powerade, especially if Gatorade keeps up with market trends by adding new lines such as G Organic while Powerade remains constant.



## **Objective & Hypotheses**

The objective for conducting this research project was to determine why Powerade's sales are so much lower than Gatorade's sales year after year. We plan to answer this research question by proposing possible explanations for why Powerade's sales are lower, using data to either accept or reject those explanations, and recommending a solution that will help increase the sales of Powerade to match the market leader, Gatorade. These explanations are possible reasons as to why Powerade's services as a nutrient supplementer is being underutilized by consumers along with the cause that Powerade does not spend as much on advertising as Gatorade does.

The possible explanations or hypotheses for our research question is (1) Powerade does not have as many sponsored athletes as Gatorade, (2) Powerade does not taste as good as Gatorade, (3) Powerade does not help athletic performance as much as Gatorade does, (4) Powerade does not offer as many flavors as Gatorade, and (5) Powerade's symbol is not as recognizable as Gatorade's.

The first hypothesis fits into an overall marketing theoretical framework by targeting the promotion of Powerade. Sponsored athletes help brands communicate information about their products to consumers in an appealing manner. The second hypothesis fits into the marketing mix by targeting the composition of the product. Taste is an important aspect of a sports drink and is what differentiates products in the drink market. The third hypothesis correlates with the marketing framework of the 4 p's by also focusing on the product formula. The ingredients in the product such as sodium, potassium, chloride, calcium, phosphate, and magnesium help athletes replenish electrolytes that are lost during exercise. The fourth

hypothesis encompasses the marketing mix by focusing again on the product makeup, because it fixates on the variety of flavors that Powerade offers. Lastly, the fifth hypothesis fits into the overall marketing framework by addressing promotion, because it focuses on whether consumers can easily identify Powerade's products compared to those of the market leader, Gatorade. To conclude, out of the hypotheses we are proposing 2 that focus on promotion and 3 that focus on the product design.

## **Methodology**

During the research process, we used general research procedures to eliminate errors and generate a thorough, meaningful collection of data. The first procedure we used was the funnel technique in our survey to prevent order bias. The survey starts by asking participants broader questions that are generally easier to understand and answer such as, "How many bottles of the following beverages have you consumed in the past 30 days?" In the middle of the survey, it asks participants more difficult questions such as, "How much do you agree or disagree that Powerade comes in a wide enough variety of flavors?" At the end of the survey, it asks participants demographic questions that once again are easier to understand, such as age, income, and gender. Putting this at the end of the survey also ensures that the consumers do not feel pressured to answer questions in a certain way due to demographic stereotypes or preconceptions.

Another survey procedure we used was utilizing the first question to ask about beverages in general instead of beginning with questions about Powerade and Gatorade. This is

important, because it begins the survey with an unbiased question to reduce non-response error and order bias. The survey also used the technique of asking about multiple brands. This helped to disguise that Powerade was the sponsor of the study, therefore avoiding any demand effects. Mentioning the market leader, Gatorade, helped provide us with a benchmark or point of comparison for interpreting Powerade results. Refer to Appendix B for more details about the survey.

The study was fielded on October 17, 2019 using Qualtrics, an online survey provider. For the questionnaire, we sent out 3000 email recruitment letters (refer to Appendix C for more details) to determine the final respondents willing to participate in the study. Minimal incentive was given for participating and no major problems were encountered during survey collection. The total number of respondents participating in the survey was 869, giving us a 29% response rate. We used an attention check question during the survey to determine our usable sample size. This question was, “How much do you agree or disagree that yesterday you suffered a fatal heart attack?” If the respondents did not answer “Strongly Disagree,” they did not pass the attention check question and their responses were not included in our data. The number of respondents who passed the attention check was 777. Refer to Appendix D for more details.

The last research procedures we used was during the process of organizing the data. To account for missing data such as respondents who answered, “I’m not sure” (6) or, “I’m not familiar with this brand (7),” we used plug rules by replacing those answers of 6’s and 7’s with

blanks. This allowed for data that was unimportant to not be counted when transforming the participants' answers into information. Refer to Appendix E for more details.

To organize responses on questions such as demographics, we re-weighted questions. We achieved this by giving responses with a lesser weight 0s and giving responses that we wanted to weigh greater as 1s. For example, the question regarding education, we weighed those who answered less than a college degree as a 0 and those who had any type of college degree as a 1. For demographics such as income, bottles consumed, and age, we used a nested if function to code our data. An example of our income nested if statement is

```
=IF(CQ2=1,25,IF(CQ2=2,38,IF(CQ2=3,63,IF(CQ2=4,88,IF(CQ2=5,113,IF(CQ2=6,138,IF(CQ2=7,163,IF(CQ2="","",")))))))).
```

With this coded data, we found the average income of the participants in the survey to be almost 56k while the average age of the demographics was 35. The average bottles of Powerade consumed in 30 days was 2.03 and the average bottles of Gatorade consumed in 30 days was 3.05. Refer to Appendix F for more details.

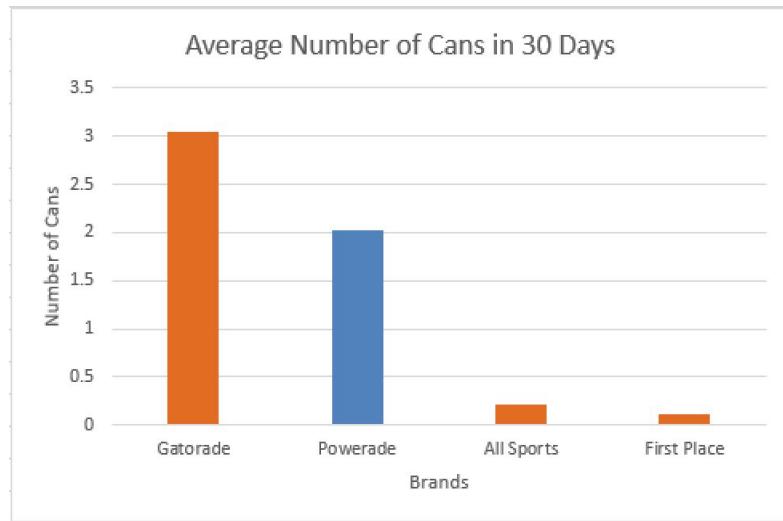
The last method procedure we used was coding open ended frames. In the questionnaire, the participants were asked to list sports drink brands that they're aware of. To turn this data into viable information, we coded unaided awareness by creating the 7 most popular brands as variable names in the first row and putting data in the following rows. If the participant was aware of the brand, we coded it as a 1, and if the participant was unaware of the brand, we coded it as a 0. Refer to Appendix G for more details.

## Results

Overall, our research was conducted to understand the reasoning behind why sales of Powerade have consistently been lower than sales of Gatorade year after year. Our survey results allowed us to generate primary data, while our secondary data researched from various online sources was used to back up our points and draw more complete conclusions. We used analysis tools such as graphs, t-tests, and perceptual maps to explain how we transformed our data to determine which of our hypotheses to accept, and which of those to reject. We organized our results explanations by their proper placement within the 4p's of the marketing mix. After all of our analyses, we were able to determine two major issues, which are the lack of flavors and the lack of endorsement deals.

### Sports Drink Usage

The graph below illustrates the usage of sports drinks in number of cans in 30 days. The usage of Gatorade is slightly above 3.0, while Powerade is slightly above 2.0. We could say that there is a difference, just by looking at this graph, but with other attributes, it is necessary to test our hypothesis to see if there is a meaningful difference. The graph was the first stepping stone to figuring out whether we would be able to reject or accept our hypothesis. Following this graph we conducted a sample t test, which is explained in the excerpt following the graph.



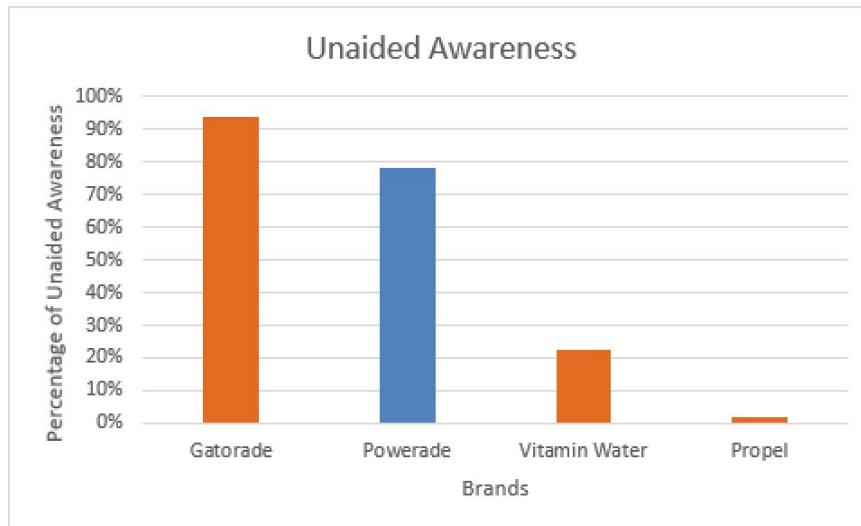
Appendix H figures 1a and 1b show the results for past 30 days of consumption for Powerade among all respondents. Based on the results of the sample t test, we were able to reject the null hypothesis and accept the alternative hypothesis, because  $1-0.000 = 100\%$ , which means we are over 95% sure there is a meaningful difference between the values. Powerade usage is significantly lower than Gatorade ( $p < .01$ ), confirming our overall concern.

### **Powerade Awareness vs. Gatorade Awareness**

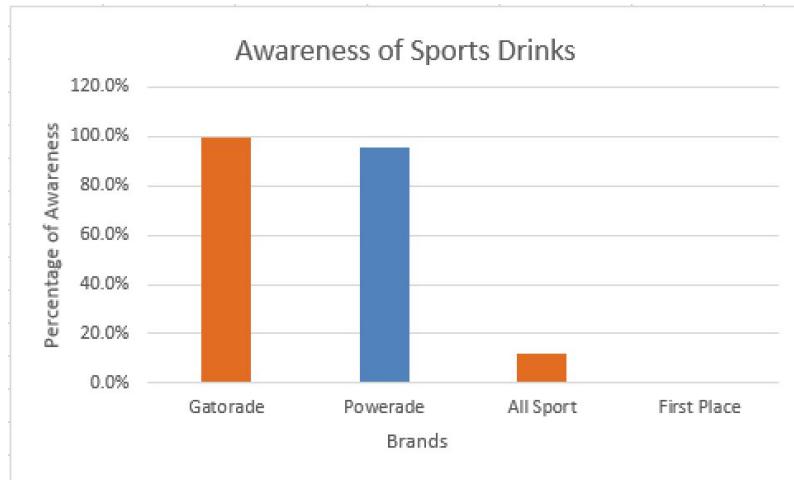
We hypothesized that Gatorade had a more recognizable symbol in comparison to Powerade. The graph below represents the percentages in regards to the awareness of various sports drinks. To further analyze these averages, we conducted sample T tests shown in Appendix H figures 2a and 2b to validate our hypothesis. The null hypothesis was that there is no difference in the awareness. Our alternative hypothesis was that there was a difference in the awareness. Our P-value is less than 0.05, which allowed for us to reject the null hypothesis and accept the alternative hypothesis, because  $1-0.000 = 100\%$  means that we are over 95% sure of the difference.

### **Unaided vs. Aided Awareness Graphs For Sports Drinks**

The unaided awareness graph allows for you to see the difference in percentages in regards to our open response awareness question. Our unaided awareness question gave us the percentage of respondents who were aware of the products at the top-of-mind without being assisted. As for our aided awareness multiple choice questions, we were given the percentage of respondents aware of the product when asked.



### Aided Awareness Graph For Sports Drinks



### Powerade Has Fewer Flavors Than Gatorade

We hypothesized that Powerade did not have as many flavors as Gatorade. Our null hypothesis was that there is no meaningful difference between Powerade flavors and Gatorade flavors. Our alternative hypothesis was that there is a meaningful difference between Powerade flavors and Gatorade flavors. Appendix H figures 3a and 3b include a sample t test, where the results allowed for us to reject the null hypothesis and accept the alternative hypothesis, because 1-0.000 is a 100%, which means that being above the 95% probability benchmark tells us that there is a meaningful difference between the amount of Powerade flavors and Gatorade flavors. Perceptual Map 1 illustrates our perceptual map which shows the relationship between the triers of Gatorade and Powerade in regards to our taste and flavor questions separately.

#### **Powerade Has Fewer Athletic Endorsements Than Gatorade**

Our hypothesis suggests that Powerade has a lower amount of athletic endorsements in comparison to Gatorade. Our Perceptual Map 3 allows for one to see the average response to our Gatorade and Powerade endorsement questions singley. You can view the relationship between those who have tried Gatorade and Powerade as well. Appendix H figures 4a and 4b illustrates our sample t test for our hypothesis. Our null hypothesis was that there is no meaningful difference between Powerade and Gatorade athletic endorsement amounts. Our alternative hypothesis was that that there is a meaningful difference between Powerade and Gatorade endorsement amounts. We were able to reject the null and accept the alternative hypothesis, because 1-0.000 is a 100% probability, which means that there is a meaningful difference between the endorsement numbers.

#### **Powerade Does Not Taste as Good as Gatorade**

In Appendix H figures 5a and 5b you will see that conducted hypothesis test for our taste hypothesis. This hypothesis suggested that triers of Gatorade and Powerade favored the taste of

Gatorade over Powerade. 1-000 gives you 100%, which then validates our alternative hypothesis. The test suggest that we are over 95% sure of the difference between the taste of the drinks. We were able to reject the null, because we concluded that there was a meaningful enough difference. In our Perceptual Map 1 you can see the significant gap in regards to the satisfaction of taste for Powerade versus Gatorade. This was one of the contributing issues for our recommendation on how to increase sales of powerade.

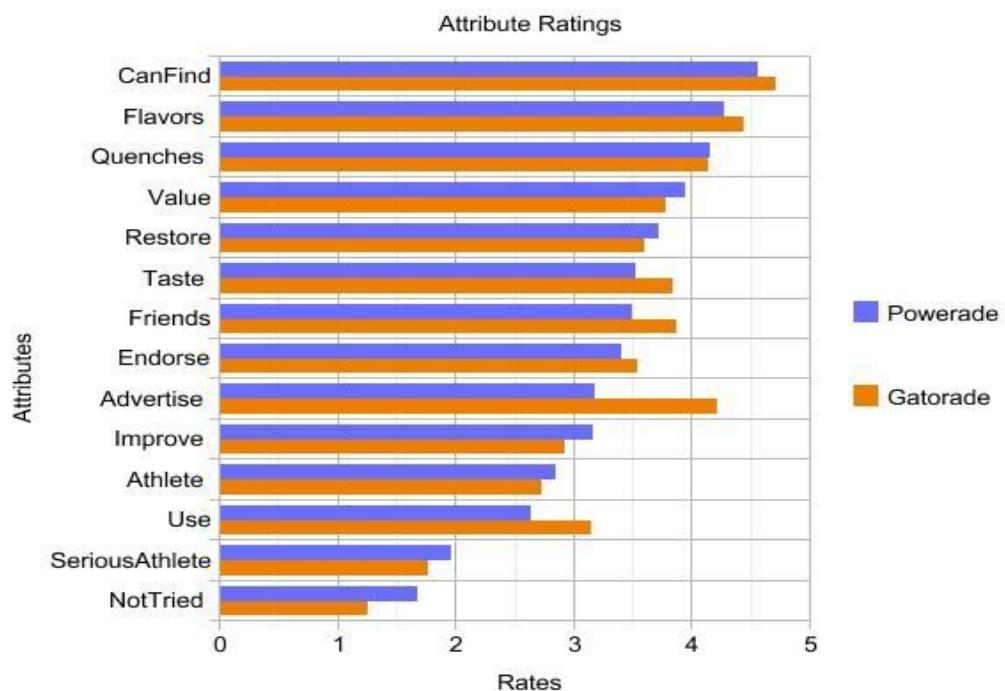
### **Powerade Lacks in Helping Enhance Athletic Performance**

We created a sample t test to validate our hypothesis on the subject of Powerade not enhancing athletic performance as well as Gatorade in Appendix H figures 6a and 6b. We performed the test and we found a 100% probability that there is a meaningful difference, as we have for previous hypotheses. Our null hypothesis was that there was no meaningful difference between the performance enhancing levels between Gatorade and Powerade. Our alternative hypothesis suggested that there was a meaningful difference between the two. Since we found the 100%, we were able to reject the null and accept the alternative hypothesis.

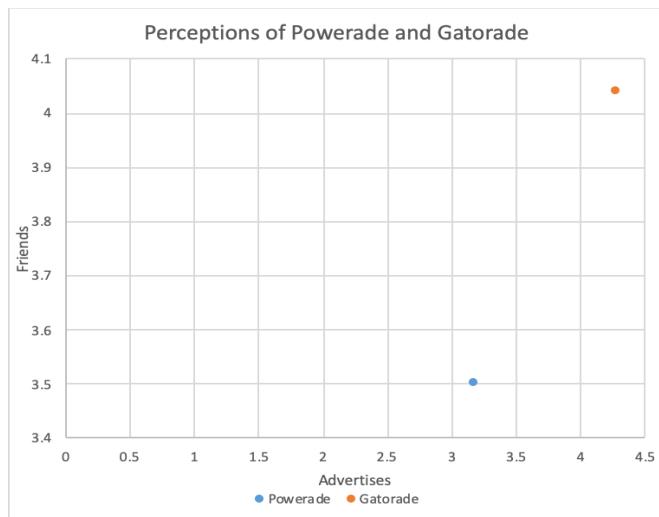
### **Attribute Ratings By Brand**

In the figure below, we have the comparison of attributes for Powerade and Gatorade. These attribute ratings are based off a 5 point scale. This shows how many of the attribute averages for Powerade exceed those of Gatorade. For research purposes we tested the attribute ratings

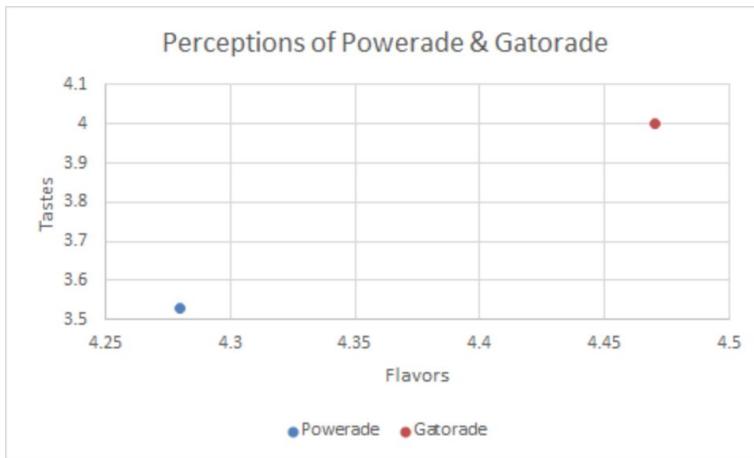
for meaningful differences if they were within our hypotheses.



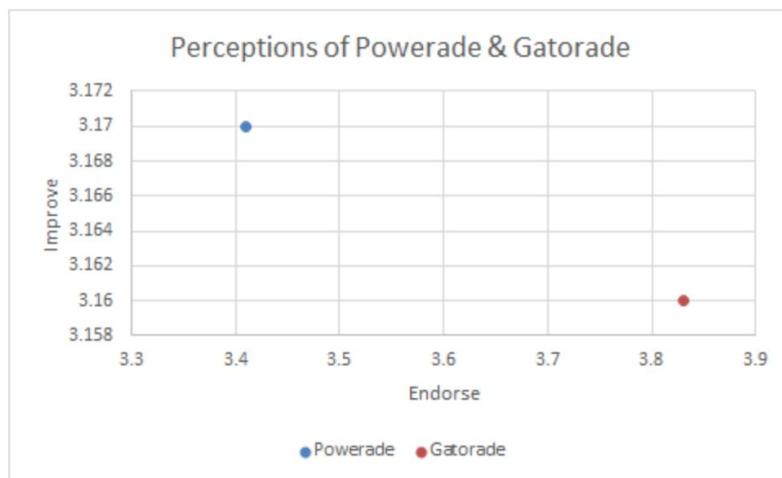
## Perceptual Maps



Map 1



Map 2



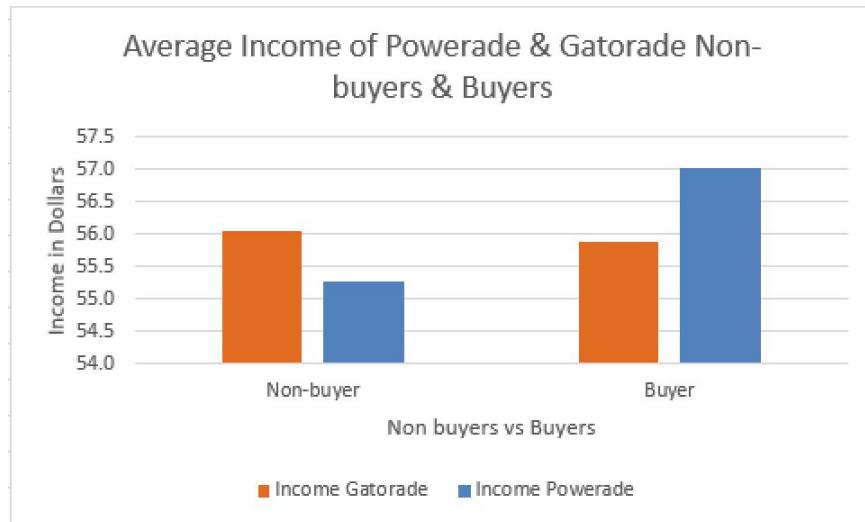
Map 3

### Powerade Buyers Vs. Non-Buyers

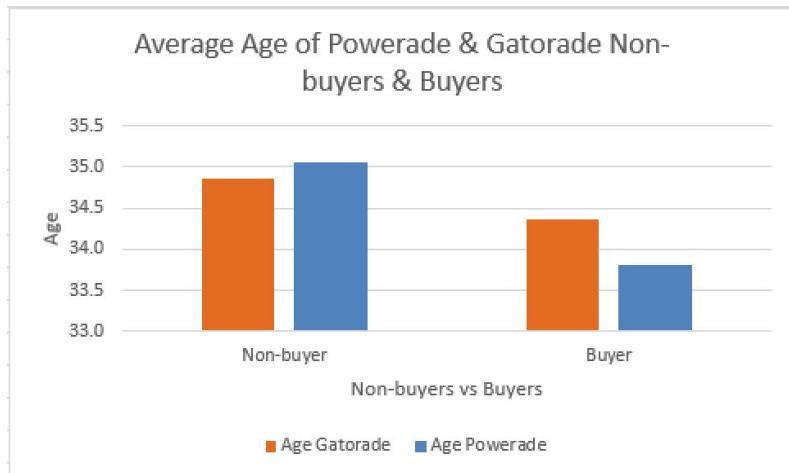
Demographic Graph 1 suggests that the average income for Powerade non-buyers happens to be substantially lower than Gatorade non-buyers. On the contrary, the average income for buyers of Powerade exceeds the average income for Gatorade buyers. In Demographic Graph 2 the average age of Gatorade and Powerade non-buyers versus buyers is displayed. The average age for Gatorade non-buyers is slightly lower than the average age for Powerade non-buyers. As for buyers, the average age for Gatorade exceeded the average for Powerade buyers.

Demographic Graph 3 illustrates the average gender for consumption of Gatorade and Powerade buyers and non-buyers. This graph is organized on a 0-1 point scale, with 1 meaning male and 0 meaning female. If the data is closer to 1 (above 0.5), the majority of respondents are male, while closer to 0 (below 0.5) means the majority are female. The average gender for Gatorade was slightly higher for non-buyers in comparison to Powerade. As for buyers, the average gender for Gatorade was slightly smaller as well. For Demographic Graph 4, we used the averages for education completed of our sample size. The average of educated non-buyers of Gatorade was substantially lower than Powerade. The average of educated buyers of Gatorade was substantially higher than Powerade.

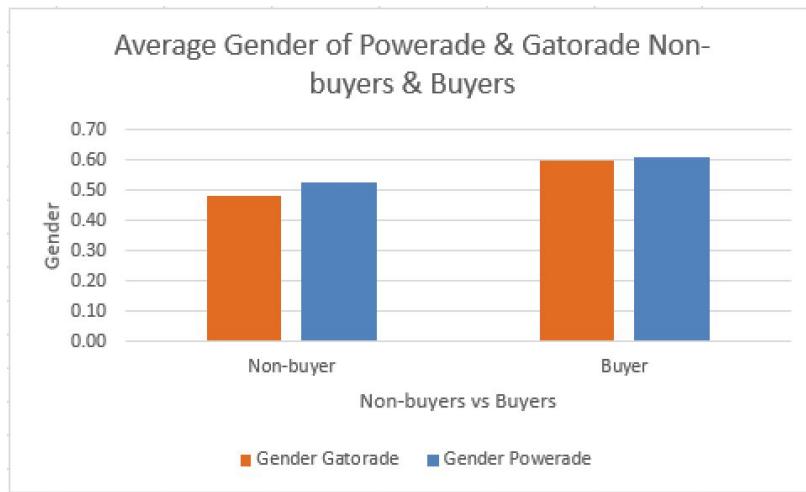
### **Demographic Graphs**



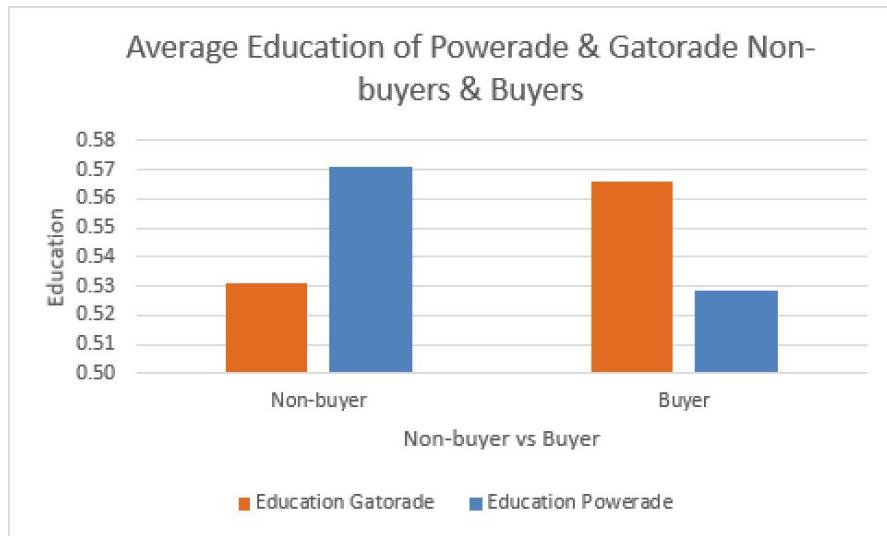
Demographic Graph 1



Demographic Graph 2



Demographic Graph 3



Demographic Graph 4

## Conclusions

As previously explained throughout our report, Powerade's sales have been lower than desired since its conception comparable to the market leader, Gatorade. In conclusion, our results found by analyzing the primary data from our survey through charts, perceptual maps, and t-tests shows why Powerade's sales are so much lower than Gatorade's sales, in each consecutive year. We found that Gatorade spends more money on their advertising and endorsements, resulting in higher consumption levels for their products. By performing hypothesis testing for attributable ratings, we came to the conclusion that awareness was not the only issue Powerade faced. We were able to validate each of our hypotheses through paired sample t-tests using survey data provided by respondents on Powerade and Gatorade. All of our hypotheses were accepted on the basis that our sigma 2-tailed values were all .000 giving us a 100% certainty that there's a meaningful difference between values, therefore accepting the alternative hypotheses. Because each of our 5 hypotheses were accepted, we based our

recommendations off of further analyzes of our perceptual maps. This information allowed us to further narrow down the 3 major problems within our 5 hypotheses.

## **Recommendations**

Based on our extensive analysis of primary and secondary data, the 3 major problems out of our 5 hypotheses are Powerade not having as many sponsored athletes as Gatorade (.42 difference on the perceptual map), Powerade not tasting as good as Gatorade (.47 difference on the perceptual map), and Powerade not offering as many flavors as Gatorade (.19 difference on the perceptual map). Our research conveyed that the two major factors separating Gatorade from Powerade is taste and flavors offered; moreover, consumers prefer the taste of Gatorade over Powerade, and Gatorade offers more flavors than Powerade.

Since Powerade is lacking in the perception of taste and amount of flavors compared to Gatorade, our recommendation is to improve the overall taste and diversify the product's flavors by creating a new product line involving 6 flavors - mixed berry, fruit punch, orange, grape, strawberry, and white cherry - providing a fresher and healthier line of Powerade sports drinks. By replacing high fructose corn syrup with organic cane sugar, the drink will feel lighter and more natural tasting, factors for which consumers have shown preferences. The new product line will promote the health benefits by advertising to accomodate for the market shift toward organic products. This will add a variety of new flavors for consumers to choose from, the price will remain relative to current Powerade products, it will be distributed to all retailers that currently sell Powerade products, and it will provide consumers with new, healthier options for Powerade sports drinks.

Our recommendation is better for Powerade than Gatorade, because Gatorade is already more preferred with these attributes of taste and flavors offered than Powerade, based off results from our survey. Gatorade already has 4 more product lines than Powerade, and Gatorade does not use high fructose corn syrup, and they already offer an organic product line.

To determine the expected results for producing this new proposed product line, we used secondary research to discover the cost of the inventory needed as well as advertising spending. To calculate the cost of inventory, we first needed to establish the cost of the sports drinks' main ingredients which are water, sodium, and sugar. According to the American Water Works Association, water is only a \$1.50 for 1,000 gallons of water. Because there are only 32 ounces in a plastic bottle, we can conclude that the cost of water is less than a cent to fill 4 plastic bottles. Moreover, because the cost of water is so minimal, it does not need to be taken into account when calculating the cost of ingredients. The same reasoning can be applied to the second main ingredient, sodium. The third main ingredient, organic cane sugar, costs \$8.88 for a 25 lb bag according to Walmart. Therefore, if 333 bottles can be produced with one 25 lb bag of organic cane sugar, then the ingredient costs 3 cents per bag. Custom Water claims a new bottle label costs around 20 cents, and Business Insider suggests the cost of producing 1 plastic water bottle is 2.1 cents. Therefore, the overall cost of producing one new bottle from our proposed product line will cost a total of 25 cents.

After calculating the cost for 1 bottle, we used multiple secondary sources to find the overall spending on inventory. According to forbes, in 2015 Powerade had 18.5% of the sports drink market. By multiplying this percentage by the number of sports drinks sold in 2015, which was 61 million based off figures provided by Statistica, we determined the amount of

sports drinks Powerade sold in 2015 to be 11.3 million. When dividing this cost by 2 to account for both product lines, we discovered 5.65 million sports drinks were sold for each product line. To conclude, by multiplying the 5.65 million by the cost of making 1 bottle, 25 cents, we found that inventory expense would be roughly 1.4 million.

As stated in the introduction, the advertising spending in 2013 for Powerade was \$17 million. We took this number and divided it by 2 to take into account that Powerade has two product lines, discovering that the spending on advertising for one product line is \$8.5 million. We then added the cost of inventory, \$1.4 million, with the cost of advertising spending, \$8.5 million, to find that the overall cost of producing a new product line is \$9.9 million.

To determine the overall increase in sales the new product line would create, we used the cost of the new product line and divided it by the previous cost of advertising, \$17 million, which gave us 58%. Then we multiplied the 58% by our advertising elasticity of demand, calculated from a graph provided, which was .07, totaling an increase of sales of about 4%.

Next, we calculated the return on investment (ROI) for our proposed marketing activity. We used the starting revenue of \$1,020.48 million from statista for Powerade which, when multiplying that number by the 4% increase in sales, gave us an ending revenue of \$1,062.1 million. By subtracting Powerade's ending revenue by its starting revenue, we found the incremental gross revenue to be \$41.62 million, and when multiplying this by our gross margin of 67% ("MacroTrends," 2019), gave us an incremental gross margin of \$27.89 million. After subtracting this incremental gross margin by the incremental marketing cost of the new product line divided by the incremental marketing cost, we determined the ROI for our marketing solution to be 182%.

The time in which it will take Powerade's total cost to equal its total revenue, or the breakeven timing, is about 4.5 months. This number was calculated by dividing incremental gross margin, \$27.89 million, by the 12 months that make up a year, and then dividing this number under the marketing cost of \$9.9 million.

## Appendix A

### MRI Data

Report Type	Target	Base Total '000	'000	% Detail	% Target	Index
Standard	Total	247,024	26,773	100.00	10.84	100
Base	Men	119,259	16,270	60.77	13.64	126
Total Adults	Women	127,765	10,503	39.23	8.22	76
Detail(s)	Educ: graduated college plus	76,755	6,331	23.65	8.25	76
Combine option: <input checked="" type="radio"/> Any of these items <input type="radio"/> All of these items	Educ: attended college	70,724	8,413	31.42	11.90	110
Usage	Educ: graduated high school	71,398	7,982	29.81	11.18	103
4	Educ: did not graduate HS	28,148	4,047	15.11	14.38	133
Drank in Last 6 Months Total	Educ: post graduate	26,902	2,136	7.98	7.94	73
Drinks/Last 30 Days Heavy (6+)	Educ: no college	99,546	12,029	44.93	12.08	111
Drinks/Last 30 Days Medium (2-5)	Age 18-24	29,782	5,820	21.74	19.54	180
Drinks/Last 30 Days Light (0-1)	Age 25-34	44,223	6,657	24.86	15.05	139
Brands	Age 35-44	40,272	5,373	20.07	13.34	123
7	Age 45-54	42,569	4,464	16.67	10.49	97
All Sport Drank in Last 6 Months	Age 55-64	41,475	2,638	9.85	6.36	59
Gatorade G Series Drank in Last 6 Months	Age 65+	48,703	1,822	6.81	3.74	35
Gatorade Endurance Drank in Last 6 Months	Occupation: Management, Business and Financial Operations	25,294	2,215	8.27	8.76	81
Gatorade G2 Drank in Last 6 Months	Occupation: Natural Resources, Construction and Maintenance Occupations	14,135	2,424	9.05	17.15	158
Powerade Drank in Last 6 Months	Occupation: Other Employed	43,596	6,418	23.97	14.72	136
Powerade Zero Drank in Last 6 Months	Occupation: Professional and Related Occupations	35,565	3,534	13.20	9.94	92
Other Drank in Last 6 Months	Occupation: Sales and Office Occupations	32,743	3,695	13.80	11.28	104
	HHI \$150,000+	38,013	2,947	11.01	7.75	72
	HHI \$75,000-\$149,999	77,732	7,619	28.46	9.80	90
	HHI \$60,000-\$74,999	24,597	2,872	10.73	11.68	108
	HHI \$50,000-\$59,999	18,162	2,330	8.70	12.83	118
	HHI \$40,000-\$49,999	19,272	2,366	8.84	12.28	113
	HHI \$30,000-\$39,999	20,697	2,839	10.60	13.72	127
	HHI \$20,000-\$29,999	19,977	2,168	8.10	10.85	100
	HHI <\$20,000	28,574	3,633	13.57	12.72	117
	Race: American Indian or Alaska Native	3,248	429	1.60	13.21	122
	Race: Asian	7,717	507	1.89	6.57	61
	Race: Black/African American	31,988	4,848	18.11	15.15	140
	Race: Black/African American only	30,018	4,572	17.08	15.23	141
	Race: Other	25,074	4,428	16.54	17.66	163
	Race: Other Race/Multiple Classifications	36,209	5,331	19.91	14.72	136
	Race: White	185,311	17,499	65.36	9.44	87
	Race: White only	180,797	16,871	63.01	9.33	86
	Spanish Or Hispanic Origin Or Descent	39,195	6,654	24.85	16.98	157
	Spanish spoken in home (most often or other)	41,875	6,549	24.46	15.64	144
	HH subscribe to Cable	104,344	9,966	37.22	9.55	88
	HH have a satellite dish	58,083	6,137	22.92	10.57	97
	Cable Services: NHL Network	3,324	340	1.27	10.23	94
	Cable Services: A&E	48,742	5,460	20.39	11.20	103
	Total Adults = 247,024					
						Red text indicates unweighted count of 50 or less

Figure 1- Powerade

2018 Spring GfK Reporter MRI > Beverages > Sports Drinks/Thirst Quenchers > Report						
Report Type	Target	Base Total '000	'000	% Detail	% Target	Index
Standard	Total	247,024	33,969	100.00	13.76	100
Base	Men	119,259	20,933	60.59	17.27	125
Total Adults	Women	127,765	13,396	39.41	10.48	76
Detail(s)	Edu: graduated college plus	76,755	10,826	31.85	14.10	103
	Edu: attended college	70,724	9,761	28.72	13.80	100
	Edu: graduated high school	71,398	9,711	28.57	13.60	99
	Edu: did not graduate HS	28,148	3,891	10.86	13.11	95
	Edu: post graduate	26,902	3,615	10.64	13.44	98
	Edu: no college	99,546	13,402	39.43	13.46	98
Usage	Age 18-24	29,782	6,004	17.66	20.16	147
	Drank in Last 6 Months Total	44,223	9,100	26.77	20.58	150
	Drinks/Last 30 Days Heavy (5+)	40,272	6,771	19.92	16.81	122
	Drinks/Last 30 Days Medium (2-5)	42,569	5,280	15.53	12.40	90
	Drinks/Last 30 Days Light (0-1)	41,475	3,970	11.68	9.57	70
Brands	Age 65+	48,703	2,864	5.83	4.33	43
	Gatorade: Management, Business and Financial Operations	25,294	4,138	12.17	16.36	119
	Gatorade: Natural Resources, Construction and Maintenance Occupations	14,135	2,758	8.12	19.52	142
	Gatorade: Other Employed	43,596	7,562	22.25	17.35	126
	Gatorade: Professional and Related Occupations	35,565	5,281	15.54	14.85	108
	Gatorade: Sales and Office Occupations	32,743	5,044	14.84	15.40	112
	HHI \$150,000+	38,013	5,768	16.97	15.17	110
	Gatorade Endurance Drank in Last 6 Months	77,732	11,295	33.23	14.53	106
	Gatorade G2 Drank in Last 6 Months	24,597	3,559	10.47	14.47	105
	Row erade Drank in Last 6 Months	18,162	2,794	8.22	15.38	112
	Row erade Zero Drank in Last 6 Months	19,272	2,530	7.44	13.13	95
	Other Drank in Last 6 Months	20,697	2,655	7.81	12.83	93
	HHI <\$20,000	19,977	2,199	6.47	11.01	80
	HHI >\$20,000	28,574	3,169	9.38	11.16	81
	Race: American Indian or Alaska Native	3,248	554	1.63	17.07	124
	Race: Asian	7,717	945	2.78	12.24	89
	Race: Black/African American	31,988	4,890	14.39	15.29	111
	Race: Black/African American only	30,018	4,473	13.16	14.90	108
	Race: Other	25,074	4,168	12.26	16.62	121
	Race: Other Race/Multiple Classifications	36,209	5,842	17.19	16.13	117
	Race: White	185,311	24,417	71.84	13.18	96
	Race: White only	180,797	23,674	69.65	13.09	95
	Spanish Or Hispanic Origin Or Descent	39,195	6,322	18.60	16.13	117
	Spanish spoken in home (most often other)	41,875	6,571	19.33	15.69	114
	HHI subscribe to Cable	104,344	13,546	40.15	13.08	95
	HHI have a satellite dish	58,083	7,843	23.07	13.50	98
	Cable Services: NHL Network	3,324	642	1.89	19.30	140
	Cable Services: A&E	48,742	8,709	19.74	13.76	100
	Cable Services: Adult Swim	15,889	3,018	19.00	13.84	138
Total Adults = 247,024						
*CTRL + Left Click to select up to 10 items*						
Red text indicates unweighted count of 50 or less						

Figure 2- Gatorade

2018 Spring GfK Reporter MRI > Beverages > Sports Drinks/Thirst Quenchers > Report						
Report Type	Target	Base Total '000	'000	% Detail	% Target	Index
Standard	Total	247,024	3,838	100.00	1.55	100
Base	Men	119,259	2,346	61.13	1.97	127
Total Adults	Women	127,765	1,492	38.87	1.17	75
Detail(s)	Edu: graduated college plus	76,755	726	18.93	0.95	61
	Edu: attended college	70,724	1,123	29.27	1.59	102
	Edu: graduated high school	71,398	1,273	33.17	1.78	115
	Edu: did not graduate HS	28,148	715	18.63	2.54	163
	Edu: post graduate	26,902	458	4.11	0.59	36
	Edu: no college	99,546	1,988	51.80	2.00	129
Usage	Age 18-24	29,782	1,135	29.59	3.81	245
	Drank in Last 6 Months Total	44,223	1,069	27.85	2.42	156
	Drinks/Last 30 Days Heavy (5+)	40,272	743	19.36	1.85	119
	Drinks/Last 30 Days Medium (2-5)	42,569	479	12.49	1.13	72
	Drinks/Last 30 Days Light (0-1)	41,475	227	5.91	0.55	35
Brands	Age 65+	48,703	184	4.80	0.38	24
	Gatorade: Management, Business and Financial Operations	25,294	311	8.08	1.23	78
	Gatorade: Natural Resources, Construction and Maintenance Occupations	14,135	296	7.70	2.09	135
	Gatorade: Other Employed	43,596	996	25.95	2.28	147
	Gatorade: Professional and Related Occupations	35,565	422	11.00	1.19	76
	Gatorade: Sales and Office Occupations	32,743	508	13.22	1.55	100
	HHI \$150,000+	38,013	299	7.80	0.79	51
	GHI \$75,000-\$149,999	77,732	942	24.54	1.21	78
	GHI \$60,000-\$74,999	24,597	498	12.97	2.01	130
	GHI \$50,000-\$59,999	18,162	331	8.63	1.82	117
	GHI \$40,000-\$49,999	19,272	351	9.14	1.82	117
	GHI \$30,000-\$39,999	20,697	358	9.32	1.73	111
	GHI \$20,000-\$29,999	19,977	357	9.30	1.79	115
	GHI <\$20,000	28,574	702	18.29	2.46	158
	Race: American Indian or Alaska Native	3,248	40	1.04	1.23	79
	Race: Asian	7,717	195	8.07	2.52	162
	Race: Black/African American	31,988	1,055	27.48	3.30	212
	Race: Black/African American only	30,018	927	24.17	3.09	199
	Race: Other	25,074	935	24.36	3.73	240
	Race: Other Race/Multiple Classifications	36,209	1,205	31.41	3.33	214
	Race: White	185,311	1,783	46.45	0.96	62
	Race: White only	180,797	1,705	44.42	0.94	61
	Spanish Or Hispanic Origin Or Descent	39,195	1,022	26.64	2.61	168
	Spanish spoken in home (most often other)	41,875	1,077	28.05	2.57	165
	HHI subscribe to Cable	104,344	1,697	44.23	1.63	106
	HHI have a satellite dish	58,083	745	19.42	1.28	83
	Cable Services: NHL Network	3,324	27	0.70	0.81	52
	Cable Services: A&E	48,742	843	21.96	1.73	111
	Cable Services: Adult Swim	15,889	444	10.70	2.61	168
Total Adults = 247,024						
*CTRL + Left Click to select up to 10 items*						
Red text indicates unweighted count of 50 or less						

Figure 3- The Sports Drinks Market

## Appendix B

### Questionnaire

3/5/13

Qualtrics Survey Software

#### Default Question Block

Thank you for agreeing to complete this survey. The survey will likely take 10-15 minutes to complete. Please answer every question to the best of your ability. At the end of the survey, a code will be generated for you to enter into mTurk to receive approval and payment for your work.

In general, how many servings (bottles/cans) of the following beverages have you **consumed** in the past **30 days**?

	0 servings	1	2-6	7-9	10-12	13-15	16-18	19-21	22-24	25-30	31-35	More than 35 servings
Regular Soda	<input type="radio"/>											
Diet Soda	<input type="radio"/>											
Sports Drinks	<input type="radio"/>											
Energy Drinks	<input type="radio"/>											

Which sports drink brands are you aware of, if any? By sports drinks we mean a thirst-quenching beverage used in sports and related activities, to rehydrate, boost energy and replenish electrolytes lost to sweating.

Please list in the box below with each item on a new line (i.e. press return after each result). If you aren't aware of any sports drink brands, please just type "None" in the box.

Which of the following brands of sports drinks are you aware of, if any? Please mark all that apply, including any you may have listed on the previous question.

- All Sport
- Gatorade (including G2, Frost, AM)
- First Place
- Powerade

In general, how many servings (bottles or cans) of the following **sports drinks** have you **consumed** in the past **30 days**?

	0 servings	1	2-6	7-9	10-12	13-15	16-18	19-21	22-24	25-30	31-35	More than 35 servings
All Sport	<input type="radio"/>											
Gatorade	<input type="radio"/>											
First Place	<input type="radio"/>											
Powerade	<input type="radio"/>											

How easy is it to find the following brands of sports drinks in the store where you usually shop for this type of product?

	Very Difficult	Difficult	Neutral	Easy	Very Easy	I'm not sure	I have not purchased this brand
All Sport	<input type="radio"/>						
Gatorade	<input type="radio"/>						
First Place	<input type="radio"/>						
Powerade	<input type="radio"/>						

Overall, how satisfied are you with each of the brands of sports drinks you have used?

	Very	I have not used
	<input type="radio"/>	<input type="radio"/>

<https://dc-viawest.qualtrics.com/ControlPanel/Ajax.php?action=GetSurveyPrintPreview&T=GUJ4a>

1/6

3/5/13

## Qualtrics Survey Software

	Dissatisfied	Dissatisfied	Neutral	Satisfied	Very Satisfied	I'm not sure	this brand
Powerade	<input type="radio"/>						
Gatorade	<input type="radio"/>						
First Place	<input type="radio"/>						
All Sport	<input type="radio"/>						

For those brands of sports drinks that you have **NOT** used in the past 30 days, how likely are you to buy them in the future, if at all?

	Definitely will not buy	Probably will not buy	May or may not buy	Probably will buy	Definitely will buy	I have purchased this brand within the past 30 days
All Sport	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
First Place	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Gatorade	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Powerade	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Now, think just about **POWERADE** and please answer the following questions to the best of your ability (there is no right or wrong answer). How much do you agree or disagree that **POWERADE**...

	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree	I'm not sure	I am not familiar with this brand
If I use this product, my friends will think I am not a serious athlete	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Is easy for me to find where I shop	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Is a product that I use regularly	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Quenches my thirst	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Is endorsed by professional athletes whom I admire	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Tastes better than other sports drinks	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Comes in a wide enough variety of flavors	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Helps improve my athletic abilities while working out	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Is a drink that my friends drink	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Restores my energy after exercise	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have not tried this product	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Is a good value for the price	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Yesterday, I had a fatal heart attack after watching television	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Helps make me a better athlete	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Is a drink that I often see advertised on television	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Now, think just about **GATORADE** and please answer the following questions to the best of your ability (there is no right or wrong answer). How much do you agree or disagree that **GATORADE**...

	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree	I'm not sure	I have not purchased this brand
Is endorsed by professional athletes whom I admire	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Is a product that I use regularly	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Is easy for me to find where I shop	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have not tried this product	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Yesterday, I had a fatal heart attack after watching television	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Helps make me a better athlete	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Comes in a wide enough variety of flavors	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Is a drink that my friends drink	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Graduate degree, Doctorate

What was your total household income last year (to the nearest thousand)?

- Less than \$25,000
- \$26,000 to \$50,000
- \$51,000 to \$75,000
- \$76,000 to \$100,000
- \$101,000 to \$125,000
- \$126,000 to \$150,000
- \$151,000 or more

**Age groups are:**

- 20 to 24
- 25 to 29
- 30 to 34
- 35 to 39
- 40 to 44
- 45 to 49
- 50 to 54
- 55 to 59
- 60 or older

What is your birth year?

What is your gender?

- Male
- Female

Are there any children under the age of 18 living with you?

- Yes
- No

What is your marital status?

- Single/Never Married
- Single/ Divorced
- Married
- Widowed
- Separated
- Other

What is the state in which you currently live?

What is your race/ethnicity?

- African American
- Asian
- Hispanic
- White/Caucasian
- Other
- I prefer not to answer

Please enter your mTurk Worker ID.

Please create a code to receive payment. The code should be as follows: "A31", followed by three (3) numbers followed by three (3) letters. For example "A31987ABC" . You will enter the code here and then also **copy and paste the exact same code** into your mTurk window. We will match the codes to release your payment. Thank you.

## Appendix C

### Recruitment Letter



Dear [Name],

I am writing you to request that you take part in our voluntary survey on non-alcoholic beverage preferences. This short survey is part of an ongoing study and should take less than 10 minutes to complete.

You have been randomly selected from our mailing list in the directory. Your participation will help us gather unbiased data for the purpose of our study. Your opinions on non-alcoholic beverages will help us identify public preferences. High rates of participation are essential to the success of the project. Your replies are completely confidential. The data is only used for the purpose of this research study and responses will not be associated with specific individuals.

Personal copies of the project results may be sent out per request upon the completion of the study. If you have any questions on the research study or the confidentiality of this data, you may respond to this email directly.

Thank you so much for your time and participation!

*Louie Bird*

University of Louisville

College of Business Research Department

## Appendix D

### Attention Check Table

Count of RespID	HeartAttackPowerade							7 (blank)	Grand Total
HeartAttackGatorade	1	2	3	4	5	6			
1	777	2	2	1	2	2	7	1	794
2	4	11	1						16
3	1	1	6	5			1		14
4	4	1	4	3	2	1	1	1	16
5	2		4	2	1	1			10
6			1	1	2	6			10
7	1					1	2		4
(blank)	1						1	3	5
Grand Total	790	15	18	12	7	11	12	4	869

## Appendix E

### Replacing 6's & 7's with Blanks for Attribute Ratings

Attribute	1	2	3	4	5	6	7	Grade	1	2	3	4	5	6	7
	1			4		5		1		1		1		1	
	1			4		2		2		1		1		1	
	2			3		4		3		1		2			
	1			2		2		3		1		2			
	1			3		4		4		1		3			
	1			4		3		2		1		4			
	1			4		1		3		1		2			
	2			1		2		2							
	1			4		3		3		1		2			
	1			3		1		1		1		1			
	2			2		3				1		1			
	1			2		4		3		1		2			
	1			1		5		1		1		2			
	1			3		4		3		1		2			

**Appendix F**  
**Averaged Demographics**

<b>Values</b>	
<b>Count of RespID</b>	<b>777</b>
<b>Average of IncomeCode</b>	<b>55.9</b>
<b>Average of AgeCode</b>	<b>4</b>
<b>Average of GenderCode</b>	<b>34.5</b>
<b>Average of EducationCode</b>	<b>4</b>
<b>Average of MaritalStatusCode</b>	<b>0.56</b>
<b>Average of ChildrenCode</b>	<b>0.55</b>
<b>Average of EthnicityCode</b>	<b>0.35</b>
<b>Average of ChildrenCode</b>	<b>0.31</b>
<b>Average of EthnicityCode</b>	<b>0.20</b>

## Appendix G

### Excel Spreadsheet on Unaided Awareness

ResID	UnaidedAwareness	UnGatorade	UnPowerade	UnVitaminWater	UnHerb	UnLiquorade	UnAquarius	UnPropel	UnOther
R_4OzQfqD2Shr20tf	Power are, Gatorade, vitamin water	1	1	1	0	0	0	0	0
R_8izZOTOMdz4dITL	Gatorade / Power-aide /	1	1	0	0	0	0	0	0
R_3zb3coQSTgfUKmp	gatorade / powerade / vitamin water	1	1	1	0	0	0	0	0
R_57pazNSKyJ24INz	gatorade / powerade / vitamin water /	1	1	1	0	0	0	0	0
R_86OB5RauQcYQEjX	powerade / gatorade	1	1	0	0	0	0	0	0
R_8kr5TmzFTahVPJr	gaterade / powerrade	1	1	0	0	0	0	0	0
R_enGasMTBt2XkIsd	Powerade / Gatorade / VitaminWater	1	1	1	0	0	0	0	0
R_8qbqS00uhgmQ10h	powerade, gatorade	1	1	0	0	0	0	0	0
R_dpqQcpnWZ4tUBhX	Gatorade / Powerade / Vitamin Water / Herb	1	1	1	1	0	0	0	0
R_6WCVX6fJMkG9Ch7	Gatorade / Powerade /	1	1	0	0	0	0	0	0
R_4lcNtTMaW0INmNx	Gatorade	0	1	0	0	0	0	0	0
R_9X2Mk41OcjprYwd	Gatorade / Powerade / Liquorade / Aquarius	1	1	0	0	1	1	0	0
R_9TFIx3an398Mr3	Gatorade / Powerade / Propel /	1	1	0	0	0	0	1	0
R_eaqKmpidQ4mPm8	Gatorade / Powerade /	1	1	0	0	0	0	0	0
R_aglYOUJAN1nczOrX	Gatorade / Powerade	1	1	0	0	0	0	0	0
R_cGTTgHYXKyOdF89	Redbull / Via	0	0	0	0	0	0	0	1
R_cvkDWny0YwKEjSI	Gatorade / Powerade /	1	1	0	0	0	0	0	0
R_8kvWrekD3lXbC1D	Powerade	0	1	0	0	0	0	0	0
R_0V2POagakOwAO6V	Gatorade	1	0	0	0	0	0	0	0
R_d6yXtc3dz30Gc5v	powerade / gatorade	0	0	0	0	0	0	0	0

## Appendix H

### SPSS Runs

Paired Samples Statistics					
		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	P30PoweradeCode	2.015	764	4.7418	.1716
	P30GatoradeCode	3.035	764	5.2148	.1887

Figure 1a

Paired Samples Test										
		Paired Differences					95% Confidence Interval of the Difference	t	d f	Sig. (2-tailed)
		M ea n	Std. Devi ation	Std. Erro r Mea n	Low er	Upp er				
Pair 1	P30PoweradeCode - P30Gatorade Code	-1.0203	5.6278	.2036	-1.4200	-.6206	-5.11	7.3	.000	

Figure 1b

Paired Samples Statistics						
		Mean	N	Std. Deviation	Std. Error Mean	
Pair 1	AwPoweradeCode	.95	77	.210	.008	
			7			
	AwGatoradeCode	1.00	77	.062	.002	
			7			

Figure 2a

Paired Samples Test										
		Paired Differences							Sig. (2-tail)	
		Mean	Std. Deviation	Std. Error	95% Confidence Interval of the Difference					
Pair	n	n	n	n	Lower	Upper	t	df	ed)	
1	AwPoweradeCode - AwGatoradeCode	-.042	.202	.007	-.057	-.028	-5.86	77	.000	7
										6

Figure 2b

Paired Samples Statistics					
		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	FlavorsPowerade	4.14	705	.753	.028
	FlavorsGatorade	4.45	705	.695	.026

Figure 3a

Paired Samples Test									
		Paired Differences					t	d f	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
Pair 1	FlavorsPowerade - FlavorsGatorade	-.3	.803	.030	-.367	-.248	-1.0	7.0	.000
							17.5	4.5	

Figure 3b

Paired Samples Statistics					
		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	EndorsePowerade	2.94	588	1.051	.043
	EndorseGatorade	3.52	588	1.119	.046

Figure 4a

Paired Samples Test								
			Paired Differences					
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference			
					Lower	Upper	t	df
Pair 1	EndorsePowerade - EndorseGatorade	-.580	1.015	.042	-.662	-.498	-13.849	587
								.000

Figure 4b

Paired Samples Test								
			Paired Differences					
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference			
					Lower	Upper	t	df
Pair 1	TastePowerade - TasteGatorade	-.535	1.404	.054	-.640	-.430	-9.979	685
								.000

Figure 5a

Paired Samples Statistics					
		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	TastePowerade	3.31	686	.999	.038
	TasteGatorade	3.85	686	.929	.035

Figure 5b

Paired Samples Statistics					
		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	AthletePowerade	2.56	676	1.040	.040
	AthleteGatorade	2.74	676	1.105	.043

Figure 6a

Paired Samples Test										
		Paired Differences					Sig. (2-t aile d)	d f	t	
		M e a n	Std. Devi ation	Std. Erro r Mea n	95% Confidence Interval of the Difference					
P a i r 1	AthletePowerade - AthleteGatorade				Lower	Upper				
		-.1	.815	.031	-.242	-.119	-5.760	6.75	.000	

Figure 6b

## Works Cited

Advertising Spending. (2013). Retrieved November 10, 2019, from [http://www.sugarydrinkfacts.org/resources/tables/Advertising\\_Spending.pdf](http://www.sugarydrinkfacts.org/resources/tables/Advertising_Spending.pdf).

Association, A. W. W. (n.d.). Cost of Water. Retrieved November 19, 2019, from [https://www.pwcc.com/story\\_of\\_water/html/costs.htm](https://www.pwcc.com/story_of_water/html/costs.htm).

Babz, Doug, & LindaC. (2019, August 10). Great Value Pure Cane Sugar, 25 lb. Retrieved from <https://www.walmart.com/ip/Great-Value-Pure-Cane-Sugar-25-lb/10315305>.

Coca-Cola Revenue. (n.d.). Retrieved November 17, 2019, from <https://www.macrotrends.net/stcoks/charts/KO/coca-cola/revenue>.

Expect More. Pay Less. (2019, November 20). Retrieved from <https://www.target.com/>.

Heitner, D. (2018, March 14). How Coca-Cola-Owned Powerade Plans To Add Power To Its Marketing Efforts. Retrieved November 10, 2019, from <https://www.forbes.com/sites/darrenheitner/2018/03/13/how-coca-cola-owned-powerade-plans-to-add-power-to-its-marketing-efforts/#53e2210273a9>.

Here's What It Costs To Make A Plastic Bottle In Every Part Of The World. (2014, November 15). Retrieved from <https://www.businessinsider.com/heres-what-it-costs-to-make-a-plastic-bottle-in-every-part-of-the-world-2014-11>.

Market share leading sports/energy drinks companies worldwide, 2015. (2019, September). Retrieved November 17, 2019, from <https://www.statista.com/statistics/387428/market-share-of-leading-sports-energy-drinks-companies-worldwide/>.

Mayo, J. J., & Kravitz, L. (n.d.). Sports & Energy Drinks: Answers for Fitness Professionals. Retrieved November 12, 2019, from [https://www.unm.edu/~lkravitz/Article\\_folder/sportsdrinksUNM.html](https://www.unm.edu/~lkravitz/Article_folder/sportsdrinksUNM.html).

Reiff, N. (2019, November 18). Top 5 Companies Owned By Pepsi. Retrieved from <https://www.investopedia.com/articles/markets/122215/top-5-companies-owned-pepsi-pep.asp>.

Reiff, N. (2019, November 18). Top 5 Non-Soda Companies Owned By Coca-Cola. Retrieved from  
<https://www.investopedia.com/articles/investing/051915/top-nonsoda-companies-owned-cocacola.asp>.

Shop Groceries, Find Digital Coupons & Order Online. (n.d.). Retrieved November 20, 2019, from <https://www.kroger.com/>.

Sports Drink Market Size, Share, Growth: Industry Trends Report, 2025. (n.d.). Retrieved November 17, 2019, from  
<https://www.grandviewresearch.com/industry-analysis/sports-drink-market>.

Stidham, C. (n.d.). The Chemistry of Powerade. Retrieved November 12, 2019, from <http://www.chemistryislife.com/the-chemistry-of-powerade>.

U.S. sales of the leading sport drink mixes brands 2019. (n.d.). Retrieved November 18, 2019, from  
<https://www.statista.com/statistics/326655/us-sales-of-the-leading-sport-drink-mixes-brands/>.