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Mrs. Stubbs

AP Statistics Period 1

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RESEARCH REPORT: The Influence of Bread and Social Trends

Our topic for our statistical survey was the ideals of bread. We are two curious intellectual high schoolers who are interested in the topic of bread, especially after the new "let's get this bread" social media trend. Because of the immediate rise in popularity of this new social media trend, we decided to base our survey off this topic, asking our random survey takers on their ideal bread, such as their bread preferences and condiments, as well as hinting towards the social media trend with our last question: How do you 'get the bread'. We chose our random sample of volunteers by using an online random number generator that uses a software coded program that outputs a random set of numbers based on our given number preferences. We decided to use this complex online number generator instead of the regular rand function on our TI-84+ CEs because we realized that using the rand function on the calculator will more or less give us same numbers as other classmates using a TI-84+ CE to obtain random numbers. All of the current AP Statistics students were given a unique number so we matched our computer generated numbers to the corresponding students. Our use of the computer program allowed us to gain unique values from the rest of our classmates, allowing us to get unique responses from different people. Our results are representative of all the current Cupertino AP Statistics students.

After we decided on the topic of bread, we decided to ask the following four questions:

- 1. What is your favorite type of bread?
 - a. Chapati
 - b. Flatbread
 - c. Multigrain bread
 - d. Oat bread
 - e. Rye bread
 - f. Sourdough
 - g. White bread
 - h. Whole Wheat
- 2. What kinds of condiments do you put on your bread?
- 3. I eat bread regularly: True or False
- 4. How do you 'get the bread'?

Our survey contained several question types including multiple choice, free response, and true/false. Question number 1 was a multiple choice question regarding the survey taker's favorite type of bread. There was a variety of selections from which they could select from. As shown in Figure 1 (Figures at bottom of report), out of the ten test takers, 5 liked sourdough the most, 4 like white bread the most, and 1 liked chapati the most. To remove any possible bias, we had eight possible answer choices. These eight answer choices contain the top 8 most common bread types eaten within the United States. While there are many other types of bread, we chose

8 choices to give the survey takers enough choices while not having too many choices. Question number 2 was a free response question where test takers could list as many condiments as they wanted. All ten test takers had unique sauces and foods they put on their bread. The 3 most common responses were Peanut Butter and Jelly, Turkey, and Cheese in descending order. Figure 2 contains some of the other responses we received. We asked Question 3 to gauge how often people ate bread. Because we did not define the term "regularly", there may have been some skewed results where some students may define regularly as daily, weekly, or monthly. We decided that regularly would mean several times a week. About 90% of survey takers ate bread regularly while 10% did not as shown in Figure 3. This shows that a large proportion of AP Statistics students at Cupertino High School eat bread several times a week. This reflects American culture and cuisine where bread plays a large role. Currently, 99% of US households consume bread. However, it has been predicted that this number will drop over the next few years. Still, there are over 2,800 commercial bakeries and 6,000 retail bakeries in the United States. Bakeries are found in every city around every corner. The baking industry accounts for over 600,000 jobs and over \$102 billion each year.

Bread plays a significant role in the culture in other countries as well. The Egyptians had discovered yeast in 2600 BC and learned how to use it to make the dough rise. With the Egyptian interactions and trades with other African and European countries, bread has spread throughout the world and become a common food. Because of this, bread is often seen as a basic necessity and used as a metaphor. Phrases such as "panem et circenses" in Rome, "peace, land, and bread" in Russia, "roti, kapra aur makan" in India demonstrated the large influence of bread. Bread is also used as a symbol in many religions. For example, in Christianity, bread and wine are very

significant. Before 1200 AD, bread was called hlaf. However, during the transition towards Middle English, the word for bread became bread. It was during this time when bread started becoming a symbol of money. "Breadwinner", "breadline", "breaking bread", and many more became popular words and phrases. In fact, many of these are still used today. Starting in May 2018, the phrase "Let's Get This Bread" started becoming popular among teenagers. Being in the era of technology, online trends spread very quickly and catch on within days and weeks. Teenagers used social media websites such as Facebook, Twitter, and Reddit to post their memes containing this phrase. A meme is a photo, video, text, or any media that is often reposted and parodied for the use of entertainment. Often, memes are inside jokes within the communities they are posted in. The phrase "Let's Get This Bread" is a slang term that means to work hard and to earn money. For our last question, we incorporated this phrase to see how many knew the internet meme. As shown in figure 4, a majority of the interviewees were not familiar with the phrase. However, two students interpreted the question correctly. Due to the question being ambiguous, two of the results we received did not show whether they truly interpreted the question correctly.

In conclusion, we found that our four-question survey revealed a lot more than just our interviewees' bread preferences. For starters, we found out that there is a correlation between the number of bread people eat and their condiment preferences, as many people prefer white bread with peanut butter and jelly and others prefer sourdough with cheese. However, we were surprised to see that people had misinterpreted our 4th question, as instead of interpreting the meme, the interviewers interpreted our fourth question as a legitimate question asking them where they buy their bread from. This reveals concerning arguments as it can be interpreted

because of the lack of knowledge of the social media trend, there are many people that do not remain social or keep up with new trends; this may be the factor of interviewers over obsessiveness for other school assignments that could lead to their lack of knowledge in this popular trend. As statistical scientists, we found the significance of bread on American cuisine and culture. While researching the market trend of this food, we were able to reveal facts about our generation and how we continue to influence American culture with modern technology.

Figure 1: Types Of Bread

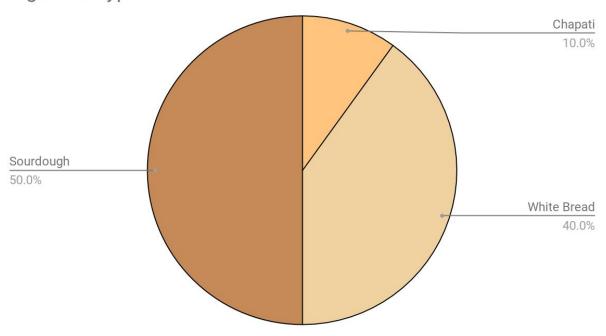
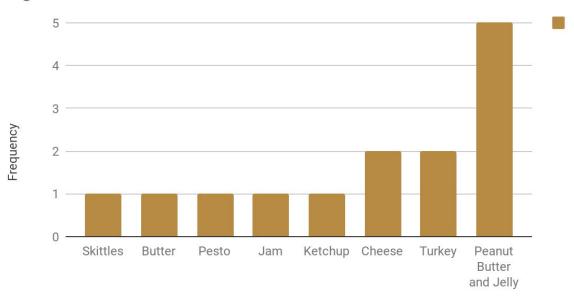


Figure 2: Condiments



Condiments

Figure 3: Regularly Eats Bread

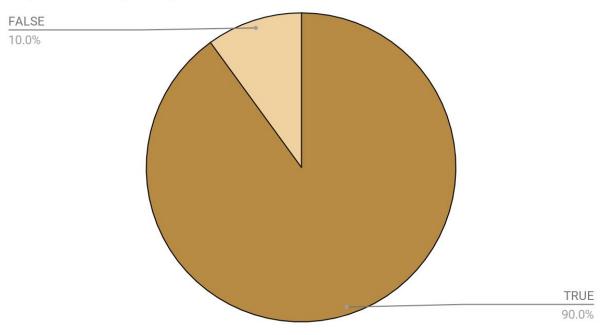
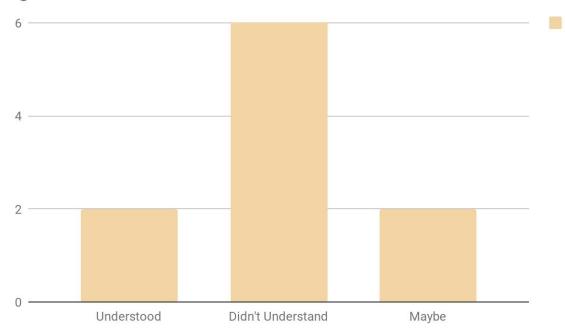


Figure 4: Understood Meme



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Resources Document

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