



CALIFORNIA SCIENCE & ENGINEERING FAIR 2019 PROJECT SUMMARY

Name(s) Summerlyn Stys	Project Number J0627
Project Title Sugar and a Drink: How Hot Can It Get?	
<p style="text-align: center;">Abstract</p> <p>Objectives The purpose of this experiment was to determine if sugar affected the temperature of a drink after five minutes on a stove. It was hypothesized that the higher the sugar content in the drink, the higher the temperature of the drink at the end of the five minutes.</p> <p>Methods To conduct this experiment, eight ounces of either water, coconut water, Gatorade, Sprite, or Redbull were measured in a measuring cup, then heated on a stove for five minutes. At the end of the timed five minutes, the temperature was recorded and the process was repeated until each drink had been tested ten times. The resulting temperatures were then averaged and made into a graph.</p> <p>Results It was found that my hypothesis was supported because Redbull and Sprite, the two drinks with the highest sugar content, had the highest recorded temperatures compared to the other drinks. The results indicate that the more sugar the drink contains, the quicker it can heat up and that it will be hotter at the end of a timed period than other drinks with a lower sugar content.</p> <p>Conclusions My hypothesis was supported by this experiment because Redbull and sprite had the highest recorded temperatures and the highest sugar content. For each test, the temperatures of these two liquids stayed close to their average and had higher temperatures compared to water, coconut water, and Gatorade. Also, water and coconut water had the lowest recorded temperatures and they had the lowest sugar content.</p>	
Summary Statement this experiment was done to discover if sugar made a drink hotter at the end of a timed period, and the more sugar in a drink, the hotter it will be at the end of a timed period.	
Help Received Mrs. Humkey, Mrs. McCarthy, and Mrs. Ringstad all helped me through editing and revising my project. My mom and dad bought me the supplies I needed and I tested and recorded the data in my home.	