



**CALIFORNIA STATE SCIENCE FAIR  
2014 PROJECT SUMMARY**

<b>Name(s)</b> <b>Daniel A. Bernhardt</b>	<b>Project Number</b> <b>J0702</b>
<b>Project Title</b> <b>Taste the Rainbow: Do We Need Coloring in Our Soda?</b>	
<b>Abstract</b> <b>Objectives/Goals</b> The objective of my investigation was to determine if the colors of soda affects the way we perceive its taste. The project I did was a three part test. Those three parts were: <ol style="list-style-type: none"><li>1. If you were blindfolded and you couldn't see the color of soda, what would you taste?</li><li>2. If you change the color of soda, does it affect the way you would perceive the taste?</li><li>3. If you taste the soda with the manufacturer's colors, is your ability to identify the flavor more accurate?</li></ol> <b>Methods/Materials</b> Twelve different sodas were put into three different categories: 1) manufacturer's color sodas, 2) customized color sodas, and 3) sodas to be tasted blindfolded. Test subjects tasted four soda samples which were the manufacturer's colors, followed by four soda samples of customized colors, and responses were recorded. Then, the test subject was put under blindfold and tasted four samples of soda and their responses were recorded. Test subjects were not required to finish each sample. If the test subject's palate was feeling foggy, the test subject could eat a salty pretzel to clear it back up. <b>Results</b> The results of the data showed that when the color of the soda was transformed, the subject's ability to accurately identify the flavor of soda plummeted to 25%. When the color of the soda was obscured, the accuracy was much better at 68%. When the color of the soda was that of the manufacturer, the accuracy was best at 82%. <b>Conclusions/Discussion</b> The results of data collected through observations confirmed the hypothesis that altering or eliminating the visual perception of the color of soda decreases the test subject's ability to identify the flavor of the soda.	
<b>Summary Statement</b> The project was to determine whether or not visual perception affects taste perception.	
<b>Help Received</b> My mother bought the paper for the display, helped proofread my writing, and helped with some typing.	