



# CALIFORNIA STATE SCIENCE FAIR 2012 PROJECT SUMMARY

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<b>Project Title</b> <b>Color vs. Taste</b>	
<p style="text-align: center;"><b>Abstract</b></p> <p><b>Objectives/Goals</b> The purpose of my project was to find out whether or not the color of a drink affect's a person's perception of taste.</p> <p><b>Methods/Materials</b> I had to do two trials because the first trial had too many errors. On the first trial I made sugar water and flavored it with flavored (candy making)oils. The biggest problem was that the flavored oils seperated from the sugar water and most of the individual samples ended up being just sugar water. On my next trial I used clear, sugar-free flavored seltzer water. I then added colors to some of the seltzer water. I had twelve samples using four different flavors of seltzer water in different combinations with four different colors; four samples I left clear, four were mis-matched colors for flavors, and four had colors that matched the flavors, red for strawberry and cherry, purple for grape, and orange for orange. I had ten participants sample all twelve of the color and flavor combinations and report what flavor they thought they were tasting.</p> <p><b>Results</b> My results showed that color does affect perceived taste and that without color or a label participants were often very confused about the flavor. When the color didn't match the flavor, there were similar results to the samples without color. When the color did match the flavor the participants were much more successful in identifying the flavors.</p> <p><b>Conclusions/Discussion</b> My hypothesis was that the color would affect perception of taste and my results proved my hypothesis was correct. When I tasted the clear seltzer waters I was concerned that my second trial would also fail because the flavors seemed too obvious and I didnt think color, or lack of color, would cause confusion. I was very supriised that during testing participants were very confused and it was exciting to see my project working.</p>	
<b>Summary Statement</b> When tasting a sweetened drink, does the sense of sight (color) affect your sense of taste?	
<b>Help Received</b> My parents helped set-up sample cups for participants.	