



**CALIFORNIA STATE SCIENCE FAIR  
2005 PROJECT SUMMARY**

<b>Name(s)</b> <b>Brittany N. Sargent</b>	<b>Project Number</b> <b>J1431</b>
<b>Project Title</b> <b>Can Gum in Your Mouth Make Your Temperature Go South?</b>	
<p style="text-align: center;"><b>Abstract</b></p> <p><b>Objectives/Goals</b> It is hypothesized that the cinnamon gum, Big Red, will change the temperature of my test subject's mouth the most. The modern person chews about 20,000 pieces of gum each year. People chew that much gum without knowing the affects that it can have on their body. Cinnamon gum also kills the bacteria living in the human mouth along with conquering bad breath. This could change the environment of the mouth and therefore could also change the temperature.</p> <p><b>Methods/Materials</b> My project includes a lot of materials. In the research, I found out that cinnamon gum kills 97.3% of the bacteria living in the human mouth. The plant oils (used to make cinnamon gum) have something in it that kills bacteria. My procedure was very complicated to plan. Each student had his or her temperature taken. Next, they were given a piece of gum. They are to chew it for 2 minutes and then spit it out in the trashcan. Then, each student's temperature was taken again and recorded. Temperature was taken before and after each piece of gum to serve as a control. They got to chew 3 different flavors of Wrigley brand gum in a period of one week.</p> <p><b>Results</b> In the testing, the gum did not change the subject's temperature enough to be recognized as anything but normal. It changed to about .2 to 2.4 degrees of the control temperature. There wasn't just one gum that changed the temperature the most. They were all pretty similar. I proved my hypothesis to be incorrect.</p>	
<b>Summary Statement</b> I tested to see if gum changed the temperature of your mouth or if it just affected your tastebuds.	
<b>Help Received</b> Teachers, Ms. Hill and Mrs. Marcarelli, helped me write everything; Friend helped me write data; Mother helped me think of project and how to do it; Step-dad helped me put together my board; Sister helped me decorate board; Friend helped me with title.	