



**CALIFORNIA STATE SCIENCE FAIR
2005 PROJECT SUMMARY**

Name(s) Amy E. Carr	Project Number J1004
Project Title Whose Mouth Is Cleaner?	
<p style="text-align: center;">Abstract</p> <p>Objectives/Goals It is said that a dog's mouth is cleaner than a human mouth, so I wanted to see if the theory was true. Even though humans brush their teeth, there are still a lot of food particles and bacteria in our mouths. Dog's mouths are supposed to be self-cleaning. I want to test different dog and different human mouths to see who really has the cleaner mouth. My hypothesis states: Cultures taken from a dog's mouth will grow fewer bacteria than cultures taken from a human's mouth.</p> <p>Methods/Materials In order to conduct this experiment, I used a q-tip to swab the cheek lining of three dogs and three humans. I used culture plates to grow the bacteria. Then I rated the amount of growth present and recorded it on a table. I used a bar graph to show the results. I repeated the experiment three times. During the experiment, I had to develop a way to incubate the cultures without having access to a real incubator. I also had to develop a method to count the number of bacterial colonies without using a microscope.</p> <p>Results For all three experiments, the human bacteria and the canine bacteria were different from each other. The human bacteria looked like grayish, small spots. The canine bacteria were more yellow or white, and looked more like streaks than spots. The human bacteria grew faster than the canine bacteria, but by day 3 the total bacterial counts were equal.</p> <p>Conclusions/Discussion My hypothesis, that cultures taken from a dog's mouth will grow fewer bacteria than cultures taken from a human mouth, was incorrect. The data showed that by day 3 there was an equal amount of bacterial growth for each specimen. However, the bacterium was different for each species, and the canine bacteria grew more slowly at first. Even though my hypothesis was incorrect, there is some truth to the belief that a dog bite is less likely to be harmful than a human bite. This is because humans have a higher chance of being harmed by their own species specific bacteria.</p>	
Summary Statement To determine whose mouth is cleaner; a dog's or a human's.	
Help Received Community Hospital of the Monterey Peninsula donated materials; Mother helped type report and troubleshoot problems.	