



**CALIFORNIA STATE SCIENCE FAIR
2002 PROJECT SUMMARY**

Name(s) Ashley M. Rosenquist	Project Number 22810
Project Title pH Levels of Saliva	
Abstract Objectives/Goals To determine if pH levels in the saliva of various animals and humans change at different times of the day. Methods/Materials Six humans, four dogs, and four cats were used in testing the pH of their saliva. All of the subjects pH levels were tested every three hours, beginning at 8:00 A.M. and ending at 8:00 P.M. I repeated my experiment twice on two separate days. The various animals and humans were tested two times using this method. Results The average pH level in the saliva of humans was about neutral, pH of 7. While dogs and cats had pH levels that were a bit higher, therefore meaning less acid was detected in their saliva. I did not discover a strong trend with any of my subjects results. The pH levels in various animals and humans did change at different times of the day. Conclusions/Discussion My results did support my hypothesis, pH levels in various humans and animals do change at different times of the day. The human's pH levels seemed to increase in the morning and level out in the afternoon, once again rising in the evening. Dog's pH levels seemed to have a steady downward trend as the day went on. Cat's pH levels on the other hand bounced around throughout the day. The difference between human's pH levels and dogs and cats pH levels was humans were mostly neutral, while dogs and cats contained less acid in their saliva. I measure in whole increments. If I were to repeat this experiment for a third time I would use a pH meter.	
Summary Statement My project is about taking various animals and humans, testing their pH levels in their saliva, to see if it varies throughout the day.	
Help Received Tim Hannah helped me generate my graphs and charts onto the computer; my mom helped me hold some of the animals while taking their pH levels with the pH strip. My science teacher, Mr. Lippmann, allowed me to use some of his pH testing strips.	