



**CALIFORNIA STATE SCIENCE FAIR
2007 PROJECT SUMMARY**

Name(s) Maya Z. Angelo	Project Number J1103
Project Title Animals vs. Humans: pH Balance	
<p style="text-align: center;">Abstract</p> <p>Objectives/Goals The purpose of my project was to find out weather an animal#s pH balance is higher than a humans throughout the day so that I could prove that an animal's pH balance is higher than a human's throughout the day.</p> <p>Methods/Materials I used a Litmus Paper pH Testing Kit showing the range of color from yellow to blue measuring the pH level (5.0 - 9.0) of saliva . I tested (10) subjects,(5) humans and (5) animals (combination of omnivores, carnivores, and a herbivore) for five different trials. I used surgical gloves for cleanliness. The litmus test strip was placed on the tongue of each subject. The test was done every two hours starting at 8:00 AM until 8:00 PM. I also interviewed a veterinarian, Dr. Javier Nolasco, DVM and Tarini Fernando, Veterinary Assistant, VCA Parkwood Animal Hospital. Also, I interviewed a dentist, Dr. Joe Sciarra, DDS, Pediatric Dentistry.</p> <p>Results After testing my animal and human subject#s pH levels on five separate trial test days, I concluded that my five animal#s pH levels were, in almost all cases, higher than the human's throughout the testing. I even studied the pH levels before and after eating. The final test analysis proved that my hypothesis of an animal#s pH level being higher than a human#s is correct.</p> <p>Conclusions/Discussion I learned that the animals test results were reading in the alkaline range regardless of eating or drinking. The final test analysis proved that my hypothesis of an animal#s pH level being higher than a human#s is correct.It's important that animals and humans have a healthy pH balance. The pH level shows how the enzymes in your stomach, liver, pancreas are working. A low pH (below 6.5) level can cause germs and disease to grow. A high pH (over 6.8) level can end up being bad too because it causes too much gas & constipation. When the saliva is not acidic or alkaline, it is balanced. It is better for the body to be a little alkaline (over 7.0). If I used vegetarians, a rabbit, or cows, their level would be in the high pH range. After my interviews, I learned animals, overall, do have a higher alkaline then humans. Of course, wild animal#s and herbivore#s pH would be different because they eat differently. I learned that animals don#t really have a cleaner mouth than humans (human#s brush their teeth everyday). I learned animals don#t have a special chemical in their saliva to help heal their wounds, they only lick their wounds to clean them.</p>	
Summary Statement I think the pH balance of an animal is higher than a human#s throughout the day.	
Help Received My mom checked grammer and board. She also drove me to the veterinarian & dentist offices so I could interview them. My parents supervised me when I tested my animals.	