



**CALIFORNIA STATE SCIENCE FAIR
2011 PROJECT SUMMARY**

Name(s) Anastasia M. Every	Project Number 31573
Project Title Monitoring of Glucose Levels to Prevent Equine Laminitis	
Abstract Objectives/Goals To help prevent Laminitis cases and raise awareness to Equine owners, by testing Equine's glucose levels. Laminitis is a deadly disease affecting Equine due to high amounts of consumed sugar. By testing Equine glucose levels before and after popular treats are fed, I am trying to see if treats that most people would feed on a regular basis has enough sugar content to affect the Equine's glucose levels. Methods/Materials Blood samples from four Equine of different ages, carrots, apples, Altoids, Carrot and Spice store brand Equine treats, glucose testing meter, and small needles were used during my project. I gathered the four Equines and took some blood samples by pricking each of their shoulders with one small needle. I then collected the blood on a glucose testing meter strip. After the glucose amount in each Equine's blood was recorded, I fed them each one type of treat. Then, after twenty minutes, I gathered more blood samples to see if there was any change in the glucose amounts in each Equine's blood. Each day, I repeated until all popular treats were used. Results Glucose levels were collected from all four of the Equine. Results before and after each treat was giving were recorded as well. Conclusions/Discussion I was able to find the change in Equine glucose levels before and after certain amounts of sugar were consumed. However, my hypothesis that Altoids would raise the glucose levels the most in Equine was rejected. Most of the Equine's glucose levels were lowered even when sugar was added to their systems. I believe this is due to the fact that we tested their glucose levels after their insulin had time to react to the large sugar amounts. If I was to redo or add on to this project, I would take the blood samples at earlier and later times such as ten minutes and thirty minutes.	
Summary Statement This project is used to raise awareness about Equine Laminitis by testing glucose levels to see if regularly fed treats have any affect on Equine glucose levels..	
Help Received Mother assisted in handling of all Equine, photo documentation, and layout of project board.	