



**CALIFORNIA STATE SCIENCE FAIR
2010 PROJECT SUMMARY**

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Project Title Ferrum Pectus Pectoris	
Abstract Objectives/Goals Does age have an effect on a horses heart rate during recovery after excercise? I hypothesize that the older the horse the longer the recovery time, and the younger the horse the less amount of recovery time is needed. Each horse is in age groups, the groups are 1-5, 6-10, 11-15, and 16-20 years old. Methods/Materials Round pen, stopwatch, 9 horses, stethoscope, height/weight tape. Take horses resting heart rate, weight, height, and age. Work horse to the right for 3 minutes and to the left for 3 minutes. Stop the horse and take heart rate. Continue taking the heart rate for every minute for the next five minutes. Repeat this on all 9 horses three times each. Results Group 1-5 years average resting heart rate:33 BPM+/-1BPM average for minute 1:66BPM+/-1BPM Average for minute 2:61BPM+/-1BPM Average for minute 3:52BPM+/-1BPM Average for minute 4:46BPM+/-1BPM Average for minute 5:37BPM+/-1Bpm Group 6-10 years average resting heart rate:36BPM+/-1BPM Average for minute 1:89BPM+/-1BPM Average for minute 2:76BPM+/-1BPM Average for minute 3:70BPM+/-1BPM Average for minute 4:60Bpm+/-1BPM Average for minute 5:56BPM+/-1Bpm Group 11-15 years average resting heart rate:36BPM+/-1BPM Average for minute 1:67BPM+/-1BPM Average for minute 2:45BPM+/-1BPM Average for minute 3:51+/-1BPM Average for minute 4:46BPM+/-1BPM Average for minute 5:39+/-1BPM Group 16-20 years average resting heart rate:33BPM+/-1BPM Average for minute 1:64BPM+/-1BPM Average for minute 2:59BPM+/-1BPM Average for minute 3:52BPM+/-1BPM Average for minute 4:44BPM+/-1BPM Average for minute 5:33BPM+/- 1BPM Conclusions/Discussion My hypothesis was wrong, the older horses did not have a longer recovery time, and the younger horses did not have the shortes recovery time. The group of horses that were tested had around the same recovery time. Age does not affect a horses heart rate during recovey after excercise.	
Summary Statement Is there a correlation between the horses heart rate recovery and there age.	
Help Received Sister helped get the horses	