



**CALIFORNIA STATE SCIENCE FAIR
2015 PROJECT SUMMARY**

Name(s) Lillian R. Mitchell	Project Number S1220
Project Title Caffeine and Athletics	
Objectives/Goals The goal of my project was to test how caffeine effected athletic performance in strength, speed or hand-eye coordination and if the placebo effect appeared to have any hand in this. (The placebo effect was not used in the original project due to constraints on time/subject availability, but it will be tested in the re-making of the project before the State Science Fair.)	
Abstract	
Methods/Materials Method: Pre-Experiment: 1. Recruit test subjects. 2. Use measuring tape to mark off a length of 25 yards (75 feet), place a marker every 5 yards. This will be used in the 50 yard dash for the speed test and for the test of strength. Experiment: 1. Have test subject run 50 yard dash, using a stopwatch and notebook to record their time. 2. Have test subject throw a small tennis ball three times, record the average distance thrown in notebook. 3. Have test subject throw a tennis ball against a wall or other similar flat, upright surface with one hand and catch it with the other. Record the number of times they were able to do this in 30 seconds. Record score in notebook. 4. Have the subject drink 100mg of caffeine. (The subject will not be told if this drink is caffeinated or not) 5. Wait 45 minutes and repeat steps 1 - 3. 6. Have test subject come back the next day and give them an equal serving of decaf coffee. (The subject will not be told if this drink is caffeinated or not) 7. Repeat steps 1 - 3. 8. Repeat this procedure with the remaining test subjects.	
Results The results of my original project indicated that caffeine had little to no effect on athletic performance, and in one case, had a negative effect.	
Conclusions/Discussion In my original project my results strongly supported my hypothesis, which was that caffeine would have almost no effect on the athletic performance of my subjects.	
Summary Statement My project tested the effects of caffeine (and the placebo effect) on athletic performance.	
Help Received Friends and acquaintances agreed to act as my test subjects.	