



CALIFORNIA STATE SCIENCE FAIR
2011 PROJECT SUMMARY

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Project Title It's a Rat Race: The Effect of 5-Hour Energy Drink	
Objectives/Goals Our experiment investigates the impact of an energy drink that claims there is no crash. We decided to test the claims of 5-Hour Energy Drink.	Abstract
Methods/Materials Materials: 1. 3 mice (1 control mouse, 2 experimental mice); 2. Wooden maze; 3. Timer; 4. Eye dropper; 5. Treat for end of maze (to encourage them to go forward); 6. A bottle of 5-hour energy drink; 7. Gate to prevent backwards movement. Procedure **** WARNING MICE WILL NOT BE FED BEFORE THEY RUN (so that they go for the treat) **** 1. Give each mouse .1mL of 5-hour energy via an eyedropper in their mouth. Wait 10 min between each new mouse. 2. Put 5 unsalted sunflower seeds at the end of maze to give the mice a reason to run. 3. Put a mouse in the maze at start. 4. Put plexi-glass cover on top of maze in case of mice jumping or climbing out of maze. 5. Time mice as they run through maze. 6. Record each time. 7. Test mouse every hour for 6 hours (the mice will rotate every 10 minutes). 8. Do steps 1-5 for each mouse. 9. Repeat steps 1-6 every testing. Control Mouse! ****WARNING MICE WILL NOT BE FED BEFORE THEY RUN **** 1. Put treat at the end of maze to give the mice a reason to run. 2. Put a mouse in the maze at start. 3. Time mouse as they run through maze. 4. Record each time. 5. Test mouse every hour for 6 hours. 6. Do steps 1-5 for each mouse. 7. Repeat steps 1-6 every testing.	
Results We discovered that although the mice had energy when in the cage, their times decreased when set into the maze and told to run. As the test wore on they fell asleep in the cage. Sometimes they would refuse to move and just sit in a corner for up to five minutes when we stopped the test. Our test mouse, Satan, ran an average of 01:33.6. Our two test mice were Tequila and Jersey Mike. Tequila had the average of 00:41.0. Jersey Mike had the average of 01:00.4.	
Conclusions/Discussion From our results we have concluded that energy drink did not help them perform better when running in the maze. All the energy drink did was made them overactive when in the cage, until exhausted, they fell	
Summary Statement We tested the validity of the no crash claim of 5-hour Energy Drink.	
Help Received Mother looked over report; Father helped build maze	