



**CALIFORNIA STATE SCIENCE FAIR
2012 PROJECT SUMMARY**

Name(s) Neil J. Patel	Project Number J0419
Project Title Off Balance	
Abstract Objectives/Goals My project was to determine if music has an effect on the loss of equilibrium and can cause dizziness. If so what music will cause the largest loss of equilibrium and make you the dizziest? My Hypothesis is that heavy metal music will cause the largest loss in equilibrium and make you the dizziest. Methods/Materials Four subjects were chosen at age groups 9 through 42. They each spun in a circle at 1 revolution per second without music, and with their eyes open for 1 minute. The subjects then tried to follow a pencil with their eyes that was moved side to side across their plane of sight and counted the nystagmus. This was a control test. The same process was repeated for the heavy metal, classical, and country music. All subjects listened to the music at full volume. The whole experiment was performed twice to ensure accurate results. Results The heavy metal tests proved that heavy metal music causes the largest loss in equilibrium and makes you the dizziest. The other types of music had a low consistent count of nystagmus. Conclusions/Discussion I conclude that music can cause a loss in your equilibrium. Heavy metal music will have the most drastic effect and the country and classical music will not effect you as much.	
Summary Statement Music can cause a loss in equilibrium and can have a potentially drastic effect on your vestibular system.	
Help Received Mother and sister helped me with the exhibit decoration.	