CALIFORNIA STATE SCIENCE FAIR
2010 PROJECT SUMMARY

Name(s)
Alexa J. Wheelan

Project Number
J1324

Project Title
Off Balance

Abstract

Objectives/Goals
To evaluate how various sounds, i.e. music, affect a human's resistance to becoming dizzy when spun around, and what sounds result in the quickest and longest recoveries from dizziness.

Methods/Materials
Subjects will spin around for 30 seconds with no sound. I will check and record the duration of the nystagmus (the horizontal twitching of the eye caused by becoming dizzy). When they recover subjects will repeat this process for each sound.

Materials:
A stop watch, human test subjects, and a fully charged Ipod that has a variety of different sounds.

Results
The genre "Synth." caused the nystagmus to linger for the longest period of time. The Humpback Whale calls and no sounds at all caused the nystagmus to linger for the shortest amount of time.

Conclusions/Discussion
My hypothesis that "Synth." would cause the nystagmus to linger the longest was proven correct. I believe that this was caused by the constantly changing beats, tones, and rhythms that are in "Synth.". It may be hard for your brain to track these sounds while also tracking your movements.

Summary Statement
To evaluate if and how various sounds affect a human's resistance to becoming dizzy.

Help Received
My dad helped me put songs on my Ipod.