



**CALIFORNIA STATE SCIENCE FAIR
2010 PROJECT SUMMARY**

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Project Title What Did You Say? iPods Cause Hearing Loss! A Study to Find if iPods Cause Hearing Loss	
Abstract Objectives/Goals To find out how much damage iPods can cause if listened frequently with a high volume. Methods/Materials To conduct this experiment an iPod, headphones, and 50 8th graders, 50 high school students, and 50 adults were used. The variables are those who listen to their iPods with >60% volume or >10 hours weekly and for >1 year. The controls are those who did not qualify for being variables. Each frequency was played and recorded if it was heard. Results It was observed that all the variables from 8th grade, high school, and adult groups could hear fewer tones than their control group. The range of hearing for any variable compared to its control had major differences. The 8th grade control vs. variable difference was 27%. The high school difference was 30% and the adult difference was 28%. Conclusions/Discussion The experimental results suggest that there is a remarkable difference in the hearing ability between variable and control groups. The hearing variation is very significant, especially in high frequencies. Throughout all the frequencies and age groups, there is a 28% hearing deficiency in the variable groups which proves that iPods can cause hearing loss if listened frequently.	
Summary Statement A study to find if iPods cause hearing loss.	
Help Received Parents driving me and professionals guiding me.	