



**CALIFORNIA STATE SCIENCE FAIR
2008 PROJECT SUMMARY**

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Project Title
PLAX vs. Listerine: Which Kills the Most Bacteria?

Abstract

Objectives/Goals
Abstract
The purpose of my project was to determine what two types of mouthwash would kill the most bacteria. This experiment involved testing three people to determine which had the most plaque after rinsing with each of the two mouthwashes. To do this I took samples by swabbing Silvia from the tongue of these people before and after. Then I swabbed the samples in a 3x3 pattern onto a blood agar Petri dish. Each test was conducted twice with each of the mouthwashes and once with out, totaling six tests for each person. The results of my experiments showed that Plax mouthwash reduced bacteria growth best. My original hypothesis was that Listerine would reduce bacteria growth best. The information gained from this project could be used by mothers concerned about the care of their children.

Methods/Materials
Procedures: 1. I got the cotton swabs ; 2. I got the three people. 3. I got them to swab their tongue. 4. Then swab the agar 3x3 formation. 5. Then I got the mouthwash. 6. After that, I pour one fl oz in each one cup. 7. Then, they swigged it for 30 second. 8. Next, I got them to swabbed tongue. 9. The swab it on the agar. 10. After that, I wait one hour to get them to swab their mouth again. 11. I repeated it again for Listerine

Materials List: Blood agar plates, Cotton swabs, Plax mouthwash, Listerine mouthwash, Dixie cups.

Results
Experimental Results
The purpose of my project was to determine what two different types of mouthwash Plax or Listerine kills the most bacteria in the mouth. The results of my experiment did not support my that hypothesis Listerine would kill the most bacteria

Conclusions/Discussion
Conclusion
As I stated in my hypothesis, I believed the Listerine would kill that most bacteria. The experimental data didn't support my hypothesis, indicating that Plax killed the most bacteria. The reason I got my results is that Plax is more acidic than Listerine.

Summary Statement
The purpose of my project was to determine what two types of mouthwash would kill the most bacteria.

Help Received
First, Mr. Scott for all the hours he has spent helping me put this project together. My mom for helping with me tests, and my brother for helping me with my tests.