



**CALIFORNIA STATE SCIENCE FAIR
2002 PROJECT SUMMARY**

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| Name(s) Krystine M. Gonzalez | Project Number J1310 |
| Project Title Mouth Funk? | |
| <p style="text-align: center;">Abstract</p> <p>Objectives/Goals My problem was which mouth wash will kill streptococcus salivarius. My hypothesis was that scope mouthwash would kill the most streptococcus salivarius. Scope has an active ingredient called cetylpyridinium chloride anti-plaque agent with bactericidal activity. This is why I think scope will kill the most streptococcus salivarius.</p> <p>Methods/Materials I inoculated streptococcus salivarius on to sterile petri dish with nutrient agar. Dipped sterile blank disk into one of the six mouthwashes I am testing. Put blank sterile disk containing mouthwash on petri dish (two sterile disks per dish). Then I incubated dishes for 24 hours at 34 degrees celsius.</p> <p>Results The best working mouthwash was mountain breeze reducing a total average of .25 centimeters of streptococcus salivarius. Then came scope reducing .24 centimeters, rite aid reducing .15 centimeters, equate reducing .09 centimeters, and last colgate phosflur and listerine reducing .05 centimeters average.</p> <p>Conclusions/Discussion Out of the six mouthwashes that were tested the largest zone of inhibition was mountain breeze, second was scope, third was rite aid, fourth was equate, listerine and colgate phosflur were tied for fifth. My hypothesis was wrong, mountain breeze has a larger zone of inhibition because of more effective ingredients. Mountain breeze has two active ingredients one is peroxide and the other is cetylpyridinium chloride which are both antiplaque agents with bactericidal. This is why mountain breeze was the most effective mouthwash by killing streptococcus salivarius.</p> | |
| Summary Statement This project is about which mouthwash is most effective against streptococcus salivarius (a floral mouth bacteria). | |
| Help Received I received help from Mr. Ed McCarthy whom watched over me while conducting my experiment. Also my mom and grandmom for helping me build my board. | |