



**CALIFORNIA STATE SCIENCE FAIR
2016 PROJECT SUMMARY**

Name(s) Maya A. Johnson	Project Number J1911
Project Title Which Mouthwash Is More Effective in Killing Oral Bacteria?	
Abstract Objectives/Goals The objective of the experiment is to determine which types of mouthwashes are the most effective in killing oral bacteria. Methods/Materials Petri dishes, Three mouthwashes: Listerine, Crest and Tom's of Maine, Camera. Measured the amount of bacteria grown before and after using mouthwash. Results Three mouthwashes were used to determine which would kill the most oral bacteria. The Xylitol mouthwash killed the most bacteria at a 84% reduction, then the alcohol based mouthwash at 77% reduction and lastly the chemical substitute mouthwash at a 145% growth. Conclusions/Discussion I performed several trials and contrary to what I expected, the alcohol based mouthwash did not perform the best. Xylitol was the most effective in killing oral bacteria. After observing my results, I did more investigation about xylitol and discovered it is used in sugar-free candies and toothpaste.	
Summary Statement I investigated which mouthwash is the most effective in killing oral bacteria and observed that mouthwash with xylitol kill the most bacteria.	
Help Received My father helped me with the data analysis.	