



**CALIFORNIA STATE SCIENCE FAIR
2016 PROJECT SUMMARY**

Name(s) Amira J. Maldonado	Project Number J1511
Project Title Investigating the Effects of Various Cleaning Methods on Bacteria Growth on Cutting Boards	
Abstract Objectives/Goals The objective of this study is to determine the effects of various cleaning methods on bacteria growth on cutting boards. Methods/Materials 3 cutting boards (plastic, antibacterial, wooden), 90 petri dishes, 100 sterilized swabs, bleach, dish soap, 9 pieces of raw chicken breast, water, large box, disposable plastic gloves, and face masks. Chicken swab before, wash board, swab after cleaning, sterilize board, and dried board completely. Results The best board to use is plastic it resulted in less bacteria growth. The most effective cleaning solution is bleach, it is the most effective cleaner on killing bacteria growth. Conclusions/Discussion In this project I conducted multiple trials to determine which cleaner was the most effective on bacteria growth on cutting boards. It is concluded that plastic cutting boards have the least bacteria growth. Where as bleach is the most effective cleaning solution on preventing bacteria growth. This study would be beneficial for food prep industries kitchens to provide what would be the best products to use for cleaning.	
Summary Statement I showed that plastic cutting boards have less bacteria growth and bleach is the most effective cleaning solution to use on cutting boards.	
Help Received Parents assisted in prepping materials for experiment and preparation of board. My teacher assisted in initial steps for project.	