

# Abstract

**Project Title: Squeezing Out the Competition**

**Project ID: 556**

## Abstract

A brief explanation of your project. Enables judges to receive a base understanding of your project and work.

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My problem is to figure out the best way to clean disgusting kitchen sponges. Every household has a kitchen sponge, and it's essential to know how to clean them, especially since they clean the dishes you eat off of. I tested the common methods of microwaving, bleaching, and dishwashing. My hypothesis was that bleaching would be the best choice, because it's often used in hospitals because it's a strong chemical. For the experiment, I soaked three sponges in a solution of common foods and things in the sinks three times over the course of three days, (once a day), swabbing three controls beforehand and three after the soakings. Then, I took them out and did one of the cleaning methods on each one and swabbed. After 10 days of incubation, I recorded data. Microwaving won with an averaged 30.4% bacterial decrease, with dishwashing in second with an averaged 29.4% bacterial decrease, and bleaching last with an averaged 19.3 % bacterial decrease. So, microwaving would be the best choice,(and fortunately, probably the most convenient choice), for cleaning sponges, and my hypothesis was proven wrong.

### Items to Include:

**Introduction:** Why did you do this project and why is it important? How will this effect people and why is it needed. Inspire the reader to continue learning more about your research and read your report.

**Problem Statement and Engineering Goal / Hypothesis:** What is the problem you were solving and what was your engineering goal or hypothesis.

**Procedures:** How did you solve the problem and or test your hypothesis. Don't go into details, provide a broad, conceptual view of what you did. For engineering, what was your design criteria.

**Results:** What was the outcome? Use your data and numbers to describe your result.

**Conclusion:** Was your hypothesis supported or the engineering goal met?