

CALIFORNIA STATE SCIENCE FAIR 2008 PROJECT SUMMARY

Name(s)

Jennifer K. Hakala

Project Number

J1809

Project Title

Does Anti-bacterial Soap Kill More Bacteria than Non-bacterial Soap?

Abstract

Objectives/Goals

The objective of this investigation was to see which soap left the least amount of bacteria using specific brands listed under materials below. My hypothesis was the Softsoap Non Bacterial soap would kill more bacteria.

Methods/Materials

People washed their hands with the following soap brands: Dial Non Bacterial, Dial Anti Bacterial, Softsoap Non Bacterial, and Softsoap Anti Baterial Soap. Additionally, bacteria on an unwashed hand was measured. The bacteria left on their hands was transported to a Petri Dish containing a formula which fed bacteria. Growth of bacterial was measured daily over a four day period, with the amount of bacteria recorded daily. A percentage was calculated based upon the area of bacteria divided by total area of the Petri Dish. A higher percentage indicated a greater amount of bacteria.

Results

The results of the data collected through observations showed that the brand Softsoap Non Bacterial soap left the least amount of bacteria, while Dial Anti Bacterial soap left the greatest amount of bacteria.

Conclusions/Discussion

The results supported my hypothesis and lets me know which soap leaves hands the cleanest with the least amount of bacteria remaining.

Summary Statement

Is anti bacterial soap more effective in killing bacteria than non bacterial soap?

Help Received

5 school friends washed their hands with the materials, My science teacher assisted with Petri Dishes.