

CALIFORNIA STATE SCIENCE FAIR 2005 PROJECT SUMMARY

Name(s)

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Project Number

J1319

Project Title

Which Method of Handwashing Removes the Most Bacteria?

Abstract

Objectives/Goals

To determine which method of handwashing, out of the three used, removes the most bacteria from your hands.

Methods/Materials

The three methods used were washing with plain water, soap & water, and hand sanitizer. I used 10 test subjects and had each of them wash their hands with each method. After washing I had them press their fingers into petri dishes, then monitored the growth in the petri dishes over a period of several days. I counted the bacteria colonies from each petri dish of each of the methods and came up with the average for each method.

Results

The soap & water method had the least amount of growth overall.

Conclusions/Discussion

I thought that the hand sanitizer would have the least growth, but it turned out to be the soap & water. I think that the length of time rubbing the hands together and the fact that you rinse away whatever was loosened by the rubbing played a big factor.

Summary Statement

My project is about finding the best way to wash your hands so that you effectively remove bacteria from them.

Help Received

Mother took some pictures; teacher got petri dishes; neighbors were test subjects