CALIFORNIA SCIENCE & ENGINEERING FAIR
2019 PROJECT SUMMARY

Name(s)

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Project Number

J1910

Project Title

The Effectiveness of Different Brands of Deodorants

Abstract

Objectives

Testing the effectiveness of different types of commercially available deodorants to determine which one works the best.

Methods

Petri dishes with nutrient agar, E. Coli sample, distilled water, syringe, four different brands of deodorants (Arm and Hammer, Sprouts, Schmidt's, and Native), heating pad, and a camera for pictures.

Results

Various deodorants were given 6 days to kill active cultures of E. Coli living in nutrient agar petri dishes. E. Coli was chosen to mimic the naturally occurring bacteria in human armpits. Data was collected every other day and pictures were taken. In order to decide which deodorant worked the best, a rating system was applied (1-10, 1 being barely any bacteria and 10 being the whole dish was covered in bacteria).

Conclusions

Surprisingly, the control petri dish with no deodorant had the least amount of bacteria and the best rating, but, out of the deodorants, Sprouts Mineral Salt was the most effective in killing the E. Coli bacteria and hence would be the most effective in killing bacteria in the human armpit.

Summary Statement

After testing different brands of deodorants, I found that the control worked the best and Sprout's Mineral Salt worked the best among the deodorants.

Help Received

I received help making the nutrient agar petri dishes and starting the E. Coli cultures.