

CALIFORNIA STATE SCIENCE FAIR 2010 PROJECT SUMMARY

Name(s)

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Project Number

J2105

Project Title

Dog's Drool: Is It Cool? Dog Saliva vs. Neosporin in Killing Bacteria

Abstract

Objectives/Goals

My project was to determine if dog saliva kills bacteria and to compare dog saliva to Neosporin in this process.

Methods/Materials

Petri dishes, agar, latex gloves, sterile cotton swabs, sterile distilled water, human saliva, dog saliva, and Neosporin were gathered. One petri dish was used as a negative control and contained no bacteria to show the agar was not contaminated. One petri dish was used as a positive control which only contained a swabbing of human saliva ("bacteria"). Two petri dishes contained the swabbing of human saliva ("bacteria") with the additional swabbing of dog saliva placed in the center of the dishes. Two other petri dishes contained the swabbing of human saliva ("bacteria") with the additional swabbing of Neosporin placed in the center of the dishes. The quantity/percentage of bacteria growing in each dish for five days was observed and documented.

Results

Dog saliva slowed down the quantity/growth of bacteria for a few days but still eventually grew bacteria. Neosporin not only prevented the growth of bacteria completely in the area applied, but it had a protective ring around it preventing the growth of bacteria, as well.

Conclusions/Discussion

Dog saliva may perhaps help slow the growth of bacteria for a little while, but it also may be adding its own bacteria when applied. Neosporin is the better medicine for helping kill bacteria. Neosporin not only proved to kill the bacteria but kept bacteria from growing at all.

Summary Statement

This project was to determine if dog saliva kills bacteria and to compare dog saliva to Neosporin in this process.

Help Received

Mom assisted in typing the report, taking pictures, transporting me, and giving suggestions for the board display. Lorrie Burnham, Microbiology lab technician at Valley College, provided replacement agar, petri dishes, and sterile water for second procedure attempt.