

CALIFORNIA STATE SCIENCE FAIR 2009 PROJECT SUMMARY

Name(s)

Mollye L. Zahler

Project Number

J1733

Project Title

It's a Dog's Mouth

Abstract

Objectives/Goals

The objective of my project was to determine if a dog's mouth is really cleaner than a human's. I predict that a human#s mouth will be cleaner because dogs eat gross things.

Methods/Materials

Samples from the mouths of seven dogs and seven humans were obtained by swabbing and spread on petri dishes containing LB media. The dishes were incubated at 37°C for 24 hours, then analyzed. I counted the number of colonies and the number of different morphologies from all the plates to determine which species had the most microorganisms living in their mouths.

Results

The average dog had 4.9 different types of culturable, visibly different microorganisms that could be grown on LB media at 37° C while humans had only an average of 3.7 different types of microorganisms in their mouths. Dogs also had more total microorganisms growing on their dishes with an average of 993 colonies and humans having an average of 502 colonies.

Conclusions/Discussion

Dogs have more total microorganisms and more different types of microorganisms in their mouths than humans, disproving the myth that a dog's mouth is cleaner than a human's.

Summary Statement

My project was testing the myth that a dog's mouth is cleaner than a human's.

Help Received

My dad showed me how to make growth media in his lab at the University of California, Santa Cruz.