CALIFORNIA SCIENCE & ENGINEERING FAIR
2019 PROJECT SUMMARY

Name(s)

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Project Number

J1602

Project Title

Honey, I've Found a Solution! The Antibacterial Properties of Manuka Honey against S. epidermidis and S. salivarius

Abstract

Objectives

The goal of this experiment is to determine whether or not Manuka honey is comparable to common modern medicines as an antibacterial.

Methods

Tested whether or not Manuka honey could match up to Neosporin and ampicillin by inoculating agar dishes with either Staph. Epidermidis or Strep. Salivarius. Measured zone of clearance around antibacterial to determine comparability.

Results

Manuka honey is effective at killing Staph. Epidermidis bacteria, but not Strep. Salivarius. Neosporin and ampicillin both yielded no results, as proven by over 90 total trials. Manuka honey was more effective at killing bacteria than both modern medicines.

Conclusions

Manuka honey killed the external bacteria, indicating that Manuka honey can be an effective alternative to topical medications for bacteria found externally.

Summary Statement

By testing it against two types of bacteria, I found that Manuka honey is an effective alternative to Neosporin because it killed bacteria that is found externally.

Help Received

I was advised by my science teacher and a high school mentor on how to stay safe during the experiment as well as how to fine-tune my procedure to make it more realistic.