CALIFORNIA STATE SCIENCE FAIR
2002 PROJECT SUMMARY

Name(s)
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Project Number
S1324

Project Title
Danger: Antibacterial Resistant Bacteria on the Loose!

Abstract

Objectives/Goals
To produce antibacterial or antibiotic resistant bacteria. And to count the number of 'generations' that this takes.

Methods/Materials
Firstly, I swabbed the back of my mouth/throat with a sterile swab, to gather a sample, which I then transferred to a blood agar plate. Then I placed a disk soaked in Amoxicillin in the center of the plate. Then I sealed the plate and placed it in the incubator. Next I repeated this process but soaked the disk in antibacterial soap. After 48 hours, the bacteria had grown and there was a ring that was bacteria free around the disk. Then I took a sterile swab soaked in distilled water and transferred the bacteria on the outskirts of the ring to a new plate, sealed it and put it in the incubator. I repeated this process until there was no longer a zone of inhibition or the antibiotic killed the bacteria.

Results
The amoxicillin killed the bacteria. However the bacteria on the plate with the antibacterial soap became resistant after three 'generations'. The other plate with antibacterial soap bacame resistant after six 'generations'.

Conclusions/Discussion
This experiment i have proven that the number of 'genrations' varies in which it takes to produce resistant bacteria. Because it is possible to produce resistant bacteria it is very important that antibiotivc and antibacterial soap be used correctly by society.

Summary Statement
Producing bacteria that is resistant to antibacterial soap.

Help Received
none