

CALIFORNIA STATE SCIENCE FAIR 2004 PROJECT SUMMARY

Name(s)

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Project Number

J1327

Project Title

Effects of Different External Factors in Changing the Effectiveness of **Various Antibiotics**

Objectives/Goals

Abstract

I wanted to see medications reaction to a household substance which was mixed with bacteria. **Methods/Materials**

I used 5 different medications, Duricef, Zithromax, Augmentin, Omnicef and Cifzil. Then mixed it with 4 different things you would find in your kitchen, salt, coffee, soap, wine. Next I put the household substance medication mixture on a disk (hole punched coffee filter) then the disk was placed into a petri dish infested with bacillus substillus (bacteria) then I recorded for two days.

Results

Salt .9 Wine 1.108 Soap .97 Control 1.016 Coffee .95

Those are the average of each household objects mixed with 5 different medications and bacteria. **Conclusions/Discussion**

After completing my project I have found that wine is best at preventing bacteria growing while mixed with a medication. This does not increase the effectiveness of the drug though! The least effective household substance was salt.

Summary Statement

I wanted to see what would happen to medication if it was mixed with household substances, then mixed with bacteria

Help Received

Mr. Whitington (teacher) provided materials, Mother helped type, Mr. Case (teacher) provided lab space, Dr. Cohen provided auto claving machine.