CALIFORNIA STATE SCIENCE FAIR
2002 PROJECT SUMMARY

Name(s)
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Project Number
J1316

Project Title
Would You Like Sugar with That?

Abstract

Objectives/Goals
My objective was to learn if a high concentration of dextrose solution is detrimental to the growth of the bacteria Serratia Marcescens.

Methods/Materials
Twenty sterile agar filled petri dishes were swabbed with the Serratia Marcescens bacteria. Then sterile disks were saturated in zero to twenty grams of the dextrose solution. The disks were then placed on the bacteria. Next, the bacteria was incubated at thirty-seven degrees Celsius for two days. The results were studied and noted. A dillution of 1/10mm followed this, which was plated in sterile agar filled petri dishes. Lastly, the dishes were incubated for two days at thirty-seven degrees Celsius. The results were studied and noted.

Results
The control and the bacteria with five to fifteen grams dextrose solution were uncountable. The bacteria with twenty grams dextrose solution grew about 300 colonies, which was a lot less than the others.

Conclusions/Discussion
The results supported my hypothesis in saying that the highest concentration of dextrose is detrimental to the growth of the Serratia Marcescens.

Summary Statement
My project researches and test to see how different concentrations of dextrose solution effect the growth of the bacteria Serratia Marcescens.

Help Received
Mr. McCarthy helped me to structure my project and supervised my experiment. He also let me use his incubator to incubate the bacteria.