



**CALIFORNIA STATE SCIENCE FAIR  
2002 PROJECT SUMMARY**

<b>Name(s)</b> <b>Lauren E. Ruh</b>	<b>Project Number</b>  <p align="right">22385</p>
<b>Project Title</b> <b>Comparing Vegetable Effects on Growth of Bacteria</b>	
<p align="center"><b>Abstract</b></p> <p><b>Objectives/Goals</b>          The objective is determine how a vegetable solution will effect the growth rate of bacteria. Will tx vegetables inhibit or promote growth of Bacillus. (controlled bacteria) and saliva (unknown bacteria)</p> <p><b>Methods/Materials</b>          Make a liquid vegetable solution for each vegetable : brussell sprouts, celery, parsley, lettuce, cabbage, mint. Swab petri dish with solution. Make Bacillus broth. Place filter paper into broth and place on petri dish. 12 trials for each vegetable. Record growth rings of bacteria. Repeat steps for saliva broth.</p> <p><b>Results</b>          The parsley inhibited growth of bacteria. Cabbage had the largest ring of growth. Other vegetables averaged between 1- 2.5 cm ring of growth.          Results were the same for both the controlled bacteria(Bacillus) and the saliva.</p> <p><b>Conclusions/Discussion</b>          My conclusion shows that certain vegetables can help prevent growth of bacteria. Eating these vegetables can help prevent bacterial growth in your mouth. Thus helping to prevent tooth decay.</p>	
<b>Summary Statement</b> Determining how vegetables help promote or inhibit bacterial growth.	
<b>Help Received</b> Mother helped make solutions, gather materials, put board together.      Teacher helped with written assignments, how to do project.	