



**CALIFORNIA STATE SCIENCE FAIR
2012 PROJECT SUMMARY**

Name(s) Hayden M. Costa	Project Number J2007
Project Title You're Drinking That?	
<p style="text-align: center;">Abstract</p> <p>Objectives/Goals The purpose of the experiment is to find how much bacteria is in fast food restaurant water and ice.</p> <p>Methods/Materials All samples are melted and materials gathered. The area is sanitized with alcohol base cleaner. Materials needed are: coliform petrifilm plates, standard petrifilm plates, spreader for the plates, dilution water, electronic pipetor, sterile tips (for pipetor), colony counter, and a tally counter. The coliform and standard plate (SPC) petrifilm is labeled according to dilution 1:1 and 1:10. A spreader is used to spread the sample. Time is recorded and plated for both coliform and SPC. Plates are placed into an incubator. An oven light was used for this experiment as the incubator. The coliform for plates were read at 24 hours +/- 2 hours. Coliform plates were taken out of the oven incubator and the colony counter was used along with the tally counter. The results were recorded. The SPC plates were read at 24 hours +/- 2 hours. The coliform plates were taken out of the oven incubator. The results were recorded</p> <p>Results Samples of water and ice were taken from dine in and drive thru of 3 fast food restaurants labeled A, B, and C. Restaurants A and C had higher bacteria levels in the water and ice in the drive thru than dine in. However, restaurant B had higher bacteria levels dine-in and drive-thru. Overall, restaurant B had the greatest amount of bacteria in both water and ice regardless if it came from dine-in or drive-thru</p> <p>Conclusions/Discussion The conclusion proves that the hypothesis was incorrect. The drive-thru restaurant water and ice will be cleaner than getting water and ice from the dine-in restaurant.</p>	
Summary Statement This experiment is to find how much bacteria is in fast food restaurant water and in ice from drive-thru and dine in.	
Help Received Mother helped with my board; Lab equipment and supplies from lab at Land O' Lakes, Tulare, CA; 7th Grade Science teacher helped with graphs.	