



**CALIFORNIA STATE SCIENCE FAIR  
2011 PROJECT SUMMARY**

<b>Name(s)</b> <b>Malinali X. Martinez</b>	<b>Project Number</b>  31849
<b>Project Title</b> <b>Bacteria Invades Fast Food Restaurants</b>	
<b>Objectives/Goals</b> Many people eat out in fast food restaurants, but have you ever wondered what you get in that tray or after you washed your hands? The purpose of this project was to determine the cleanliness of fast food restaurant trays and their bathroom faucet handles. <b>Abstract</b> <b>Methods/Materials</b> Four fast food restaurants that had trays were picked and each location (trays and bathroom faucet handles) was swabbed on three different dates. Then the specimens were transferred to Petri dishes that were put into an incubator. After one week in the incubator, bacteria colonies were counted to see the percentage of bacteria that covered the Petri dishes. <b>Results</b> Results show that overall bathroom faucet handles were more contaminated than restaurant trays. Overall, samples swabbed from restaurant faucet handles had a mean of 18.6% of the Petri dish covered by bacteria colonies compared with a mean of 16% of the plate covered when samples were taken from restaurant trays. <b>Conclusions/Discussion</b> After reviewing my results, I noticed no consistent pattern in the data#some restaurants had higher amounts in bacteria on the faucet handles and others had more bacteria on the trays. In the future it would be interesting to repeat this same experiment at different branches at the same restaurants to see if the results are consistent with my findings.	
<b>Summary Statement</b> My project is to determine how much bacteria were found on trays and bathroom faucet handles in selected grade A restaurants.	
<b>Help Received</b> Teacher helped me chart my findings and showed me the procedure on how to collect my data.	