



**CALIFORNIA STATE SCIENCE FAIR  
2008 PROJECT SUMMARY**

<b>Name(s)</b> Avneesh K. Sharma	<b>Project Number</b> <b>J1432</b>
<b>Project Title</b> <b>Do Serving Dishes in Restaurants Carry Bacteria?</b>	
<b>Abstract</b> <b>Objectives/Goals</b> To determine whether dishes on which food is served in restaurants carry bacteria which can cause disease. <b>Methods/Materials</b> Empty serving dishes from five restaurants were swabbed when they were first brought to the table and re-swabbed after cleaning with an alcohol wipe. The re-swabbed dishes cleaned with the alcohol wipe served as the control group. All the swabs were plated on separate Petri dishes containing agar and placed in an incubator at 37 degrees Celsius. The Petri dishes were examined for bacterial growth after 24 hours. Subcultures were then set up and incubated for 24 hours at 37 degrees Celsius. The Petri dishes were re-examined for bacterial growth after 48 hours. Bacteria were identified by using Gram Stain, catalase test, latex coagulation test and indole test. <b>Results</b> Of the five restaurants tested, dishes from one restaurant did not grow any bacteria; dishes from two restaurants grew one type of bacteria; dishes from one restaurant grew two types of bacteria; and dishes from one restaurant grew five types of bacteria. No bacterial growth was found on the control group of dishes. <b>Conclusions/Discussion</b> Many people get sick after eating in restaurants. The Center for Disease Control estimates that millions of cases of food poisoning occur in the U.S. every year. The Department of Environmental Health tests food hygiene in restaurants, but does not test the cleanliness of dishes in which food is served to customers. This study shows that serving dishes in some restaurants carry pathogenic bacteria.	
<b>Summary Statement</b> The project is to determine whether serving dishes in restaurants carry pathogenic bacteria.	
<b>Help Received</b> Father helped collect samples from restaurants; project guide was Dr. Stephan Gregorian; lab work done with help from Samuel Jiminez in Placentia Linda Hospital; supervisor was Betty Robinson (Microbiologist); mother helped with display board.	