



**CALIFORNIA STATE SCIENCE FAIR
2005 PROJECT SUMMARY**

Name(s) Kalan Downen; Danielle Kenoyer	Project Number J1308
Project Title Which Soap Prevents Bacteria Growth Best?	
<p style="text-align: center;">Abstract</p> <p>Objectives/Goals The purpose of our project was to determine which soap worked best: Dove, Bath & Body, Soft-soap, or Dial. The information gained from our project could be used to help people in the hospital to keep their patients from getting sick. It could also be used by homeowners who desire a clean environment.</p> <p>Methods/Materials The experiment involved conducting two test runs with each of the four soaps. To perform the experiments we first prepared Petri dishes with a nutrient agar. After that, we used cotton swabs to collect bacteria from human hands. This was done by quickly sliding an uncontaminated swab across a hand, slightly opening the lid of the Petri dish, and swiping the swab across the agar one time. In the first test run the hands were unwashed. For the second test run the hands were washed before bacteria samples were taken.</p> <p>Results The results of our experiment did not support our hypothesis that Bath & Body would work best. Rather, Dial prevented bacteria growth best. The information gained from this project could be used to help people in the hospitals use the right soap so that they are less likely to get their patients sick again.</p> <p>Conclusions/Discussion The information gained from our project did not support our hypothesis, indicating that Dial worked best on preventing bacteria growth. We used our visual contact to verify the rate of change in bacteria growth. We learned that when using Dial soap you kill off most of the bacteria. We believe the reason for this is because the Dial soap had more disinfectant substances to kill off germs than the other soaps did, which allows it to kill off more bacteria than the other soaps did.</p>	
Summary Statement The purpose of our project was to determine which soap worked best: Dove, Bath & Body, Soft-soap, or Dial.	
Help Received Jay Kenoyer helped type, Mr. scott, Annett Downen, and Adam Kenoyer.	