



**CALIFORNIA STATE SCIENCE FAIR
2007 PROJECT SUMMARY**

Name(s) Kevin R. Kaufmann	Project Number J1817
Project Title Antibacterial Soap vs. Antibacterial Gel: Cause for Concern?	
Abstract Objectives/Goals The objective is to determine if antibacterial gel inhibits germ growth as effectively as antibacterial soap, even when the variables surrounding the growth of germs change. Methods/Materials Nutrient agars were prepared. A basketball containing bacteria from the hands of school children, (no children were used in experiments), was the source of germs. Germs were grown in the presence of antibacterial gel, soap and a neutral environment for bacteria. All environments include an incubated area. Results Antibacterial soap exhibited a minimal amount of growth. The antibacterial gel consistently grew bacteria in large amounts of colonies. The fluid friction applied method had no change of results in the bacterial growth in the antibacterial gel experiments. The control was not as heavy a growth of bacteria as the antibacterial gel. Conclusions/Discussion Antibacterial soap is more effective than antibacterial gel, even when friction is applied. Antibacterial gel and friction may have killed some bacteria picked up by the original swabbing, but growth of some type of bacteria can not be killed by gel alone. From these results, it is recommended to use an antibacterial soap.	
Summary Statement This project is to observe if antibacterial gel is as effective as antibacterial soap, or creating an antibacterial resistance in the bacteria domain.	
Help Received Used lab facilities at Center for Advanced Research and Technology (CART), Under the supervision of Constance Zeeb, Instructor; Forensic Research & Biotechnology, Photographs taken by mother, Diane M. Kaufmann	