



**CALIFORNIA STATE SCIENCE FAIR
2010 PROJECT SUMMARY**

Name(s) Siena M. Okomo	Project Number J2122
Project Title The Effectiveness of Various Medications at the Eradication of Bacteria	
<p style="text-align: center;">Abstract</p> <p>Objectives/Goals The objective of this experiment was to determine whether natural remedies or Western medication is more effective at the eradication of bacterial growth.</p> <p>Methods/Materials Forty Petri dishes were prepared with nutrient agar and inoculated with infected water. Paper disks were treated with four remedies: Bactine™, Calendula Gel, Bacitracin, and tea tree oil, two antiseptics and two antibiotics with one Western and one natural remedy per group respectively, and placed in the center of each Petri dish which then grew for seven days. The diameter of area without growth was measured and compared.</p> <p>Results This experiment had no decisive conclusion but Bactine, was more effective for antiseptics with a 1.4 mm diameter while Calendula Gel only had 0.3 mm. Bacitracin, the Western antibiotic did not work at all but tea tree oil was 0.8.</p> <p>Conclusions/Discussion The failure of the Western antibiotic may have been due to a bacterial resistance. To obtain a valid conclusion that could be applied to everyday life, all the products must show some type of eradication.</p>	
Summary Statement To compare the effectiveness of natural remedies to Western medication in the eradication of bacterial growth.	
Help Received N/A	