



**CALIFORNIA STATE SCIENCE FAIR
2002 PROJECT SUMMARY**

Name(s) Kelsey L. Capron	Project Number 22229
Project Title Natural Antibiotics vs. Pharmaceutical Antibiotics	
Abstract Objectives/Goals My objective was to learn if natural antibiotics or pharmaceutical antibiotics are more effective on slowing bacteria growth. Methods/Materials I cultured bacteria from my mouth, then measured and compared the zones of inhibition of natural and pharmaceutical antibiotics. I used 5 different natural antibiotics: Usnea, garlic, onion, white sage, and osha. I used 5 different pharmaceutical antibiotics: Ampicillin, erythromycin, neomycin, streptomycin, tetracycline, and kanamycin. Results Pharmaceutical antibiotics worked more consistently than natural antibiotics, however, garlic averaged the widest zones of inhibition. Although garlic averaged the widest zone of inhibition (1.58 cm.), ampicillin and tetracycline were very close (1.47 cm.) Conclusions/Discussion My conclusion is that pharmaceutical antibiotics are more reliable, therefore more useful.	
Summary Statement I tested natural antibiotics against pharmaceutical antibiotics to find out which is more effective on reducing the growth of bacteria.	
Help Received Father helped make incubator; father gave advice on graphs.	