



**CALIFORNIA STATE SCIENCE FAIR
2005 PROJECT SUMMARY**

Name(s) Adel M. Kamal	Project Number J0408
Project Title Got a Bone to Pick	
Abstract Objectives/Goals My goal was to answer the question "Can Bones resorb calcium". My Hypothesis was yes, bones can resorb calcium. Methods/Materials First I decalcified the bones using Vinegar, is 6% Acetic acid (CH ₃ COOH). Then I used Calcium Oxide (CaO), Pickling lime, to provide the calcium for the bones to resorb. I used chicken bones to conduct the experiment. Results My results showed that all the bones, when put in Vinegar, lost their calcium; the calcium in the bones reacted with the acetic acid and formed calcium acetate. Later on in my experiment I noticed that pickling lime, calcium oxide, helped the bones regain calcium. I also noticed that not all the calcium lost was regained. Conclusions/Discussion My hypothesis was correct. From my research I learned that osteoporosis is a disease that causes bone loss. Bone loss is the loss of calcium and minerals in a bone. I found that bone density is how tightly packed bones are or how many minerals are in a bone. I also learned about prevention methods and medication for osteoporosis.	
Summary Statement The focus of my project is to explore the possibility of reversing osteoporosis.	
Help Received Mother helped with cutting bones.	