



**CALIFORNIA STATE SCIENCE FAIR
2002 PROJECT SUMMARY**

Name(s) Mane K. Chakarian	Project Number J1107
Project Title Determining the Effects of Natural Juices on Meat Preservation	
Abstract Objectives/Goals My goal was to find out which natural juices prevent spoilage and bacterial growth on meat. Methods/Materials I used apple juice, lemon juice, vinegar, tomato juice, orange juice, beef meat, a cutting board, a knife, a juicer, and 12 two inch depth bowls. First, I washed the fruits and cut them in two. Then, I cut the meat into 12 pieces and placed them into 12 two inch depth bowls. After, I strained the juices from the fruits and deposited half the juices into the 5 bowls and the other half into the other 5 bowls. Last, I placed 6 bowls in the refrigerator and the other 6 outside and kept track every few days to see when the meat starts to rot. Results I found out that tomato juice helps prevent spoilage the best and vinegar doesn't prevent spoilage at all. Conclusions/Discussion In conclusion people who store meat should add some tomato juice to keep it from rotting, or a fruit or vegetable that doesn't contain much citric acid otherwise the meat will rot quickly.	
Summary Statement How natural juices help prevent spoilage of meat.	
Help Received Mother helped provide materials and helped set up board/ teacher went over papers.	