



**CALIFORNIA STATE SCIENCE FAIR
2005 PROJECT SUMMARY**

Name(s) Krista L. Owens	Project Number J0411
Project Title Controlled Atmosphere Storage Affects Malic Acid in Apples	
Abstract Objectives/Goals The purpose of the project is to determine the effects of controlled atmospheric conditions on malic acid production in apples. Methods/Materials Apples were stored in 3 different temperature environments (refrigerator, room, freezer) over a period of time. Juice was extracted from each group and titrated to determine concentration of malic acid produced. Results Malic acid concentration was slightly higher in the apples stored in the freezer. Conclusions/Discussion The results did not support the hypothesis or research. I believe that storing the juice from each group in the refrigerator for 3 days before titration may have caused the results to be different from what is found in the research.	
Summary Statement The effects of controlled atmospheric storage on malic acid production in apples.	
Help Received Teacher helped with supervising. Local market donated apples. Grandmother helped with materials, etc.	