

# CALIFORNIA STATE SCIENCE FAIR 2005 PROJECT SUMMARY

Name(s)

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**Project Number** 

**J0507** 

**Project Title** 

# **Vitamin C Content After Storage**

### **Abstract**

### **Objectives/Goals**

Our objective was to learn how the vitamin C content in citrus fruits changes when put in storage at room temperature (68 degrees).

#### Methods/Materials

Our first task was to pick three of each of the following fresh citrus fruits from an orchard: lemons, limes, grapefruits, mandarin oranges, tangerines, valencia oranges, and washington navel oranges. Then, we made our cornstarch and iodine solutions. We took a vitamin C tablet and titrated it as our standard. It took six drops to turn the blue iodine solution clear. This became our starting point which we used to compare to the citrus fruits. The next day we ran our first experiment. We squeezed the juice from the fruit and and compared the vitamin C content to our standard. We repeated this experiment two more times over the next two weeks.

#### **Results**

The more drops of juice from our fruits it took to make the blue iodine solution clear, the less vitamin C the fruit had.

### **Conclusions/Discussion**

Based on the results of our experiment, we conclude that 71% of the fruits tested decreased their vitamin C content when put in storage in room temperature, 68#a. 29% of the fruits;# vitamin C increased.

### **Summary Statement**

We are testing the vitamin C content in fruits after storage by titrating the juices.

## **Help Received**

Mother bought board, friend let us pick fruit off his orchard