



**CALIFORNIA STATE SCIENCE FAIR
2010 PROJECT SUMMARY**

Name(s) Kenneth K. Suon	Project Number J0420
Project Title Orange's Rival	
Abstract Objectives/Goals Background: Have you ever wondered if you're getting enough vitamin C? In this project I will be measuring the amount of vitamin C in certain fruits. In the world there are a variety of fruits and most have different Ascorbic Acid levels. Vitamin C is important in our daily lives. It can keep us healthy by preventing disease like scurvy or cancer. The purpose of my experiment is to find out which fruit is better to eat for the daily requirement of vitamin c. Methods/Materials My design for this experiment is to extract 20ml of juice from the selected fruits and titrate to measure the level of the iodine solution needed to react completely with the Ascorbic Acid in the sample. After all the acid has reacted with the iodine solution the sample starts to change color. The amount of iodine added to the sample is equated with the level of Ascorbic AcidI used four fruits: orange, tangerine, lime, and lychee. . I hypothesize that the tangerine has the most vitamin C. I believe this because it is a sourer fruit then a regular orange which is the mark of Ascorbic Acid. Materials/Methods: The materials are regular science experimental test tubes, vials, cylinders, burets, etc. the method I will use is called titration which will require iodine and soluble starch solutions. I am using distilled water and vitamin C tablets 250mg. The vitamin C tablet is the control. Each fruit is extracted for the juice and tested three times Results Orange (range = 0.94mg; average = 17.31). Lemon (range = 2.35; average = 13.48). Tangerine (range = 1.41; average = 9.88). Lychee (range = 1.17; average = 18.96).the equation used to determine the Absorbic Acid is the amount of control vitamin C multiplied by amount of Iodine needed for the testing juice divided by amount Iodine needed for control vitamin C. Conclusions/Discussion Conclusions/Significance: In conclusion my hypothesis was wrong. The lychee extract had more Ascorbic. Acid then all the other fruits I was using. This test is reliable because the numbers of the result were in a close range to each other. The level of absorb cid is based on amount of iodine used. The results show that 20ml of lychee extract had more vitamin C then the other fruits. This project could be further studied by testing other fruits. Support was provided from Pershing Middle School teacher Ms. McCormick and family members such as Sarak Suon, Emily Suon, Kanika Suon, Paul Schimelpfenig.	
Summary Statement Finding Vitamin C content in fruit.	
Help Received Teacher lending materials/ support; Parents and family helping do project and edit work.	