CALIFORNIA STATE SCIENCE FAIR
2002 PROJECT SUMMARY

Name(s)
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Project Number
S0516

Project Title
The Evaluation of Fruit from Various Grocery Stores

Abstract

Objectives/Goals
The objective is to determine which grocery store, of three evaluated, will have the best quality of fruit.

Methods/Materials
13 types of fruit were donated from three different stores (Food Max, Vons, and Ralphs) and was directly analyzed using a hand refractometer. The fruit sat in a refrigerator for four days after the initial testing, and then was tested again using the same method and device. A drop of fruit sap (juice) was placed on the lense of the refractometer and the results of the chart in the refractometer were recorded. The readings were compared to the recommended allowance in the Ream's Composite.

Results
After completing an analysis of variance (ANOVA) test, it was determined that Food Max possessed the best quality of fruit as compared to the Ream's Composite. Ralphs had the worst quality of fruit with the greatest degree of variance from the recommended allowance.

Conclusions/Discussion
Of Food Max, Vons, and Ralphs, Food Max had the best quality of fruit with the highest Brix (sugar content) level. The conclusion did not support the theory that Vons had the best quality of fruit.

Summary Statement
Testing fruit donated from three different stores to determine which has the best quality.

Help Received
Used hand refractometer, supplied by Ms. Christine Dickson, Agriculture teacher at North High School.