

Do Oranges Gain or Lose Vitamin C After Being Picked?

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In this experimenter's science fair project, the amount of vitamin C present in Naval Oranges various amounts of days after being picked was tested. The hypothesis signified that as the amount of days after being picked increased, the orange would lose Vitamin C, because the fruit was no longer receiving nutrients from its parent plant. However, the results of this experiment did not support this experimenter's hypothesis. When completing this experiment this scientist had to create both a starch and iodine solution to use when titrating the Vitamin C tablets and orange juice samples. The Vitamin C tablet was used as a control and the Naval oranges were tested the day of picking, two days after, four days after, seven days after, and 14 days after. The scientist used a burette to identify the amount of iodine solution needed to completely titrate the samples, and after all data was collected a specific formula was used in order to find the exact amount of Vitamin C present, which was the data presented in the scientist's results. The results exposed the details of the levels of Vitamin C increasing and decreasing, but not at a steady rate. In other words, while the levels did change there was no specific pattern present in the results. This scientist believes this is an effect of the oranges not being of the exact same ripeness; although, there were many other factors such as how the weather affected the orange and how many oranges the experimenter used in testing (2 per day) that may have altered the results.