

Got Vitamin C?

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This study shows which type of pineapple juice has the greatest amount of Vitamin C (ascorbic acid) between fresh pineapple juice, frozen pineapple juice from concentrate, and canned pineapple juice not from concentrate. The experimental hypothesis stated that as processing increases the amount of ascorbic acid will decrease, and the null hypothesis stated that there will be no difference in the amount of ascorbic acid. Titration techniques were used to determine the amount of ascorbic acid in each sample. The Vitamin C solution was prepared each day before testing to serve as a control and test the effectiveness of the Lugol's iodine solution. 10 drops of starch indicator were added to 20mL of each sample before titration occurred. The Lugol's iodine solution reacts with the starch indicator once all ascorbic acid was oxidized causing a color change thus completing the titration process. Neither hypothesis was supported because canned and frozen pineapple juice had a significantly greater amount of ascorbic acid than fresh pineapple juice. Canned and frozen pineapple juice may have ascorbic acid as one of the additives.