

Abstract: The amount of Vitamin C in Fresh Citrus Fruit.

Different types of citrus contain different amounts of vitamin C. The purpose of this experiment is to determine the amount of vitamin C in various types of citrus fruit and determine which has the most. The amount of vitamin C, chemically known as ascorbic acid, was determined using an oxidation-reduction (redox) type titration using iodine solution. As iodine is added, it will first oxidize the ascorbic acid in the beverage, producing a colorless product (dehydroascorbic acid). When all the ascorbic acid is oxidized, the iodine will react with the starch indicator which will change the color in the beverage to a dark indigo color. This color change is the endpoint of the reaction. The iodine solution was standardized against a solution of pure ascorbic acid of known concentration in water. Thus the amount of vitamin C can be calculated. Therefore, the more iodine added, the more Vitamin C the beverage contained. The mean was calculated for each type of fruit using the data in the data table and the percent of vitamin C was determined. The results were compared using a bar graph and histograms. It was shown that the oranges contained the highest concentration of vitamin C.

210 words.