

Health science

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Objectives:

To find the rate of fermentation of the apple and carrot juices, and compare their rates to each other. Introduction: Procedure: A 5.00 ml of apple juice was taken in a clean 150 ml conical flask and diluted with 50 ml of distilled water. Then, 2.00 grams of Baker's yeast and 5.00 ml of solution of Pasteur's salts were added to the above conical flask.

The content of flask was shaken well and maintained the temperature of the reaction mixture between 35-40 °C by using hot water bath. After that, 10 drops of the reaction mixture from the flask were taken after 10 minutes and added to a test tube which contained 1.00 ml of Benedict's reagent. The test tube was placed in hot water for about 2.00 minutes and changes in color were noticed. The last step was repeated every 10.00 minutes for 6 times.

The same procedure was used for carrot solution and rate of fermentation for both solutions were found.

Observation:

- Volume of fruit juice taken = 5.00 ml
- Volume of dist. Water added = 50.0 ml
- Weight of Baker's yeast added = 2.00 gm
- Volume of solution of Pasteur's salts = 5.00 ml

Time (Min)	Color of reaction mixture on reaction with Benedict's solution in case of :
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20	Green	Green
30	Green	Green
40	Green	Green
50	Green	Green
60	Green	Dark Blue