

Let's See the C

The scientific explanation

Vitamins are organic compounds that are essential for the proper functioning of the human body. They are required in tiny amounts, but as the body cannot synthesize them on its own, they must be obtained from food.

Most of the vitamins come from fruits and vegetables, and we often consume vegetables that have undergone some form of cooking using heat treatments such as baking, blanching, or frying. To check if vitamins are destroyed during the cooking, here we test for the presence of vitamin C before and after exposure to heat.

The test is performed using an iodine and starch solution. In the presence of starch, iodine ions take on a typical deep blue color. When the starch - iodine ions bonding is disrupted, the color disappears. Since vitamin C interferes with this bonding, the color's disappearance indicates the vitamin is present. After 40 minutes in the oven at a temperature of 180°C, the test result showed that some vitamin C is still present, although in a small amount - indicating that some of it was destroyed during baking.