



How to prevent oxidation of the fruit

The oxidation of the fruit was due to a reaction between some substances present in plant cells (phenols) and the oxygen present in the air, catalyzed by enzymes present in the fruit. The reaction produces dark compounds that give color to the typical oxidized apple or banana. In order to slow the reaction we should or inactivate enzymes or avoid exposure to oxygen present in the air. Let's see some remedies:

Blanching the fruit: denatures the enzyme that catalyzes the reaction. By the term blanching is meant the soak the fruit for a few seconds in boiling water.

Add an acid: denatures the enzyme that catalyzes the reaction or shifts the pH outside of the range within which the enzyme it works. Traditionally in the kitchen the acidulated water is prepared by adding lemon juice, but we can also use citric acid or vitamin C (ascorbic acid) in the following proportions:

Lemon: 15 g of lemon juice for 250 g of water

citric acid: 1 g of citric acid per 250 g of water

Vitamin C: 0.25 g of lemon juice for 250 g of water

Hold the fruit in ice water: prevents contact with oxygen and the low temperature slows down the oxidation reaction.