Blanching: what is the most effective method?

Fresh vegetables contain enzymes which, in time, help breakdown plant tissue, leading to 'off' flavouring. Freezing vegetables slows down the process but does not stop it.

To keep vegetables for a long time they are often blanched. This involves immersing the vegetables in boiling water for long enough to inactivate the enzymes without unduly softening or discolouring the vegetables.

The enzymes that are usually used as an indication of sufficient blanching are catalase and peroxidase (depending on the vegetable). The presence of peroxidase can be confirmed if a brown coloration is observed within 10 s of adding 3 drops of 0.5% hydrogen peroxide and 3 drops of 1% guaiacol solution to the same cool sample. (It is recommended that the samples are cooled in fresh water each time.)

- What is the most effective method of blanching sprouts?

Health & Safety

In planning this activity, you should consider health and safety. Check your plans with your teacher before implementing them.

Wear eye protection during this experiment.

Credits

© Royal Society of Chemistry

Health & safety checked May 2018

Page last updated October 2018