



The BOC quick guide to:

Defrosting frozen fruit and vegetables

What's the benefit of freezing fruit and vegetables?

Surely frozen fruit and vegetables must be a pale imitation of the fresh alternative? Actually a lot of fruit and vegetables are frozen within hours of being harvested, locking in valuable vitamins. In contrast, 'fresh' produce may have been out of the ground for a week or more before landing on your plate, long enough to lose valuable nutrients. Research at the Penn State University showed that, at a room temperature of 20°C, it took only four days for spinach to lose 47% of its folate, a vitamin B compound that's important for cell and tissue growth and DNA repair.

But surely it can't taste as good?

Advances in knowledge and technology now mean that, if you freeze and defrost your fruit and vegetables the right way, you can maintain good quality in both taste and texture.

Three steps to success

First, your preparation must be right. Choose only the best produce, thoroughly clean it and then blanch vegetables or add ascorbic acid to fruit. This will de-activate enzymes in the produce that cause flavour change and colour loss.

Water makes up to 90% of the weight of most fruit and vegetables. It is therefore essential the produce is then frozen as quickly as possible, to minimise the size of ice crystals formed within. The larger the crystal, the greater the damage to the cell structure of the fruit or vegetable, harming its texture. Cryogenic freezing operates at much lower temperatures than traditional mechanical freezers so is much quicker, perfect for these foods, particularly when they can be separated mechanically during the process to produce individual quick freezing (IQF).

Finally, great care must be taken when you defrost fruit to ensure both quality and safety are maintained. Food remains safe while frozen but as soon as it begins to defrost and becomes warmer than 40°F, any bacteria present before freezing will begin to multiply.

Fruit and vegetables – different approaches

Never thaw fruit at room temperature or in warm water. The centre of the produce may remain frozen as it thaws while the warmer outer layer of the food becomes the “Danger Zone”.

Instead you can defrost fruit:*

- In a refrigerator at 40°F or less
- In cold running water at less than 70°F
- In the microwave if you’ll be cooking or serving it immediately.

As for vegetables, most should be cooked straight from frozen, without thawing first. One exception is corn on the cob which should be partially thawed first to ensure the cob is heated through by the time the corn is cooked. Leafy greens, such as turnip greens and spinach, also cook more evenly if partially thawed before cooking.

* Figures from the US National Center for Home Food Preservation
<http://nchfp.uga.edu/how/freeze/thawing.html>



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