



Preservation

• FOOD PRESERVATION METHODS FOR FRESH VEGETABLES •

MATURITY AND RIPENESS OF VEGETABLES

THE MATURITY OF VEGETABLES HAS BEEN DIVIDED INTO TWO CATEGORIES:

- Horticultural maturity:** It refers to the stage of development when plant and plant part possesses the pre-requisites for use by consumers for a particular purpose i.e. ready for harvest.
- Physiological maturity:** It is the stage when a fruit is capable of further development or ripening when it is harvested i.e. ready for eating or processing.

VEGETABLE PRESERVING METHODS

- Storing** is the easiest method for keeping your harvest, but most vegetables don't have a long shelf life. Root vegetables and vegetables that can be cured, like onions and winter squash, will last the longest.
- Refrigerator pickles** are the simplest way you can preserve fresh vegetables and extend their shelf life for a few days. Think of them as a type of salad, or simply crunchy, mouthwatering fast food.
- Fermenting with salt** uses low salt concentration (2.5% to 5% weight of the salt per weight of the food), to promote fermentation. Sauerkraut is perhaps the most well-known examples. But the technique can be applied to almost any vegetable.
- Drying vegetables** is easy to do in your conventional gas or electric oven. Electric food dehydrator appliances offer more control than your oven. (**10 best vegetables to grow for dried soup mix:** carrots, celery, corn, dried shelling beans, green or wax beans, herbs (such as parsley, chives, oregano, thyme), onions, bell peppers, potatoes, tomatoes).
- Freezing vegetables** for long term storage requires adequate packaging and a dedicated freezer appliance (known as a deep freeze) to chill foods to at least - 18°C. Use it for short term freezing of food that you plan to use within one month. (**10 best vegetables to grow for freezing:** asparagus, green or wax beans, broccoli, brussels sprouts, carrots, cauliflower, corn, greens for cooking (such as spinach, collards, bok choy), shelling peas and pea pods, and precooked dry beans, potatoes, and winter squash).
- Canning** requires a modest investment in equipment and skills that are easy to learn and practice. There are two canning methods: boiling water-bath (BWB) canning and steam-pressure canning. Which method you use depends on whether the food you plan to can is high acid or low acid. High-acid foods include most fruits and fruit products. In addition, low acid vegetables can be canned using tested recipes for pickles, relish, and tomato products, which contain added acid, usually vinegar.
- Juicing** vegetables gives you all the good enzymes, minerals, vitamins, co-factors, chlorophyll, anti-oxidants, phytonutrients and all other nutrients your body craves. When juicing vegetables you don't use the fibers. This makes this way of food preparation less economic and more wasteful than blending.

THINGS TO BEAR IN MIND

- Remember that nutrients are destroyed by heat, light, air, and water.
- Most vegetables need to be kept cold to retain their nutrients and stay fresh. Get them into the refrigerator as soon as possible.
- Don't peel a vegetable or fruit if you don't have to. The peel contains concentrated nutrients and fiber. Better wash with water just before to eat it.
- Cut vegetables into the largest pieces possible. Cutting, chopping, dicing, and shredding cause nutrient loss due to exposure to air and warmth through the increased surface area.
- Use as little water as possible during cooking. Water-soluble vitamins, such as vitamin C and the B-complex, leach into cooking water. Steam cook vegetables instead of boiling them. In microwave cooking, use little or no cooking water.
- If you insist on boiling vegetables, simmer instead of boil as much as you can.
- Don't use baking soda in cooking water, it destroys water-soluble vitamins.
- Don't keep food warm--serve it right away. Don't leave leftovers at room temperature--refrigerate immediately.
- When pureeing vegetables, use the cooking water or the water over which the vegetables were steamed. It contains valuable nutrients that leached out of the vegetables during cooking.

SOME CONSIDERATIONS

Familiarise yourself with the reasons before to selecting any particular method of food preservation.

Your choice of food preservation will depend on weighing up the advantages and disadvantages of each method.

INTERACTIVE QUESTIONS

- What is the difference between physiological and horticultural maturity?
- What are the advantages and disadvantages of the different forms of conserving fruits and vegetables?
- What are the best preparation methods for retaining the health-beneficial properties of plant products?