So You Want to Preserve











Blanching & Pickling

August 2021

Blanching to Freeze Produce

Blanching is essential for top quality frozen vegetables.

Blanching is the exposure of vegetables to boiling water or steam for a brief period of time. The vegetables must then be rapidly cooled in ice water to prevent cooking.

Blanching inactivates enzymes and helps to destroy microorganisms on the surface of vegetables. It makes vegetables more compact, so they do not take up as much space in the freezer.

Follow the time recommendations for blanching each vegetable carefully. Blanching time is crucial and varies with the type and size of vegetable.

Over blanching results in a cooked product and a loss of flavor, color and nutrients. Under blanching stimulates enzyme activity and is worse than no blanching at all.





Steam Blanching Broccoli

Steam Blanching

Steam blanching takes about 1½ times longer than water blanching.

To steam blanch, use a pot with a tight lid and a basket that holds the food at least three inches above the bottom of the pot. Put an inch or two of water in the pot and bring the water to a boil.

Put the vegetables in the basket in a single layer so steam reaches all parts quickly. Cover the pot and keep heat high. Start timing as soon as the lid is on. Steam blanch for the time

Water Blanching

For home freezing, boiling water is the best method to blanch vegetables. Use one gallon of water per pound of prepared vegetables. Put vegetables in a blanching basket and lower into vigorously boiling water. Place a lid on the blancher and start timing as soon as the water returns to a boil. Keep heat high for the time given in the directions for the specific vegetable.

Blanching Time for Common Vegetables

Vegetable	Water	Steam
Broccoli, 1 1/2" flowerets	3 min	5 min
Carrots, diced, sliced or lengthwise strips	2 min	3 min
Corn-on-the-cob (depending on size)	7-11 min	10-16 min
Snap Green Beans	3 min	5 min

For more information on blanching go to https://go.unl.edu/freezing-blanching

Microwave Blanching is not a recommended method. Research has shown that some enzymes may not be inactivated.

Cooling

As soon as blanching is complete, cool vegetables quickly and thoroughly to stop the cooking process. To cool, plunge the basket of vegetables immediately into a large quantity of cold water, 60°F or below. Change water frequently or use cold running water or iced water. If ice is used, have about one pound of ice for each pound of vegetables. Cooling vegetables should take the same amount of time as blanching.



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Types of Pickles

Brined (fermented) pickles require

several weeks of "curing" at room temperature. During this period, colors, and flavors change. Acid is produced as lactic acid bacteria grow.

Quick (unfermented) pickles are made in 1 or 2 days by adding acid in the form of vinegar. It is critical to add enough vinegar to prevent bacterial growth.

Choose and follow an up-to-date recipe from these reputable sources.

National Center for Home Food Preservation or University Extension

Nebraska Extension has information on food preservation on the web http://food.unl.edu

Remember never taste food from a jar with an unsealed lid or food that shows signs of spoilage.

What foods can you pickle?



Vegetables including cucumbers, asparagus, beets, green beans, carrots, onions, peppers, green tomatoes and zucchini.

Fruits including cantaloupe, apples, crab apples, pears, and watermelon rind.

Pickling Ingredients

Vegetables – select tender varieties and use within 24 hours of harvesting. Always wash vegetables before processing. Cucumber blossom end needs to be trimmed off as they contain an enzyme that will soften pickles.

Salt – canning and pickling salt is the best choice. It is needed in brined pickles and sauerkraut to control microorganisms. Table salt will make the brine cloudy. Other salts are not recommended.

Vinegar – used with quick pickle recipes. Must be 5% acidity.

Flavorings – whole fresh spices are best, garlic should be fresh and

Why can pickles?

For pickles, canning stops the growth of *Listeria* and other microorganisms that could make us sick or cause spoilage. Canning is a heat treatment that destroys *Listeria*. Without canning fermented pickles, *Listeria* can grow even at refrigerator temperatures.

Canning also reduces the oxygen in the space above the food in the jar. Less oxygen in the jar means less opportunity for mold spores to grow. Following a reliable recipe from an up-to-date source and use the correct headspace is critical to ensure a safe product.

Keep home canned pickled products safe.

Microorganisms are all around us and they can be found on produce. Proper home canning prevents the growth of the bad germs that cause spoilage and illness. When the acidity of a canned food is high, harmful bacteria that cause *Botulism* cannot grow. That is why pickling vegetables by adding the correct amount of acid is necessary and prevents spoilage.

How to process pickles.

Process pickles using a boiling water canner, low temperature pasteurization processing in a boiling water canner, or steam canner processing.

mature. Powdered spices & immature herbs can cause darkening or cloudy brine.

Water – soft water makes the best brine for pickling. Hard water can cause discoloration of pickles.

Firming Ingredients – may not be needed. Common firming ingredients are pickling lime, calcium chloride, and alum. Read and follow current directions for using these ingredients.



For more information: http://go.unl.edu/foodpreservation