



# we can Vegetables

## Food Preservation

### Important vegetable canning pointers

Can vegetables from your garden or purchased from nearby producers when the products are at their peak quality – within 6 to 12 hours after harvest for most vegetables. Discard moldy food. Remove small diseased cuts and spots from food. See handout “The Canning Process” for step-by-step instructions before beginning.

Vegetables are low-acid foods so they must be canned in a pressure canner at the appropriate pressure to guarantee their safety. If they are not canned at the appropriate pressure, the canned vegetables could contain the deadly toxin that causes botulism.

Before you gather the vegetables to be canned, make sure that you have everything that you will need and enough time to complete the process. You will need a pressure canner with a dial gauge or a weighted gauge and enough clean Mason jars and two-piece lids to hold your canned food. Lid rings can be reused if they are not rusted, but the flat metal disk should be used only once.

### General recommendations for packing glass jars

Wash jars in soapy water, rinse them well, and keep them hot or wash them in an automatic dishwasher and keep them hot. Treat lids according to the manufacturer’s instructions. Put 2 to 3 inches of water in the bottom of the pressure canner and begin heating it. Now you are ready to prepare your vegetables.

Vegetables may be packed raw or hot. Some foods may be packed by either method. Follow the instructions listed in the chart on the following pages. Whatever method you use, there should be enough liquid to fill in around the solid food in the jar and to cover the food completely.

**Raw Pack** – Pack vegetables tightly without crushing. Cover them with boiling water, leaving the amount of headspace specified in the recipe. Release bubbles, wipe jar rims, adjust lids, and process.

**Hot Pack** – Heat vegetables as directed in the recipe. Pack hot vegetables loosely to about 1 inch from the top of the jar. Cover them with boiling water or hot cooking liquid. Release bubbles, wipe jar rims, adjust lids, and process.

Salt may be added if desired – ½ teaspoon to pint jars and 1 teaspoon to quart jars. Salt is not needed to keep food safe and may be omitted.

*Note* – Each food’s processing time is based on research that tells us how long the product must be heated so that all of the food in the jar has reached the temperature needed to destroy all dangerous bacteria. The length of time varies with the density of the food, its packing liquid, and its acidity. Because these processing times are based on research, they should be followed exactly. Under-processing can result in spoiled food, and over-processing results in lower-quality food.

After processing time is complete, remove canner from heat and let it cool naturally. It will depressurize while it is cooling. When it is depressurized, open the petcock or remove the weight. After 10 minutes, open the lid (carefully) and remove the jars using a jar-lifter. Don’t tilt jars. Place them on a dry towel or cooling rack and allow them to sit undisturbed for 12 to 24 hours. Check seal. If a jar is not sealed, refrigerate the food for use within two to three days or freeze it.

*These processing recommendations are for West Virginia altitudes (maximum altitude, 4,000 feet). For canning directions in other locations, consult your county Extension office.*

Vegetable	Pack	Preparation	Canner Type – Process Time
<b>Beans, snap and Italian pieces</b>	Hot	About 14 pounds is needed to make 7 quarts. Wash, trim, and cut or snap in 1-inch pieces or leave whole. Cover beans with water. Bring to a boil. Boil 5 minutes. Pack hot beans loosely almost to top of hot jars. Cover with boiling water leaving 1-inch headspace.	Dial gauge – 12 pounds pressure Weighted gauge – 15 pounds pressure pints – 20 minutes quarts – 25 minutes
<b>Beans, snap and Italian pieces</b>	Raw	Wash, trim, and cut or snap in 1-inch pieces or leave whole. Pack tightly almost to top of jar. Cover with boiling water leaving 1-inch headspace.	Processing times the same as for hot pack, above.
<b>Beets</b>	Hot	About 21 pounds is needed to make 7 quarts. Trim off beet tops; leave 1-inch stem and roots to reduce bleeding of color. Scrub well. Cover with boiling water. Boil until skins slip off easily (15-25 minutes). Cool; remove skin and trim off stems and roots. Leave small beets whole; cut large in ½-inch cubes or slices. Pack hot beets almost to top of hot jars. Cover with fresh hot water, leaving 1-inch headspace.	Dial gauge – 12 pounds pressure Weighted gauge – 15 pounds pressure pints – 30 minutes quarts – 35 minutes
<b>Carrots</b>	Hot	About 17½ pounds is needed to make 7 quarts. Select small carrots no more than ¼ inch in diameter. Larger carrots are too fibrous. Wash, peel, and rewash carrots. Slice or dice. Cover with boiling water; bring to boil and simmer for 5 minutes. Fill jars. Cover with cooking liquid or hot water leaving 1-inch headspace.	Dial gauge – 12 pounds pressure Weighted gauge – 15 pounds pressure pints – 25 minutes quarts – 30 minutes

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Vegetable	Pack	Preparation	Canner Type – Process Time
<b>Carrots</b>	Raw	Wash, peel, and rewash carrots. Slice or dice. Pack tightly into jars. Add fresh hot water, leaving 1-inch headspace.	Process the same as for hot pack, above.
<b>Corn, cream-style</b>	Hot	About 20 pounds (in husk) is needed to make 9 pints. Husk corn, remove silk, and wash ears. Blanch ears 4 minutes in boiling water. Cut corn from cob at about the center of kernel. Scrape remaining corn from cob with a table knife. In saucepan, to each 2 cups of corn and scrapings, add 1 cup of boiling water. Heat to boiling. <b>Use pints only.</b> Fill pint jar with hot corn mixture, leaving 1-inch headspace.	Dial gauge – 12 pounds pressure Weighted gauge – 15 pounds pressure pints (only) – 85 minutes
<b>Corn, whole kernel</b>	Hot	About 31½ pounds (in husk) is needed to make 7 quarts. Canning of some sweeter varieties or too immature kernels may cause browning. Select corn ready for eating fresh. Husk corn, remove silk, and wash. <b>Blanch 3 minutes in boiling water for hot or raw pack.</b> Cut corn from cob at about three-fourths the depth of the kernel. <b>Do not scrape cob.</b> In saucepan, add 1 cup of hot water for each quart of corn, bring to a boil, and simmer 5 minutes. Fill jars with hot corn and liquid, leaving 1-inch headspace.	Dial gauge – 12 pounds pressure Weighted gauge – 15 pounds pressure pints – 55 minutes quarts – 85 minutes
<b>Corn, whole kernel</b>	Raw	After blanching and cutting kernels from cob, fill jars with corn, leaving 1-inch headspace. Do not shake or press down. Add 1 teaspoon of salt to each jar, if desired. Add fresh boiling water, leaving 1-inch headspace.	Process as for hot pack, above.
<b>Peas, green or English, shelled</b>	Hot	About 31½ pounds (in pods) is needed to make 7 quarts. Shell and wash peas. In saucepan, cover with boiling water and bring to boil for 2 minutes. Fill jars loosely with hot peas and added cooking liquid, leaving 1-inch headspace.	Dial gauge – 12 pounds pressure Weighted gauge – 15 pounds pressure pints or quarts – 40 minutes
<b>Peas, green or English, shelled</b>	Raw	Shell and wash peas. Fill jars with raw peas, add boiling water, leaving 1-inch headspace. Do not shake or press down peas.	Process as for hot pack, above.
<b>Peppers, hot, sweet, jalapeno, chile, and pimento</b>	Hot	About 9 pounds is needed to make 9 pints. <b>Use pints or half-pints only.</b> Select firm, yellow, red, or green peppers. Don't use diseased or soft peppers. <b>Caution: If you choose hot peppers, wear plastic gloves while handling them or wash hands thoroughly with soap before touching your face.</b> Remove core and seeds. Quarter large peppers; small can be left whole.	Dial gauge – 12 pounds pressure Weighted gauge – 15 pounds pressure half-pints or pints – 35 minutes

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Vegetable	Pack	Preparation	Canner Type – Process Time
<b>Peppers, hot, sweet, jalapeno, chile, and pimento</b>	Hot	Slash two or four slits in each pepper. Either blanch or blister peppers. (Blister: oven or broiler – place peppers in 400 degree F oven or broiler for 6-8 minutes until skin blisters. Range top – cover hot burner with heavy iron mesh. Place peppers on burner for several minutes until they blister.) Allow peppers to cool. Place in pan and cover with cool cloth. After several minutes, peel each pepper. Add ½ teaspoon salt to each pint jar, if desired. Fill jars loosely with peppers and add fresh boiling water, leaving 1-inch headspace.	Dial gauge – 12 pounds pressure Weighted gauge – 15 pounds pressure half-pints or pints – 35 minutes
<b>Potatoes, sweet</b>	Hot	About 17½ pounds is needed to make 7 quarts. Do not dry pack sweet potatoes. Choose small-to medium-size potatoes. Can within 1-2 months after harvest. Wash potatoes and boil or steam until partially soft (15-20 minutes). Cool only enough to handle. Remove skins; cut medium potatoes to uniform size. Caution: Do not mash or puree pieces. Fill jars, leaving 1-inch headspace. Add 1 teaspoon salt per quart jar, if desired. Cover with your choice of fresh boiling water or syrup, leaving 1-inch headspace.	Dial gauge – 12 pounds pressure Weighted gauge – 15 pounds pressure pints – 65 minutes quarts – 90 minutes
<b>Pumpkin and winter squash, cubed</b>	Hot	About 16 pounds is needed to make 7 quarts. Wash, remove seeds, cut into 1-inch slices, and peel. Cut flesh into 1-inch cubes. Boil 2 minutes in water. <b>Caution: Do not mash or puree.</b> Fill jars with cubes and cooking liquid, leaving 1-inch headspace.	Dial gauge – 12 pounds pressure Weighted gauge – 15 pounds pressure pints – 55 minutes quarts – 90 minutes
<b>Spinach and other greens</b> (Greens may be canned; however, freezing results in a better product.)	Hot	About 28 pounds is needed to make 7 quarts. Can only freshly harvested greens. Discard wilted, discolored, diseased, or insect-damaged leaves. Leaves should be tender and attractive in color. Wash only small amounts of greens at a time. Drain water and continue rinsing until water is clear and free of grit. Don't soak greens. Cut out tough stems and midribs Place 1 pound of greens at a time in a cheesecloth bag or blancher basket and steam 3-5 minutes, or until wilted. Fill jars loosely with greens and add fresh boiling water, leaving 1-inch headspace.	Dial gauge – 12 pounds pressure Weighted gauge – 15 pounds pressure pints – 70 minutes quarts – 90 minutes

**For more information**

*ext.wvu.edu* or contact WVU Extension Service Families and Health Programs at 304-293-2796.

**Sources**

Adapted from the U.S. Department of Agriculture's *Complete Guide to Home Canning*, No. 539, revised September 1994.

**Revised**

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