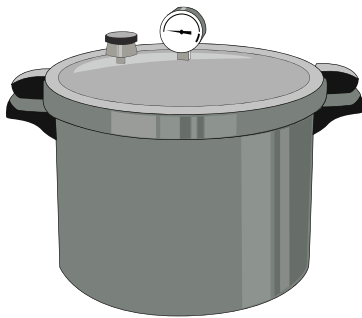


Canning Green Beans



Home-canned beans are safe, nutritious and good to eat if canned properly. Use the right canning equipment and follow recommended procedures for the various food products.

All fresh vegetables, except for most tomatoes, are low-acid foods. Low-acid foods have pH values higher than 4.6. The ONLY SAFE method of home-canning low-acid foods is to use a steam pressure canner to achieve a temperature of 240 degrees, which is much higher than the 212-degree temperature of boiling water. A pressure of 10.5 pounds at 0 to 1,000 feet of altitude is required to reach 240 degrees inside the canner. Pressure does not destroy microorganisms, but it is necessary to produce the high temperature that kills the botulism-causing bacterium, botulinum.



The pounds of pressure figure was rounded to 11 pounds in dial gauge canners to avoid the confusion of half-pound recommendations. Weighted gauge canners are already machined to operate at 10.5 pounds as a built-in safety factor when they are set at 10 pounds. The exact time depends on the kind of food being canned, the way it is packed into jars and the size of the jars.

Botulism is a rare but deadly food poison. Bacteria that cause botulism are common in the soil and probably on everything grown in soil. They will do no harm unless they are allowed to live and grow in air-free situations, such as in canned low-acid foods. If a low-acid food is not processed at 240 degrees for the recommended length of time, the bacterial spores can survive. Since they grow without oxygen, the spores can become active in low-acid food stored in airtight containers and produce the deadly toxin that causes botulism.

If you're not sure that vegetables were canned using recommended time and temperature, boil home-canned, low-acid foods for 10 minutes before tasting. Boiling will destroy any harmful food poisoning toxin if present.

Yield

The pounds-to-quart canning ratio is approximately 2 to 1. A bushel weighs 30 pounds and yields 12 to 20 quarts. An average of 14 pounds is needed per canner load of 7 quarts; an average of 9 pounds is needed per canner load of 9 pints (4 1/2 quarts).

Steps in Canning Green Beans

1. Check top of jars for nicks, cracks and sharp edges. Wash the jars thoroughly in hot, soapy water and rinse. Leave them in the dishwasher or hot water until ready to use; then invert on a clean towel.
2. Check the lids to be sure sealing compound is good and rings are not bent or rusty. Pretreat new lids by placing them in a saucepan of simmering water, or follow manufacturer's directions on the package.
3. Use freshly gathered beans that are young, tender and crisp. Rinse them thoroughly under running tap water to remove surface contamination. While washing them, remove the ends and bruised or decayed portions.
4. Leave the beans either whole or cut/snapped into 1-inch pieces.
5. Fill the jars using either "Raw Pack" or "Hot Pack" method. (See instructions in boxed text.)

Raw Pack

- Pack raw beans tightly to within 1 inch of the top. If desired, add 1 teaspoon of canning salt to each quart, 1/2 teaspoon to each pint.
- Fill the jars with boiling water, leaving 1-inch headspace.

Hot Pack

- Put the beans in a pan; cover them with boiling water.
- Boil 5 minutes.
- Fill jars loosely with hot beans, leaving 1-inch headspace. Add 1 teaspoon of canning salt per quart to the jar, if desired.
- Cover the beans with boiling water, leaving 1-inch headspace.



6. Run a non-metallic spatula or scraper down the jar between beans and sides to push out air bubbles.

7. Wipe top and threads with a clean, damp towel. Place the lid on with the sealing compound next to the jar. Screw the band on firmly or according to manufacturer's directions.

8. Pour 2 to 3 inches of hot water, or amount recommended by the manufacturer, into the canner.

9. Place filled jars on the jar rack in the canner using a jar lifter; fasten the cover securely. Open the petcock or leave the counterweight or weighted gauge off the vent port.

10. Turn the heat on high and allow steam to escape continuously for 10 minutes.

11. After venting, or exhausting, the canner, place the counterweight or weighted gauge on the vent port, or close the petcock.

12. Let pressure rise to 11 pounds in a dial gauge canner or process the beans at 10 pounds in a weighted-gauge pressure canner.

13. Start timing the process when the pressure reading on the dial gauge indicates the recommended pressure has been reached; for canners without dial gauges, start timing when the weighted gauge begins to jiggle or rock as the manufacturer describes.

14. Process quarts for 25 minutes, pints for 20 minutes for both types of canners. Higher elevation requires additional processing time. Keep the pressure steady by adjusting the heat.

15. When processing time is up, remove canner from the heat. Let pressure fall naturally to zero; wait 3 minutes. Slowly open the petcock or remove the weight from the vent port to let the remaining steam escape. Open the back of the canner first, tilting its lid away from you. This prevents the steam from burning you.

16. Remove the jars with jar lifters. Set the jars on a rack or on folded towels several inches apart, away from drafts. Do not cover, and do not tighten the bands.

17. Let the jars cool for 12 to 24 hours and test for a good seal. Press the center of the lid. If the dome is down and doesn't spring back, the jar is sealed. Remove the rings, and wash, dry and store them for reuse.

18. Store home-canned foods in a cool, dry place.

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