

Common Canning Problems

Common Canning Problems & Remedies

Problem	Cause	Prevention
Canned Foods Loss of liquid from glass jars during processing This is not a sign of spoilage; do not open to replace liquid. However, if at least half of the liquid is lost, refrigerate the jars and use within two to three days.	Lowering pressure in canner suddenly after processing period.	Do not force pressure down by placing canner in a draft, opening the vent too soon, running cold water over the canner, etc. Allow pressure to drop to zero naturally; wait 10 minutes before opening after weight is removed from canner lid.
	Fluctuating pressure during processing in pressure canner.	Maintain a constant temperature throughout processing time.
	Failure to work out air bubbles from jars before processing.	Remove by running a plastic spatula or plastic knife between food and jar before applying lids.
	Improper seal for the type of closure used.	Follow the manufacturer's directions for closure used.
	Ring bands not tight enough.	Tighten bands fingertip-tight over flat lid, but do not over tighten.
	Jars not covered with water in boiling water canner.	Jars should be covered with 1 to 2 inches of water throughout processing period.
	Starchy foods absorbed liquid.	Make sure dried beans are completely rehydrated prior to canning. Use hot pack for other starchy foods.
	Food packed too tightly in jars can boil over during processing and start a siphon.	Leave the appropriate headspace.
Imperfect seal Discard food unless the trouble was detected within a few hours. Canned food can safely be recanned if the unsealed jar is discovered within 24 hours. To re-can, remove the lid and check the jar sealing surface for tiny nicks. Change the jar if necessary; add a new treated lid and reprocess using the same processing time.	Chips or cracks in jars.	Examine carefully by rubbing finger around the mouth of the jar.
	Failure to follow recommended directions for closures used.	Follow manufacturer's directions.
	Particles left on mouth of jar.	A clean, damp cloth should be used to remove any seeds, seasonings, etc. that prevent a perfect seal.
	Using old closures that should be discarded.	Do not reuse rubber rings and self-sealing metal lids. Do not use rusty bands.
	Lifting jars by top or inverting while hot.	Use jar lifters for removing jars from canner, grasping below lip. Leave in upright position.
	Fat on jar rims.	Trim fats from meats. Add no extra fat. Wipe jar rim well.

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Product dark at top of jar Not necessarily a sign of spoilage.	Air left in the jar permits oxidation.	Remove air bubbles before sealing jars. Use recommended headspace.
	Insufficient amount of liquid or syrup.	Cover product with water or syrup.
	Food not processed long enough to destroy enzymes.	Process recommended length of time.
Cloudy liquid Sometimes denotes spoilage.	Starch in vegetables.	Select products at desirable stage of maturity. Do not use over mature vegetables.
	Minerals in water.	Use soft water.
	Fillers in table salt.	Use pure refined salt.
	Spoilage.	Prepare food as directed with published canning process. Process by recommended methods and times.
Color changes that are undesirable	Contact with minerals such as iron, zinc or copper in cooking utensils or water.	Avoid these conditions by using carefully selected cooking utensils. Use soft water.
	Overprocessing.	Follow directions for processing time and operation of canners.
	Immature or over mature products.	Select fruits and vegetables at optimum stage of maturity.
	Exposure to light.	Store canned foods in dark place.
	May be a distinct spoilage.	Process by recommended method and for recommended time.
	Natural and harmless substances in fruits and vegetables (pink or blue color in apples, cauliflower, peaches or pears).	None
Sediment in jars Not necessarily a sign of spoilage.	Starch in vegetables.	Select products at desirable stage of maturity.
	Minerals in water.	Use soft water.
	Fillers in table salt.	Use pure or refined salt.
	Yellow sediment in green vegetables or onions.	None (natural occurrence).
	White crystals in spinach.	None (natural occurrence).
	Spoilage.	Prepare food as directed according to published canning process. Process by recommended method and for recommended time.
Spoilage	Incorrect pressure.	Dial gauges should be checked every year for accuracy.
	Incorrect processing temperature.	Low acid vegetables and meats must be pressure canned for safety. Most fruits and pickles can be canned in boiling water. Process jams and jellies in a boiling water canner after filling jars.
	Incorrect processing time.	Follow research based recommendations for canning foods. Follow directions for operation of canners and timing of processes. Do not overfill jars.
	Poor selection of fruits and vegetables.	Select product of suitable variety and at proper stage of maturity. Can immediately after gathering.
	Imperfect seal on jars.	Check jars and lids for defects Wipe jar rim before closing. Don't overfill jars.

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Floating (especially some fruits)	Over processing fruits and tomatoes destroys pectin.	Follow directions for processing times.
	Fruit is lighter than sugar syrups.	Use firm, ripe fruit. Heat before packing. Use a light to medium syrup.
	Improper packing.	Pack fruit as closely as possible without crushing it.
Canned Juices Fermentation or spoilage	Failure to process adequately.	Juices should be processed in a boiling water canner long enough to destroy spoilage organisms.
	Imperfect seal.	Use recommended canning methods and processing times. Use new flat lids for each jar and make sure there are no flaws. Pretreat the lids per manufacturer's directions. Use ring bands in good condition – no rust, no dents, and no bends. Wipe sealing surface of jar clean after filling and before applying lid. Filled jars should be processed in a boiling water canner according to recommendations and long enough so a vacuum seal will form after cooling the jars.
	Air left in jars.	Proper processing will exclude air from jars.
Cloudy sediment in bottom of jar.	Solids in juice settle.	Juice may be strained and made into jelly. Shake juices if used as a beverage.
Separation of juice (especially tomato)	Enzymatic change during handling (after cutting).	Heat tomatoes quickly to simmering temperatures. To prevent juice from separating, quickly cut about 1 pound of fruit into quarters and put directly into saucepan. Heat immediately to boiling while crushing. Continue to slowly add and crush freshly cut tomato quarters to the boiling mixture. Make sure the mixture boils constantly and vigorously while you add the remaining tomatoes.
Poor flavor	Immature, overripe or inferior fruit used.	Use only good quality firm, ripe fruit or tomatoes for making juice.
	Use of too much water for extracting fruit juice.	Use only amount of water called for in directions. No water is added to tomatoes.
	Improper storage.	Cool, dark, dry storage.

Testing for Sealed Jars

After 12 to 24 hours, test to be sure the jars are sealed. Most two-piece lids will seal with a "pop" sound while they're cooling. When completely cool, test the lid. It should be curved downward and should not move when pressed with a finger. A conventional method is to tap the center of the lid

with a spoon. A clear ringing sound means a good seal. A dull note may mean it doesn't have a tight seal or that food is touching the underside of the lid. To determine which, hold the jar up and look at it. If no food is touching the lid, the jar does not have a tight seal. If a jar is not sealed, refrigerate it and use the unspoiled food within two to three days. Other

options are to reprocess the food within 24 hours or to freeze it.

On Guard Against Spoilage

Don't taste or use canned food that shows any sign of spoilage! Look closely at all jars before opening them. A bulging lid or leaking jar is a sign of spoilage. When you open the jar, look for other signs such as spurting liquid, an off-odor or mold. Spoiled canned food should be discarded in a place where it will not be eaten by humans or pets. Spoiled low-acid vegetables, meats and seafood should be detoxified to destroy any poisons that might be present, before being discarded. To detoxify canned low-acid foods that have spoiled, Wear disposable rubber or heavy plastic gloves. Carefully place the suspect containers and lids on their sides in an 8-quart volume or larger stock pot, pan, or boiling-water canner. Wash your hands and gloves thoroughly. Carefully add water to the pot and avoid splashing the water. The water should completely cover the containers with a minimum of 1-inch of water above the containers. Place a lid on the pot and heat the water to boiling. Boil 30 minutes to ensure detoxifying the food and all container components. Cool and discard the containers, their lids, and food in the trash or dispose in a nearby landfill

Improperly canned low-acid foods can contain the toxin that causes botulism without showing signs of spoilage. Low-acid foods are considered improperly canned if any of the following are true:

- The food was NOT processed in a pressure canner.
 - The canner's gauge was INACCURATE.
 - Up-to-date researched processing times and pressures were NOT used for the size of the jar, style of pack and kind of food being processed.
 - Ingredients were added that were NOT in an approved recipe.
- Proportions of ingredients were CHANGED from the original approved recipe.
 - The processing time and pressure were NOT correct for the altitude at which the food was canned.
 - Because improperly canned low-acid foods can contain the toxin that causes botulism without showing signs of spoilage, they should also be detoxified as directed above and then discarded.
 - Surfaces that come in contact with spoiled or questionable food should be cleaned with a solution of one part chlorine bleach to five parts water. Wet the surface with this solution and let stand five minutes before rinsing.

For more information on canning foods at home, request [HGIC 3040, *Canning Foods at Home*](#); [HGIC 3051, *Most Frequently Asked Canning Questions*](#); [HGIC 3020, *Home Canning Equipment*](#) or [HGIC 3000, *Preserving Foods*](#).

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