

Pressure Canning Problem Solving Chart

PRINCIPLES OF PRESSURE CANNING

MODULE 7D



Steam is escaping from the pressure canner lid...

- ▶ Shut off your canner, allow it to cool, then inspect
 - ▶ Ensure your handles are secure and tightly fastened
 - ▶ If you have a rubber gasket in the lid, ensure it is properly placed and is not cracked or broken.
 - ▶ Be sure your vent pipe is securely fastened.
 - ▶ Be sure your safety button and indicator on the dial gauge are properly installed and securely fastened.
- ▶ Be sure your lid was secure and locked.
- ▶ Consult your owner's manual for more details or to call customer service for support.

Exterior of jars have a chalky, white residue on them...

Cause

- ▶ Mineral deposits from your water have attached to the glass jar
- ▶ Repeated exposure will cause etching and permanent cloudiness to the glass

Solution

- ▶ Add one ounce of distilled white 5% vinegar to your canner vessel when adding the required 3 quarts of water to pressure can
 - ▶ Vinegar will keep your jars clean and free of mineral deposits

A glass jar broke during pressure canning...

Cause

- ▶ The jar already had stress fractures and gave out during exposure to high heat
- ▶ Your canner was not full of jars
- ▶ The canner evaporated all the water during venting and processing
- ▶ The flat rack was not used
- ▶ Glass was exposed to thermal shock before entering the canner

Solution

- ▶ Inspect your jars for hairline fractures and chips prior to filling
- ▶ If you do not have enough jars to fill the canner, add jars with water and process alongside
- ▶ Venting time is only 10 minutes, do not exceed.
- ▶ Use the Glass Coffee Pot analogy to avoid shocking jars
- ▶ KEEP PROCESSING AND CLEAN MESS AFTER THE CANNER HAS COOLED

Liquid escaped from my jar and the top two inches are exposed...

Cause

- ▶ Air was left in the jar which caused oxidation and dried out the food
- ▶ The pressure in the canner may have increased or decreased too rapidly during processing, or the weighted gauge rocked too vigorously during processing
- ▶ The jars may have been overfilled and headspace was not measured

Solution

- ▶ While the food is safe to eat, you may remove and discard the dry portion
- ▶ If pressure increases while processing, slowly turn the stove knob to control the pace of incline or decline in temperature. This will avoid liquid from siphoning out of the jar
- ▶ Use a headspace measuring tool and adhere to the required headspace in the recipe

My canning lid did not seal...

Cause

- ▶ The ring was too tight preventing a vacuum
- ▶ Air pockets were not removed from the jar prior to adhering lid and ring

Solution

- ▶ Rings are to be hand-tightened to the point of feeling resistance. Stop tightening the ring once resistance is felt. If too tight, loosen the ring slightly
- ▶ Use the reverse side of the headspace measuring tool to remove trapped air pockets
- ▶ Gently tap the jar onto a safe surface to remove trapped air from raw packed jars

My canning lid did not seal...

Cause

- ▶ Air was exhausted too vigorously during the 10 minute venting time
- ▶ Pressure fluctuated rapidly during processing causing siphoning which forces food/liquid out of the jar during processing
- ▶ Food particles were left on the jar rim

Solution

- ▶ While it is important to vent, adjust the heat to maintain a steady but gentle stream of steam
- ▶ When increasing or decreasing the stove burner knob, do so gently and not swiftly
- ▶ Always wipe your jar rim with vinegar. It cuts through grease, sugary residue and food particles. Be sure to clean 1/4-inch into each jar and not just the rim surface

Black deposits on the underside of my lid after opening a jar...

Cause

- ▶ There may be tannins in the food
- ▶ There may be hydrogen sulfide expelled from the food during processing

Solution

- ▶ Neither cause is harmful and is merely a reaction to the tannins or hydrogen sulfide encountering the metal lid. It is not a sign of spoilage.
- ▶ The dark deposit on the underside of the lid is harmless and does not mean the food is unsafe to consume