

# Troubleshooting Pickling and Fermentation Problems



Fermented pickling involves curing in a brine solution for one or more weeks. Quick process pickles, or vinegar pickling, are easy to prepare with boiling hot vinegar and seasonings. Both variations of pickling; however, do not come without challenges. Please consider the following when troubleshooting issues with your canned product.



## Problem: White sediment in jar

Cause	Prevention
Bacteria cause this during fermentation	No prevention.
Salt contains an anti-caking agent or other additives	Use canning or pickling salt.

## Problem: Strong, bitter taste

Cause	Prevention
Spices cooked too long in vinegar, or too many spices used	Follow directions for amount of spices to use and the boiling time.
Vinegar too strong	Use vinegar of the proper strength (5% acidity).
Dry weather	No prevention. Bitter taste is usually in the peel or skin of fruits and vegetables.
Using salt substitutes	Cannot be prevented due to potassium chloride.

## Problem: Dark or discolored pickles

(If brass, copper or zinc utensils and brining equipment were used, DO NOT use pickles.)

Cause	Prevention
Minerals in hard water	Use soft water.
Ground spices used	Use whole spices.
Spices left in jars of pickles	Place spices loosely in cheesecloth bag so they can be removed before canning.
Brass, iron copper, or zinc utensils used	Use food-grade un-chipped enamelware, glass, stainless steel, or stoneware utensils.
Iodized salt used	Use canning or pickling salt.

## Problem: Shriveled Pickles

Cause	Prevention
Placing cucumbers in too strong brine, too heavy syrup, or too strong vinegar	Follow a reliable recipe. Use amounts of salt and sugar called for in a recipe, and vinegar that is 5% acidity.
Long lapse of time between harvest and brining (fermentation only)	Brine (start fermentation) within 24 hours after harvesting cucumbers.
Overcooking or overprocessing	Follow tested recipe.
Dry weather	No prevention. Bitter taste is usually in the peel or skin.



### Problem: Soft or slippery pickles (if spoilage is evident, do not eat)

Cause	Prevention
Vinegar too weak (pickling only)	Use vinegar of at least 5% acidity.
Salt brine too weak during fermentation	Maintain salt concentration specified in recipe.
Cucumbers stored at too high a temperature during fermentation	Store fermenting cucumbers between 70 - 75° F. This is the optimum temperature for growth of organisms necessary for fermentation.
Insufficient amount of brine	Keep cucumbers immersed in brine.
Pickles not processed properly (to destroy microorganisms)	Process pickles in canner after filling jars.
Moldy garlic or spices	Always use fresh spices.
Blossom ends not removed from cucumbers	Slice at least 1/16th inch off blossom end of cucumbers and discard.

### Problem: Spotted, dull, or faded color

Cause	Prevention
Cucumbers not well cured or brined. (fermentation only)	Use brine of proper concentration. Complete fermentation process.
Excessive exposure to light	Store processed jars in a dark, dry cool place.
Cucumber of poor quality	Use high quality produce, and grow under proper conditions (i.e. weather, soil).

### Problem: Hollow Pickles (fermentation only)

Cause	Prevention
Cucumbers too large for brining	Use smaller cucumbers.
Improper fermentation	Keep brine proper strength and covered. Cure until fermentation is complete.
Long lapse of time between harvest and brining	Fermentation process should be started within 24 hours after harvesting cucumbers.
Growth defect of cucumber.	No prevention. Remove and use for relishes instead of fermented pickles.

### Problem: Scum on the brine surfaces while curing cucumbers (fermentation only)

Cause	Prevention
Wild yeasts and bacteria feed on the acid reducing the concentration if allowed to accumulate	Remove scum as often as needed.



This information was adapted from the National Center for Home Food Preservation and University of Georgia. For more information and recipes to follow, go to <http://nchfp.uga.edu>

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