



Lewis County

Master Food Preserver

WASHINGTON STATE UNIVERSITY
EXTENSION

Food Safety and
Preservation



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PICKLE POINTERS

Here are some points to remember:

- Use only pickling, canning salt. This can be found next to the regular table salt or in the home canning section of your supermarket. Reduced salt pickles can be safely prepared using tested recipes, but texture and flavor may be noticeably different.
- Acidity is as important to the safety of pickles as it is to their flavor and texture. Vinegar should contain 5% acidity (50 grains), as most commercial vinegars do. Do not use vinegar of unknown acidity. Cider vinegar tastes mellow than white but gives a darker product.
- For heating pickling liquids, do not use copper, brass, iron or galvanized utensils. They could react with acids and affect color, flavor and even safety.
- Choose fresh, firm, young, unwaxed pickling cucumbers and begin the pickling process as soon as possible after harvesting. Use 1 ½ inch size for gherkins, 3-4 inch for dills. (Wide mouth jars are easier to pack).
- Wash cucumbers carefully to remove soil. Remove 1/16 inch from blossom end. Blossoms may contain an enzyme which causes softening of pickles. You may wish to leave a bit of the stem attached.
- Food-grade pickling lime may be used for soaking cucumbers 12-24 hours before pickling to improve crispness. Excess lime absorbed by the cucumbers must be removed to make pickles safe. Drain, rinse, and soak in fresh water for 1 hour. Repeat twice more.

Problem	Possible Causes	Possible Solutions
<i>Soft Pickles</i>	<ol style="list-style-type: none"> 1. Used slicing variety cucumbers. 2. Enzyme present in blossom end of cucumber. 3. Cucumber was over matured of yellow. 4. Used hard water 	<ol style="list-style-type: none"> 1. Use pickling variety cucumbers. 2. Remove 1/16 inch from blossom end of cucumber before pickling. 3. Use less mature green cucumbers 4. Use soft water. If soft water is unavailable, use distilled water or boil hard water for 15 minutes and let set for 24 hours, covered. Remove any scum and slowly pour water in a container so that sediment is not disturbed.

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5. Processed in Pressure Canner

5. Process in Boiling Water Canner

Problem	Possible Causes	Possible Solutions
<p><i>Slippery</i> <i>(DO NOT EAT IF SPOILAGE IS EVIDENT)</i></p>	<ol style="list-style-type: none"> 1. Brine was too weak. 2. Vinegar solutions was too weak 3. Brine level too low. 4. Acidity lowered by surface scum 5. Failed to ferment adequately because temperature was either too low or too high during fermentation. 6. Insufficient heat to destroy micro-organisms. 	<ol style="list-style-type: none"> 1. Do not alter the quantities of salt and water in tested recipes. 2. Always use commercially bottled vinegar. 5% (50 grains) acidity. 3. Brine must cover cucumbers. 4. Remove scum daily. 5. Optimal temperature during fermentation is between 70°F and 75°F. Avoid under 65°F or over 80°F. 6. Process in Boiling Water Canner for recommended time in recipe.
<p><i>Black Spots</i></p>	<ol style="list-style-type: none"> 1. Too much time lapse between harvesting and pickling. 2. Used hard water containing iron. 	<ol style="list-style-type: none"> 1. Start pickling cucumbers within 24 hours after harvesting. 2. Use soft water (see solutions for Soft Pickles).
<p><i>Shriveling</i></p>	<ol style="list-style-type: none"> 1. Too much time lapse between harvest and pickling. 2. Salt brine, vinegar solution or syrup was initially too strong. 3. Overcooking. 	<ol style="list-style-type: none"> 1. Start pickling or fermentation of cucumbers within 24 hours of harvest. 2. Follow tested recipes exactly. 3. Follow tested recipes exactly.
<p><i>Dull/Faded Color</i></p>	<ol style="list-style-type: none"> 1. Used slicing variety or over-mature cucumbers. 2. Used sunburned cucumbers. 3. Pickles exposed to excessive light. 	<ol style="list-style-type: none"> 1. Use fresh, firm-ripe, pickling cucumbers. 2. No solution. 3. Store pickles in a cool, dark, dry place.
<p><i>Hollow Pickles</i></p>	<ol style="list-style-type: none"> 1. Used slicing variety or over-mature cucumber. 2. Temperature too high during 	<ol style="list-style-type: none"> 1. Use pickling varieties and proper maturity. Use over-mature cucumbers for relish. 2. Optimal temperature during

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	fermentation.	fermentation is between 70°F and 75°F.
Problem	Possible Causes	Possible Solutions
	3. Faulty growth of cucumbers.	3. No solution. Hollow cucumbers usually float during washing. Remove and use for relish.
<i>Dark Pickles</i>	<ul style="list-style-type: none"> 1. Used hard water containing iron or copper. 2. Used iodized table salt 3. Used copper, brass, zinc, and iron or chipped enamelware utensils. 4. Used ground spices. 5. Cooked too long with spices. 	<ul style="list-style-type: none"> 1. Use soft water (see solutions for Soft Pickles). 2. Use only canning or pickling salt. 3. Use glass, stainless steel, stoneware, and un-chipped enamelware or food grade plastic utensils. 4. Use whole spices. 5. Follow directions in tested recipes and use spice bag or cheesecloth for easy removal.
<i>Bitter Flavor</i>	<ul style="list-style-type: none"> 1. Used old spices. 2. Spices packed with pickles. 3. Used salt substitute. 4. Growing season too dry or hot. 	<ul style="list-style-type: none"> 1. Use fresh spices. 2. Use spice bag and remove spices before canning. 3. Salt substitutes are usually bitter. Use canning or pickling salt to avoid bitterness. DO NOT use salt substitutes in fermented pickles. 4. No solution.
<i>White Sediment in Bottom of Jar</i>	<ul style="list-style-type: none"> 1. Used table salt which contains anti-caking material. 2. Spoilage due to bacterial growth. 	<ul style="list-style-type: none"> 1. Use canning or pickling salt. 2. Could be harmful. Cannot be corrected. Discard.

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