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Upcoming Webinars

- · April 17 The Role of Bees in my Fruit and Vegetable Gardens
 - Janet Knodel, Professor and Extension Entomologist, NDSU
- April 24 Making Nature at Home in Your Landscape
 - Carrie Knutson, Extension Agent, Agriculture & Natural Resources - Horticulture, NDSU

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- Please complete the short online survey that will be emailed to you after today's webinar. It will take just a couple minutes!
- Be sure to sign up for an opportunity to win a prize in the drawing. After submitting the survey, a form to fill out with your name/address will appear.

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Play it Safe! Safe Changes to Tested Canning Recipes Karen Blakeslee, Extension Associate, Kansas State University K-STATE Research and Extension

Provide Family and Friends Safe Food

The safety of the food that you preserve for your family and friends is important.

You can make some changes and substitutions to research-tested recipes while still protecting your family by following a few simple rules.

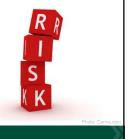


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Knowing the Risks Matters

- · Safety depends on
 - Acid content (pH)
 - Density or thickness of food
 - Size and shape of food pieces
 - Temperature of food
 - Size and shape of containers
 - Heat processing method
 - Recipe used
 - Use tested recipes for success!



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Fruits and Fruit Sauces - Safe Changes

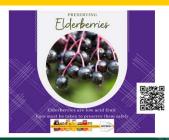
- Replace ½ of sugar with honey
- Reduce or eliminate sugar
 - Fruit canned in water lacks taste and loses quality
- · Use a light fruit juice



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Fruits and Fruit Sauces - Cautions

- No safe canning recommendations for
 - Elderberries
 - White Peaches
 - White Nectarines
 - Canning with Sucralose, Stevia or other sugar substitutes
 - Best added when ready to serve



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Jams and Jellies - Safe Changes

- Add 1 teaspoon or less of herb or flavoring
- Substitute peaches for nectarines, apples for pears and vice versa
- Use unsweetened frozen and thawed fruit in place of fresh
- Use 6 tablespoons regular bulk pectin for 1 box
- · Use honey with limits

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Jams and Jellies - Cautions

- Must be processed in boiling water canner or steam canner
- Use type of pectin stated in recipe
 - Liquid and dry pectin not interchangeable
- · Don't double recipes!
- Only use pint jars when stated in recipe



Photo: Colorado State University Extens

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Meat - Safe Changes

- · Add one of the following
 - Dried seasoning, onion, or garlic

 - 1 teaspoon per pint
 2 teaspoons per quart
 - Fresh seasoning, onion, or garlic

 - 1 tablespoon per pint
 2 tablespoons per quart



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Meat - Safety Cautions

- Do not add
 - Meat to other canning recipes unless the recipe allows it
 - Thickeners such as flour, cornstarch, rice, pasta, barley
 - Extra fat
- · Meat MUST be pressure canned



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Pickles and Relishes - Safe Changes

- Reduce sugar or salt in quickprocess pickles
- Substitute apple cider vinegar for distilled white vinegar
 - MUST use 5% acidity!
- Add a clove of garlic or small dried red pepper to each jar
- · Substitute zucchini or summer squash for cucumber in relish recipes
- Add calcium chloride for crispness



Recipes for Special Diets



Pickles and Relishes - Safety Cautions

- · Do not change salt amounts in any fermented vegetable recipe
 - Rinse prior to serving to reduce sodium 30% to 40%
- Do not use other types of vinegar unless stated in tested recipe
- Do not change vinegar or water
- English or grocery store cucumbers can be used, the quality is inferior



Refrigerate favorite, untested, pickle recipes not safe for TIP! canning up to 2 weeks.

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Salsa - Safe Changes

- Substitute sweet peppers for hot peppers, measure for measure
- Red, yellow, white onions are interchangeable
- Reduce or eliminate sugar or salt
- Reduce amount of onion, celery or peppers
- Sub tomatillos for tomatoes
- Use any variety or color of tomatoes
- Replace vinegar with bottled lemon or lime juice in same amount



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Salsa - Safety Cautions

- Do not
 - Thicken salsa before canning
 - Add corn or black beans to any recipe, or substitute these for peppers or onions
 - Reduce any type or amount of acid
 - Increase amounts of herbs, garlic or spices
 - Reduce amount of tomatoes
- No salsa recipes using jars larger than pints!!



Tomato/Tomato Paste Salsa NCHFP



Tomatoes – Safe Changes

- Add a small amount of sugar to offset perceived flavor of added acid
- Can reduce or eliminate salt or sugar

	Bottled Lemon Juice	Citric Acid	Vinegar (5% acidity)
Pints	1 tablespoon	14 teaspoon	2 tablespoons
Quarts	2 tablespoons	1/2 teaspoon	4 tablespoons



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Tomatoes – Safety Cautions

- Do not add other ingredients unless stated in recipe
- Do not add flour, cornstarch or other thickener to create a condensed soup
 - Add these when ready to use the safely canned tomatoes
- Do not skip acidification step!



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Vegetables - Safe Changes

- Create vegetable mixture
 - Each vegetable must have tested recipe
 - Process for vegetable with longest processing time
 - Reduces overall quality of other vegetables
- Add up to 1 clove garlic per jar
- Reduce or leave out salt



Mixed Vegetables of all of these, use process time for

Corn - 55 minutes!

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Vegetables – Safety Cautions

- Do not add thickeners such as flour, cornstarch, rice, pasta, or other starchy ingredients
 - Add these when ready to serve the vegetable
- Do not can any vegetable that does not have research testing
- Do not can mashed pumpkin or winter squash!



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Other Tips

- Use jar size indicated in recipe or smaller
 - Use 4 oz jars as Half-pint jars
 - Use 12 oz jars as Pint jars
 - Use 24 oz jars as Quart jars
- Do not use colored jars designated for crafting
 - Ball® colored jars are safe for canning



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