

K-STATE
Research and Extension

Welcome!

County Fair Food Judge Training



To help us with quality of the training, please mute your mic and stop video. Thank you!

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Meet the Team!



Beth Hinshaw
Extension Specialist
4-H Youth Development
Southeast



Karen Blakeslee
Extension Associate
Rapid Response Center
Dept of Animal Sciences and Industry



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Crystal Futrell Extension
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Health and Wellness
Johnson County

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Just Because It Seals, Doesn't Mean It's Safe!



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Follow Along!

Refer to the handout

And the Winner is...
A Guide to Judging Food Preservation

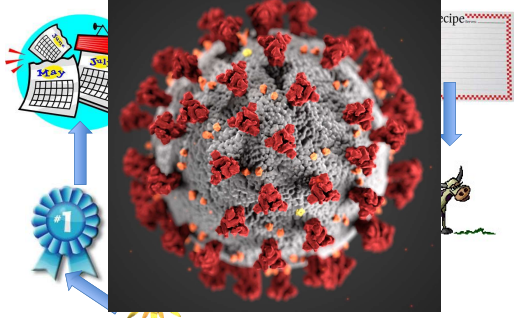
All handouts are at
<https://www.rrc.k-state.edu/judging/index.html>



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The Road to the Fair



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The Science...Yes, it matters!



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For the Fair **AND** Home!

- This is not JUST for the Fair!!
- All foods need to be canned safely for any use!
- Be Smart!
- Be Safe!



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Underprocessed Salsa Gone BAD!!



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Conditions for Growth


F  Food	A  Acid	T  Time
T  Temperature	O  Oxygen	M  Moisture


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3 Conditions that affect Food Preservation

A

Acid

O

Oxygen

M

Moisture

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Acidity of Foods

Approximate growth limits for:

1	Strong Acid
2	Molds
3	Yeasts
4	Bacteria
5	
6	
7	Neutral
14	Strong Alkali

pH 4.6

High-Acid Foods


Lemons, Pickles, Gooseberries, Apricots, Plums, Apples, Blackberries, Sour Cherries, Raspberries, Strawberry, Pears, Tomatoes

Process at 212°F in Boiling-Water Canner

Low-Acid Foods

Olives, Carrots, Beets, Turnips, Green Beans, Spinach, Asparagus, Lima Beans, Peas, Corn

Process at 240°F in Steam-Pressure Canner


A

Acid

Ball Blue Book, Newell Brands

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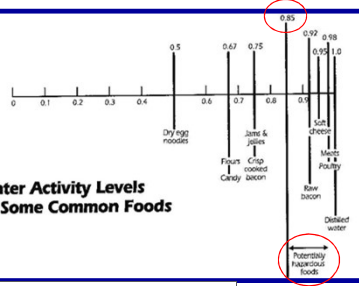
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Water Activity

M

Moisture

Fruits & Vegetables 0.97-0.99
Dried foods 0.55-0.80

Water Activity Levels of Some Common Foods



Water activity = a measure of the amount of moisture in foods that is available for microbes to use.

Scale: measured on a scale from 0 to 1.0, with distilled water having a value of 1.0

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Oxygen Requirements

Microorganisms have different oxygen needs for growth.

- **Aerobic** - need oxygen to grow
- **Anaerobic** - grow only when oxygen is absent
- **Facultative** - can grow with or without oxygen


O
Oxygen

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Importance of Heat Penetration

- Process time is affected by whether food heats by convection, conduction, or a combination of both.
- Heat penetration studies scientifically determine safe processing times.
- The “cold spot” must reach the correct temperature for the correct length of time to destroy target pathogens.
 - Geocentric – conduction – dense recipes
 - Isocentric – convection – liquid recipes

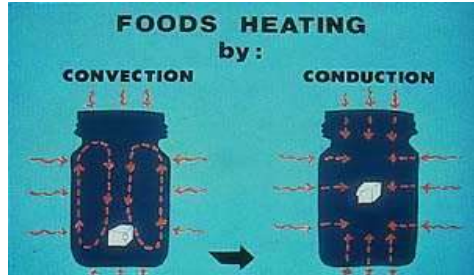


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FOODS HEATING by:

CONVECTION **CONDUCTION**



Isocentric - liquid recipes Geocentric - dense recipes

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Heat Penetration, cont.

- Follow recipe exactly

The following slow down heat penetration:

- Extra sugar or fat
- Oversize food pieces
- Added thickeners

- Use recommended canners
 - Heat-up and cool-down times in pressure canners are counted toward sterilizing value of the process.
 - **Don't rush them.**
- **Science of Canning: Recipe Development (Jarden Home Brands)**
 - <https://youtu.be/01ITxSgXlYs>

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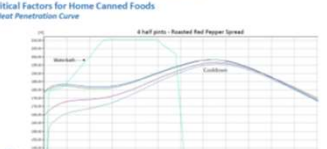
Just Wait!

Importance of 5-minute wait

- After processing and removing canner lid
- **Allows temperature in jars to continue to rise**
- Gives extra chance for lids to seal
- Allows steam to escape from canner
- Written into Ball Blue Book recipes, KSRE recipes, in “Preserving Food” chapter of So Easy to Preserve

Recipe Validation

Critical Factors for Home Canned Foods
Heat Penetration Curve



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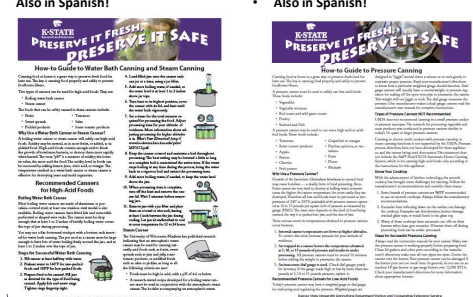
How-to Guides to...

Water Bath and Steam Canning
<https://www.bookstore.ksre.ksu.edu/pubs/MF3241.pdf>

- Also in Spanish!

Pressure Canning
<https://www.bookstore.ksre.ksu.edu/pubs/MF3242.pdf>

- Also in Spanish!



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Question #1

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Question #1

Which of these can be processed safely in a water bath canner?

- A. Halved or sliced peaches
- B. Corn relish
- C. Vegetable soup mix
- D. Barbecue sauce
- E. A, B, and D**

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What Makes YOU a Food Preservation Judge?

- You love to educate!
- Know basic food science
- You understand the importance of preserving food safely
- Show them...
You enjoy preserving food!



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Tools to Take

- Towels
- Washcloths
- Flashlight
- Ruler
- Water bottle
- Disinfectant wipes
- Resources
- Scorecards

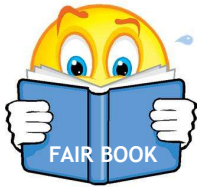


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READ

THE RULES!



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Many more resources!

Session 3 - Food Preservation, April 30, 2020

Presentation slides (PDF)

Recording of Session 3

And the Winner Is! - Tips on Judging food preservation, condensed version of Powerpoint

10 Tips for Safe Home-Canned Food (Spanish)

Safe Safe Sales at Home (Spanish)

What's Your Elevator? (Spanish)

Dry Meat Safety at Home (Spanish)

Food Preservation Judging Criteria

Food Safety Recommendations for Food Preservation Exhibits - Updated March 2019

Judging Home Preserved Foods - University of Georgia

Food Preservation Problems and Solutions

Canning Meat - Problems and Solutions

Food Preservation Labels

Food Preservation Labels Small 1 x 2.38

Food Preservation Labels Large 2 x 4

Scorecards

- Judging Dried Fruits & Leather
- Judging Fruits
- Judging Herbs
- Judging Pickles
- Judging Preserves
- Judging Cured Meat Jerky
- Judging Meat and Poultry
- Judging Tomatoes and Tomato Products
- Judging Dried Vegetables
- Judging Vegetables

<https://www.rrc.k-state.edu/judging/index.html>

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Labels for Jars

Other Required Information

- **Must have recipe**
- Recipe source
- Processing adjustment for altitude, if needed
- Date of recipe source
 - If using Ball or Mrs. Wage's mix or pectin inserts, indicate date purchased
- Clear jars
- Jerky must list heat treatment

[illegible]

Judge Visually

- **We do not recommend opening or tasting any jars of food!**
 - For safety of you, the judge
 - For safety of the food product at the fair and return home
- **Safety is the #1 consideration in awarding food preservation entries**
 - Unsafe methods should not be rewarded!
- **Why? Not all spoilage can be seen by normal human senses.**

An illustration of a metal jar lid with a keyhole, a small key, and a ruler, likely representing food safety or preservation.[illegible]

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Judging Resource

- Judging Home Preserved Foods
- Great tips on judging visually



https://nchfp.uga.edu/publications/nchfp/tech_bull.html
<https://www.rrc.k-state.edu/judging/index.html>

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What Judges Consider

Disqualification

- Jar unsealed
- No recipe
- No label, missing information
- Wrong processing method
- Underprocessing
- Jerky not heated to 160°F
- Jar bigger than recipe states
- Added thickeners, rice, pasta
- Moving bubbles
- Not acidifying tomatoes
- Mashed or pureed pumpkin/winter squash
- Paraffin wax on sweet spreads
- Untested recipe source
- Contains alcohol

Lowering a Ribbon Placing

- Not following fair book rules
- Different color rings/ bands
- Messy jars, rusty rings
- Not enough liquid
- Improper headspace
- Wrong color (artificial color added if not in recipe)
- Food over mature
- Uneven sized food pieces
- Using colored jars
- Brands of jar/lids not the same
- Food above liquid
- Fancy pack, if not stated in recipe
- Foreign material
- Abnormal sediment in jars
- Using iodized salt



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Showmanship Tips

While not critical for food safety or quality, these can affect final ribbon placing.

- Use same color rings and lids
- Using the same brand of jars and lids
- Hard water residue present on jar surface should be removed
- Sticky label residue on the reused jars should be removed
- Rings should be free of rust
- Remove rings, check for sticky residue
- No fabric lid covers or other décor



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Recipe Source List

- <https://www.kansas4-h.org/events-activities/fairs/kansas-state-fair/index.html>

2020
Kansas State
Fair
4-H Exhibitor Handbook

You cannot take your own recipe and apply processing recommendations from tested sources!!

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Recipes




- ☹️ Not recommended to can homemade (your own creation!) recipes
- ☹️ Freeze homemade recipes for long-term storage
- ☹️ Recipes older than 1994 may be unsafe

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Don't use any of the older versions!



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New Canning App

- Canning Timer & Checklist App
- For Apple and Android devices
- Intended for people with previous canning experience
- Provides reminders and timer for specific foods
- <https://catalog.extension.oregonstate.edu/pnw689>



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Another New App!

- Preserve Smart
- For Apple iOS and Android
- You tell it your elevation and all recipes will highlight the appropriate processing
- About 50 recipes, canning, freezing, drying
- <https://apps.chhs.colostate.edu/preservesmart/>



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to
Live*

[illegible]

Unsafe Recipes Sources

Just because a food is canned commercially doesn't mean it can be canned safely at home!!


- Blogs
- Pinterest
- Old recipe books
- Recipe magazines
 - May not be adequately tested
- Many others...



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Untested Recipe Example



Paradise Marmalade

3 cups prepared fruit (about 2½ pounds fully ripe Bartlett pears)
1 medium orange
1 lemon
1 can (8 ½ ounces) crushed pineapple in juice, undrained

½ cup chopped maraschino cherries
5 cups sugar
1 box STELLER-Fruit Pectin
½ teaspoon margarine or butter

PEEL and core pears. Finely chop or grind fruit. Measure 3 cups into 6- or 8-quart saucepot. Remove colored part of peel from orange using a vegetable peeler; set aside. Remove and discard remaining white part of peel from orange. Chop the fruit, reserving any juice; add to saucepot. Repeat procedure with lemon; add to saucepot. Cut reserved orange and lemon peels into thin slices, or chop or grind; add to saucepot. Add pineapple in juice and maraschino cherries to saucepot; mix thoroughly.

PREPARE jars according to directions on page 8. Keep jars and lids hot until ready to fill.

MEASURE sugar into separate bowl. Stir pectin into fruit in saucepot. Add margarine. Place over high heat; bring to a full rolling boil, stirring constantly. Immediately stir in all sugar. Bring to a full rolling boil and boil 1 minute, stirring constantly. Remove from heat; skim off foam with metal spoon.

FILL washed, hot, prepared jars, filling to within ½ inch of tops. Wipe rims and threads. Cover with two-piece lids. Screw bands tightly. "Invert jars for 5 minutes, then turn upright. After jars cool, check seals."

Or follow water bath method recommended by USDA.

Makes about 8 (1 cup) jars

How much processing is that?

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Untested Recipe Example



Labor of love

Time to beef up summer's bounty for later use.

Puree all vegetables to the max. Add all of the loads to a large pot, stir it all together, and bring to a boil. As it heats, use corn chips to sample the salsa, adjusting salt, black pepper and chile pepper. If necessary, turn off the heat and immediately transfer the hot salsa into warm sterile jars and screw on sterile lids. They will seal as they cool on the counter.

CLARIFICATION

In the story "Labor of love" on the Wednesday Food page, the salsa processing time was omitted. The instructions should read: Turn off the heat and immediately transfer the hot salsa into warm, sterile jars and screw on sterile lids. Process in a boiling water bath for 20 minutes (no need to pressure-can because of the added vinegar). The jars will seal as they cool on the counter.

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New from Mrs. Wages

- 1 Step Pickling Brines
- ONLY makes 1 pint
- **REFRIGERATOR STORAGE ONLY!!**



Mrs. Wages

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New from Heinz

- Ready to use
- Already diluted with water
- Has sugar and salt included
- **ONLY for REFRIGERATOR PICKLES!!!!**



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Question #2

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Question #2

Which of these recipes is NOT from a reliable source?

- A. Bread and Butter pickles – USDA
- B. Pumpkin Butter – The Frugal Navy Wife**
- C. Reduced Sugar Peach Pineapple Spread – Preserve Smart app
- D. Elderberry Jelly – Sure-Jell website

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K-STATE Research and Extension Types of Jars

- Use regular or wide-mouth canning jars
 - ½-pint up to 1-quart sizes only
 - **Do not use jar larger than stated in recipe**
- Clean, not damaged
- No colored jars
- No Mayonnaise jars
- Ball, Kerr, Golden Harvest



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K-STATE Research and Extension New Jars from 2017 & 2018

- Ball® Collection Elite™
 - Spiral Jar
 - Regular mouth 16 oz
 - Wide mouth 28 oz
 - **Use like a quart jar!**
 - Sharing Mason Jar
 - Regular mouth 16 oz
- Ball® Smooth-Sided
 - Regular mouth 16 oz
 - Regular mouth 32 oz
 - Wide mouth 32 oz



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K-STATE Research and Extension New in 2020

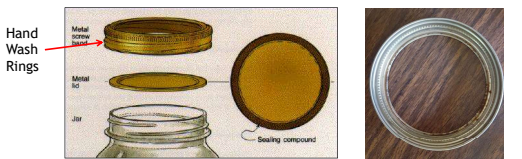
- Flute Jars
- Pints only
- Safe for canning



Knowledge *Life* @ 2020 Newell Brands, Inc.

K-STATE Research and Extension Types of Lids

- Use two-pieced lid
- Always use new lids
- Newer lids don't need pretreating, but if you do...
 - Do not boil! Just simmering hot water



Hand Wash Rings

USDA Complete Guide To Home Canning

Do NOT BAKE food in the lids/rings!!

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K-STATE Research and Extension New Lids


- Sure Tight™ Lids
- Hold seal 18 months
- Twice the tinplate coating to reduce rust issues
- BPA free



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K-STATE Research and Extension Reusable Lids

- Wide and Regular mouth size
- Still use metal rings
- Water bath or pressure can
- FOLLOW THE DIRECTIONS FOR BEST RESULTS!!
- Univ. of Georgia did research
 - https://getd.libs.uga.edu/pdfs/sivanan_dam_geetha_201412_ms.pdf



<https://reusablecanninglids.com>

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Fancy Packs

From Univ. of Georgia

- Many types of fancy packs produce potentially unsafe products.
- The adequacy of process times is dependent on using specified preparation procedures.
- Fancy packs may not have received adequate heat penetration to kill harmful microorganisms.

https://nchfp.uga.edu/publications/nchfp/tech_bull/1Judging_Preserved.pdf



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Allowed Fancy Packs

- Cucumber spears for pickles
- Asparagus spears
- Pickled asparagus spears
- Pickled okra
- Whole green beans
- Pickled green beans
- Pickled baby carrots



USDA recipes are available for these

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Question #3



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Question #3

I live in SE Kansas, where the altitude is 900 feet. But I went to my Grandma's house in NW Kansas, where the altitude is 2,750 feet, to can food. Which altitude should be listed on the entry label for the fair in SE Kansas?

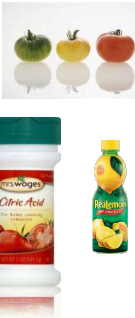
- A. 900 feet
- B. 2,750 feet**
- C. 1,000 feet
- D. None

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Tomatoes Need Acid

- Tomatoes have pH ~ 4.0 – 5.2
 - Borderline for safe boiling water canning
 - This includes **all colors** of tomatoes!
 - Must acidify for BW and pressure canning
- For Pints
 - 1 Tablespoon **bottled** lemon juice
 - ¼ teaspoon citric acid
- For Quarts
 - 2 Tablespoons **bottled** lemon juice
 - ½ teaspoon citric acid




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More on Tomatoes

- Vinegar may be used, but...
 - 4 Tablespoons vinegar per quart or 2 Tablespoons per pint
 - Flavor may be objectionable
- Add acid directly to jar before filling
- If too acidic, add sugar to taste
 - Example: 1 tablespoon per quart



Fermenting tomatoes

TOMATOES

- Freezing
- Canning
- Processing Methods
- Quality
- Problems and Solutions
- Recipes

For information, visit: <http://www.ksre.k-state.edu/extension/4H/4H-1000/>

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Question #4

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Question #4

Which of these IS safely canned?

- A. Salsa in a quart jar
- B. Green beans processed in a boiling water bath canner
- C. Strawberry jam inverted to seal (open kettle canning)
- D. Acidified whole tomatoes in a pressure canner

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Judging Steps

- Review recipe and label information
- Check lid seal
- Examine jar appearance
- Remove ring, check for residue
- Measure headspace
- Examine contents with flashlight
- Rotate jar, lean on its side to check food consistency
 - Look for defects
 - Refer to judging scorecards for details
- Provide comments, how to improve
- Award ribbon placing

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Judging Tomatoes

Italian Tomatoes

12 cups halved cored peeled tomatoes (about 24 medium or 8 lb)

Water

Spice blend, see below

Ball® Citric Acid or bottled lemon juice

Salt, optional

Italian Spice Blend

4 tsp basil

2 tsp thyme

2-1/2 tsp oregano

1-1/2 tsp sage

1 tsp garlic powder

1 tsp hot pepper flakes, optional

Add 2-1/4 tsp of spice blend to each pint jar. If omitting hot pepper flakes, use only 2 tsp.

Processed 40 + 5 minutes for altitude
Source: www.freshpreserving.com, 2019

FOOD PRESERVATION EVALUATION - Judging Canned Tomatoes and Tomato Products			
Name _____		Product/Class _____	
Judging Criteria: _____			
Appearance	Color: <input type="checkbox"/> Yellow <input type="checkbox"/> Purple <input type="checkbox"/> Blue <input type="checkbox"/> Red <input type="checkbox"/> White (discolored)	Texture	_____
Flavor	_____	Consistency	_____
Spice Blend	_____	Head Space	_____
Lid Seal	_____	Ring	_____
Label	_____	Contents	_____
Overall	_____	Comments	_____

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Choose the ribbon!

Purple

Blue

Red

White

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Sensational Salsa!

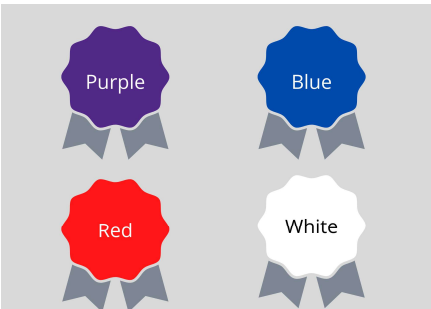
Please do not experiment with canning your own recipe that mixes low-acid vegetables together, even with "some" acid like vinegar or lime juice. If done improperly, you put yourself at risk for botulism, a potentially fatal foodborne illness.

<http://nchfp.uga.edu/publications/nchfp/factsheets/salsa.html>
<http://www.ksre.ksu.edu/bookstore/pubs/MF3171.pdf>
<http://www.bookstore.ksre.ksu.edu/pubs/MF3171S.pdf>

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[illegible]

Choose the ribbon!



The image shows four award ribbons arranged in a 2x2 grid. Each ribbon is a circular badge with a ribbon tail at the bottom. The ribbons are: Purple (top left), Blue (top right), Red (bottom left), and White (bottom right). Each ribbon has the word of its color written in the center.

Purple

Blue

Red

White

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Fruit Pie Filling

- Don't use cornstarch!
- Use Clear Jel – cook type
 - Do not use instant!



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Photo: ISU

Judging Pie Filling

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FOOD PRESERVATION EVALUATION - Judging Canned Fruits

Name: _____ Product/Date: _____

County/State: _____

USE THIS FOR UNRECORDED JUDGING. JUDGES SHOULD BE CERTAIN TO SIGN AND DATE EACH JUDGING.

Points to Consider	Final grade		Comments
	First place	Second place	
Appearance Color Texture Odor Taste	Uniform in color and texture No signs of spoilage No signs of spoilage No signs of spoilage No signs of spoilage	Not uniform in color and texture Signs of spoilage Signs of spoilage Signs of spoilage Signs of spoilage	
Quantity of Ingredients Needed For			
Cherry Pie Filling:			
	1 Quart	7 Quarts	
Fresh or thawed sour cherries	3-1/3 cups	6 quarts	
Granulated sugar	1 cup	7 cups	
Clear 3rd®	1/4 cup + 1 tsp	1-3/4 cups	
Cold water	1-1/3 cups	9-1/3 cups	
Bottled Lemon Juice	1 tbsp + 1 tsp	1/2 cup	
Cinnamon (optional)	1/8 tsp	1 tsp	
Almond extract (optional)	1/4 tsp	2 tsp	
Red food coloring (optional)	6 drops	1/4 tsp	

Processed 30 + 5 minutes for altitude
Source: Preserving Cherries, KSRE, 2015

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Judging Fruit

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FOOD PRESERVATION EVALUATION - Judging Canned Fruits

Name: _____ Product/Date: _____

County/State: _____


USE THIS FOR UNRECORDED JUDGING. JUDGES SHOULD BE CERTAIN TO SIGN AND DATE EACH JUDGING.




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Choose the ribbon!


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Purple



Blue



Red



White

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Judging Fruit

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FOOD PRESERVATION EVALUATION - Judging Canned Fruits

Name: _____ Product/Date: _____

County/State: _____

USE THIS FOR UNRECORDED JUDGING. JUDGES SHOULD BE CERTAIN TO SIGN AND DATE EACH JUDGING.

Peaches-Halved or Sliced

Choose ripe, mature, yellow-flesh peaches of ideal quality for eating fresh or cooking.

Dip fruit in boiling water for 30 to 60 seconds until skins loosen. Dip quickly in cold water and slip off skins. Cut in half, remove pits and slice if desired. To prevent darkening, keep peeled fruit in [ascorbic acid solution](#). Prepare and boil a very light, light, or medium [syrup](#) or pack peaches in water, apple juice, or white grape juice. Raw packs make poor quality peaches.

Hot pack or Raw pack

Points to Consider	First place	Second place	Comments
Appearance Color Texture Odor Taste	Uniform in color and texture No signs of spoilage No signs of spoilage No signs of spoilage No signs of spoilage	Not uniform in color and texture Signs of spoilage Signs of spoilage Signs of spoilage Signs of spoilage	
Quantity of Ingredients Needed For			
Peaches-Halved or Sliced:			
	1 Quart	7 Quarts	
Fresh or thawed sour peaches	3-1/3 cups	6 quarts	
Granulated sugar	1 cup	7 cups	
Clear 3rd®	1/4 cup + 1 tsp	1-3/4 cups	
Cold water	1-1/3 cups	9-1/3 cups	
Bottled Lemon Juice	1 tbsp + 1 tsp	1/2 cup	
Cinnamon (optional)	1/8 tsp	1 tsp	
Almond extract (optional)	1/4 tsp	2 tsp	
Red food coloring (optional)	6 drops	1/4 tsp	

Processed 20 + 5 minutes for altitude
Source: Preserving Peaches, KSRE, 2015

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Choose the ribbon!


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Choose the ribbon!


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Purple



Blue



Red




White

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Jam and Jelly...Do Not...

- Use Paraffin wax
 - Can cause mold growth
 - Heat processing prevents mold growth
- Invert jars to seal
 - Not recommended by USDA
- Alter sugar or pectin
 - Exception - If using low- or no-sugar pectin, sugar can be altered
- Double recipes
 - Product will not set



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Judging Jelly

Cherry Jelly with liquid pectin

3 cups sour cherry juice
(about 3 pounds or 2 quart boxes sour cherries and ½ cup water)
7 cups sugar
2 pouches liquid pectin

Processed 5 + 5 minutes for altitude
https://nchfp.uga.edu/how/can_07/cherry_jelly_liquid.html
June 2005

Quality Factor	Excellent	Good	Fair	Poor
Appearance	Clear, bright, uniform color. No visible fruit or seeds. No air bubbles.	Clear, bright, uniform color. No visible fruit or seeds. No air bubbles.	Clear, bright, uniform color. No visible fruit or seeds. No air bubbles.	Clear, bright, uniform color. No visible fruit or seeds. No air bubbles.
Texture	Smooth, uniform texture. No lumps or clumps.	Smooth, uniform texture. No lumps or clumps.	Smooth, uniform texture. No lumps or clumps.	Smooth, uniform texture. No lumps or clumps.
Flavor	Strong, pleasant cherry flavor. No bitterness or sourness.	Strong, pleasant cherry flavor. No bitterness or sourness.	Strong, pleasant cherry flavor. No bitterness or sourness.	Strong, pleasant cherry flavor. No bitterness or sourness.
Setting	Set firmly, no run or slump. No air bubbles.	Set firmly, no run or slump. No air bubbles.	Set firmly, no run or slump. No air bubbles.	Set firmly, no run or slump. No air bubbles.
Shelf Life	Long shelf life, no spoilage. No mold or fermentation.	Long shelf life, no spoilage. No mold or fermentation.	Long shelf life, no spoilage. No mold or fermentation.	Long shelf life, no spoilage. No mold or fermentation.

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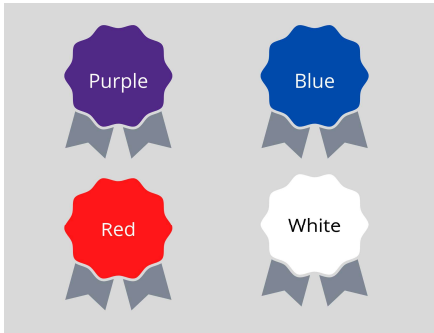
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Choose the ribbon!



Purple Blue
Red White

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Judging Jam

Spiced Plum Jam

3 1/2 cups finely chopped fresh red plums (about 2 pounds plums)
1-2 Tablespoons water if needed to prevent sticking
2 teaspoons cinnamon
1/4 teaspoon ground cloves
1/4 teaspoon ground allspice
3 Tablespoons powdered pectin
4 cups sugar

Processed 10 + 5 minutes for altitude
Sure-Jell pectin insert
2019

FOOD PRESERVATION EVALUATION – Judging Sweet Spreads

Name: _____ Product/Class: _____

County/State: _____ Region: Purple Blue Red White Unjudged

NOTE: THIS IS A SUGGESTED EVALUATION. JUDGES' COMMENTS ARE NOT TO BE USED FOR ADJUDICATION.


Criteria to Consider	Excellent	Good	Acceptable	Unacceptable
Visual Appeal	Attractive, appealing, and appetizing. Processing evident for altitude.	Attractive, appealing, and appetizing. Processing evident for altitude.	Attractive, appealing, and appetizing. Processing evident for altitude.	Unattractive, unappealing, and unappetizing. Processing evident for altitude.
Texture	Smooth, consistent, and uniform. No lumps or chunks.	Smooth, consistent, and uniform. No lumps or chunks.	Smooth, consistent, and uniform. No lumps or chunks.	Unsmooth, inconsistent, and non-uniform. Lumps or chunks present.
Flavor	Excellent, balanced, and flavorful. No off-flavors or aftertaste.	Good, balanced, and flavorful. No off-flavors or aftertaste.	Acceptable, balanced, and flavorful. No off-flavors or aftertaste.	Poor, unbalanced, and unflavorful. Off-flavors or aftertaste present.
Consistency	Consistent, uniform, and spreadable. No runny or thick areas.	Consistent, uniform, and spreadable. No runny or thick areas.	Consistent, uniform, and spreadable. No runny or thick areas.	Inconsistent, non-uniform, and non-spreadable. Runny or thick areas present.
Stability	Stable, consistent, and uniform. No separation or settling.	Stable, consistent, and uniform. No separation or settling.	Stable, consistent, and uniform. No separation or settling.	Unstable, inconsistent, and non-uniform. Separation or settling present.
Overall	Excellent, balanced, and flavorful. No off-flavors or aftertaste.	Good, balanced, and flavorful. No off-flavors or aftertaste.	Acceptable, balanced, and flavorful. No off-flavors or aftertaste.	Poor, unbalanced, and unflavorful. Off-flavors or aftertaste present.

Source: State University of New York Extension, Food Safety and Inspection Service, and Consumer Information Service.

NOTE: This is a suggested evaluation. Judges' comments are not to be used for adjudication. The evaluation is for informational purposes only.

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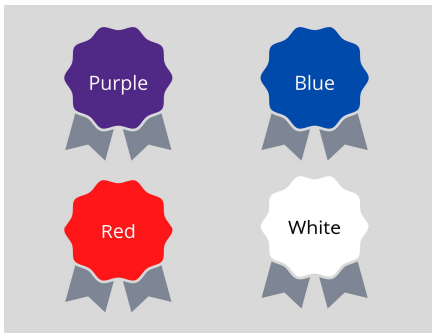


Spiced Plum Jam

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Super Pickle Relish

July 2015

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Super Pickle Relish

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Judging Vegetables

Carrots - Sliced or Diced

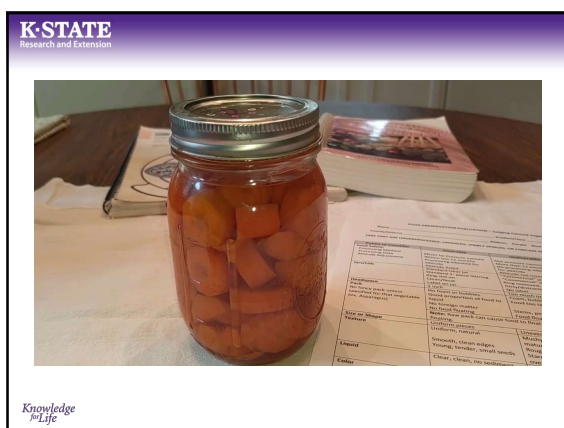
Select small carrots, preferably 1 to 1-1/4 inches in diameter. Larger carrots are often too fibrous.

Hot pack or Raw pack

1 teaspoon of salt per quart to the jar, if desired. Add hot cooking liquid or water, leaving 1-inch headspace.

Processed at 15# pressure, weighted gauge canner https://nchfp.uga.edu/how/can_04/carrots_sliced.html USDA, 2015

Points to Consider	Excellent	Good	Acceptable	Comments
Appearance	Well prepared, uniform, attractive	Well prepared, uniform	Well prepared, uniform	
Flavor	Excellent	Good	Acceptable	
Texture	Excellent	Good	Acceptable	
Color	Excellent	Good	Acceptable	
Odor	Excellent	Good	Acceptable	
Weight	Excellent	Good	Acceptable	
Space	Excellent	Good	Acceptable	
Time	Excellent	Good	Acceptable	
Cost	Excellent	Good	Acceptable	
Preparation	Excellent	Good	Acceptable	
Storage	Excellent	Good	Acceptable	
Use	Excellent	Good	Acceptable	
Overall	Excellent	Good	Acceptable	



Choose the ribbon!

Purple

Blue

Red

White

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Judging Meat

Strips, Cubes or Chunks of Meat

Choose high quality chilled meat. Remove excess fat. Soak strong-flavored wild meats for 1 hour in brine water containing 1 tablespoon of salt per quart. Rinse. Remove large bones. The hot pack is preferred for best liquid cover and quality during storage. The natural amount of fat and juices in today's leaner meat cuts are usually not enough to cover most of the meat in raw packs.

Hot pack or Raw pack
Add 1 teaspoon of salt per quart to the jar, if desired.

Processed at 15# pressure, weighted gauge canner
https://nchfp.uga.edu/how/can_05/strips_cubes_chunks.html
USDA, 2009

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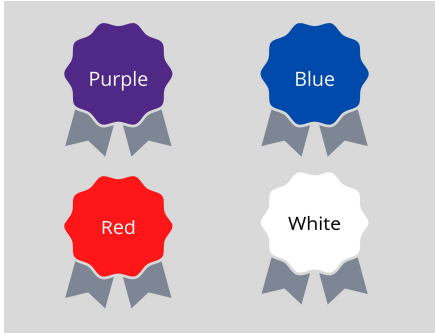
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Drying Foods

- Convenient
- Lightweight
- Uses minimal space
- No refrigeration needed
- Prevents growth of microorganisms
- Slows enzyme activity
- Long shelf life




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Types of Dried Foods

- Leather
 - Fruit Leather
 - Vegetable Leather
- No visible moisture
- Dry but pliable




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Types of Dried Foods

- Fruit
 - Pretreat to prevent browning
 - Ascorbic acid
 - Sulfites
 - Fruit juice
 - Honey
 - Slice thin and even
 - Peeled fruit dries best



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Types of Dried Foods

- Vegetables
 - Keep pieces uniform for even drying
 - Steam or water blanch
 - Brittle or crisp

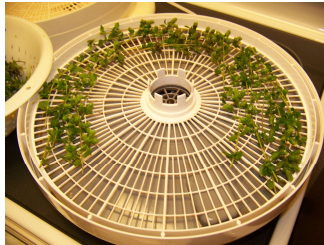


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Types of Dried Foods

- Herbs
 - Food dehydrator
 - Microwave
 - Paper bag with holes




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Types of Dried Foods

- Jerky
 - Must be heated to 160°F
 - This is not the drying temp!
 - Heat in marinade prior to drying
 - Heat in 275°F oven for 10 minutes after drying
 - Strips should be ¼-inch thick or less




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- <http://www.bookstore.ksre.ksu.edu/pubs/MF3173.pdf>
- <http://www.bookstore.ksre.ksu.edu/pubs/MF3173S.pdf>

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Dried Foods Scorecards



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Get Educated!

4-H Foods Project Curriculum and online resources




<http://nchfp.uga.edu/putitup.html>

<https://www.rrc.k-state.edu/preservation/>

10 Tips for Safe Home-Canned Foods
<http://www.ksre.ksu.edu/bookstore/pubs/MF3170.pdf>

<http://nchfp.uga.edu/>

National Center for Home Food Preservation



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<https://www.rrc.k-state.edu/judging/index.html>

Food Educational Exhibit Evaluation Form

Session 3 - Food Preservation, April 30, 2020

Presentation title: (FNF)

Recording of Session 3

And the Winner Is! - Tips on Judging Food Preservation, condensed version of Powerpoint

10 Tips for Safe Home-Canned Food (Spamish)

Savvy Safe Salads at Home (Spamish)

What's Your Favorite? (Spamish)

Dry Heat Safety at Home (Spamish)

Food Preservation Judging Criteria

Food Safety Recommendations for Food Preservation Exhibits - Updated March 2019

Judging Home Preserved Foods - University of Georgia

Food Preservation Problems and Solutions

Canning Meat - Problems and Solutions

Food Preservation Labels

Food Preservation Labels Small 1 x 3.58

Food Preservation Labels Large 2 x 4

Scorecards

- Judging Dried Fruits & Leather
- Judging Fruits
- Judging Meats
- Judging Pickles
- Judging Preserves
- Judging Dried Meat, Jerky
- Judging Meat and Poultry
- Judging Tomatoes and Tomato Products
- Judging Vegetables

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Big thanks to my video producer!

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**Just Because It Seals,
Doesn't Mean It's Safe!**



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April 2020

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