

# RUTGERS

New Jersey Agricultural  
Experiment Station

## Tips for Submitting a Winning Entry in the Hunterdon County 4-H & Agricultural Fair- Home Canned Foods Division

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## Basic Goals of Participation

1. Submit an entry that is prepared in a safe and tested manner to reduce the risk of food borne illness
2. Prepare an entry that looks inviting and tastes delicious!
3. Have fun show-casing your food preparation skills in a friendly environment!
4. Be open to learning and improving your knowledge and skills!



## Basic Rules for Product Submission

Go to the 4-H and Agricultural Fair website for complete rules:

- ❑ Entries are submitted at the Agricultural Tent on the Tuesday BEFORE the Fair Opening: 9:00-2:30pm
- ❑ Entries must be submitted as 2 sealed, labeled jars of the same product accompanied by 1) a completed **Canned Goods Entry Sheet** and 2) a complete, detailed, **recipe** for the product submitted.
- ❑ The recipe must be a **tested recipe from a trusted home food preservation source**, and must follow the latest guidance from the United States Department of Agriculture or their designated agents.



## What should be included on the Entry Sheet?

- All areas of the Entry Sheet need to be filled in!
- Note: if you check the box to indicate which tested recipe was used, your recipe must confirm that!
- Non-tested recipes are discouraged and may result in disqualification.

Hunterdon County 4-H & Agriculture Fair Adult Home Canning Exhibit

**HOME CANNED GOODS ENTRY SHEET**

Exhibitor# \_\_\_\_\_ Year: \_\_\_\_\_

Sub-division A:  Jams, Jellies, & other Sweet Spreads **OR**

Sub-division B:  Canned Fruits, Vegetables, Pickles, Relishes, Sauces, and other Food

Class#: \_\_\_\_\_

Name of Product: \_\_\_\_\_

Tested Recipe Reference Used\*:

USDA Complete Guide to Home Canning (Revised 2015, Bulletin No.539, Available online at <https://nchfp.uga.edu/resources/category/usda-guide#gsc.tab=0>)

So Easy to Preserve-USDA's National Center for Home Food Preservation, 6<sup>th</sup> Edition, 2014 (edited in 2020) and available for purchase at: [https://estore.uga.edu/C27063\\_ustores/web/product\\_detail.jsp?PRODUCTID=4495&SINGLESTORE=true](https://estore.uga.edu/C27063_ustores/web/product_detail.jsp?PRODUCTID=4495&SINGLESTORE=true)

Ball Blue Book Guide to Preserving (2015, 37<sup>th</sup> Edition or later, available at bookstores and online)

Other tested recipe source: \_\_\_\_\_

Recipe attached showing all ingredients, quantities, & processing steps:  Yes  No

Entry labelled on lid and jar with Name of Product and Date prepared:  Yes  No

Jar lid properly vacuum sealed:  Yes  No

Jar size:  ½ pint  pint  quart  other \_\_\_\_\_

Processing method:  boiling water bath canner  dial or weighted gauge pressure canner

Processing time: \_\_\_\_\_ minutes and/or Pressure: \_\_\_\_\_ psi

Note: Judges reserve the right to disqualify an entry if proper processing methods cannot be documented.  
\*For more information about safe and tested canning methods, please contact:

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Form Revision Date 5/2024

## What Should be Included on the Recipe?

A detailed recipe must be submitted for each product.

A print copy of a **tested recipe** may be submitted, providing it includes all of the following:

- The recipe source
- A complete list of ingredients
- The amount of each ingredient
- The complete preparation steps
- The processing method, time, and/or pressure



# What is a "tested" recipe?

- ❑ There is data, documentation, or prior knowledge, which supports the food safety of the product produced.
- ❑ The data comes from a **qualified testing laboratory** and may include the pH, density, and temperature of the product during processing (to make sure the food is heated sufficiently at all parts within the jar).
- ❑ There may also be microbiological testing to determine if the processing has destroyed harmful microorganisms.
- ❑ Tested recipes also aim to produce a product of highest quality, while guaranteeing product safety.



## Why can't I use my own family recipes or ones from the internet?

- Recipes handed-down from family members over the years may not have been updated to follow current home preserving guidelines.
- Websites such as Pinterest, celebrity chefs, and cookbooks, magazines, and newspaper articles **cannot be counted on to share tested recipes**. The emphasis may be on the taste or appearance of the food, not the food safety of the product.
- The judges must be able to quickly determine at the first stage of judging if the entry has followed a tested recipe!

## Where can I get tested recipes for home canning?

- **USDA's Complete Guide to Home Canning-** 2015 Edition:  
[http://nchfp.uga.edu/publications/publications\\_usda.html](http://nchfp.uga.edu/publications/publications_usda.html)
- **The National Center for Home Food Preservation:**  
<https://nchfp.uga.edu/#gsc.tab=0>
  - Including *So Easy to Preserve*, 6th Edition, 2014, the Home Food Preservation resource published by the University of Georgia.
- **Ball Canning Recipes:** <https://www.ballmasonjars.com/recipes> and/or recipes published in the latest edition of *The Ball Blue Book*, 37th Edition or later.
- Other select **Extension Universities** who conduct their own research and testing





# Most Common Reasons for Entry Disqualification or Poor Scores

- **Failure to submit a completed Entry Form with the entry.**
  - The Entry Form serves as a check-list to verify the most important safety steps in the preparation of the product.
- **Failure to submit a detailed recipe with the entry.**
  - The judges must verify that a recipe submitted follows all current guidelines for preparation/processing.
- **Failure to follow a tested recipe from an approved source, which is one of the most serious issues.**
  - Judges are therefore unable to determine if the recipe is safe. Note that judges do not have access to non-approved recipe sources at the time of judging.
- **Changing ingredients or proportions of ingredients in a recipe.**
  - This may affect the safety of the product: i.e. altering vinegar/water ratios in pickle recipes, adding more fresh herbs than recommended to a recipe, changing proportions of acid and low acid ingredients in salsas, adding thickeners such as flour or cornstarch to sauces

## Most Common Reasons for Entry Disqualification or Poor Scores, Cont'd

- Using the wrong processing method for the product.
- Improper headspace per recommendations for the product.
  - This can also be a result of improper packing of ingredients, which leads to too much leftover air in the jar.
- Using a jar-size that is not indicated in a tested recipe for that product.
- Failure to achieve a proper (vacuum) seal on the jar.
- Failure to indicate date of processing and name of product on the jar.
- Omitting acid (bottled lemon juice or citric acid) to tomato recipes.

# What are allowable ingredient swaps?

Source: Play it Safe: Changes and Substitutions to Approved Home Food Processing Recipes;  
Univ. of Wisconsin Extension

- It is **strongly recommended** that a tested recipe be followed exactly for judging at the Fair. This avoids any unnecessary delays while the judges try to assess the safety of any recipe changes.
- Usually, a tested recipe or source will indicate any permissible ingredient swaps. However, it is even better to use a tested recipe that exactly meets your needs.
- It is best to try the recipe in advance if any safe ingredient swaps are made (see the following slides).
- The recipe form must indicate the exact recipe information, including any ingredient changes.

# What are allowable ingredient swaps?

## Fruits

- Sugar helps preserve color, texture, and adds flavor. Sugar can be decreased or eliminated but texture may suffer if canned in plain water.
- Fruit may be canned in a light-colored fruit juice to reduce sugar.
- There are no tested recipes for using sugar substitutes. These can be added after the jar is opened.

# What are allowable ingredient swaps?: Jams & Jellies

- Up to 1 teaspoon of an herb or other flavoring can be added
- Peaches and nectarines are interchangeable; apples and pears are also interchangeable
- Unsweetened frozen or drained canned fruit can replace fresh fruit
- In a recipe with pectin, honey can replace up to 1 cup of the sugar in a 6-pint recipe; The amount of liquid will need to be reduced by the amount of honey.
- In a non-pectin recipe, honey can replace up to half of the sugar. Decrease the amount of liquid by the amount of honey.
- Types of pectin (liquid, regular, low-sugar) are **NOT interchangeable**. Follow the recipe for type of pectin.



# What are allowable ingredient swaps?

## Tomatoes

- To acidify tomato products,  $\frac{1}{4}$  teaspoon of citric acid or 1 Tablespoon of bottled lemon juice must be added to each pint jar.
  - $\frac{1}{2}$  teaspoon citric acid or 2 Tablespoons bottled lemon juice must be added per quart size jar
- Salt may be eliminated from recipes
- Do not add any amount of low-acid ingredients such as peppers, onions, or celery **unless specified in the tested recipe.**
- Never add flour or cornstarch to thicken the product



# What are allowable ingredient swaps?

## Salsas

Salsa is a mixture of acid (fruit and tomatoes) and low acid ingredients (peppers and onions).

- Sweet peppers can be substituted for hot peppers, measure for measure
- Different colored and types of tomatoes may be used. Pay attention to recipe guidance on stage of ripeness.
- Sugar and salt can be reduced. Dried spices may be added or deleted
- **Don't add more vegetables or fresh herbs than the recipe calls for!**
- Low acid ingredients may be reduced but cannot be replaced with other starchy vegetables such as beans or corn.
- The type or amount of acid cannot be changed.



# What are allowable ingredient swaps?

## Pickles & Relishes

- For quick pickles (NOT fermented or brined types) you may reduce sugar or salt. Usually this is for flavor.
- Grocery store 5% cider vinegar may be substituted for 5% white vinegar or vice versa. No other types of vinegar may be used.
- 1 clove of garlic or one small dried hot pepper can be added to the jar
- Zucchini or summer squash may be substituted for cucumber in any approved relish recipe.





# What are allowable ingredient swaps?

## Vegetables

Vegetables are low acid foods and **MUST** be processed in a pressure canner. **Always refer to a tested recipe.**

- Vegetable mixtures may be created as long as there is a tested recipe for each vegetable **AND** you use the processing time for the vegetable that has the **LONGEST PROCESSING TIME**.
- Up to 1 clove of garlic may be added to a jar.
- **Absolutely no thickeners (flour, cornstarch, rice, pasta, etc.) can be added**





## A Few Words about Fermented Foods

**Currently there are no protocols for judging fermented foods at the Fair due to several factors:**

- Currently the USDA and National Center for Home Food Preservation only have tested recipes for fermented cucumber pickles and sauerkraut.
- Fermented cucumber pickles and sauerkraut go through a curing process at room temperature for several weeks until they are “pickled”. This process is dependent on the precise amount of salt added, as well as the fermentation temperature and time.
- Following a tested method EXACTLY is necessary to prevent the growth of harmful micro-organisms while encouraging the action of desired fermentation micro-organisms.
- It is difficult to document that this process has been followed.

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**THANK YOU!**  
**GOOD LUCK ON YOUR ENTRY!**

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