Home Food Preservation: What’s Old is New Again!

Andy Hirneisen, MA
Nicole McGeehan, MPH,CHES
Food Safety Educators | Penn State Extension
Additional Collaborators

Sharon McDonald, MEd, RD, LDN
Food Safety Educator/Specialist

Stacy Reed, MS
Food Safety Educator

Poster Presentation

Impact of Revitalized Penn State Extension Master Food Preserver Volunteer Program
Penn State Extension Home Economics Educator, Alice Bosserman, at the 1917 Kutztown Fair
home canning

About 84,000,000 results (0.45 seconds)

pressure canning

About 22,000,000 results (0.45 seconds)

hot fill canning method

About 5,660,000 results (0.41 seconds)
Balancing Tradition, Trends and Science

• Importance of science-based research approach
• Educational programs
• Resources and literature
• Measuring impact
Canned foods can be divided into acid and low-acid foods.
Clostridium botulinum

**Low-acid**

- **Mild heat** (180-212 °F)
  - Severe heat (>212 °F)

**Acid/Acidified**

- **Mild heat** (180-212 °F)
Approved Processing Methods

High Acid Foods

- Boiling Water Bath Canner
  (water is the heating medium)

- Atmospheric Steam Canner
  (atmospheric steam is the heating medium)

Low Acid Foods

- Pressure Canner
  (pressurized steam is the heating medium)
Open kettle canning, also known as hot fill, is **not recommended**.

ALL canning must involve a processing step!
Seal Formation

1. Air
2. Room Temperature
3. Heat
4. Escaping Steam
5. Vacuum
6. Cool
7. Room Temperature
What does this mean for those we educate?

• No modifications are allowed unless specified in the procedure

• Directions must be followed exactly as described

• There is no way to predict if an untested recipe or processing method will be safe
  – Grandma’s Recipe
  – Facebook
  – Pinterest
Providing Research-Based Education

Fairs and Community Events
Providing Research-Based Education

Classroom Instruction

From Consumers to Chefs

FOOD SAFETY EDUCATION MATTERS
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Food Safety Hotline

From Consumers to Chefs

FOOD SAFETY EDUCATION MATTERS

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Internet Resources

Food Preservation

Information on home food safety, including canning and freezing sauerkraut, pickles, meat, poultry, vegetables, fruits, beans, fruit pie fillings, jellies, jams and spreads. Tips on harvesting and preserving herbs and spices and home cheesemaking.

Let's Preserve: Freezing Fruits

By Luke LaBorde, Ph.D., Martha Zepp, Andy Hirneisen, MA

This article explains how to freeze foods successfully and provides details on freezing specific fruits.
Preserving Cranberries

With fresh cranberries readily available in stores from October through December, now is a great time to purchase a supply and preserve them for year-round use.

Holiday Leftovers
The holiday meal is over. You’re ready to relax, sit down, and visit with guests. But wait, doing so could result in some uninvited guests—bacteria that love to grow at room temperature!
Learn More

Versatile Canned Chicken
Do you like the convenience of opening a can of ready-to-use meat and having many possibilities for preparing a meal? Think of a can of tuna. You can do the same thing with canned chicken.
Check It Out

Freezing Sweet Corn
Freeze corn as soon as possible after harvesting. It is best if frozen within six hours of being picked. Select tender ears of corn with milky kernels. After husking and removing the silk, trim off the ends of the ears to remove small fibrous kernels. Wash corn before blanching.

Blanching involves heating the corn to stop enzyme reactions that continue the ripening process and eventually make the corn tough. Heat is the most common method of stopping enzyme reactions as in heat processing in canning and Blanching in freezing foods. Sugar also slows enzyme reactions which is why fruits frozen in syrup do not need to be blanched. You may have heard of freezing corn without blanching it. The success of this depends upon the natural sweetness of the sweet corn. Many of the super sweet varieties of corn contain...
Providing Research-Based Education

Master Food Preserver Volunteers
Home Food Preservation Program Evaluation Form - Please Choose One Answer Per Question

Q1 Do you currently...

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
<th>No, but plan to</th>
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</thead>
<tbody>
<tr>
<td>Can low-acid foods?</td>
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<tr>
<td>Can high-acid foods?</td>
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<td>Freeze food?</td>
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<tr>
<td>Dry food?</td>
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</tbody>
</table>

Q2 As a result of attending Penn State Extension's Home Food Preservation program, how much did you learn from the program on the following topics related to preparing jars for canning?

<table>
<thead>
<tr>
<th>Topic</th>
<th>Nothing New</th>
<th>Some New Knowledge</th>
<th>Moderate Amount</th>
<th>A Great Deal</th>
<th>NA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Measuring Headspace</td>
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<tr>
<td>Removing Air Bubbles</td>
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<td>Using New Lids</td>
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<td>Tightening Ring Bands</td>
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</tbody>
</table>

Q3 As a result of attending Penn State Extension's Home Food Preservation program, how much did you learn from the program on the following topics related to using a pressure canner?

<table>
<thead>
<tr>
<th>Topic</th>
<th>Nothing New</th>
<th>Some New Knowledge</th>
<th>Moderate Amount</th>
<th>A Great Deal</th>
<th>NA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Venting Canner</td>
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<tr>
<td>Maintaining Proper Pressure</td>
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<tr>
<td>Canner Cool-Down</td>
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</tbody>
</table>

Q4 As a result of attending Penn State Extension's Home Food Preservation program, how much did you learn from the program on the following topics related to drying foods?

<table>
<thead>
<tr>
<th>Topic</th>
<th>Nothing New</th>
<th>Some New Knowledge</th>
<th>Moderate Amount</th>
<th>A Great Deal</th>
<th>NA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-Heat Jerky</td>
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<td>Testing for dryness</td>
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<td>Storage of dried food</td>
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</tbody>
</table>

Q5 As a result of attending Penn State Extension's Home Food Preservation program, how much did you learn from the program on the following topics related to freezing foods?

<table>
<thead>
<tr>
<th>Topic</th>
<th>Nothing New</th>
<th>Some New Knowledge</th>
<th>Moderate Amount</th>
<th>A Great Deal</th>
<th>NA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blanching</td>
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<tr>
<td>Pre-Treatment</td>
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<td>Headspace</td>
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<td>Storage Containers</td>
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</table>

Q6 Listed below are canning practices discussed in the Home Food Preservation program. For each practice, check the answer that applies to you.

<table>
<thead>
<tr>
<th>Practice</th>
<th>Did Before Program</th>
<th>Plan to Do</th>
<th>Plan to Do More Often</th>
<th>Probably Won't Do</th>
<th>NA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use and follow tested recipes from approved sources.</td>
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<td>Have the dial gauge from my pressure canner tested yearly for accuracy.</td>
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<tr>
<td>Use a pressure canner to can low acid foods.</td>
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</tbody>
</table>

Q7 Please list any additional comments:
2018 Outcomes of Home Food Preservation Programs

Changes in Safe Canning Behavior...

- Use and follow tested recipes from approved sources
  - Did Before Program: 22%
  - Plan To Do: 54%
  - Plan To Do More Often: 0%
  - Probably Won't Do: 0%

- Have the dial gauge from my pressure canner tested yearly for accuracy
  - Did Before Program: 10%
  - Plan To Do: 11%
  - Plan To Do More Often: 0%
  - Probably Won't Do: 0%

- Use a pressure canner to can low acid foods
  - Did Before Program: 19%
  - Plan To Do: 71%
  - Plan To Do More Often: 11%
  - Probably Won't Do: 0%

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2018 Outcomes of Home Food Preservation Programs

Participants That Increased Knowledge Related To....

- Freezing foods: 84%
- Drying foods: 86%
- Using a pressure canner: 91%
- Preparing jars for canning: 71%
Let’s Preserve Series Handouts
Articles
News Stories
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