

# Foods for Iowa 4-H Fairs - Quick Reference Guide

Food and nutrition exhibits involve fun and engaging food science and nutrition experiments.

Exhibits should be prepared with food safety in mind. Using unsafe ingredients or recipes could cause judges who evaluate exhibits to become ill. Plan ahead for a successful fair experience. Use these guidelines to help you select an acceptable product for exhibit, find an approved recipe source, and identify the appropriate preparation method.



## Preserved Foods - Keys to Success

### 1 Approved Recipe Source

Between 1994-2015, significant changes have been made in home food preservation processes. As a result, recipes handed down from previous generations, found in older cookbooks, or published online may not be safe to use or exhibit.

In order to qualify for state fair in Iowa, home preserved food exhibits must follow current preservation guidelines and use an approved, tested recipe.

ISU Extension and Outreach recognizes the following as current, tested recipe sources:

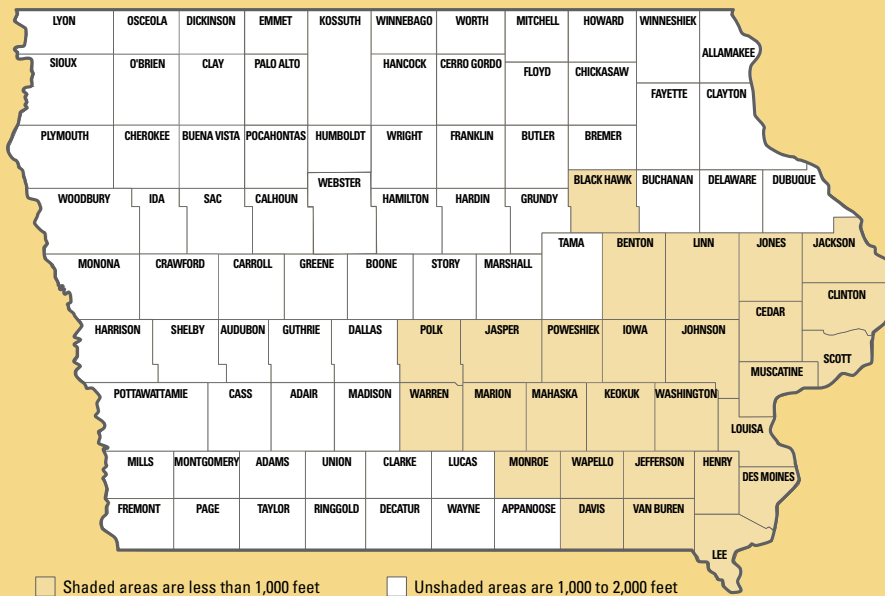
- Iowa State University Extension and Outreach's Preserve the Taste of Summer
  - Canning and Freezing Tomatoes (PM 638) [store.extension.iastate.edu/Product/3990](http://store.extension.iastate.edu/Product/3990)
  - Canning Fruits (PM 1043) [store.extension.iastate.edu/Product/4366](http://store.extension.iastate.edu/Product/4366)
  - Canning Vegetables (PM 1044) [store.extension.iastate.edu/Product/4367](http://store.extension.iastate.edu/Product/4367)
  - Canning Salsa (HS 21) [store.extension.iastate.edu/Product/14173](http://store.extension.iastate.edu/Product/14173)
  - Freezing Fruits and Vegetables (PM 1045) [store.extension.iastate.edu/Product/4369](http://store.extension.iastate.edu/Product/4369)
  - Making Fruit Spreads (PM 1366) [store.extension.iastate.edu/Product/4785](http://store.extension.iastate.edu/Product/4785)
  - Making Pickles and Pickle Products (PM 1368) [store.extension.iastate.edu/Product/4787](http://store.extension.iastate.edu/Product/4787)
  - Canning Meats, Poultry, Wild Game and Fish (PM 3021) [store.extension.iastate.edu/Product/13757](http://store.extension.iastate.edu/Product/13757)
- National Center for Home Food Preservation - [nchfp.uga.edu](http://nchfp.uga.edu)
  - Judging Home Preserved Foods - [nchfp.uga.edu/publications/nchfp/tech\\_bull/0Judging\\_Preserved\\_full.pdf](http://nchfp.uga.edu/publications/nchfp/tech_bull/0Judging_Preserved_full.pdf)
- USDA Complete Guide to Home Canning (2015) - [nchfp.uga.edu/publications/usda/INTRO\\_HomeCanrev0715.pdf](http://nchfp.uga.edu/publications/usda/INTRO_HomeCanrev0715.pdf)
- So Easy to Preserve (University of Georgia) [setp.uga.edu](http://setp.uga.edu)

### 2 Proper Equipment and Processing Time

If pressure canning is necessary, be sure to **USE A PRESSURE CANNER NOT A PRESSURE COOKER**. A canner will hold at least 4 quart-sized jars.

Adjust the processing time based on the altitude of your location.

Altitudes of Iowa Counties



### 3 Ask the Experts

Contact Iowa State University Extension and Outreach **AnswerLine** with any questions. Tell them you are calling in reference to a 4-H exhibit. Calls are answered Monday through Friday, 9 a.m.–noon, 1–4 p.m.

**CALL:** 1-800-262-3804 or (515) 296-5883  
Relay Iowa (hearing impaired) 1-800-735-2942

**EMAIL:** [answer@iastate.edu](mailto:answer@iastate.edu)

# Preserved Foods

Home preserved food must be prepared using current, tested recipes to qualify as a fair exhibit.

	ACCEPTABLE EXAMPLES	UNACCEPTABLE EXAMPLES	METHOD NOTES
<b>JAMS JELLIES SWEET SPREADS</b>	<ul style="list-style-type: none"> <li>Fruit jams and jelly</li> <li>Corn cob jelly</li> <li>Pepper jelly</li> <li>Tomato jam</li> <li>Fruit butter</li> <li>Conserves</li> <li>Preserves</li> <li>Marmalades</li> </ul>	<ul style="list-style-type: none"> <li>Recipes made with Jell-O®</li> <li>Recipes that require refrigeration</li> <li>Jars sealed with paraffin or inverted</li> </ul>	<ul style="list-style-type: none"> <li>It is highly recommended that any freezer/refrigerator/Jell-O® jams or jellies be exhibited as a written project.</li> </ul>
<b>PRESERVED FRUITS</b>	<ul style="list-style-type: none"> <li>Whole or cut fruits</li> </ul>		<ul style="list-style-type: none"> <li>May be packed in sugar syrup, water or fruit juice.</li> </ul>
<b>LOW ACID VEGETABLES</b>	<ul style="list-style-type: none"> <li>Beans</li> <li>Carrots</li> <li>Corn</li> <li>Soups</li> <li>Vegetable with meat</li> </ul>	<ul style="list-style-type: none"> <li>Do not pack for artistic affect ("fancy packs" or hand-placing the vegetables to produce a tight, vertical pack) unless the recipe directly states to pack this way</li> </ul>	<ul style="list-style-type: none"> <li>If recipe calls for a peeled vegetable, it must be peeled.</li> </ul>
<b>PICKLES AND RELISHES</b>	<ul style="list-style-type: none"> <li>Cucumber</li> <li>Beets</li> <li>Asparagus</li> <li>Carrots</li> </ul>	<ul style="list-style-type: none"> <li>Do not pack for artistic affect ("fancy packs" or hand-placing the vegetables to produce a tight, vertical pack) unless the recipe directly states to pack this way</li> <li>Alum not advised</li> </ul>	
<b>SALSA</b>	<ul style="list-style-type: none"> <li>Canned mild salsa</li> <li>Canned hot salsa</li> <li>Canned fruit salsa</li> </ul>	<ul style="list-style-type: none"> <li>Fresh salsa</li> <li>Pico de gallo</li> <li>Recipe that a participant creates CANNOT be used as a fair exhibit</li> </ul>	<ul style="list-style-type: none"> <li>May NOT contain black beans. If desired, you can add them at the time of serving.</li> </ul>
<b>TOMATO PRODUCTS</b>	<ul style="list-style-type: none"> <li>Tomatoes</li> <li>Tomato juice</li> <li>Tomato sauce</li> <li>Ketchup</li> <li>Spaghetti sauce</li> <li>BBQ sauce (canned)</li> </ul>	<ul style="list-style-type: none"> <li>Fresh BBQ sauce (not canned)</li> </ul>	<ul style="list-style-type: none"> <li>Tomato products are considered an acidified product and should be acidified according to standards. Refer to the National Center for Home Food Preservation<sup>2</sup> for standards and include in your recipe explanation.</li> </ul>
<b>MEATS OR POULTRY</b>	<ul style="list-style-type: none"> <li>Canned beef, chicken, pork, and venison</li> </ul>	<ul style="list-style-type: none"> <li>Jerky</li> </ul>	<ul style="list-style-type: none"> <li>Either raw pack or hot pack are acceptable.</li> </ul>
<b>HONEY</b>		<ul style="list-style-type: none"> <li>Honeycomb</li> </ul>	<ul style="list-style-type: none"> <li>Package in Queenline or classic honey jar.</li> <li>Density/moisture content must be measured by a refractometer.</li> </ul>
<b>MAPLE SYRUP</b>	<ul style="list-style-type: none"> <li>Maple syrup</li> </ul>		<ul style="list-style-type: none"> <li>It is highly recommended that maple syrup exhibits should follow the instructions as outlined by University of Minnesota Extension, <i>Maple Syrup, Minnesota Harvester Handbook</i>, <a href="http://www.myminnisotawoods.umn.edu/wp-content/uploads/2013/02/MAPLE-SYRUP-V9-SR.pdf">www.myminnisotawoods.umn.edu/wp-content/uploads/2013/02/MAPLE-SYRUP-V9-SR.pdf</a></li> </ul>
<b>DRIED FOODS</b>	<ul style="list-style-type: none"> <li>Fruits</li> <li>Vegetables</li> </ul>	<ul style="list-style-type: none"> <li>Meats, including jerky</li> <li>Fruit leather</li> </ul>	<ul style="list-style-type: none"> <li>Must be completely dry (brittle texture).</li> <li>Must be stored in an airtight food grade container.</li> <li>Fruit leather must be brought in a plastic bag as part of a display but is not for tasting.</li> </ul>

# Baked Goods and Confections

	ACCEPTABLE EXAMPLES	UNACCEPTABLE EXAMPLES	METHOD NOTES
PERISHABLE FOOD	<ul style="list-style-type: none"> <li>None</li> </ul>	<ul style="list-style-type: none"> <li>Foods served hot</li> <li>Foods that require refrigeration</li> <li>Foods containing alcohol</li> <li>Foods served or made in canning jars or containers that are not food-grade</li> <li>Dips, fried foods, homemade noodles, nut butters, salads, smoothies</li> </ul>	<ul style="list-style-type: none"> <li>Perishable items (except home canned foods) that cannot be <b>safely</b> brought to the fair can be exhibited as a written project. Project can include pictures, explanation of steps, and evaluation of product quality from others at home.</li> </ul>
PIES	<ul style="list-style-type: none"> <li>Double crusted fruit pie</li> <li>Traditional recipe pecan pie</li> <li>Dutch apple pie</li> </ul>	<ul style="list-style-type: none"> <li>Non-traditional pecan pie (recipe that includes added water or milk and requires refrigeration)</li> <li>Custard, pumpkin, or meringue pies</li> <li>Unbaked fruit pies</li> <li>Products made with a butter-sugar mixture topping that is baked less than 45 minutes, e.g., apple or rhubarb crisps</li> </ul>	<ul style="list-style-type: none"> <li>Fruit must be cooked.</li> </ul>
PASTRIES	<ul style="list-style-type: none"> <li>Croissants</li> <li>Danishes</li> <li>Strudels</li> <li>Turnovers</li> </ul>	<ul style="list-style-type: none"> <li>Cream or custard filled</li> </ul>	<ul style="list-style-type: none"> <li>Fruit must be cooked.</li> </ul>
CANDIES	<ul style="list-style-type: none"> <li>Fudge</li> <li>Taffy</li> <li>Candied lemon</li> </ul>	<ul style="list-style-type: none"> <li>Candies that require refrigeration</li> <li>Cream cheese mints</li> </ul>	<ul style="list-style-type: none"> <li>Texture must be dry enough that it does not require refrigeration.</li> </ul>
YEAST BREADS	<ul style="list-style-type: none"> <li>White, Wheat, Rye</li> <li>Pretzels</li> <li>Rolls</li> <li>Breads with cheese that is fully incorporated (not visually detectable)</li> </ul>	<ul style="list-style-type: none"> <li>Breads containing meat, salsa, vegetables, potatoes, beans, fresh herbs or layers of cheese inside or on top of the product</li> <li>Breads leavened by wild microorganisms such as sourdough, friendship bread, etc.</li> <li>Caramel rolls made with milk or cream in caramel sauce</li> </ul>	
QUICK BREADS	<ul style="list-style-type: none"> <li>Coffee cakes</li> <li>Muffins</li> <li>Biscuits</li> <li>Scones</li> <li>Banana, Pumpkin, Zucchini breads</li> </ul>	<ul style="list-style-type: none"> <li>Quick breads containing meat, salsa, vegetables, beans, fresh herbs, or chunks (large or small) of cheese.</li> </ul>	<ul style="list-style-type: none"> <li>May be frosted or unfrosted. See frosting guidelines (page 4).</li> <li>No visible chunks of cheese. It is highly suggested that you use shredded cheese.</li> </ul>
BISCUITS	<ul style="list-style-type: none"> <li>Rolled or dropped biscuits</li> <li>Scones</li> </ul>	<ul style="list-style-type: none"> <li>Biscuits containing meat, salsa, vegetables, beans, fresh herbs, or chunks (large or small) of cheese.</li> </ul>	<ul style="list-style-type: none"> <li>No visible chunks of cheese. It is highly suggested that you use shredded cheese.</li> </ul>
CEREAL GRAINS	<ul style="list-style-type: none"> <li>Baked granola</li> <li>Cereal</li> <li>Crackers (containing no herbs)</li> <li>Trail mixes</li> </ul>		<ul style="list-style-type: none"> <li>Must be baked.</li> <li>Must be dry and in an airtight food grade container.</li> </ul>
FLAVORED OILS/ VINEGARS	<ul style="list-style-type: none"> <li>None</li> </ul>	<ul style="list-style-type: none"> <li>Homemade salad dressings</li> <li>Flavored vinegars with fruit peels in the product</li> <li>Vinegar or oils with added herbs or garlic</li> </ul>	

	<b>ACCEPTABLE EXAMPLES</b>	<b>UNACCEPTABLE EXAMPLES</b>	<b>METHOD NOTES</b>
<b>COOKIES AND BARS</b>	<ul style="list-style-type: none"> <li>• Drop, rolled, pressed, or refrigerator</li> <li>• Black bean brownies (commercially processed beans)</li> <li>• Brownies, Scotcheroos</li> <li>• No-bake cookies that do not contain flour</li> </ul>	<ul style="list-style-type: none"> <li>• Items that require refrigeration after baking or preparing (this excludes items that set up at room temperature)</li> <li>• Edible cookie dough</li> </ul>	<ul style="list-style-type: none"> <li>• All doughs containing flour and eggs <b>MUST</b> be baked.</li> </ul>
<b>CAKES</b>	<ul style="list-style-type: none"> <li>• Foam</li> <li>• Sponge</li> <li>• Shortened</li> <li>• Cupcakes</li> <li>• Angel food</li> <li>• Pound</li> <li>• Chocolate</li> <li>• Carrot</li> </ul>	<ul style="list-style-type: none"> <li>• Cake filled or topped with any product requiring refrigeration</li> <li>• Cake filled, garnished, or topped with fresh fruit</li> <li>• Fruit filled cakes containing chunks of fruit</li> <li>• Pineapple upside down cake</li> </ul>	<ul style="list-style-type: none"> <li>• May be frosted or unfrosted. Frosting is required if decorating skills are part of the goal.</li> <li>• Carrots in carrot cake <b>MUST</b> be shredded finely.</li> </ul>
<b>FROSTING AND GLAZES</b>	<ul style="list-style-type: none"> <li>• Commercially canned frostings, e.g., German chocolate, cream cheese</li> <li>• Sprinkle of powdered sugar</li> <li>• Traditional buttercream (butter, sugar, flavoring, liquid)</li> <li>• Glazes with powdered sugar and water</li> </ul>	<ul style="list-style-type: none"> <li>• Traditional German chocolate frosting made from scratch</li> <li>• Cream cheese frosting made from scratch</li> <li>• Ganache</li> <li>• 7-minute frosting</li> <li>• Fresh juice</li> </ul>	<ul style="list-style-type: none"> <li>• It is highly suggested that exhibits be presented without frosting unless the frosting is part of the exhibit goal.</li> </ul>

No endorsement of products or firms is intended nor is criticism implied of those not mentioned.

Developed by Shannon Coleman, assistant professor and state human sciences specialist in food safety; reviewed by Beth Marrs, Elizabeth Meimann and Marlene Geiger, AnswerLine specialists; Renee Sweers, human sciences specialist, and Lena Frank, student in food science and human nutrition, with Iowa State University Extension and Outreach.

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