



## ***SOUTH CAROLINA FAMILY AND COMMUNITY LEADERS***

Affiliated with National Volunteer Outreach Network, Country Women's Council, U.S.A., Associated Country Women of the World and in partnership with Clemson University Cooperative Extension Service  
SCFCL website: <http://www.scfcl.com>

### **Leader Training Guide**

#### **Title: Kids Can Jam! Having Fun in Your Kitchen**

**Objectives:** To share the fun of food preservation with 4-H age youth.  
To give youth an opportunity to learn about and develop an appreciation for food preparation and preservation

#### **Lesson Overview/Introduction:**

Making jam from locally grown fruit with 4-H'ers or 4-H age youth provides an opportunity to share your food preservation knowledge in a fun way. While kids are having fun, they can learn about growing and picking fruit, about the benefits of eating fruit, about hand-washing, about kitchen safety, and about measuring, stirring, and other cooking techniques. This lesson will focus on making strawberry jam but the concepts are applicable to making jam from blackberries, blueberries, raspberries, cherries or peaches.

#### **Lesson:**

South Carolina-grown strawberries are available in late-April through May. Strawberries are high in vitamin C, a good source of potassium and a source of fiber. They taste really good and make excellent jam. The key to this exercise is to begin with a recipe that you enjoy. Strawberry No-Cook Freezer Jam (page 4) is a recipe that easily can be prepared by younger children (aged 7-9). Preparation of Strawberry Jam with Added Pectin (page 4) requires greater cooking skill and is more appropriate for older children. Both groups require close supervision. A 4-H agent co-leader may help with the logistics.

Practice preparing the recipe beforehand so you can anticipate safety issues and kitchen traffic problems. Limit the group to the number that can work safely in the kitchen you are using; we recommend a maximum of 10 youth. A good rule of thumb is to include no more than 2 youth per adult helpers/experienced mentors. Ask them to wear tennis shoes (not sandals) and wear jeans/pants. Alternatively, provide long aprons for protection against hot liquids.

Assemble your equipment and ingredients ahead of time. Review the equipment with the children. Give them a chance to use the headspace tool, practice with the jar lifter, position the two-piece lids, etc. Let them wash jars and prepare equipment. Review knife safety (e.g., cut away from the body, no knives in the sink, carry with tip down and cutting edge facing away from you) with them. As you go over the recipe with them, review dry and liquid measures. Let them practice measuring sugar and water. Keep them busy. As much as possible, let them do the preparation. You may want to divide them into working groups. For example, one group can wash and cap strawberries; one group can mash them. Another group can measure the ingredients; another can stir the pectin into fruit; one group can ladle freezer jam into jars. Make enough jam so that every child can go home with a jar.

Special care must be taken with cooking strawberry jam and the boiling water process. You may want to stir the jam yourself or select a mature student to do it carefully. Boiling jam, steam and boiling water can cause serious burns.

Despite the necessary kitchen safety concerns, the process time provides an opportunity for you to share how jam-making preserves strawberries (sugar, heat, refrigeration). You and the children might share related stories (what jam/jelly have they tasted, which do they like, how they might use jams). It may be a good time to sample jam prepared ahead of time. If the group gathered the strawberries used in the jam, this would be a perfect time to review that experience. Talk about favorite strawberry recipes. Make it fun; keep it positive and enjoy the children. Keep the conversation going while they help you wash the equipment and clean up the kitchen. The exercise will require at least two hours for freezer strawberry jam and at least three hours for the strawberry jam with added pectin.

Note: This lesson can easily be modified by using other currently available fruits (blackberries, blueberries, raspberries, cherries or peaches). The recipes differ slightly but the preparation procedures and equipment will be the same. The two recipes included in this lesson specifically require Ball® Instant Pectin (freezer jam) and Ball® powdered fruit pectin (jam with added pectin). Powdered and liquid pectins are not interchangeable; the proportion of fruit and the sequence for pectin addition differ. If you use Mrs. Wages, Sure-Jell or another pectin, use the manufacturer's recommended recipe.

### **Lesson Summary:**

Making strawberry jam with 4-H aged youngsters gives them an opportunity to learn about and develop an appreciation for food preparation and preservation and gives you a chance to share the fun and the science of food preservation with them.

### **Suggested Activities:**

- Increase your personal knowledge by reviewing fact sheets and other references (below).
- Contact your local 4-H agent, Boy Scout leader or Girl Scout leader and offer to provide the jam-making lesson.
- Take a field trip with a small youth group to a local pick-your-own strawberry farm (or to your own garden). Clear the trip with parents and the farmer first. Share information about growing berries. (A friendly farmer may be willing to do this.) Show youth how to select and pick ripe berries. Provide opportunities to taste fresh-picked berries.
- If possible, make a copy of the listed steps for each child.
- You may want to have each child bring a hot mitt and a potato masher to the lesson.

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**Sources/References:**

<ul style="list-style-type: none"> <li>• HGIC 3180 Basics of Jelly Making</li> <li>• HGIC 3224 Strawberry Jam</li> <li>• HGIC 4255 Using and Storing Strawberries</li> <li>• Ball® Blue Book Guide to Preserving</li> </ul>	<ul style="list-style-type: none"> <li>• Freshpreserving.com</li> <li>• Tips for Involving Children in the Kitchen (<a href="http://snap.nal.usda.gov/recipes/tips-involving-children-kitchen">http://snap.nal.usda.gov/recipes/tips-involving-children-kitchen</a>)</li> </ul>
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**Suggested Materials and Recipes:**

Easy Strawberry No-Cook Freezer Jam (Source: Ball® RealFruit™ Instant Pectin product instructions)	
Equipment	Ingredients (for 2 8-oz Jars)
<ul style="list-style-type: none"> <li>• Paring knife</li> <li>• Cutting board</li> <li>• Potato masher</li> <li>• Large bowls or deep pan</li> <li>• Ladle</li> <li>• Plastic or glass 8-oz freezer jars and lids</li> <li>• Liquid and dry measuring cups and measuring spoons</li> </ul>	<ul style="list-style-type: none"> <li>• 1<math>\frac{2}{3}</math> cup prepared strawberries.</li> <li>• <math>\frac{2}{3}</math> cup sugar or granulated Splenda®</li> <li>• 2 tablespoons instant pectin</li> </ul> <p>Recipe may be tripled for a total of 6 each 8-oz jars.</p>

Preparation:

1. Wash strawberries just before using. Prepare berries by capping and crushing one layer at a time with potato masher in a large bowl or deep pan. Measure 1 $\frac{2}{3}$  cups.
2. Stir  $\frac{2}{3}$  cup sugar or Splenda® and 2 tablespoons instant pectin in a bowl.
3. Add fruit. Stir 3 minutes
4. Ladle jam into clean freezer jars and let stand 30 minutes.
5. Enjoy. May be refrigerated up to 3 weeks or frozen up to 1 year.

Strawberry Jam with Added Pectin (Source: Ball Blue Book Guide to Preserving, p.34)		
Equipment		Ingredients (for 8 half-pint jars)
<ul style="list-style-type: none"> <li>• Paring knife</li> <li>• Cutting board</li> <li>• Potato masher</li> <li>• Large bowl or deep pan</li> <li>• Liquid and dry measuring cups and spoons</li> <li>• 8 quart saucepan</li> <li>• Ladle,</li> <li>• Slotted spoon</li> </ul>	<ul style="list-style-type: none"> <li>• Prepared canning jars, 4 oz or 8 oz.</li> <li>• Canning funnel</li> <li>• Headspace tool</li> <li>• Two-piece lids</li> <li>• Magnetic lid wand</li> <li>• Jar lifter</li> <li>• Boiling water canner</li> <li>• Pot holders</li> </ul>	<ul style="list-style-type: none"> <li>• 2 quarts strawberries.</li> <li>• 1 package powdered pectin</li> <li>• ¼ cup lemon juice</li> <li>• 7 cups sugar</li> </ul>

Prepare Canner, Lids and Jars:

1. Fill canner half full of clean hot water. Heat water in canner to simmer (180°F) and hold. Wash jars thoroughly and rinse in hot water; hold covered in water bath canner to stay hot. Have hot water heating on stove for adding to canner.
2. Prepare lids according to manufacturer's recommendations (usually, cover with hot water, bring to a simmer and hold in hot water).

Prepare Jam

1. Wash strawberries just before using. Prepare by capping and crushing one layer at a time with potato masher in deep bowl or pans.
2. Combine strawberries, pectin and lemon juice in large saucepan. Bring to boil with stirring.
3. Add sugar, stirring until dissolved.
4. Boil hard 1 minute, stirring constantly. Remove from heat.
5. Skim foam with slotted spoon, if necessary.
6. Ladle jam into hot jars, leaving ¼ inch headspace.
7. Remove air bubbles; adjust headspace by adding hot jam.
8. Wipe rims. Center lids on jars. Tighten bands to fingertip-tight.
9. Process 10-minutes in boiling water canner.

Boiling Water Canner Process:

1. Place jars of jam one at a time in rack in boiling water canner. Have the water 1-2 inches above tops of jars.
2. Bring water in canner to vigorous boil before timing; maintain boil throughout 10 min process.
3. Turn off heat; remove canner lid. Wait 5 minutes.
4. Remove jars one at a time with jar lifter being careful not to tilt them; place ~1 inch apart on dry towels or cake cooling rack; place away from drafts.
5. Let jars cool undisturbed 12 to 24 hours. Remove rings and store in a cool dry place for up to a year for best quality.

\*For this exercise, each youth may take home a hot jar of jam in their hot mitts.