Kentucky 4-H Fair Recipe Book—Food Preservation Division

For fair competition, Kentucky 4-H members are to use the recipes in this booklet. The recipes were adapted from the Put It Up! Food Preservation for Youth curriculum from the National Center for Home Food Processing and Preservation, University of Georgia Cooperative Extension and Clemson Cooperative Extension. Additional helpful information is available on the NCHFP website at: http://nchfp.uga.edu/.

861 **Dried Apples:** Dry apples according to the instructions in the 2018 4-H Fair Recipe Book. Place 12 pieces of dried fruit in a container which is an example of a container suitable for long term storage of dried fruit. Label package with kind of fruit and date processed. Size of the container is not being judged. Publication HE 3-501 may be helpful: http://www2.ca.uky.edu/agc/pubs/FCS3/FCS3501/FCS3501.pdf


864 **Strawberry Jam:** (half pint or smaller jar), canned using a boiling water canner. Use the recipe in the 2018 4-H Fair Recipe Book. The USDA recommended headspace for jam is ¼ inch. Canning label must be completed by member and affixed to the jar. Write the type of fruit used on the canning label. Publications FCS3-579 at http://www2.ca.uky.edu/agc/pubs/FCS3/FCS3579/FCS3579.pdf and USDA Complete Guide to Home Canning: http://nchfp.uga.edu/publications/usda/GUIDE%201%20Home%20Can.pdf may be helpful. Refrigerator and freezer jams are not appropriate for this class.

865 **Green Beans:** (One pint), canned using a pressure canner. Use the recipe in the 2018 4-H Fair Recipe Book. Beans may be ‘raw packed’ or ‘hot packed’ but the packing method used must be indicated on the label. The USDA recommended headspace for green beans is 1 inch. Canning label must be completed by member and affixed to the jar. Publication FCS3-583 Home Canning Vegetables (http://www2.ca.uky.edu/agc/pubs/FCS3/FCS3583/FCS3583.pdf) and USDA Complete Guide to Home Canning: http://nchfp.uga.edu/publications/usda/GUIDE%201%20Home%20Can.pdf may be helpful.
Dried Apples
Recipe adapted from the Put It Up! Food Preservation for Youth curriculum from the National Center for Home Food Processing and Preservation, University of Georgia Cooperative Extension and Clemson Cooperative Extension

2 to 3 apples of your choice
2 cups vitamin C-enriched apple juice (enough to cover the apples when sliced)
Cooking spray

1. If you are using an electric dehydrator, plug it in (so that it is not touching anything) with the lid on the base. If you are using an oven, slide oven racks to be 2 to 3 inches apart and turn on oven. Preheat dehydrator or oven to 140°F.
2. Wash apples under cool running water.
3. Place enough apple juice in a bowl to cover the apples when sliced.
4. Core and peel the apples. Cut away any bruised or damaged areas. Carefully cut apples into 1/8-inch thick pieces, either as slices or rings.
5. To prevent browning, place the apple pieces into the bowl of juice as they are cut. Soak the apple pieces in the juice for 3 to 5 minutes.
6. Spray drying tray lightly with cooking spray. This will prevent sticking.
7. Remove the apple pieces from the juice, place briefly on paper towels to remove excess juice, and then place the pieces in a single layer on the drying tray. Place the drying tray into the preheated dehydrator or oven.
8. Dry at 140°F for approximately 6 to 12 hours in a dehydrator. Plan to start checking for doneness in 3 hours and check every hour or half-hour until done. Oven drying may take 12 to 24 hours. If using an oven, leave the door cracked open to allow moist air to escape. Place a fan outside the oven near the door to speed up drying time.
9. When dry, the apple pieces should be bendable, but not sticky. If a piece is folded in half, it should not stick to itself. You should not be able to squeeze any moisture from the fruit. Do not let the apples dry so long that they become crispy.
10. After drying, cool the dried apples 30 to 60 minutes before packaging. Packaging warm fruit could lead to sweating and mold growth.
11. Once they are cool, put the dried apples into a sealable airtight container. Label the container with the name of the fruit and the date.

UK Extension Publication HE 3-501 may be helpful.

For the fair: Place 12 pieces of dried fruit in a container which is an example of a container suitable for long term storage of dried fruit. Label package with kind of fruit and date processed. The container may be larger than needed for 12 pieces. Judging will be based on suitability of container, not size.
Boiling Water Canning

Follow these general instructions for boiling water canning Choice Salsa, Dill Pickles or Strawberry Jam.

Prepare canner and jars:
1. Assemble equipment and ingredients.
2. Place rack in bottom of boiling water canner. Fill canner half full with clean, hot water and place on burner. Turn heat on medium-high to heat water in canner to the temperature specified in each recipe (180°F, simmering, for hot packed Choice Salsa and Strawberry Jam; 140°F, almost simmering, for raw packed Dill Pickles).
3. Only use jars that were specifically made for home canning. (Do not re-use containers such as mayonnaise jars.) Use only the jar sizes specified in each recipe. Examine jars carefully. Discard any with cracks or chips in the rim. Examine ring bands and discard any with rust or bends.
4. Wash jars thoroughly in warm soapy water, rinse well, and place them in the canner to stay warm until ready to use.
5. Wash ring bands and prepare lids as instructed by the manufacturer.
6. Heat 3 to 4 cups hot water in a medium saucepan for adding to canner, if needed.

Prepare the recipe:
As directed for each product.

Fill the jars:
1. Slowly remove jars from hot water with jar lifter. Carefully empty any water back into the canner. Place jars upright on towel-covered countertop or rack.
2. Fill jars as directed in each recipe, leaving the required headspace. Headspace is the gap between the top of the food and the top of the jar rim. Measure headspace with headspace tool or ruler to ensure it is correct.
3. Remove air bubbles by slowly moving bubble freer or nonmetal spatula gently in and out around the inside edge of each jar. Check headspace of each jar again and gently add or remove liquid with a small spoon, if needed.
4. Wipe jar rims with a clean, damp paper towel.
5. Apply lids according to manufacturer’s directions. Turn band onto jars until fingertip tight. Fingertip tight is when you meet firm resistance as you turn the band onto the jar using your thumb and two fingers.

Boiling water processing:
1. Use a thermometer to check that the temperature of the water in the canner is the temperature specified in the recipe (180°F for Choice Salsa or Strawberry Jam; 140°F for Dill Pickles). Adjust burner higher or lower, if necessary.
2. Use a jar lifter to carefully place filled jars one at a time on the rack in the canner. Keep jars upright at all times. Make sure water is 1 to 2 inches above tops of jars. Add hot water from the saucepan if needed, pouring between jars rather than directly on top of jars.
3. Place lid on canner and turn heat to high. Bring water in canner to a strong boil and then start a timer, using the time specified in the recipe for your altitude. Be sure to maintain a steady boil throughout the entire timing process.

4. Once the timer goes off, turn off heat. Remove canner lid, lifting the underside of the lid away from you to direct the steam away from your face. Wait 5 minutes for the contents of the jars to settle.

5. After 5 minutes of cooling, remove jars from the canner one at a time using a jar lifter, keeping them upright. Be careful not to tilt them. Place jars at least 1 inch apart on a dry towel or cake-cooling rack. Place away from drafts of moving air.

6. Let jars cool, undisturbed, for 12 to 24 hours. Check jars for vacuum seals. The lids on sealed jars will be indented and will not flex when pressed.

7. Remove ring bands from sealed jars and wipe jars. Store in a cool, dark, dry place. Store unsealed or opened jars in the refrigerator and eat within one week.

**Choice Salsa**

Recipe is from the *Put It Up! Food Preservation for Youth* curriculum from the National Center for Home Food Processing and Preservation, University of Georgia Cooperative Extension and Clemson Cooperative Extension.

6 cups (about 5 pounds) tomatoes (red, orange, yellow or green)
9 cups (about 3 pounds) onions and/or peppers of any variety*
1 1/2 cups commercially bottled lemon or lime juice
3 teaspoons canning or pickling salt
About 6 pint (or 12 half-pint) canning jars

*Red, yellow or white onions may be used and will slightly affect the overall flavor. More bell peppers make a milder salsa, while hot chili peppers make a spicier salsa. It is important to the safety of the salsa that you use no more than 9 cups total of onions and peppers.

1. Prepare canner and jars as directed in *Boiling Water Canning*, heating to 180°F (simmering).

2. **Peel tomatoes**: Fill a stockpot with enough water to cover several tomatoes at a time. Bring water to a boil while preparing tomatoes. Fill a large bowl with ice (if you have it) and cold water. Wash tomatoes. Cut an “x” in the non-stem end of tomatoes with the tip of a small knife. Place 2 to 3 tomatoes at a time in boiling water for 30 to 60 seconds or until skins split. Remove tomatoes with a slotted spoon and place in cold/ice water. Slip off tomato skins and discard them. Place tomatoes on a clean cutting board.

3. Carefully use a knife to remove the firm inner core from tomatoes. Coarsely chop tomatoes (into blueberry-sized pieces).

4. Peel, rinse, trim and dice onions in ¼-inch pieces.

5. **Bell peppers**: Rinse peppers. Remove stems, seeds and membranes. Dice peppers in ¼-inch pieces.

6. **If using hot peppers**: Place food handling gloves on both hands. Rinse and dry hot peppers. Remove stems and remove the seeds and membranes, unless you want more spicy heat. Dice hot peppers into very small pieces. Remove and discard gloves. Wash hands well.
7. Measure and combine 9 cups of peppers and onions with 6 cups of tomatoes in a large stockpot. You can vary the individual amounts of peppers and onions to suit your taste, but be sure that they measure 9 cups in total. Measure and add 1½ cups bottled lemon or lime juice and 3 teaspoons salt. Stir to mix ingredients evenly.

8. Heat to boiling over high heat and then reduce to a simmer and cook for 3 minutes, stirring as needed to prevent scorching.

9. Remove hot jars from canner and fill as directed in Boiling Water Canning, leaving ½-inch headspace. Use a jar funnel for neater filling and be sure to release air bubbles and adjust headspace if needed. Wipe jar rims and apply lids.

10. Process in a boiling water canner as directed in Boiling Water Canning. Process pint or half-pint jars for 15 minutes at altitudes of 1,000 feet or below; 20 minutes at altitudes of 1,001-6,000 feet.

For the fair: Replace ring band on jar, if it was removed for storage. Complete 4-H Canning Label and affix to jar.

Dill Pickles

Recipe is from the Put It Up! Food Preservation for Youth curriculum from the National Center for Home Food Processing and Preservation, University of Georgia Cooperative Extension and Clemson Cooperative Extension.

About 9 pounds (36) pickling cucumbers, 3 to 4 inches long
3 cups water
3 cups vinegar (5% acidity)
6 tablespoons canning salt
10 to 11 heads of fresh dill or 1½ teaspoons dried dill weed or dill seed
3 to 3 ½ tablespoons whole mustard seed
3 to 7 cloves of garlic (optional)
About 6 to 7 pint (or 12 to 14 half-pint) canning jars (use wide mouth jars for easier packing)

1. Prepare canner and jars as directed in Boiling Water Canning, heating to 140°F (almost simmering).
2. Rinse cucumbers in a colander immediately before using. Scrub well, giving special attention to the area around the stems.
3. Remove a ¼-inch slice off the blossom end of each cucumber and discard. If stem is still attached, cut off all but ¼ inch. Carefully slice the cucumbers lengthwise and then lengthwise again to create spears.
4. If using fresh dill, chop leaves finely with scissors, separating into small piles of 1½ heads per pile. If using garlic, peel and slice cloves into thin slices.
5. Make the pickling brine: Combine 3 cups water, 3 cups vinegar and 6 tablespoons salt in a large saucepan. Bring to a boil over high heat
6. Remove hot jars from canner as directed in Boiling Water Canning. Place 1½ heads of chopped dill or 1½ teaspoons dried dill weed or dill seed in the bottom of each jar. Add ½ teaspoon mustard seed to
each jar. Add ½ to 1 clove of sliced garlic to each jar, if desired. (Use one-half those ingredient amounts if using half-pint jars.)

7. Pack cucumber spears tightly into the jars, leaving ½-inch or more of headspace. (If using half-pint jars, it may be necessary to trim the length of the cucumber spears.) Ladle boiling pickling solution over the cucumbers in the jars, leaving ½-inch headspace. Use a jar funnel for neater filling and be sure to release air bubbles and adjust headspace if needed, as directed in Boiling Water Canning. Wipe jar rims and apply lids.

8. Process in a boiling water canner as directed in Boiling Water Canning. Process pint or half-pint jars for 10 minutes at altitudes of 1,000 feet or below; 15 minutes at altitudes of 1,001-6,000 feet.

9. For best flavor, store sealed jars for 3 weeks before eating.

For the fair: Replace ring band on jar, if it was removed for storage. Complete 4-H Canning Label and affix to jar.

Strawberry Jam (with Regular Pectin)

Recipe is from the Put It Up! Food Preservation for Youth curriculum from the National Center for Home Food Processing and Preservation, University of Georgia Cooperative Extension and Clemson Cooperative Extension.

5 cups crushed strawberries (about 4 pints strawberries)*
1 package powdered pectin
7 cups sugar
About 8 half-pint (or 16 4-ounce) canning jars

*Strawberry jam is best made with fresh-picked, in-season berries. If you use store-bought berries, be sure to mash them up very well or you will get a lot of floating fruit and trapped air in the final product.

1. Prepare the canner and jars as directed in Boiling Water Canning, heating to 180°F (simmering). If you are using 4-ounce jars and need to double-stack them, place a second canning rack on top of the first layer of jars. Continue to place jars in a single layer on top of this second rack.

2. Rinse strawberries in a colander immediately before using. Do not soak berries. Gently lift them out of water. Remove caps.

3. Cut out and discard bruised spots, if needed.

4. Thoroughly crush berries one layer at a time in a deep baking pan or cookie sheet using a potato masher. It is helpful to place a damp dish towel or slip-proof mat under the pan to prevent sliding.

5. Premeasure 7 cups sugar into a bowl and set aside.

6. Measure 5 cups crushed strawberries and add to a stockpot.

7. Add 1 package of regular pectin to strawberries and stir well. Turn burner under stockpot to high heat, stir constantly, and bring to a full boil (bubbles over the entire surface).

8. Add the premeasured 7 cups sugar, continue stirring, and heat again to a full rolling boil. Boil hard for 1 minute, stirring constantly. Do not boil longer. Longer boiling may damage the pectin bond, causing jam to soften.
9. Remove from heat; quickly skim foam from top with a slotted spoon.
10. Remove hot jars from canner and fill as directed in *Boiling Water Canning*, leaving ¼-inch headspace. Use a jar funnel for neater filling and check and adjust headspace if needed. Wipe jar rims and apply lids.
11. Process in a boiling water canner as directed in *Boiling Water Canning*. Process half-pint or 4-ounce jars for 10 minutes at altitudes up to 6,000 feet. If needed, 4-ounce jars can be stacked in the canner by placing a second rack on top of the first layer of jars and placing a second layer of jars on top of this rack. Make sure water is 1 to 2 inches above tops of all jars.

*For the fair:* Replace ring band on jar, if it was removed for storage. Complete 4-H Canning Label and affix to jar.

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**Preserved Food Labels**

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Pressure Canning

Follow these general instructions for pressure canning Green Beans and other low-acid foods (vegetables, meats, poultry, and combination recipes).

Prepare canner and jars:
1. Assemble equipment and ingredients.
2. Place rack into pressure canner. Add 2 to 3 inches of water and place on burner. Turn burner on medium-high to heat water in canner to 140°F (almost simmering) for a raw pack, or 180°F (simmering) for a hot pack.
3. Only use jars that were specifically made for home canning. (Do not re-use containers such as mayonnaise jars.) Use only the jar sizes specified in the recipe. Examine jars carefully. Discard any with cracks or chips in the rim. Examine ring bands and discard any with rust or bends.
4. Wash jars thoroughly in warm soapy water and rinse well. To keep jars warm until use, either fill jars with hot water and place upright in the canner or cover jars with hot water in a clean, drain-plugged sink.
5. Wash ring bands and prepare lids as instructed by the manufacturer.

Prepare the recipe:
As directed for raw pack or hot pack.

Fill the jars:
1. Remove jars from hot water with jar lifter and pour water out in sink (not in canner). Place jars upright on towel-covered countertop or rack.
2. Fill jars as directed in the recipe, leaving the required headspace. Headspace is the gap between the top of the food and the top of the jar rim. Measure headspace with headspace tool or ruler to ensure it is correct.
3. Remove air bubbles by slowly moving bubble freer or spatula gently in and out around the inside edge of each jar. Check headspace of each jar again and gently add or remove liquid with a small spoon, if needed.
4. Wipe jar rims with a clean, damp paper towel.
5. Apply lids according to manufacturer’s directions. Turn band onto jars until fingertip tight. Fingertip tight is when you meet firm resistance as you turn the band onto the jar using your thumb and two fingers.

Pressure canner processing:
1. Use a thermometer to check that the temperature of the water in the canner is as specified in the recipe (140°F for a raw pack; 180°F for a hot pack). Adjust burner higher or lower, if necessary.
2. Use a jar lifter to carefully place filled jars one at a time on the rack in the canner. Keep jars upright at all times. Water level will rise, but should not cover jar tops. Remove water if needed.
3. Place lid on canner and close tightly, but leave the weight off the vent port. Turn heat to high. Wait until you see steam form a funnel as it comes out of the vent port, and then set a timer for 10 minutes. Allow steam to escape for 10 minutes to vent the canner (remove excess air).
4. After the canner has vented for 10 minutes, place the weight or close the vent port to begin pressurizing the canner.

5. Determine how many pounds of pressure are needed for processing at your altitude. For a weighted gauge canner, this is 10 pounds at altitudes of 1,000 feet and below; 15 pounds at altitudes above 1,000 feet. For a dial gauge canner, it is 11 pounds at altitudes of 2,000 feet and below; 12 pounds at altitudes of 2,001 to 4,000 feet; or 13 pounds at altitudes of 4,001 to 6,000 feet.

6. Wait until you can see and hear the weight steadily jiggling as recommended by the manufacturer (for a weighted gauge canner) or the dial indicates the recommended pressure (for a dial gauge canner). Set the timer for the processing time specified in the recipe. Once the recommended pressure is reached, you may lower the heat very slightly so that pressure does not rise too high, but be careful. *If at any time the pressure drops below the recommended level, you must bring the canner back to pressure and reset the timer to the full recommended processing time.*

7. When the timer sounds, turn off the heat. Allow the canner pressure to drop naturally as the canner cools. Wait until the pressure returns to 0 pounds (if the canner has a vent lock, it will drop) and then wait 2 more minutes. If the canner gives no indication of the remaining pressure, set a timer for 45 minutes to allow time for the pressure to drop to zero. Carefully check that the pressure is gone before removing the weight from the vent port.

8. After removing the weight, wait 10 minutes for the contents of the jars to settle. Remove the canner lid, lifting the underside of the lid away from you to direct the steam away from your face.

9. Remove jars from the canner one at a time using a jar lifter, keeping them upright. Be careful not to tilt them. Place jars at least 1 inch apart on a dry towel or cake-cooling rack. Place away from drafts of moving air.

10. Let jars cool, undisturbed, for 12 to 24 hours. Check jars for vacuum seals. The lids on sealed jars will be indented and will not flex when pressed.

11. Remove ring bands from sealed jars and wipe jars. Store in a cool, dark, dry place. Store unsealed or opened jars in the refrigerator and eat within one week.

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**Green Beans**

Recipe is from the *Put It Up! Food Preservation for Youth* curriculum from the National Center for Home Food Processing and Preservation, University of Georgia Cooperative Extension and Clemson Cooperative Extension.

8 to 9 pounds green beans (¾ to 1 pound per pint)
9 cups water
4½ teaspoons canning salt (optional)
About 9 pint canning jars

1. Prepare the canner and jars as directed in **Pressure Canning**, heating to 140 °F (just below simmering) for a raw pack or 180°F (simmering) for a hot pack. See step 5, below.

2. Fill a large saucepan with 9 cups water to be used to fill jars. Cover saucepan with lid and turn heat on high to bring to a boil.
3. Use a colander to rinse beans. Discard any discolored or diseased bean pods.
4. Use your clean hands to snap the ends off the beans, and then snap the beans into 1-inch pieces. Or, use a small knife to cut off ends and slice into 1-inch pieces.
5. Green beans can be canned using either a raw pack or a hot pack. Raw packs are quicker, but hot packs tend to have the best color and flavor. Choose one of the packs below for filling jars and process as directed.

**Raw Pack:**

6. Remove jars from hot water as directed in *Pressure Canning*, pouring the water out in the sink (not in the canner).
7. Use a jar funnel and clean fingers to push raw beans tightly into hot jars, leaving 1-inch headspace.
8. Add ½ teaspoon salt to each jar, if desired.
9. Using a ladle, fill each jar with boiling hot water to cover beans, leaving 1-inch headspace.
10. Remove air bubbles and adjust headspace if needed, as directed in *Pressure Canning*. Wipe jar rims and apply lids.
11. Process pint jars for 20 minutes in a pressure canner, as directed in *Pressure Canning*. Be sure to vent the canner before pressurizing and use the correct processing pressure for your altitude and type of canner.

**OR**

**Hot Pack:**

6. Place beans into the boiling water in the saucepan for 5 minutes. Turn off heat.
7. Remove jars from hot water as directed in *Pressure Canning*, pouring the water out in the sink (not in the canner).
8. Use a jar funnel and slotted spoon to fill the hot jar with the heated beans, leaving 1-inch headspace. Repeat to fill each jar.
9. Add ½ teaspoon salt to each jar, if desired. Using a ladle, fill each jar with the boiling hot cooking liquid to cover the beans, leaving 1-inch headspace.
10. Remove air bubbles and adjust headspace if needed, as directed in *Pressure Canning*. Wipe jar rims and apply lids.
11. Process pint jars for 20 minutes in a pressure canner, as directed in *Pressure Canning*. Be sure to vent the canner before pressurizing and use the correct processing pressure for your altitude and type of canner.

*For the fair:* Replace ring band on jar, if it was removed for storage. Complete 4-H Canning Label and affix to jar.
### Preserved Food Labels

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