

# 4-H

## Food Preservation Proficiency Program

### A Member's Guide

#### OVERVIEW

The 4-H Food Preservation Proficiency program helps you learn what you need to know about your 4-H project. Your project leader will assist you in setting and achieving your goals. Through your project, you will acquire food preservation skills.

There are many resources to help you learn more about your project:

- The University of California Davis has free resources available online by visiting: <http://anrcatalog.ucdavis.edu/4HYouthDevelopment/> This site lists a variety of project materials and resources recommended for use in your project.
- The Tehama County 4-H Resources and Lending Library at our county 4-H Office includes other books, videos, and reference materials that can be checked out by members and leaders.
- Food specialty stores frequently offer classes and other educational activities.

There are five levels in the Project Proficiency Program. You may choose how many levels you wish to complete:

- ◆ Level I – “Explorer”, you begin to learn about food preservation.
- ◆ Level II – “Producer”, you will practice and refine the many skills involved in food preservation.
- ◆ Level III – “Consumer”, you become experienced in many areas of food preservation.
- ◆ Level IV – “Leader”, allows you to show your own leadership potential.
- ◆ Level V – “Researcher”, you carry out a demonstration or experiment on some aspect of food preservation and prepare a paper or portfolio.

As you work through the proficiency program, your leader will date each skill item as you complete it. When all items in a proficiency level are completed, your leader will sign the Certificate of Achievement.

## FOOD PRESERVATION

### Level I - Explorer

Date \_\_\_\_\_  
Completed \_\_\_\_\_

- \_\_\_\_\_ 1. Name different canners and when to use which.
- \_\_\_\_\_ 2. Explain the names of necessary equipment and what each is used for.
- \_\_\_\_\_ 3. Give some examples of acid, low acid, etc. classification of foods.
- \_\_\_\_\_ 4. Think about how the seasons effect what you preserve and explain the best time to can certain foods is and why.
- \_\_\_\_\_ 5. Explain to your project leader what the recommended canning method, time and temperature is for fruits and tomatoes.
- \_\_\_\_\_ 6. Either alone or with some project members, select fruit or tomatoes for canning.
- \_\_\_\_\_ 7. Learn how to use the water bath canner, assemble equipment and wash jars. Show your project leader.
- \_\_\_\_\_ 8. Show your project leader how to wash and prepare fruit for canning (peeling, quartering, etc.).
- \_\_\_\_\_ 9. Help can three fruits or two fruits and tomatoes.
- \_\_\_\_\_ 10. Learn to check for a seal, how to label, and store canned foods.
- \_\_\_\_\_ 11. Explain how to judge product for taste, color, and for safe keeping qualities.
- \_\_\_\_\_ 12. Figure out the cost of a home canned product versus a like product commercially canned. How does yours compare?
- \_\_\_\_\_ 13. Explains methods for making jams and jellies. When are the best fruits for jam and jelly available?
- \_\_\_\_\_ 14. Make a freezer jam with commercial pectin, selecting proper containers for the freezer jam, label and store the jam. Judge the jam for color, flavor, and texture. The keeping of the jam. After several months, check for "freezer burn" and note any other changes.
- \_\_\_\_\_ 15.
- \_\_\_\_\_ 16. Explain how drying preserved food and give examples of ways to dry food. Select fruit for making leather. Make and dry one or two different types of fruit
- \_\_\_\_\_ 17. leather. Try a combination of fruits.
- \_\_\_\_\_ 18. Select meat for jerky. Follow directions for sun or oven drying of jerky. Explain the proper packaging for leather and jerky.
- \_\_\_\_\_ 19. Explain the values of sun drying versus oven or dehydrator drying. The effect of lemon juice or ascorbic acid on the color and flavor of fruit leather. Make one roll of fruit leather (light colored fruit) with lemon juice and one
- \_\_\_\_\_ 20. without. Compare.
- \_\_\_\_\_ 21. Learn and explain to other how freezing preserves food.
- \_\_\_\_\_ 22. Which containers are suitable for the freezing process? Explain how to seal

\_\_\_\_\_ containers for freezing and why it's important.

- \_\_\_\_\_ 23. How do you select food for freezing and how do you prepare food for freezing?  
Experiment: Quick freeze loose berries with dry sugar or without any sugar.  
Freeze fruit in syrup containing crystalline ascorbic acid. Judge the frozen fruit for
- \_\_\_\_\_ 24. color, taste and texture. Make a display of freezer containers.
- \_\_\_\_\_ 25. Try freezing berries in different temperatures. Which gives the best result?
- \_\_\_\_\_ 26. Describe the characteristics of freezer burn. How can it be avoided?

Member Name: \_\_\_\_\_ Date: \_\_\_\_\_

Project Leader's Signature: \_\_\_\_\_ Date: \_\_\_\_\_

## FOOD PRESERVATION

### Level II - Producer

Date \_\_\_\_\_  
Completed \_\_\_\_\_

- \_\_\_\_\_ 1. Review what you learned about the classification of foods.
- \_\_\_\_\_ 2. Can a variety of fruits (three or four) using different strength syrups.
- \_\_\_\_\_ 3. Make quick pickled cucumbers.
- \_\_\_\_\_ 4. Make a pickled relish or salsa.
- \_\_\_\_\_ 5. Pickle a vegetable or mixture of vegetables.
- \_\_\_\_\_ 6. Prepare fruit or tomato juice and can it.
- \_\_\_\_\_ 7. Can fruit with fruit juice rather than syrup.
- \_\_\_\_\_ 8. Explore pickling fruit.
- \_\_\_\_\_ 9. Explore ways to teach the use of the water bath to a younger group.
- \_\_\_\_\_ 10. With your family, find out the annual need for canned fruit.
- \_\_\_\_\_ 11. Explain to your leader, the safety practices of pickling.
- \_\_\_\_\_ 12. Explore and discuss with your project group the effect of improperly storing  
canned fruits by placing one jar in a hot, damp location and another in a cool, dry,  
dark location.
- \_\_\_\_\_ 13. Research and tell your leader how to test fruit for acid and pectin content, and to  
determine which ones need added pectin or acid.
- \_\_\_\_\_ 14. Find some recipes for conserves, preserves, and marmalade and try one.

Member Name: \_\_\_\_\_ Date: \_\_\_\_\_

Project Leader's Signature: \_\_\_\_\_ Date: \_\_\_\_\_

## FOOD PRESERVATION

### Level III - Consumer

Date  
Completed

- \_\_\_\_\_ 1. Learn how to sulfur light colored fruits for drying and try it.
- \_\_\_\_\_ 2. Blanch and dry a vegetable. And dry a vegetable that doesn't require blanching.
- \_\_\_\_\_ 3. Dry herbs.
- \_\_\_\_\_ 4. Judge dried foods at a project, county or state event.
- \_\_\_\_\_ 5. Explore time of re-hydration and quality of re-hydrated vegetables.
- \_\_\_\_\_ 6. Research the best way to dry vegetables: sun, oven or dehydrator.
- \_\_\_\_\_ 7. Freeze cookies, baked and unbaked; discuss quality losses of frozen foods (texture, color, taste, etc.)
- \_\_\_\_\_ 8. Research and develop your own way to keep records of food going in and coming out of the freezer. Discuss the reasoning for doing this.  
Store shelled nut meats in proper containers at room temperature, refrigerator temperature, and in the freezer. At 2 week intervals, taste and record any signs of rancidity. From the same group of nuts, store some in the shell in a cool, dry place and check these at 2 week intervals for signs of rancidity. Record your observation.
- \_\_\_\_\_ 9. After completing the experiment in #9, explain which is the best method for storing nuts and why?
- \_\_\_\_\_ 10. Can meat, poultry or fish.
- \_\_\_\_\_ 11. Research and share methods of safely canning vegetables and meats.
- \_\_\_\_\_ 12. Make 3 or 4 jams and jellies by the long boil method.
- \_\_\_\_\_ 13. Compare taste, texture, and color to those made with commercial pectin or by freezer method.
- \_\_\_\_\_ 14. Make fermented dill pickles or green tomatoes.
- \_\_\_\_\_ 15. Explore and discuss with your leader the effect of surface scum and mold on fermented pickles.
- \_\_\_\_\_ 16.

Member Name: \_\_\_\_\_ Date: \_\_\_\_\_

Project Leader's Signature: \_\_\_\_\_ Date: \_\_\_\_\_

**FOOD PRESERVATION**  
**Level IV - Leader**

Date  
Completed

- |       |     |   |
|-------|-----|---|
| _____ | 1.  | Serve as Junior or Teen leader in this project for one year.  |
| _____ | 2.  | Assist younger members with their food preservation recipes.  |
| _____ | 3.  | Prepare teaching materials for use at project meetings.   |
| _____ | 4.  | Develop and put on a demonstration or judging event or train a junior team for such an event.   |
| _____ | 5.  | Assist younger members about learning a specific technique in the project.  |
| _____ | 6.  | Develop your own special project related activity. Chart your progress, plan the activities, analyze successes and problems, and report on your findings. |
| _____ | 7.  | Assist at a food show or nutrition workshop.  |
| _____ | 8.  | Make sauerkraut and can it.   |
| _____ | 9.  | Make brined vegetables.   |
| _____ | 10. | Explore recipes using freshened, brined pickles and try one.  |
| _____ | 11. | Learn and discuss what role lactic acid fermentation plays with cucumbers and cabbage.  |

Member Name: \_\_\_\_\_ Date: \_\_\_\_\_

Project Leader's Signature: \_\_\_\_\_ Date: \_\_\_\_\_

<p style="text-align: center;"><b>FOOD PRESERVATION</b> <b>Level V - Researcher</b></p>
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Date  
Completed

1. Report on the results of a demonstration comparing measurable differences in management procedure. (experiment)  
\_\_\_\_\_
2. Prepare a paper of 300 words or more on one of the following topics:  
\_\_\_\_\_
  - History of one aspect of food preservation
  - Pros and cons of vegetarianism
  - Role of advertising in food choices
  - How food preservation methods affect quality
  - Technological advances in food preservation
  - Cultural influences on food preservation methods
  - Other
3. Prepare a speech or illustrated talk to orally summarize your findings and present at a club, project meeting or other educational event.  
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Member Name: \_\_\_\_\_ Date: \_\_\_\_\_

Project Leader's Signature: \_\_\_\_\_ Date: \_\_\_\_\_

# Certificate of Achievement

*This certifies that*

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*has completed the Food Preservation Proficiency  
in Tehama County.*

*Explorer*

*Producer*

*Consumer*

*Leader*

*Researcher*

\_\_\_\_\_  
*Date*

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