

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 Solano 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 classification of foods, i.e., acid, low acid, etc.
- _____ 4. Think about how the seasons affect what you preserve and explain when 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 fruits 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 your compare?
- _____ 13. Explain 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.
- _____ 15. The keeping of the jam. After several months, check for "freezer burn" and note any other changes.
- _____ 16. Explain how drying preserves food and give examples of ways to dry food.

- _____ 17. Select fruit for making leather. Make and dry one or two different types of fruit 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.
- _____ 20. Make one roll of fruit leather (light colored fruit) with lemon juice and one without. Compare.
- _____ 21. Learn and explain to others 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.
- _____ 24. Freeze fruit in syrup containing crystalline ascorbic acid. Judge the frozen fruit for 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 of a 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. 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.
- _____ 9. 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.
- _____ 10. After completing the experiment in #9, explain which is the best method for storing nuts and why?
- _____ 11. Can meat, poultry or fish.
- _____ 12. Research and share methods of safely canning vegetables and meats.
- _____ 13. Make 3 or 4 jams and jellies by the long boil method.
- _____ 14. Compare taste, texture, and color to those made with commercial pectin or by freezer method.
- _____ 15. Make fermented dill pickles or green tomatoes.
- _____ 16. Explore and discuss with your leader the effect of surface scum and mold on fermented pickles.

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 brine 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: _____

FOOD PRESERVATION

Level V - Researcher

Date _____
Completed _____

- _____ 1. Report on the results of a demonstration comparing measurable differences in some 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.

Member Name: _____ Date: _____

Project Leader's Signature: _____ Date: _____

Certificate of Achievement

This certifies that

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

Explorer

Producer

Consumer

Leader

Researcher

Date

Date

Date

Date

Date

Initials

Initials

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