# ■ University of California Agriculture and Natural Resources

CALIFORNIA 4-H PROJECT SHEET SERIES
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# PEER REVIEWED S

# 4-H BEGINNING FOOD PRESERVATION PROJECT



This project invites youth and adult volunteers to engage in interactive and informal learning to discover the science and art of safe food preservation.

- Learn a variety of food preservation methods while making delicious foods to later enjoy.
- Explore fun facts about nutrition, produce, and the history of food preservation.
- Engage in real life applications of science and mathematics, such as heat transfer, chemistry, and measuring.

# Starting Out Beginner

- Identify the common equipment and supplies needed for preservation methods.
- Learn how to pick the best produce for preserving.
- Review basic food handling and food safety practices.
- Practice safe kitchen skills—such as cutting with knives and handling boiling water.
- Make delicious foods, like strawberry jam, crushed tomatoes, or dried fruit.

## Learning More Intermediate

- Experiment with different ways to use preserved food products.
- Practice preservation methods with new types of produce.
- Explore the science and mathematics of preserving.
- Test your knowledge of the fundamentals of preservation methods.

# Exploring Depth Advanced

- Challenge yourself with more complex recipes.
- Learn how to find safe and tested recipes.
- Make new food products, like fruit leathers, dill pickles, and vegetable soup.
- Use proper terminology (e.g., microorganisms, oxidation, enzymes).

## **4-H THRIVE**

Help youth:

# **Light Their Spark**

A spark is something youth are passionate about; it really fires them up and gives them joy and energy. Help youth find how this project excites them.

## Flex Their Brain

The brain grows stronger when we try new things and master new skills. Encourage youth effort and persistence to help them reach higher levels of success.

#### **Reach Their Goals**

Help youth use the GPS system to achieve their goals.

- **G**oal Selection: Choose one meaningful, realistic and demanding goal.
- Pursue Strategies: Create a step-by -step plan to make daily choices that support your goal.
- Shift Gears: Change strategies if you're having difficulties reaching your goal. Seek help from others. What are youth going to do when things get in their way?

#### Reflect

Ask project members how they can use their passion for this project to be more confident, competent and caring. Discuss ways they can use their skills to make a contribution in the community, improve their character or establish connections.

The activities above are ideas to inspire further project development. This is not a complete list.

Light Your Spark

Flex Your Brain

Reach Your Goals

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Your Spark Flex Your Brain

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# **Expand Your Experiences!**

# **Healthy Living**

- Learn how to prepare foods safely to prevent sickness.
- Calculate the caloric value of your homemade food products.
- Grow your own fruits and vegetables to preserve.

# Science, Technology, Engineering, and Mathematics

- Examine different types of packing in freezing foods.
- Experiment with raw and hot packed beans in the pressure canner. Then consider: What happened? Which end do your like better?
- Create your own chart that shows the pH values in your favorite fruits and vegetables and the correct canning method for those foods.

# Citizenship

- Organize an awareness-raising campaign to show how much waste is eliminated by making homemade goods rather than purchasing canned goods from a store.
- Collect extra fruit in your community that would be wasted, and make fruit leathers to donate to homeless shelters.
- Make jam to share with others in your community.

# Leadership

- Teach others in your 4-H club about safe food handling practices.
- Create a list of sources for safe, tested food preservation recipes and share with others who like to preserve foods.

Curriculum

#### **Connections & Events**

what you've learned with others

Field Days - At these events,

a variety of contests related to

Contact your UC Cooperative

Extension Office to determine

available, such as a field day.

additional opportunities

4-H members may participate in

Presentation Days - Share

through a presentation.

their project area.

All food preservation projects should follow approved resources for preserving. In particular, the following resources are particularly appropriate for 4-H food preservation projects:

- <a href="http://nchfp.uga.edu/putitup.html">http://nchfp.uga.edu/putitup.html</a>
- <a href="http://nchfp.uga.edu/">http://nchfp.uga.edu/</a>
- https://pubs.wsu.edu/ listltems.aspx? CategoryID=262

#### 4-H Record Book

4-H Record Books give members an opportunity to record events and reflect on their experiences. For each project, members document their experiences, learning and development.

4-H Record Books also teach members record management skills and encourage them to set goals and develop a plan to meet those goals.

To access the 4-H Record Book online, visit http://ucanr.edu/orb/

### Resources

 So Easy to Preserve Book and DVD

http://setp.uga.edu

- Table of Temperatures for Food Preservations <a href="http://nchfp.uga.edu/how/general/food-pres-temps.html">http://nchfp.uga.edu/how/general/food-pres-temps.html</a>
- Table of Temperatures for Water Boiling by Altitude <a href="http://nchfp.uga.edu/how/general/boil-water-chart.html">http://nchfp.uga.edu/how/general/boil-water-chart.html</a>
- UC Eating Healthy from Farm to Fork <a href="http://ucanr.edu/sites/">http://ucanr.edu/sites/</a> <a href="letseathealthy/Curriculum/?close=yes">letseathealthy/Curriculum/?close=yes</a>

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