This project requires County Director, 4-H Youth Development, and Master Food Preserver Advisor approval, as well as participation of Certified Master Food Preservers. Youth interested in this project must have completed the Beginning Food Preservation Project. If you are interested in leading this project, please request a Jr. Master Food Preserver Project Leader Packet. In conjunction with the UC ANR Master Food Preserver Program, this project invites youth to expand their knowledge of the science and art of safe home food preservation and to extend this knowledge with others in their communities.

- Expand existing knowledge of safe home food preservation methods.
- 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.
- Develop leadership skills while educating others in your community.
- Collaborate with Master Food Preservers to develop effective and engaging presentations.

### Starting Out

**Beginner**

- Successfully complete Beginning Food Preservation project.
- Learn and identify the four most common methods of preserving.
- Review basic food handling and food safety practices.
- Practice safe kitchen skills—such as cutting with knives and handling boiling water.
- Explore how food preservation influenced history and culture.
- Research store bought items and compare ingredients and cost with home-prepared products.

### Learning More

**Intermediate**

- Explore the science and mathematics of preserving.
- Test your knowledge of the fundamentals of preservation methods.
- Become familiar with local food systems and identify local produce sources.
- Challenge yourself with calculating the total cost of food preservation product, including hidden costs (i.e. labor, transportation), and identify ways it can be more economical and sustainable.

### Exploring Depth

**Advanced**

- Challenge yourself with more complex recipes.
- Educate others on how to find safe and tested recipes.
- Expand your home food preservation vocabulary (e.g., microorganisms, oxidation, enzymes).
- Pass a certification exam after completing the course.
- Complete 5 hours of educational hours in conjunction with certified Master Food Preservers.
- Renew your Junior Master Food Preserver certificate by passing an annual recertification exam.

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

**Healthy Living**
- Learn more about your local food systems by participating in a farm tour of one of your local farms.
- Teach others how to prepare foods safely to prevent sickness.

**Science, Technology, Engineering, and Mathematics**
- Examine the economic value of home-preserved products (consumer sciences).
- Create a display chart that shows the pH values in your favorite fruits and vegetables and the correct canning method for those foods to be used in public demonstrations and outreach events.

**Citizenship**
- Collect extra produce ( glean) in your community that would be wasted and preserve it or collaborate with a local glean agency.
- Assist certified Master Food Preservers at community events to teach others about home food preservation methods.

**Leadership**
- Conduct a food preservation demonstration at Presentation Day, Food Celebration, club meetings or other approved public speaking spaces in conjunction with a Certified MFP.
- Volunteer with a Certified MFP at an information booth, such as a Farmers’ Market booth.
- 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.

---

**Resources**

- So Easy to Preserve Book and DVD
  [http://setp.uga.edu](http://setp.uga.edu)
- Table of Temperatures for Food Preservations
  [http://nchfp.uga.edu/how/general/food_pres_temps.html](http://nchfp.uga.edu/how/general/food_pres_temps.html)
- Table of Temperatures for Water Boiling by Altitude
  [http://nchfp.uga.edu/how/general/boil_water_chart.html](http://nchfp.uga.edu/how/general/boil_water_chart.html)
- UC Eating Healthy from Farm to Fork
  [http://ucanr.edu/sites/letseathealthy/Curriculum/?close=yes](http://ucanr.edu/sites/letseathealthy/Curriculum/?close=yes)
- Put it Up! Food Preservation for Youth Curriculum
  [http://nchfp.uga.edu/putitup.html](http://nchfp.uga.edu/putitup.html)

---

**Connections & Events**

- **Presentation Day:** Teach others through a presentation on your favorite safe home food preservation method.
- **Farmer’s Markets:** Collaborate with certified Master Food Preservers to encourage others in your community about how to preserve produce at home.
- **Food Bank Demonstration Sites:** Develop partnerships with local Food Banks to teach recipients how they can use home food preservation methods to reduce food waste and increase their food resources.
- Contact your UC Cooperative Extension office to determine additional opportunities available.

---

**Curriculum**

- All food preservation projects should follow approved resources for preserving. The following curriculum is required for 4-H Jr. Master Food Preservation Project:
  - [http://nchfp.uga.edu/putitup.html](http://nchfp.uga.edu/putitup.html)
- Other approved resources for Certified Master Food Preservers can be found at:
  - [http://nchfp.uga.edu/](http://nchfp.uga.edu/)
  - [https://pubs.wsu.edu/listItems.aspx?CategoryID=262](https://pubs.wsu.edu/listItems.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/](http://ucanr.edu/orb/)

---

**University of California Agriculture and Natural Resources**

---

**Author:** 4-H Food Preserver Project Sheet Katherine Soule
**UC ANR 4-H Youth Development Program** • [http://4h.ucanr.edu](http://4h.ucanr.edu)
FOR FURTHER INFORMATION

To order or obtain ANR publications and other products, visit the ANR Communication Services online catalog at http://anrcatalog.ucanr.edu/ or phone 1-800-994-8849. You can also place orders by mail or request a printed catalog of our products from:

University of California
Agriculture and Natural Resources
Communication Services
2801 Second Street
Davis, CA 95618
Telephone 1-800-994-8849
E-mail: anrcatalog@ucanr.edu

©2018 The Regents of the University of California. This work is licensed under the Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License. To view a copy of this license, visit http://creativecommons.org/licenses/by-nc-nd/4.0/ or send a letter to Creative Commons, PO Box 1866, Mountain View, CA 94042, USA.

Publication 8614

The University of California, Division of Agriculture and Natural Resources (UC ANR) prohibits discrimination against or harassment of any person in any of its programs or activities on the basis of race, color, national origin, religion, sex, gender, gender expression, gender identity, pregnancy (which includes pregnancy, childbirth, and medical conditions related to pregnancy or childbirth), physical or mental disability, medical condition (cancer-related or genetic characteristics), genetic information (including family medical history), ancestry, marital status, age, sexual orientation, citizenship, status as a protected veteran or service in the uniformed services (as defined by the Uniformed Services Employment and Reemployment Rights Act of 1994 [USERRA]), as well as state military and naval service.

UC ANR policy prohibits retaliation against any employee or person in any of its programs or activities for bringing a complaint of discrimination or harassment. UC ANR policy also prohibits retaliation against any person who assists someone with a complaint of discrimination or harassment, or participates in any manner in an investigation or resolution of a complaint of discrimination or harassment. Retaliation includes threats, intimidation, reprisals, and/or adverse actions related to any of its programs or activities.

UC ANR is an Equal Opportunity/Affirmative Action Employer. All qualified applicants will receive consideration for employment and/or participation in any of its programs or activities without regard to race, color, religion, sex, national origin, disability, age or protected veteran status.

University policy is intended to be consistent with the provisions of applicable State and Federal laws.

Inquiries regarding the University’s equal employment opportunity policies may be directed to: John Sims, Affirmative Action Contact and Title IX Officer, University of California, Agriculture and Natural Resources, 2801 Second Street, Davis, CA 95618, (530) 750-1397. Email: jsims@ucanr.edu. Website: http://ucanr.edu/sites/anrstaff/Diversity/Affirmative_Action/.

To simplify information, trade names of products have been used. No endorsement of named or illustrated products is intended, nor is criticism implied of similar products that are not mentioned or illustrated.

An electronic copy of this publication can be found at the ANR Communication Services catalog website, http://anrcatalog.ucanr.edu/. This publication has been anonymously peer reviewed for technical accuracy by University of California scientists and other qualified professionals. This review process was managed by ANR Associate Editor for Human and Community-Youth Development Lynn Schmitt-McQuitty.

California 4-H Project Sheet Series Authors

JOHN BORBA, 4-H Youth Development Advisor, UC Cooperative Extension, Kern County; CLAUDIA DIAZ, 4-H Youth Development Advisor, UC Cooperative Extension, Riverside and San Bernardino counties; MARCEL HOROWITZ, Healthy Youth, Families, and Communities Advisor, UC Cooperative Extension, Yolo County; ANNE IACCOPUCCI, 4-H Healthy Living Academic Coordinator, California State 4-H Office; SHANNON KLISCH, UC CalFresh Community Education Supervisor, UC Cooperative Extension, San Luis Obispo County; KENDRA LEWIS, 4-H Evaluation Academic Coordinator, California State 4-H Office; KATHERINE SOULE, Youth, Families, and Communities Advisor and Director of UC Cooperative Extension, San Luis Obispo and Santa Barbara Counties; and STEVEN WORKER, 4-H Youth Development Advisor, UC Cooperative Extension, Marin, Napa, and Sonoma counties.