In this project, youth learn about foods by partnering in the kitchen to plan and create baked goods. Explore the science, nutrition and history of baking while promoting healthy eating and resource management.

- Learn to bake a variety of snacks and treats, including cakes, pastries, pies, granola, breakfast bars, chips, cookies and more.
- Discover the health benefits associated with different foods.
- Explore the science behind baking, such as ratios, chemistry and ingredient

### Starting Out
**Beginner**
- Identify common pans used in baking.
- Learn to read a recipe.
- Review basic kitchen hygiene including washing hands and tying up hair.
- Measure wet and dry ingredients correctly.
- Learn how to safely use an oven and how to handle hot pans.

### Learning More
**Intermediate**
- Learn to scale recipes.
- Alter a recipe to make it more healthful (e.g., whole wheat, fat substitutes, shredded vegetables).
- Tour a bakery.
- Learn to correctly wrap and store baked goods.
- Explore the variables that affect baking outcomes (distance from heat, baking time and temp, etc.).
- Use a Dutch oven.

### Exploring Depth
**Advanced**
- Create a personal file of at least 25 baked recipes.
- Explore careers in the baking industry.
- Learn to bake gluten-free.
- Learn how different baking materials (cast iron, ceramic, glass, etc.) transfer heat.
- Build a solar oven.
- Understand how to bake at high altitudes.
- Explore advanced

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

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**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

### Reach Their Goals
Help youth use the GPS system to achieve their goals.

**Goal 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

### 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
Expand Your Experiences!

Healthy Living

- Calculate and determine the caloric value and serving size of a homemade dessert.
- Create a portfolio of healthy, youth-friendly baked snacks such as granola bars.

Science, Technology, Engineering, and Mathematics

- Research the role of fat in baking and experiment using different types of fat or oil (e.g., margarine, olive oil, butter, vegetable oil) in a recipe.
- Be a food photographer. Find an example of food photography in a magazine and

Citizenship

- Tea for two: invite a special person like a grandparent or older friend over for a pot of tea and cookies. Bake cookies and set out tea and make someone very happy.

Leadership

- Facilitate a baking class that teaches others how to make healthier desserts.
- Determine the different types of grains used in baked products (e.g., oats, wheat, rice flour, flaxseed) and give a presentation that follows one grain from farm to

Resources

- Very Best Baking [www.verybestbaking.com](http://www.verybestbaking.com)
- Joy of Baking [joyofbaking.com](http://joyofbaking.com)
- King Arthur Flour [www.kingarthurflour.com](http://www.kingarthurflour.com)
- Home Baking Association [www.homebaking.org/foresseducators](http://www.homebaking.org/foresseducators)
- Baking 911 [baking911.com](http://baking911.com)
- Baking Bites [bakingbites.com](http://bakingbites.com)
- Smitten Kitchen [smittenkitchen.com](http://smittenkitchen.com)
- Betty Crocker [www.bettycrocker.com/tips/bakewithkids](http://www.bettycrocker.com/tips/bakewithkids)

Connections & Events

<table>
<thead>
<tr>
<th>Presentation Days – Share what you’ve learned with others through a presentation.</th>
<th>Curriculum</th>
<th>4-H Record Book</th>
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<tbody>
<tr>
<td>Field Days – At these events, 4-H members may participate in a variety of contests related to their project area.</td>
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<td>Contact your county 4-H office to determine additional opportunities available, such as favorite foods</td>
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<td>Fantastic Foods <a href="http://www.4-hmall.org/Category/4-hcurriculum-foods.aspx">www.4-hmall.org/Category/4-hcurriculum-foods.aspx</a></td>
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<td>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.</td>
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<tr>
<td>4-H Record Books also teach members record management skills and encourage them to set goals and develop a plan to meet those goals.</td>
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University of California Agriculture and Natural Resources