

1



Citizenship

- [Citizenship Project](#)
- [Tennessee 4-H Congress](#)



Communication

- [Clover Speak](#)
- [Creative Arts and Design](#)
- [Performing Arts](#)
- [Photography](#)
- [Poster Contests](#)
- [Public Speaking](#)



Family & Consumer Sciences

- [Clothing and Textiles](#)
- [Consumer Education](#)
- [Creative Arts and Design](#)
- [Economics](#)
- [Energy](#)
- [Fitness](#)
- [Food Science](#)
- [Healthy Living](#)

FOOD SCIENCE

In the 4-H Food Science project, you will learn about food safety and food science. Learn how food goes from the farm to your table. Also learn how to safely prepare foods for yourself and others.

- Project Plan »
- Project Outcomes » 4**
- Project Pages for 4-Hers »
- Outdoor Meat Cookery »
- Activity Sheets »
- Project Leaders »
- Resources »

- [Beginning: 1-2 years in Project](#)
- [Intermediate: 3-5 years in Project](#)
- [Advanced: 6-9 years in Project](#)

W 476-A
1-2 YEARS IN PROJECT

Food Science

April 2020
For more information, contact:

*Jennifer Richards, Tennessee 4-H Youth Development
Mark Wenke, Department of Food Science and Technology
Dwight Loveday, Department of Food Science and Technology
Melody Fagan, Department of Food Science and Technology
James William Swart, Tennessee 4-H Youth Development*

Basics of Food Science

- Define food science.
- Research a specific career in food science.
- Research the skills and education needed to be a food scientist.

Food Microbiology

- Define bacteria, virus, protozoa and fungi.
- Compare and contrast the differences between bacteria, viruses, protozoa and fungi.
- Identify the three main shapes of bacteria.
- Identify conditions that are favorable for bacterial growth in food.
- List different methods used for food preservation.
- Understand use by, best buy, sell by and expiration dates.

Food Laws and Regulations

- Define the following food science terms: quality assurance, HARPC and food law.
- Compare and contrast the roles of the USDA and FDA in keeping our food supply safe.

Food Chemistry

- Define the five major components of a food's composition (lipids, proteins, etc.).
- Research the major vitamins and minerals in foods.
- Define pH.

Food Sensory Science

- Define flavor.
- Understand how the five senses contribute to flavor perception.
- Identify the five major tastes.
- Identify changes in foods with processing.

4

3

5