

Food Science

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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.



Food Science, Safety and Sanitation in the Kitchen

- Understand the basic principles in handwashing techniques. Recognize the four core concepts of food safety (cook, clean, chill, separate).
- Identify the proper internal temperature for cooking raw commodities.
- Identify the temperature “Danger Zone” for microbial growth.
- Understand the principles of thawing, cooling and reheating foods.
- Identify proper sanitation practices within a kitchen.

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