

Food Science Technology: Grades 11, 12

Adopted 2002

Introduction to Food Science

1.1 The development of food science from prehistoric to modern times

1.2 Food availability in the United States to that of other countries

1.3 Careers in the food science industry

1. Research a career in food science to determine education requirements, working conditions, and salary. **1.3.1**
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1.4 FFA opportunities available to students with an interest in food science

The Food Industry

2.1 Food industry

2.2 The economic scope of the food industry

1. Trace the path food travels from the farm to the consumer. **2.2.1**
 2. Determine the breakdown of each dollar spent on food in the United States. **2.2.2**
 - 2.3** Compare the amount of food exported from the United States to that imported each year.
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Food Safety

3.1 The risks involved in the use of pesticides in food production

3.2 The risks involved in the use of hormones and antibiotics on animals raised for food

3.3 The use of chemical preservatives in food

3.4 Government agencies in charge of quality assurance in the food supply

1. Match grades of food commodities given by the USDA to their symbols and meanings. **3.4.1**
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Processing and Preserving Food

4.1 The importance of food preservation

4.2 How the growth of molds is inhibited in baked goods

4.3 What causes milk to sour

1. Conduct a test of several samples of milk to determine quality. [4.3.1](#)
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4.4 Nutritional values of canned, frozen, and fresh foods

Slaughtering Meat Animals

5.1 Sanitation concerns involved in slaughtering meat animals

5.2 The steps involved in slaughtering the following types of meat animals:BeefSheepHogsPoultryFish

1. Demonstrate the process of slaughtering the following types of meat animals:beefsheephogspoultryfish [5.2.1](#)
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5.3 The process of Kosher slaughter

5.4 Primal and retail cuts from the following types of meat animals:BeefSheepHogs

5.5 Products made from animal byproducts

1. Debate the issue of using animals for food vs. animal rights groups' beliefs. [5.5.1](#)
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Value-Added Products

6.1 Value-added product

6.2 Trends in the American lifestyle which have increased demand for value-added products

6.3 Examples of popular value-added products

1. Compare price per pound of value-added products to that of unprocessed forms of the same food [6.3.1](#)
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Marketing Food Products

7.1 The percentage of each food dollar that is spent on marketing

7.2 The effect of advertising on consumers

1. Analyze advertisements for various food products, including those from the beef, pork, milk, and potato boards. [7.2.1](#)
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7.3 The importance of computers in the marketing process