

# 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**
- 

**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.
- 

## 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**
- 

## 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
- 

#### 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:<ul><li>Beef</li><li>Sheep</li><li>Hogs</li><li>Poultry</li><li>Fish</li></ul>

1. Demonstrate the process of slaughtering the following types of meat animals:<ul><li>beef</li><li>sheep</li><li>hogs</li><li>poultry</li><li>fish</li></ul> 5.2.1
- 

#### 5.3 The process of Kosher slaughter

---

#### 5.4 Primal and retail cuts from the following types of meat animals:<ul><li>Beef</li><li>Sheep</li><li>Hogs</li></ul>

---

#### 5.5 Products made from animal byproducts

1. Debate the issue of using animals for food vs. animal rights groups' beliefs. 5.5.1
- 

### 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
- 

### 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
- 

#### 7.3 The importance of computers in the marketing process