



Discovering Food and Nutrition

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| STANDARDS | PAGE REFERENCES |
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| NUTRITION AND WELLNESS | |
| UNIT 1: NUTRITION | |
| 1. Describe the classes and types of nutrients. | |
| a. Identify the six major classes of nutrients. | Student Edition: 34, 35-36, 37-38, 38-39, 40, 40-41, 41-43 |
| b. Distinguish between organic and inorganic nutrients. | Student Edition: Nutrients are covered on: 34, 35-36, 37-38, 38-39, 40, 40-41, 41-43 |
| c. Identify food sources for each class of nutrients. | Student Edition: 35-36, 37-38, 38-39, 40-41, 41-43, 232, 240-241, 302-303 |
| d. Distinguish between fat soluble and water soluble vitamins. | Student Edition: 40-41 |
| e. Describe the proper use of nonfood sources of nutrients. | Student Edition: 43-44 |
| f. Distinguish between saturated and unsaturated fatty acids. | Student Edition: 38 |
| 2. Describe the various functions of the six classes of nutrients. | |
| a. Identify the functions of carbohydrates, including fiber, in the body. | Student Edition: 35-36 |

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| b. Identify the functions of lipids in the body. | Student Edition: 37-38 |
| c. Identify the functions of proteins in the body. | Student Edition: 38-39, 204, 215, 256, 278 |
| d. Identify the functions of water in the body. | Student Edition: 40 |
| e. Identify the functions of vitamins in the body. | Student Edition: 40-41, 204, 215, 223, 249, 256, 269, 278 |
| f. Identify the functions of minerals in the body. | Student Edition: 41-43, 204, 215, 223, 249, 256, 269, 278 |
| 3. Explain the processes of digestion, absorption, and metabolism. | |
| a. Identify the organs involved in digestion. | Student Edition: Digestion is discussed on: 35 |
| b. Describe the stages of digestion. | Student Edition: Digestion is discussed on: 35 |
| c. Explain the process of absorption. | Student Edition: Digestion is discussed on: 35 |
| d. Contrast the transport of lipids with carbohydrates, vitamins, minerals, and proteins. | Student Edition: Digestion is discussed on: 35 |
| UNIT 2: EXERCISE AND DIET | |
| 1. Understand the role of energy in well-being and performance. | |
| a. Determine energy needs to maintain optimal health. | Student Edition: 35, 46, 47-49, 50, 51-52, 85 |
| b. Explain factors that increase or decrease energy usage by the body. | Student Edition: 35, 50, 51-52, 84-85, 85 |
| 2. Describe the effects of body weight on overall wellness. | |
| a. Define terms related to body weight including ideal body weight, overweight, obesity, and underweight. | Student Edition: 51-52, 55 |
| b. Analyze factors that affect body weight, including physical, emotional, psychological, and hereditary factors. | Student Edition: 27, 28-29, 30, 30-31, 31-32, 32 |

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| c. Research the risks associated with weight problems. | Student Edition: 86, 88 |
| 3. Evaluate methods of weight control. | |
| a. Discuss the role of diet and physical activity as keys to weight control. | Student Edition: 28-30, 50, 51-52 |
| b. Determine whether a weight loss or weight gain program is nutritionally sound and effective. | Student Edition: 50, 51-52, 86 |
| c. Discuss the effectiveness of various medications in weight control. | This standard can be met during teacher/class discussion when expanding on the following pages covering energy balance. Student Edition: 50-52 |
| 4. Understand malnutrition and its effect on wellness. | |
| a. Explain the consequences of malnutrition at different stages of growth and development. | Student Edition: Nutrition throughout one's lifespan is covered on: 84-85 |
| b. Define the common types of eating disorders. | Student Edition: 86 |
| c. Discuss nutritional problems common to the adolescents. | Student Edition: 85, 86, 87-88, 89 |
| 5. Describe the concept of personal fitness. | |
| a. Explain terms related to personal fitness including health, wellness, functional health, physically active lifestyle, and sedentary lifestyle. | Student Edition: 28-29, 32, 33 #1, 51-52, 55 |
| b. Explain the difference between exercise and physical fitness. | Student Edition: Physical activity is discussed on: 28-29, 33 #4 <i>Applying Knowledge and Skills</i> 33, 53 |
| c. Discuss attitudes and beliefs about physical fitness including lack of time, poor physical condition, high percentage of body fat, unrealistic physical fitness goals or expectations, lack of knowledge about physical fitness, and negative experiences with physical activity. | Student Edition: Physical fitness ideas are covered on: 27, 28-29, 30-31, 32, 51-52 |

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| 6. Discuss health risk factors and their effect on personal fitness. | |
| a. Identify health risk factors including age, heredity, gender, smoking, hypertension, high blood cholesterol, diabetes, hypokinetic lifestyle, stress, and obesity. | Student Edition: 30-31, 31-32, 37, 48, 54-55, 88 <i>Applying Knowledge and Skills</i> 33 |
| b. Evaluate the risk factors associated with various lifestyle diseases such as cardiovascular disease, hypertension, cancer, and diabetes. | Student Edition: 31-32, 37, 48 |
| c. Discuss problems associated with smoking including cardiovascular disease, lung cancer, throat and mouth cancer, birth defects, hypertension, chronic bronchitis, shorter lifespan, and premature wrinkling of the skin. | Student Edition: 31 |
| 7. Understand the role of exercise in maintaining a life-long program of physical fitness. | |
| a. Explain how obtaining or maintaining physical fitness can benefit each of the following: physical appearance, self-esteem, stress, academic performance, life expectancy, and health care costs. | Student Edition: 27, 28-29, 30, 30-31, 31-32, 51-52, 55 |
| b. Discuss the suitability of various safe physical activities for different stages of the life cycle. | Student Edition: Types of physical activities are covered on: 28-29, 31, 32, 52 |
| c. Discuss reasons for having a medical examination before beginning a personal fitness program. | Student Edition: 32, 52 |
| d. Evaluate current level of physical activity as related to overall health and well being. | Student Edition: 55 <i>Applying Knowledge and Skills</i> 53 |
| e. Demonstrate the use of selected physical exercise equipment. | See Glencoe's <i>Foundation of Personal Fitness</i> © 2005 Student Edition: 276-293 |
| 8. Discuss the concepts of body composition in relation to personal fitness. | |
| a. Discuss the concepts of body type and body composition. | Student Edition: Body shapes are covered on: 27 |
| b. Discuss the relationship between body composition and the risk of developing chronic diseases in adults. | Student Edition: The relationship between weight and health is covered on: 55 |

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| c. Describe the use of body composition evaluations including height/weight chart, body circumference, skinfold, and medical/laboratory methods. | See Glencoe's <i>Nutrition & Wellness</i> © 2004 Body Mass Index, height, and BMI charts are covered on: 265-266 |
| UNIT 3: HEALTHY FOOD CHOICES | |
| 1. Plan menus for individuals and groups. | |
| a. Explain the Food Guide Pyramid. | Student Edition: 60-61, 61-62, 62-63, 69 #1 |
| b. Analyze existing menus for nutrition and acceptability. | Student Edition: 69 #3 <i>Applying Knowledge and Skills</i> 191 <i>Try It!</i> 75 |
| c. Identify the factors to consider when planning menus for individuals and groups. | Student Edition: 62-63, 63-68, 70-71, 73-74, 75-76, 77, 87-88, 186-188, 188-190 |
| d. Develop menus for individuals and groups considering various factors. | Student Edition: <i>Applying Knowledge and Skills</i> 69, 77, 83, 89, 191, 199, 203, 277 |
| 2. Apply acceptable food purchasing guidelines. | |
| a. Identify the steps to follow when purchasing food. | Student Edition: 90-94, 98-100, 205-206, 215-216, 225-227, 233-235, 249-251, 257-258, 269-272, 279-283 |
| b. Compare costs, services, and other factors among different types of food stores, including grocery stores, convenience stores, food co-ops, warehouses, specialty stores, government distribution agencies. | Student Edition: 92 |
| c. Critique food labels for nutritional content. | Student Edition: 95-97, 205, 216 <i>Applying Knowledge and Skills</i> 101 <i>Try It!</i> 58, 335 |
| d. Apply basic math skills to compute cost of food per serving. | Student Edition: 98, 259, 271-272, 282 <i>Exploring Further</i> 101, 301 |
| e. Compare the costs and acceptability of commercially prepared foods versus home prepared foods. | Student Edition: <i>Exploring Further</i> 203 |

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| f. Discuss the government agencies responsible for assuring safety of the food supply. | Student Edition: Grades and inspection seals are covered on: 258, 271, 281, 293 |
| UNIT 4: MEAL PREPARATION | |
| 1. Identify food preparation tools and equipment and their use. | |
| a. Describe food preparation tools and equipment. | Student Edition: 109, 110-111, 112-113, 113, 114, 115 <i>Applying Knowledge and Skills</i> 115 <i>Exploring Further</i> 115 |
| b. Demonstrate the use of food preparation tools and equipment. | Student Edition: <i>Applying Knowledge and Skills</i> 123, 133, 159, 301 <i>Try It!</i> 121 |
| 2. Demonstrate the proper procedures for measuring ingredients. | |
| a. Apply proper procedures for measuring dry ingredients. | Student Edition: 130-132, 133 #2 <i>Applying Knowledge and Skills</i> 133 |
| b. Apply proper procedures for measuring liquid ingredients. | Student Edition: 132, 133 #3 <i>Applying Knowledge and Skills</i> 133 |
| c. Apply proper procedures for measuring moist and solid ingredients. | Student Edition: 133 <i>Applying Knowledge and Skills</i> 133 |
| d. Apply basic math skills in calculating conversions of measurements to equivalents. | Student Edition: 124-127, 127-129 <i>Applying Knowledge and Skills</i> 129 |
| 3. Evaluate procedures that preserve nutritional quality and safety during food preparation. | |
| a. Identify major bacteria, viruses, and molds that cause food-borne illnesses. | Student Edition: 160-161 |
| b. Describe how bacteria, viruses, and molds make food unsafe. | Student Edition: 160-161 |
| c. Discuss steps to follow in handling and storing foods to protect nutritional quality and food safety. | Student Edition: 162-165, 166-169, 169-171, 206, 235, 242, 260, 272, 283-285, 303-304 |

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| 4. Prepare and critique food products. | |
| a. Interpret recipe terminology and the importance of prepreparation. | Student Edition: 116-118, 118-123, 134-141, 172-174, 351-357, 360-369 <i>Applying Knowledge and Skills</i> 179, 191, 267, 357 |
| b. Prepare food products using regular and low fat recipes. | Student Edition: <i>Exploring Further</i> 315 The importance of a low fat diet is covered on: 57-58, 88 |
| c. Critique food products using regular and low fat recipes. | Student Edition: <i>Exploring Further</i> 221, 291, 315 |
| d. Prepare food products using two or more cooking methods. | Student Edition: <i>Applying Knowledge and Skills</i> 247 <i>Exploring Further</i> 143, 301 |
| e. Critique food products using two or more cooking methods. | Student Edition: <i>Applying Knowledge and Skills</i> 247 <i>Exploring Further</i> 143, 301 |
| f. Prepare food products comparing convenience versus scratch methods. | Student Edition: Convenience foods are discussed and prepared on: 93, 260, 272-273, 283, 311 <i>Applying Knowledge and Skills</i> 213, 221, 315, 357 <i>Exploring Further</i> 315 |
| g. Critique food products comparing convenience versus scratch methods. | Student Edition: Convenience foods are discussed and prepared on: 93, 260, 272-273, 283, 311 <i>Applying Knowledge and Skills</i> 213, 221, 315, 357 <i>Exploring Further</i> 315 |
| 5. Demonstrate proper social etiquette to include multicultural situations. | |
| a. Discuss table service to include formal and informal service. | Student Edition: 192-193, 193-194 <i>Applying Knowledge and Skills</i> 199 <i>Exploring Further</i> 199 |

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| b. Demonstrate basic table setting techniques. | Student Edition: 195, 196-197 <i>Applying Knowledge and Skills</i> 199 <i>Exploring Further</i> 199 |
| c. Demonstrate proper table manners. | Student Edition: 198-199 <i>Applying Knowledge and Skills</i> 199 <i>Exploring Further</i> 199 |
| UNIT 5: COMPONENTS FOR A HEALTHY LIFESTYLE | |
| 1. Explain the relationship of food choice to physical exercise/performance. | |
| a. Analyze food intake and its relationship to various physical activity/performance levels. | Student Edition: 47-49, 50, 51-52, 84-85, 85 <i>Applying Knowledge and Skills</i> 69, 89 |
| b. Evaluate the effects of specific food choices on immediate and long-term physical performance. | Student Edition: 26, 54-55, 56-57, 57-58, 58-59, 63-69, 85, 87-88 |
| c. Develop a personal plan for a life-long program of fitness incorporating exercise and healthy diet. | Student Edition: 26, 27, 28-29, 30, 30-31, 31-32, 84-85, 85 |
| 2. Design a physical activity and exercise program. | |
| a. Explain the scientific principle of overload including frequency, intensity, and time. | Student Edition: Physical activity is covered on: 28-29, 50, 51-52, 55 |
| b. Explain the scientific principle of specificity including conditioning, mode of activity, and record keeping. | Student Edition: Physical activity is covered on: 28-29, 50, 51-52, 55 |
| c. Explain the purpose of proper warm-up and describe the different types including active warm-up, muscle/skeletal warm-up, static body stretches, cardiovascular warm-up and passive warm-up. | See Glencoe's <i>Foundations of Personal Fitness</i> © 2005. Student Edition: 60, 102-106 |
| d. Design a personal fitness prescription for a workout including frequency, intensity, time, modes, resistance work training, and flexibility. | Student Edition: 28-29 |

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| e. Explain the purpose of proper cool down and the different types including cardiovascular and stretching cool down. | See Glencoe's <i>Foundations of Personal Fitness</i> © 2005. Student Edition: 60, 108-109 |
| f. Design a personal cool down program including a cardiovascular and stretching component. | See Glencoe's <i>Foundations of Personal Fitness</i> © 2005. Student Edition: 60, 108-109 <i>Personal Fitness Planning</i> 109 |
| 3. Review occupational and leadership opportunities in foods and nutrition. | |
| a. Investigate career opportunities in the foods industry. | Student Edition: 18-20, 20, 20-25 <i>Applying Knowledge and Skills</i> 25 <i>Exploring Further</i> 25 |
| b. Describe leadership opportunities available from student youth organizations in the school and community. | Student Edition: <i>Try It!</i> 31 |