

Fundamentals of Nutrition and Culinary Essentials

HUMAN SCIENCES AND EDUCATION HSE.HS.21

1 Apply skills to meet career goals within the food, nutrition, and culinary industries. HSE.HS.21.1

- a** Demonstrate working as a member of a diverse team. HSE.HS.21.1.A
 - b** Demonstrate professional practices required in the workplace. HSE.HS.21.1.B
 - c** Summarize roles, responsibilities, education, training, and credentialing requirements for careers within the food, nutrition, and culinary industries. HSE.HS.21.1.C
 - d** Compare and contrast personal strengths, talents, interests, and passions to the skills and traits required of the workplace. HSE.HS.21.1.D
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2 Analyze U.S. and global food systems and their impact on personal health. HSE.HS.21.2

- a** Compare and contrast definitions of health and wellness. HSE.HS.21.2.A
 - b** Analyze farm to table for a variety of food products grown locally and globally. HSE.HS.21.2.B
 - c** Identify issues surrounding global production of food and how sustainability and conservation practices are connected. HSE.HS.21.2.C
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3 Analyze the six essential nutrients and their purposes in the body. HSE.HS.21.3

- a** Identify key bodily functions of the six essential nutrients and the components of each. HSE.HS.21.3.A
 - b** Summarize the digestion, absorption, and metabolic processes associated with the use of nutrients in the digestive system. HSE.HS.21.3.B
 - c** Identify the nutrient density of a variety of foods for each of the nutrients. HSE.HS.21.3.C
 - d** Interpret the impact and effects of over or underconsumption of each nutrient. HSE.HS.21.3.D
 - e** Explain the concept of calories and energy density of foods. HSE.HS.21.3.E
 - f** Apply nutrition mathematical concepts to calculate energy from nutrients and the energy composition of a food item. HSE.HS.21.3.F
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4 Integrate current dietary recommendations and guidelines to plan and analyze a healthy diet. HSE.HS.21.4

- a Recognize reliable sources of nutrition information (e.g., Dietary Reference Intakes, Dietary Guidelines, MyPlate model, food labels). [HSE.HS.21.4.A](#)
 - b Compare and contrast personal eating habits to current recommendations for a healthy diet. [HSE.HS.21.4.B](#)
 - c Apply current dietary recommendations and guidelines to meal planning. [HSE.HS.21.4.C](#)
 - d Identify package labeling components. [HSE.HS.21.4.D](#)
 - e Analyze the Nutrition Facts label to determine nutrient contributions of a variety of foods. [HSE.HS.21.4.E](#)
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5 Demonstrate effective food and kitchen safety and sanitation procedures. [HSE.HS.21.5](#)

- a Identify microorganisms which are related to food spoilage and foodborne illnesses. [HSE.HS.21.5.A](#)
 - b Apply proper personal hygiene, health habits, and industry-standard apparel. [HSE.HS.21.5.B](#)
 - c Sequence the requirements for proper receiving and storage of prepared foods and identify signs of food spoilage and contamination (e.g., FIFO - first in first out). [HSE.HS.21.5.C](#)
 - d Identify the critical control points and the Temperature Danger Zone during all food handling processes as a method for minimizing the risk of foodborne illness (HACCP system). [HSE.HS.21.5.D](#)
 - e Demonstrate kitchen safety practices to prevent accidents (e.g., slips, burns, fires, shock, cuts, equipment accidents, poisoning). [HSE.HS.21.5.E](#)
 - f Implement a safety and sanitation inspection and identify modifications necessary for compliance with standards. [HSE.HS.21.5.F](#)
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6 Demonstrate foundational food preparation techniques. [HSE.HS.21.6](#)

- a Demonstrate foundational culinary techniques (measuring, knife skills, folding, creaming) and correct use of kitchen equipment. [HSE.HS.21.6.A](#)
 - b Demonstrate mise en place. [HSE.HS.21.6.B](#)
 - c Demonstrate proper scaling techniques to convert recipes to yield smaller and larger quantities. [HSE.HS.21.6.C](#)
 - d Apply the fundamentals of time, temperature, and cooking methods (dry, moist, combination) to cooking, cooling, reheating, and holding a variety of foods. [HSE.HS.21.6.D](#)
 - e Demonstrate the preparation techniques for common essential nutrient-dense food sources (fruits, vegetables, proteins, carbohydrates, dairy products). [HSE.HS.21.6.E](#)
 - f Label and store fresh and finished food products appropriately to reduce spoilage. [HSE.HS.21.6.F](#)
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7 Create a meal plan based on the dietary recommendations for individuals and families across the lifespan. [HSE.HS.21.7](#)

- a Identify food purchasing strategies used by consumers (e.g., store layout, comparison shopping). [HSE.HS.21.7.A](#)
- b Develop a market order and time management plan. [HSE.HS.21.7.B](#)
- c Identify the categories of a menu (e.g., appetizers, sandwiches, entrees). [HSE.HS.21.7.C](#)
- d Apply recommended portion sizes to food preparation and serving. [HSE.HS.21.7.D](#)
- e Recognize and make dietary modifications for special dietary needs. [HSE.HS.21.7.E](#)