

# Correlation of *Nutrition & Wellness for Life* to Pre-PAC Domains and Competencies *Nutrition, Food, and Wellness*

The American Association of Family and Consumer Sciences (AAFCS) in collaboration with AAFCS members and business, industry, and education leaders developed the *Pre-Professional Assessment and Certification (Pre-PAC) Program*. AAFCS administers these standards-based assessments for pre-professionals in family and consumer sciences career areas. The background sources used in developing these assessments are driven by the industry standards with input from business and industry leaders, the NASAFACS National Standards for Family and Consumer Sciences, and the Career Clusters Initiative.

The following chart correlates the domains and competencies of the *Nutrition, Food, and Wellness* Pre-PAC assessment with the content of ***Nutrition & Wellness for Life***. For each competency, the chart lists the chapter number(s) and appendix that identify the content location.

After studying the content of this text, students will be able to achieve the following competencies:

<b>Domain 1: <i>Wellness</i></b>		
<b>Competency 1A</b> <b>Assess emotional, psychological, spiritual, cultural, and intellectual influences on individual/family food choices and nutrition and wellness across the life span.</b>		<b>Text Concepts (Related Text Components)</b>
<b>1.A.1</b>	Emotional influences on food choices	Ch. 2, 13, 16
<b>1.A.2</b>	Psychological influences on food choices	Ch. 1, 13, 16
<b>1.A.3</b>	Dietary patterns associated with religious beliefs (i.e., vegetarianism, kosher foods)	Ch. 2, 8

1.A.4	Cultural influences on food choices	Ch. 2
1.A.5	Intellectual influences on food choices	Ch. 1, 2
1.A.6	Components of wellness across the life span	Ch. 1, 14, 20, 21, 22
1.A.7	Fundamentals of good nutrition across the life span	Ch. 5, 14
<b>Competency 1B</b> <b>Analyze economic and environmental influences on food choices and nutritional practices.</b>		<b>Text Concepts</b> <b>(Related Text Components)</b>
1.B.1	Economic influences on food choices	Ch. 2, 8, 11, 18
1.B.2	Environmental influences on food choices	Ch. 8, 18 See feature box <i>Food and the Environment</i> in Chapters 2, 3, 4, 5, 6, 8, 11, 13, 16, 17, 19, and 22
1.B.3	Globalization of food	Ch. 2, 19
1.B.4	Effects of industrialization	Ch. 1, 3, 6
1.B.5	Role of resources	Ch. 2, 18
1.B.6	Strategies to reduce food waste	Ch. 2, 5 See feature box <i>Food and the Environment</i> in Chapters 10, 17, and 19
1.B.7	Family customs	Ch. 2
1.B.8	Sustainable living practices	See feature box <i>Food and the Environment</i> in Chapters 2, 3, 4, 5, 6, 8, 10, 11, 13, 16, 17, 19, and 22

<b>Competency 1C</b> <b>Analyze governmental influences to include legislation and regulation related to nutrition and wellness.</b>		<b>Text Concepts</b> <b>(Related Text Components)</b>
1.C.1	Food Safety and Inspection Service (FSIS)	Ch. 3
1.C.2	United States Department of Agriculture (USDA)	Ch. 1, 3, 5, 18, 19
1.C.3	Food and Drug Administration (FDA)	Ch. 1, 2, 3, 5, 7, 9, 11, 18, 23
1.C.4	Food and Agriculture Organization	Ch. 2
1.C.5	Legal and legislative issues associated with wellness (i.e., health claims on food labels, consumer rights, allowable amounts of fats in foods, Delaney Clause, etc.)	Ch. 5, 7, 18
1.C.6	Use of additives and controlled-substances (i.e., GRAS list)	Ch. 18
1.C.7	Regulation of herbal supplementations	Ch. 23
<b>Competency 1D</b> <b>Analyze the effects of food and diet fads on wellness.</b>		<b>Text Concepts</b> <b>(Related Text Components)</b>
1.D.1	Healthy eating habits and practices	Ch. 1, 5, 13
1.D.2	Healthy strategies to lose weight	Ch. 12, 13
1.D.3	Healthy strategies for weight management (i.e., maintaining or gaining)	Ch. 12, 13
1.D.4	Traits, examples, and health risks of fad diets	Ch. 13
1.D.5	Types and symptoms of eating disorders	Ch. 16
<b>Domain 2: Food Handling</b>		
<b>Competency 2A</b>		<b>Text Concepts</b> <b>(Related Text Components)</b>

<b>Apply science-based dietary guidelines in planning to meet nutrition and wellness needs of individuals and families.</b>		
<b>2.A.1</b>	Dietary Guidelines for Americans	Ch. 5
<b>2.A.2</b>	Recommendation Dietary Allowance	Ch. 5
<b>2.A.3</b>	MyPyramid	Ch. 5
<b>2.A.4</b>	Food sources of food groups	Ch. 5
<b>2.A.5</b>	Nutritive value of foods	Ch. 5, Appendix D
<b>2.A.6</b>	Portion sizes	Ch. 5
<b>2.A.7</b>	Recommendations for 2,500-calorie diet	Ch. 5, 8
<b>2.A.8</b>	Strategies to gain, lose, and maintain weight	Ch. 12, 13
<b>Competency 2B</b>		<b>Text Concepts</b>
<b>Recognize health and nutrition requirements of individuals and families with special needs.</b>		<b>(Related Text Components)</b>
<b>2.B.1</b>	Dietary needs of athletes	Ch. 15
<b>2.B.2</b>	Dietary needs of young children	Ch. 14
<b>2.B.3</b>	Dietary needs of older adults	Ch. 14
<b>2.B.4</b>	Dietary needs of vegetarians	Ch. 8, 10, 14, 15
<b>2.B.5</b>	Strategies to lower intake of fat	Ch. 2, 5, 7, 8, 13, 15, 19
<b>2.B.6</b>	Strategies to lower sodium intake	Ch. 5, 10
<b>2.B.7</b>	Strategies to minimize caffeine intake	Ch. 11, 14, 23
<b>2.B.8</b>	Strategies to avoid/prevent cancer, heart disease, obesity, iron-deficiency anemia	Ch. 1, 5, 6, 7, 8, 9, 10, 13, 14, 20, 23

<b>Competency 2C</b> <b>Demonstrate ability to select, store, prepare, and serve nutritious, safe and appealing foods.</b>		<b>Text Concepts</b> <b>(Related Text Components)</b>
2.C.1	Developing a healthy approach to food and nutrition	Ch. 17, 18, 19
2.C.2	Locally grown foods	Ch. 18
2.C.3	Safe food practices for cooking outdoors	Ch. 3, 19
2.C.4	Equivalents and measuring techniques	Ch. 19
2.C.5	Selection, storage, and cooking techniques for meats and meat products	Ch. 3, 19
2.C.6	Selection, storage, and cooking techniques for dairy products	Ch. 3, 19
2.C.7	Selection, storage, and cooking techniques of grain and starches	Ch. 3, 19
2.C.8	Selection, storage, and preparation techniques for fruits	Ch. 3, 19
2.C.9	Selection, storage, and preparation techniques for vegetables	Ch. 3, 19
2.C.10	Buffet service	-----
2.C.11	Food service styles	-----
<b>Competency 2D</b> <b>Evaluate food and nutrition information, including food labels, in relation to the nutrition content of the food.</b>		<b>Text Concepts</b> <b>(Related Text Components)</b>
2.D.1	Portion sizes	Ch. 5
2.D.2	Nutrition Facts Panel (i.e., information located on label, order of ingredients, etc.)	Ch. 5
2.D.3	Food product identification	-----
2.D.4	Reliable sources of nutrition information	Ch. 1, 2

<b>Domain 3: Food Safety</b>		
<b>Competency 3A</b> <b>Assess conditions and practices that promote safe food handling and methods for preventing a foodborne illness outbreak for commercial and home practice.</b>		<b>Text Concepts</b> <b>(Related Text Components)</b>
<b>3.A.1</b>	Safe food storage practices	Ch. 3, 19
<b>3.A.2</b>	Safe food handling practices	Ch. 3, 19
<b>3.A.3</b>	Challenges to preventing foodborne illness	Ch. 3
<b>Competency 3B</b> <b>Analyze safety and sanitation practices in retail, institutions and home (including the use of equipment).</b>		<b>Text Concepts</b> <b>(Related Text Components)</b>
<b>3.B.1</b>	Sanitation practices (i.e., handwashing, Fight BAC guidelines, etc.)	Ch. 3
<b>3.B.2</b>	Food safety temperatures (i.e., danger zone, sterilization temperature, correct doneness temperatures for meat, etc.)	Ch. 3, 19
<b>3.B.3</b>	HACCP (i.e., purpose, implementation, and identification of critical points)	Ch. 3
<b>3.B.4</b>	Safe use of equipment	Ch. 19
<b>3.B.5</b>	Cross-contamination	Ch. 3, 19
<b>Competency 3C</b> <b>Analyze the causes and foods at risk for foodborne illnesses.</b>		<b>Text Concepts</b> <b>(Related Text Components)</b>
<b>3.C.1</b>	Viruses	Ch. 3
<b>3.C.2</b>	Food contaminants (chemical and microbial)	Ch. 3
<b>3.C.3</b>	Potentially hazardous foods	-----

<b>3.C.4</b>	Foodborne illnesses (i.e., Clostridium botulinum, Clostridium perfringens, Escherichia coli, Listeria monocytogenes, Staphylococcus aureus, Salmonella, Botulism, Hepatitis, and Trichinosis)	Ch. 3
<b>3.C.5</b>	Pathogens and toxins	Ch. 3
<b>Domain 4: Science and Technology</b>		
<b>Competency 4A</b> <b>Analyze influence of scientific and technical advances on the nutrient content, availability, and safety of foods.</b>		<b>Text Concepts</b> <b>(Related Text Components)</b>
<b>4.A.1</b>	Strategies to increase food supply	Ch. 2
<b>4.A.2</b>	Sustaining the food supply	Ch. 2 See feature box <i>Food and the Environment</i> in Chapters 2, 3, 4, 5, 6, 8, 10, 11, 13, 16, 17, 19, and 22
<b>4.A.3</b>	Protecting the food supply	Ch. 2, 3
<b>4.A.4</b>	Food preservation methods	Ch. 18
<b>4.A.5</b>	Role of technology in expanding the food supply	Ch. 2
<b>4.A.6</b>	Genetically engineered foods	Ch. 2
<b>4.A.7</b>	Gluten and flour types	Ch. 3, 19
<b>4.A.8</b>	Effect of ethylene on plants	-----
<b>4.A.9</b>	Irradiation	Ch. 18
<b>4.A.10</b>	Functions of food packaging	Ch. 18
<b>4.A.11</b>	Recipe changes at higher altitudes	_____

<b>Competency 4B</b> <b>Relate scientific and technical advances in food processing, storage, product development, and distribution for nutrition and wellness.</b>		<b>Text Concepts</b> <b>(Related Text Components)</b>
4.B.1	Scientific method and hypothesis testing	Ch. 1
4.B.2	Freezing techniques (i.e., blanching before freezing, ideal foods for home freezing, preventing freezer burn)	Ch. 3
4.B.3	Solute, solvent, and saturated substances	Ch. 11
4.B.4	Food science principles (i.e., osmosis, caramelizing sugars, Maillard reaction, kneading dough, use of egg whites, etc.)	Ch. 3, 10, 19
4.B.5	Microwave cookery	Ch. 3, 17
4.B.6	Home canning	-----
4.B.7	Cryogenic freezing and liquids	-----
4.B.8	Moist-heat and dry-heat methods of cookery	Ch. 19
4.B.9	Effect of ingredients on microbes, processing time, and/or temperature	-----
4.B.10	Effects of canning, drying, freezing, and heating on vegetables	Ch. 9, 18, 19
4.B.11	Reconstituting dehydrated foods	-----
<b>Competency 4C</b> <b>Determine the effects of food science and technology on meeting nutritional needs.</b>		<b>Text Concepts</b> <b>(Related Text Components)</b>
4.C.1	Organically grown foods	Ch. 18
4.C.2	Advantages of concentrated foods	-----
4.C.3	Role of sulfur	Ch. 10
4.C.4	Effects of food density, shape and size, and amount of food	Ch. 5, 17



<b>Domain 5: Nutrition Principles</b>		
<b>Competency 5A</b> <b>Evaluate the functions and the requirements of <i>vitamins</i> on nutrition and wellness across the life span, and their food sources.</b>		<b>Text Concepts</b> <b>(Related Text Components)</b>
5.A.1	Fat-soluble vs. water-soluble vitamins	Ch. 9
5.A.2	Forms of Vitamins A and B and D	Ch. 9
5.A.3	Vitamins (i.e., effect of light on certain vitamins, dangers of mega dosing, etc.)	Ch. 9
5.A.4	Food sources	Ch. 9
5.A.5	Vitamin associated with building strong bones	Ch. 9
<b>Competency 5B</b> <b>Evaluate the functions and the requirements of <i>minerals</i> on nutrition and wellness across the life span, and their food sources.</b>		<b>Text Concepts</b> <b>(Related Text Components)</b>
5.B.1	Minerals common in most foods	Ch. 10
5.B.2	Iron (i.e., Relation of hemoglobin and myoglobin to iron, heme and nonheme iron, etc.)	Ch. 10
5.B.3	Relation of sodium to high blood pressure	Ch. 10
5.B.4	Role of sodium and potassium in the regulation of osmotic flow of liquids	Ch. 10
5.B.5	Mineral associated with building strong bones	Ch. 10
5.B.6	Food sources	Ch. 10
<b>Competency 5C</b> <b>Evaluate the functions and the requirements of <i>proteins</i> on nutrition and wellness across the life span, and their food sources.</b>		<b>Text Concepts</b> <b>(Related Text Components)</b>

5.C.1	Meeting protein needs through a vegetarian eating plan	Ch. 8, 14, 15
5.C.2	Elements found in protein (C, H, O, N)	Ch. 8
5.C.3	Essential amino acids	Ch. 8
5.C.4	Proteins commonly found in food such as milk	Ch. 8, 19
5.C.5	Metabolism of excess proteins	Ch. 8
5.C.6	Role of protein in the diet	Ch. 8, 12
5.C.7	Food sources	Ch. 8
5.C.8	Calories per gram of protein	Ch. 4, 8
<b>Competency 5D</b> <b>Evaluate the structures, the functions and the requirements of <i>fats</i> on nutrition and wellness across the life span, and their food sources.</b>		<b>Text Concepts</b> <b>(Related Text Components)</b>
5.D.1	LDL-cholesterol and HDL-cholesterol	Ch. 7
5.D.2	Fats (i.e., saturated, unsaturated, polyunsaturated)	Ch. 7, 8, 13, 14
5.D.3	Fatty acids (i.e., omega-3, essential fatty acids, <i>trans</i> fatty acids, sources of fatty acids)	Ch. 7, 8, 19
5.D.4	Functions of fat in the body	Ch. 7
5.D.5	Food sources	Ch. 7, 8, 19
5.D.6	Calories per gram of fat	Ch. 4, 7
<b>Competency 5E</b> <b>Evaluate the functions and the requirements of <i>carbohydrates</i> on nutrition and wellness across the life span, and their food sources.</b>		<b>Text Concepts</b> <b>(Related Text Components)</b>
5.E.1	Monosaccharides and disaccharides	Ch. 6
5.E.2	Fiber (i.e., dietary fiber, soluble fiber, insoluble fiber)	Ch. 6

5.E.3	Pectin	Ch. 6
5.E.4	Sugars (i.e., Glucose, Dextrose, Lactose, Sucrose, Fructose, Glycogen)	Ch. 6
5.E.5	Food sources	Ch. 6
5.E.6	Calories per gram of carbohydrates	Ch. 4, 6
<b>Competency 5F</b> <b>Evaluate the functions and the requirements of <i>water</i> on nutrition and wellness across the life span, and its food sources.</b>		<b>Text Concepts</b> <b>(Related Text Components)</b>
5.F.1	Content and function of water in the body	Ch. 11
5.F.2	Water content of foods	Ch. 11
5.F.3	Polar covalent bonds	-----
5.F.4	Recommended consumption amounts of water	Ch. 11, 15
5.F.5	Physical activity and water needs	Ch. 11, 15
<b>Domain 6: <i>Careers</i></b>		
<b>Competency 6A</b> <b>Analyze jobs and preparation requirements for careers in nutrition and food occupations.</b>		<b>Text Concepts</b> <b>(Related Text Components)</b>
6.A.1	Specific career titles associated with nutrition and food occupations (i.e., Dietitian, Executive chef, Researcher, Food stylist, Food service manager, Counselor, Restaurateur)	See <i>Featured Career</i> box in each chapter
6.A.2	Functions of careers associated with nutrition and food	See <i>Featured Career</i> box in each chapter
6.A.3	Roles and responsibilities of careers associated with nutrition and food	See <i>Featured Career</i> box in each chapter
6.A.4	Sources of information on related careers (i.e., <i>Occupational Outlook Handbook</i> )	Appendix A

<b>Competency 6B</b> <b>Analyze personal qualifications, interests, values, and educational preparation necessary for employment in a career in nutrition and food.</b>		<b>Text Concepts</b> <b>(Related Text Components)</b>
6.B.1	Personal priorities, aptitudes, and preferences associated with nutrition and wellness related careers	Appendix A
6.B.2	Résumé and portfolio development	Appendix A
6.B.3	Interview skills	Appendix A
6.B.4	Education, training, and licensure requirements for nutrition and food careers	Appendix A, See <i>Featured Career</i> box in each chapter
<b>Competency 6C</b> <b>Evaluate job market opportunities locally, regionally and nationally.</b>		<b>Text Concepts</b> <b>(Related Text Components)</b>
6.C.1	Food and product design and development	Ch. 2
6.C.2	Manufacturing and food distribution	-----
6.C.3	Biotechnology	Ch. 8, 9
6.C.4	Foodservice	Ch. 6, 17
6.C.5	Sources for development of materials and processes used in the food industry, including NASA and armed forces	-----
<b>Competency 6D</b> <b>Compare personal goals to career opportunities within food areas.</b>		<b>Text Concepts</b> <b>(Related Text Components)</b>
6.D.1	Short-term goals vs. long-term goals	Ch. 1, Appendix A
6.D.2	Role of standards, resources, and opportunities in career decision-making	Appendix A
6.D.3	Work schedules for jobs in foodservice, teaching, and counseling	-----
6.D.4	Career planning	Appendix A