

Unit 03: Basic Nutrition

Content Area: **Family and Consumer Sciences**
Course(s):
Time Period: **Marking Period 1**
Length: **3 Weeks**
Status: **Published**

Brief Summary of Unit

In this unit students will explore the *Dietary Guidelines for Americans*, the *MyPlate*, and the leader nutrients within the food groups. The students will explore the six categories of nutrients. In this course, students are provided with opportunities to develop skills that pertain to a variety of careers. When completing this course, students can make informed choices and pursue electives in the FCS program that further their study and contribute toward the formation of career interest.

Standards

National Standards for Family and Consumer Sciences Education

Standard 8.0 Food Production and Services Comprehensive Standard: Integrate knowledge, skills, and practices required for careers in food production and services.

8.3.6 Identify a variety of types of equipment for food processing, cooking, holding, storing, and serving, including hand tools and small ware.

8.5.4 Apply the fundamentals of time, temperature, and cooking methods to cooking, cooling, reheating, and holding of variety of foods.

Area of Study 9.0 Food Science, Dietetics, and Nutrition dietary plans.

9.3.1 Analyze nutrient requirements across the life span addressing the diversity of people, culture, and religions.

9.3.2 Analyze nutritional data.

9.3.4 Assess the influence of cultural, socioeconomic and psychological factors on food and nutrition and behavior.

9.3.5 Analyze recipe/formula proportions and modifications for food production.

9.3.6 Critique the selection of foods to promote a healthy lifestyle.

9.3.7 Plan menus, applying the exchange system to meet various nutrient needs.

9.4.4 Construct a modified diet based on nutritional needs and health conditions.

Area of Study 14.0 Nutrition and Wellness

14.2.1 Evaluate the effect of nutrition on health, wellness and performance.

14.2.3 Analyze the effects of food and diet fads, food addictions, and eating disorders on wellness.

14.3.1 Apply current dietary guidelines in planning to meet nutrition and wellness needs.

Cross curricular connections:

CS.K-12.2.b Create team norms, expectations, and equitable workloads to increase efficiency and effectiveness.

LA.K-12.NJSLSA.L3 Apply knowledge of language to understand how language functions in different contexts, to make effective choices for meaning or style, and to comprehend more fully when reading or listening.

LA.K-12.NJSLSA.W4 Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.

LA.K-12.NJSLSA.W5 Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach.

CS.K-12.2.d Evaluate and select technological tools that can be used to collaborate on a project.

HE.K-12.P.3 Communicating clearly and effectively (verbal and nonverbal)

CS.K-12.2.a Cultivate working relationships with individuals possessing diverse perspectives, skills, and personalities.

LA.WHST.6-8.4 Produce clear and coherent writing in which the development, organization, voice, and style are appropriate to task, purpose, and audience.

HE.K-12.P.10 Using technology tools responsibly

CS.K-12.2.c Solicit and incorporate feedback from, and provide constructive feedback to, team members and other stakeholders.

LA.WHST.6-8.6 Use technology, including the Internet, to produce and publish writing and present the relationships between information and ideas clearly and efficiently.

MA.K-12.1 Make sense of problems and persevere in solving them.

TECH.K-12.P.8 [Practice] - Use technology to enhance productivity, increase collaboration and communicate effectively.

PFL.9.1.K12.P.4 [Practice] - Demonstrate creativity and innovation.

FCSE.9-12.9.5.3	Prepare food for presentation and assessment.
FCSE.9-12.9.3.6	Critique the selection of foods to promote a healthy lifestyle.
FCSE.9-12.8.4.2	Apply menu-planning principles to develop and modify menus.
FCSE.9-12.4.4.4	Plan safe and healthy meals and snacks that meet USDA standards.
FCSE.9-12.8.2.5	Practice standard personal hygiene and wellness procedures.
FCSE.9-12.2.1.1	Apply time management, organizational, and process skills to prioritize tasks and achieve goals.
FCSE.9-12.9.4.1	Analyze nutritional needs of individuals.
FCSE.9-12.2.1.3	Analyze decisions about providing safe and nutritious food for individuals and families.
FCSE.9-12.8.2.7	Demonstrate safe food handling and preparation techniques that prevent cross contamination from potentially hazardous foods and food groups.
FCSE.9-12.9.3.7	Plan menus, applying the exchange system to meet various nutrient needs.
FCSE.9-12.9.3.2	Analyze nutritional data.
FCSE.9-12.8.5.14	Demonstrate cooking methods that increase nutritional value, lower calorie and fat content, and utilize herbs and spices to enhance flavor.

WRK.K-12.P.9 [Practice] - Work productively in teams while using cultural/global competence.

ELD standards: <https://docs.google.com/document/d/1wdmsiGOdCHlrjU-WPvAtENnEgi0EStZXo0uiFYv1Nu4/edit>

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FCSE.9-12.9.4.1	Analyze nutritional needs of individuals.
FCSE.9-12.9.5.3	Prepare food for presentation and assessment.

Essential Questions

- What are the six categories of nutrients?
- • What is wellness?
- • Why are nutrients like players on a team?
- What are The Dietary Guidelines for Americans?
- What are the three most basic principles of healthful eating?
- What is MyPlate?

Students Will Know

- • how nutrients work together in promoting health.
- • how to plan meals using MyPlate and the Dietary Guidelines for Americans.
- • how to use MyPlate to follow a balanced diet.
- • key terms: calorie, nutrient, fiber, carbohydrates, diet, cholesterol, fat, nutrient density, protein, saturated fat, trans fat, unsaturated fat, Recommended Dietary Allowances, malnutrition, discretionary calories, empty-calorie foods, and combination foods.
- • The five food groups and types of food in each food group and their nutritional values.
- • the possible effects of getting too few or too many nutrients.
- • the principles of healthy eating
- • • the USDA Dietary Guidelines.

Students Will Be Skilled At

- analyzing a food journal to identify what is missing nutritionally and how to improve the diet.
- avoiding an excess of added sugars and empty calories in their diets
- creating meal plans to meet one's nutritional needs
- designing meals including foods from each My Plate section.
- eating proper portion sizes
- identifying the nutrients found in foods and why these nutrients are important.
- making a balanced meal including all five food groups.

Evidence/Performance Tasks

FCS courses are designed to promote skill attainment. Student progression and pace through which they proceed through the performance tasks is based on their affinity for and ability to reach skill attainment. The teacher will determine formative and summative skill attainment; alternative assessments will be incorporated for each student based on their strengths and challenges.

Students will:

- • • actively and meaningfully participate in performance tasks
- • • complete and submit all homework assignments. Examples: 24 hour food diary, Exploring: Choose My Plate website
- • • complete the unit test: Nutrition
- • • complete writing exercised based on the following suggested prompt/s:
 - o What did you eat today? What did you eat yesterday? How might your food choices have been improved?
 - o How does the shape of the pyramid help to determine how many servings from each food group to eat? How does it help to follow the dietary guidelines?
 - o Why is it better to obtain calories from a combination of foods from the five food groups than from just one or two food groups?
 - o If one does not eat enough foods from animal sources, how might enough protein with all the essential amino acids be obtained?
- evaluate the eating habits of themselves and of other teens and make recommendations for a diet that will improve the nutritional quality of their meals.
- • • be evaluated by the teacher through observation of performance.
- • • complete a self evaluation rubric of performance.
- • • complete the unit quizzes: o Food Guide Pyramid o Nutrients
- • • meaningfully participate in guided question and answer sessions, group and individual discussions
- create a visual (poster or brochure) to teach others about the Dietary Guidelines for Americans, MyPlate, and the leader nutrients.
- develop a class cookbook of favorite nutritious recipes.
- plan a one day menu for meals and snacks that reflect a “balanced diet”
- show an understanding of the purpose of the unit lesson(s), and the key terms and concepts.

Learning Plan

- • • Administer Test: Nutrition
- • • Facilitate Nutrition Lab #4: Balanced Meal Lab. Have each group prepare one of the following: vegetarian lasagna, meat lasagna, focaccia bread, apple cobbler, and panzanella salad.
- * Facilitate discussion re: Food Choices vs. Health. Do health issues influence your food choices? Do you eat foods because they are good for you? What factors make you eat the foods you do? Do issues in the media influence your food choices?
- *Activity: Snack attack.
- • Provide students with access information necessary for them to view “Exploring Choose My Plate.” Online so that they may begin the tasks in class and complete for homework.
- • • Provide components for / requirements of students to complete a Food Diary: Have students keep a food diary of all foods eaten in an entire day.
- • • Capture student attention with a Hook (suggested hook provided): Show via United Streaming / Discovery Education: “Simple Steps to Healthy Eating.” Guide students in drawing the Food Guide Pyramid as the video plays; include food groups, serving sizes, example foods, and leader nutrients.
- • • Divide students into groups of three or four. Tell each group to look at recipes either online or in cookbooks. Each group is to find at least 5 recipes- one for breakfast, one for lunch, two for dinner, and one for a side dish or a dessert. The recipes must be appealing and have healthy ingredients. Allow students time in class to look for recipes and then complete for homework. Each group must provide a hard copy of each recipe. During the next class period, collect the recipes and organize them by meal and/or category into a class cookbook. Make a copy for each student in class. Then go over the recipes

and pick out the class favorites. Suggest that students prepare at least one recipe for their families or friends. Use a rubric to evaluate the students' work during this lesson. Prepare favorite recipes during class lab. Sample and evaluate recipes prepared in lab.

- • • Facilitate discussion re: Portion Sizes: As a group, using food models, review the food pyramid and discuss food-serving sizes by comparing food portions to familiar physical objects. For example, the palm of a hand or a deck of cards (equals 3 oz. cooked meat), 4 dice (equals 1 oz. cheese), a computer mouse (equals 1 potato), a tennis ball (equals a piece of fruit), and a hockey puck (equals a bagel). Use food models. Discuss how portion sizes have changed over the years.
- • • Facilitate Nutrition Lab #1: Breakfast burritos and pineapple cooler
- Facilitate Activity re: Food groups and nutrition by having students engage in the following: List the food groups. Write down most nutritious foods you eat in each group. How many foods do you have in each group? How colorful are the foods that you eat? Share with a partner. Rate your diet. Discuss motivating factors and barriers to eating healthy.
- Share Dietary Guidelines powerpoint.
- * Facilitate Nutrition lab #3: Taco lab.
- • • Assign a Project: Choose MyPlate.gov project. Have students analyze 24 hour recall using the computer program MyPlate.gov. Once the recall is analyzed, have students make additions/ deletions so that they practice how to plan a day's menu that is balanced according to their personal needs.
- • • Facilitate Nutrition Lab #2: Nutritious breakfast that represents each of the food guide pyramid groups. Ex: French toast with vanilla yogurt and fresh fruit.
- • • Nutrition Lab #4: Nutritious & quick snack.
- • • Preview the essential questions and connect to learning throughout the unit.
- • • Provide a Demonstration to assist students in understanding how to estimate portions. Ask for 3 volunteers. Pour a typical amount of cereal in a bowl. Spoon a helping of cooked pasta or rice on a plate. Pour a glass of milk. Have students estimate the amount, then measure. How close was their estimate to the measured amount?
- • • Provide a Leader Nutrients Intro: Have students Identify the leader nutrients for each food group using the following hints to remember which leader nutrients correspond with each level: o Grain Group: Children Think Nutrition Is Fun (carbohydrates, thiamin, niacin, iron, and fiber) o Vegetable Group: Vitamin A & Vitamin C & Fiber o Fruit Group: Vitamin C & Vitamin A & Fiber o Dairy: C P R: (calcium, protein, riboflavin) o Meat, beans, & nuts: P I N T: (protein, iron, niacin and thiamin)
- • • Provide notes on Leader Nutrients Functions and Sources: using teacher prepared power point, discuss the leader nutrients, functions, and sources: Carbohydrates (simple/complex), fats (animal/plant), protein (complete/ incomplete), vitamins (water/fat soluble), minerals (calcium, iron), water, and fiber.
- • • Administer Quiz: food guide pyramid.
- Distribute worksheets – “One food many groups” and “A la carte- Making healthy food choices”
- Engage students in discussion on the following suggested (or a related) topic “Why is nutrition important to you? What did you learn about nutrition as a child? What have you been told about your eating habits as a child? How does this effect your eating habits now?
- Provide a Demonstration: Sugar Shockers. Measure out the amount of sugar that is in common foods and drinks of teenagers so they can visually see the quantity.
- Review food groups with large pyramid with pockets.
- Review Nutrition Jeopardy in anticipation of test. Play in teams of 2 or 3.

Materials

The materials used in this course allow for integration of a variety of instructional, supplemental, and intervention materials that support student learners at all levels in the school and home environments

In addition to the materials below, the link connects to district approved textbooks and resources utilized in this course: [CORE BOOK LIST](#)

- • Interactive use of SmartBoard
- • Software programs
- • Topic related videos or DVDs
- • Virtual Field Trips
- • Web sites
- Food models
- Necessary recipes and ingredients

Suggested Strategies for Modifications

This link includes content specific accommodations and modifications for all populations:

<https://docs.google.com/spreadsheets/d/1ZSDsCUamViCaBpr1IPOB7FJEC-jx4KnDjZzegIUKeMg/edit?usp=sharing>