Unit 02: Culinary Nutrition

Content Area: **Family and Consumer Sciences**
Course(s):
Time Period: **Marking Period 1**
Length: **2 Weeks**
Status: **Published**

Brief Summary of Unit

This unit will help the students to plan and prepare a balanced meal based on specific criteria and teach the students how to eat healthfully when they dine out. Also, this unit will discuss the National School Lunch Program and the requirements of the program. 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

Essential Questions

- What is nutrition?
- How can professional kitchens promote nutrition and healthy cooking?
- Why should the dietary needs of people with health problems be considered when planning a restaurant menu?
- How can the Dietary Guidelines for Americans and the MyPlate help to create well-balanced meals?

Essential Understandings

Students will understand that:

- cooking has an effect on the nutrient content of food and that certain cooking methods are better than others at preventing nutrient loss.
- following the Dietary Guidelines for Americans and the MyPlate will help ensure a healthy lifestyle now and in the future.
- the criterion for a balanced meal ensures palatability.
- nutrition is the study of the way humans make use of the foods they eat in order to fulfill the body's needs for growth, repair and maintenance.
- restaurant patrons are increasingly asking for menu options that are lower in fats and cholesterol, or with sauces served on the side.
- foodservice employees must understand the basics of nutrition to help them create healthful menus or to make healthful ordering suggestions to diners.

Students Will Know

- key terms: nutrient, carbohydrate, legume, fiber, protein, fat, hydrogenation, cholesterol, trans fatty acid, vitamin, minerals, additive.
- the six categories of nutrients.
- the purpose of the Dietary Guidelines for Americans, nutrition labels, and MyPyramid.
- how to plan a balanced meal.
- how to reduce the amount of fat, cholesterol, and sodium in recipes.
- how to select the healthful choices from a restaurant menu.
- how to alter a recipe to make it more healthful.

Students Will Be Skilled At

- recognizing cooking terms that denote high calorie/ high fat or lower calorie/ lower in fat. (example: carbonara, alfredo, primavera, crispy, etc.)
- choosing healthier food options while dining out.
- modifying a recipe to make it more healthful - lower in fat, lower in sodium, etc.
- identifying menu options that meet the nutritonal needs of those with health problems

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:

- meaningfully address the essential questions and guiding questions of this unit of study.
- meaningfully participate in guided question and answer sessions
- engage in group and individual discussions
- demonstrate an understanding of the purpose of the unit lesson(s) by explaining key terms and concepts.
- actively and meaningfully participate in performance tasks
- identify nutrients and examples of foods in the Food Guide Pyramid with food groups, serving sizes and leader nutrients
- taste test participation. o
- modify and explain changes made to a favorite food recipe to make the food more healthful and food lower in calories, fat, sodium, etc and/or higher in vitamins and minerals
- critique and/or create a restaurant menu
- Share acquired knowledge in writing: suggested writing activity: How important is it for today's chef to be able to cook healthful vegetarian items?
- complete unit assessment on Culinary Nutrition
- be evaluated by the teacher through observation of performance.
- complete a self-evaluation rubric of performance.

Learning Plan

- Preview the essential questions and connect to learning throughout the unit.
- Present review lesson on the Food Guide Pyramid and leader nutrients.
- Assign activity such as but not limited to having students develop their own Food Guide Pyramid including food group name, number of servings daily, examples of food, and leader nutrients and functions in the body.
- Facilitate lab #1: Lighten Up: lab groups select a lighter version of a high fat high calorie recipe. examples: low fat brownies, macaroni and cheese, fettucini alfredo.
- Facilitate lab #2: vegetables. examples: butternut squash risotto, broccoli cheddar bites, spaghetti squash lasagna
- Prepare a Taste Test: have students compare, contrast taste products that have an original and a light version. Have them consider taste, texture, and visual while considering the cost diferential.
- Engage students in discussion of benefits for recipe ingredient substitutions to make a recipe more healthful.
- Support lab groups in choosing a recipe and modifying it to make it more healthful. Examples: cheesecake, fettuccine alfredo, chocolate chip cookies.
- Facilitate lab #3: Prepare both original and modified recipes.
- Have students review restaurant menus and make a list of "menu signal words" that would imply healthy versus unhealthy foods. Discuss healthful food options while eating at various types of restaurants.
- Give unit assessment: Culinary Nutrition.

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

- necessary kitchen and cooking equipment
- necessary recipes and ingredients
- worksheet: Practice Eyeballing a Meal
- worksheet: Many Nutritious Menu Options
- Culinary Nutrition Jeopardy, using SmartBoard.
- assessment: Culinary Nutrition

Suggested Strategies for Modifications

This link includes content specific accommodations and modifications for all populations: https://docs.google.com/spreadsheets/d/1ZSDsCUamViCaBpr1lPOB7FJEC-jx4KnDjZzegIUKeMg/edit?usp=sharing