

# FN A144: LIFE CYCLE NUTRITION

Item	Value
Curriculum Committee Approval Date	11/04/2020
Top Code	130600 - Nutrition, Foods and Culinary Arts
Units	3 Total Units
Hours	54 Total Hours (Lecture Hours 54)
Total Outside of Class Hours	0
Course Credit Status	Credit: Degree Applicable (D)
Material Fee	Yes
Basic Skills	Not Basic Skills (N)
Repeatable	No
Open Entry/Open Exit	No
Grading Policy	Standard Letter (S)

## Course Description

An overview of nutrition for the mother during pregnancy and lactation (breast feeding). Nutritional recommendations for infants, including breast and/or bottle feeding and solid foods through the first year of life. Government assistance programs such as WIC will be explored. ADVISORY: FN A140 or FN A170. Transfer Credit: CSU.

## Course Level Student Learning Outcome(s)

1. Evaluate the positive nutritional factors and potential risks that affect the nutritional health of pregnant women, children and older adults.

## Course Objectives

- 1. Identify the nutrients of particular importance to a healthy prenatal outcome, as well as the sources of those nutrients in foods of various cultures.
- 2. Identify the rationale of gradual weight gain during pregnancy, the ideal weight gain, and the techniques to use in weighing and charting prenatal weight and BMI of clients.
- 3. List the common problems of pregnancy and the management of these through nutrition counseling or referral.
- 4. Discuss the effects of at least three types of substance abuse on the health of the mother and of the fetus. Identify ways to recognize signs of substance abuse, and when to refer to other professionals.
- 5. Discuss five clinical indicators of nutritional need for postpartum women, and three conditions which require referral to the nutritionist.
- 6. Name three reasons why breast feeding is best for mothers and infants.
- 7. Name five factors which discourage breast feeding, and two ways to promote this method of feeding infants.
- 8. Identify the nutrients of particular importance to the lactating mothers and two factors that influence breast milk production.
- 9. Discuss pros and cons of formula feeding, issues of sanitation, dilution, intolerances, and substitutions
- 10. Demonstrate the appropriate techniques and the use of height/weight grids for charting child growth.
- 11. Identify the social, economic, and psychological factors that influence a child's nutrition choices.

- 12. Describe and use the tools for making healthy food choices for children.
- 13. Identify the six classes of nutrients children need for good health, and the best food sources of each.
- 14. Discuss the effect of poor nutrition (diet) on a child's physical and mental well-being. List at least 3 food choices to help prevent common food-related problems, such as anemia, dental carries, etc.
- 15. Plan age appropriate menus for children following the recommendations - include breakfast, lunch, dinner, and snacks.
- 16. Describe the physiological, psychological, and social changes that often occur among the aging population.
- 17. Identify the changes in nutritional requirements for aging adults and the factors affecting food intake.
- 18. Plan a menu appropriate to varying ages and conditions of mature adults, using nutrition tools available.
- 19. Discuss the modification of diets to help people cope with conditions/disease states.
- 20. Identify how medications may affect the nutritional status of an aging individual.
- 21. Identify community resources and government agencies that can benefit nutritional status, such as WIC and SNAP.

## Lecture Content

Introduction to course  
 Physiological changes during pregnancy  
 Preparation for a healthy baby  
 What affects the outcome of pregnancy?  
 The first trimester; meeting basic nutritional needs. The nutrients: their role in health  
 Tools to help, such as MyPlate  
 The second and third trimesters  
 Changes in nutritional needs  
 Food safety  
 Weight management - correct use of weight charts  
 Common problems of pregnancy and their management  
 Substance abuse; effects on mother and child - how to recognize  
 Feeding the newborn, breastfeeding/formula feeding, weight loss  
 Screening for high nutrition risk  
 Feeding the newborn infant - breast feeding, nutritional needs, problem management  
 Marketing positive images during prenatal months, Community support  
 The nonbreast-fed baby, formula choices, issues of sanitation, dilution, substitutions, intolerances  
 Infant screening and assessment  
 Height/weight grids - head circumference  
 Cultural variances/guidelines  
 Introducing solid foods/eating through the first year  
 Resources and services available  
 WIC and other agencies  
 Basic principles and concepts recommended in feeding children  
 Responsibility of caregivers/child Guides to planning menus  
 Dietary reference intakes  
 U.S. Dietary Guidelines and Goals - MyPlate for children  
 Federal/state regulations  
 The toddler, the pre-schooler, the school age child.  
 Preventing childhood obesity  
 Nutrition to meet growth and development needs of children  
 2 18 years old  
 Six nutrient groups - sources - roles in health and disease  
 Energy needs/weight maintenance principles  
 Handling nutrition-related problems  
 Anemia, allergies, diabetes, dental carries, overweight, hyperactivity, food intolerances, smart snacking  
 Nutrition education guidelines  
 A look at child nutrition programs that promote healthy eating  
 Marketing good nutrition to kids through curriculum  
 The number and health status of aging adults in the United States.  
 Physiological, psychological, and sociological changes of aging and their impact on nutritional status.  
 Theories of aging  
 Nutritional needs in aging - myths and reality  
 Dietary Reference Intakes (DRI's) and RDA's  
 Review of safe and effective nutrient levels  
 Vitamin and mineral requirements  
 Hydration  
 Meeting nutritional needs through the use of various menu planning tools  
 MyPlate  
 U.S. Dietary Guidelines and Goals  
 Resources  
 Diseases that respond to nutritional intervention including  
 Cardiovascular  
 Diabetes  
 Gastro-intestinal  
 Neuro-muscular conditions

Cognitive disorders, including Alzheimer's disease Drug/nutrient interactions Self medication Alternative therapies Alcohol Tips for maintaining positive nutritional status during feeding problems occurring from neuro-muscular conditions and those of dementia Nutrition-related services available for the mature adult from the community agencies

### Method(s) of Instruction

- Lecture (02)
- DE Online Lecture (02X)

### Instructional Techniques

Lecture, demonstrations and taste-testing, small-group discussion, videos/films, Internet searches

### Reading Assignments

1. Assigned chapters from the textbook. 2. Selected handout materials to be provided by the instructor. 3. Selected current articles to be provided by the instructor. 4. Students are expected to spend 2-3 hours per week on reading assignments.

### Writing Assignments

1. Analyze a dietary pattern of a pregnant or lactating woman in terms of MyPlate. Compare and write evaluation of infant formulas and/or baby food, as advertised on TV, and in articles in parenting magazines. Written assignment analyzing marketing of food to children. Plan a menu or analyze dietary intake appropriate to specific needs of the child or senior, using current dietary guidelines. Compare and critique nutrition information found in the media or Internet against scientifically-based nutrition references Case Studies: preconception, pregnancy, infant nutrition, preschool nutrition, adult nutrition Students are expected to spend 3 hours per week in writing assignments.

### Out-of-class Assignments

Interview a Senior citizen on current dietary practices. Analyze the persons intake based on current dietary guidelines. Utilize current technologies for nutrient analysis of a child or seniors intake. Menu evaluation: gestational diabetes, preschooler, adult, senior Students are expected to spend 2-3 hours per week in out-of-class assignments

### Demonstration of Critical Thinking

Quizzes, analysis of growth patterns for children, diet analysis, diet screening and assessment, analysis of internet and media marketed to children and older adults.

### Required Writing, Problem Solving, Skills Demonstration

Analyze a two-day dietary pattern of a pregnant or lactating woman in terms of MyPlate. Compare and write evaluation of infant formulas and/or baby food, as advertised on TV, and in articles in parenting magazines. Written assignment analyzing marketing of food to children. Plan a menu or analyze dietary intake appropriate to specific needs of the child or senior, using current dietary guidelines. Compare and critique nutrition information found in the media or Internet against scientifically-based nutrition references.

### Eligible Disciplines

Nutritional science/dietetics: Master's degree in nutrition, dietetics, or dietetics and food administration OR bachelor's degree in any of the above AND master's degree in chemistry, public health, or family and consumer studies/home economics OR the equivalent. (Note: A bachelor's degree in nutrition, dietetics, or dietetics and food administration, and certification as a registered dietitian, is an alternative

qualification for this discipline.) Master's degree required. Title 5, section 53410.1

### Textbooks Resources

1. Required Brown, Judith E.. Nutrition Through the Life Cycle, 7th ed. Cengage Learning, 2020

### Other Resources

1. Current journal articles and professional publications and internet resources. 2. Selected handout materials to be provided and distributed by the instructor.