

DIET-2410: LIFE CYCLE NUTRITION - PREGNANCY AND LACTATION

Cuyahoga Community College

Viewing: DIET-2410 : Life Cycle Nutrition - Pregnancy and Lactation

Board of Trustees:

January 2021

Academic Term:

Fall 2021

Subject Code

DIET - Dietetic Technology

Course Number:

2410

Title:

Life Cycle Nutrition - Pregnancy and Lactation

Catalog Description:

The study of special nutritional needs, physiology, and health concerns of during preconception, pregnancy, lactation and infancy. Examine evidence-based practices and nutrition tools, promotion of health, and nutrition intervention to reduce risk of nutrition related concerns during each of the life cycle phases.

Credit Hour(s):

1

Lecture Hour(s):

1

Requisites

Prerequisite and Corequisite

ENG-0995 Applied College Literacies, or appropriate score on English Placement Test; or departmental approval.

Note: ENG-0990 Language Fundamentals II taken prior to Fall 2021 will also meet prerequisite requirements.

Outcomes

Course Outcome(s):

Plan general menu modifications to address nutrition needs during pregnancy.

Objective(s):

1. Define the term life cycle and explain why nutrition needs change during the life cycle.
2. Apply knowledge about the nutrition labeling to determine nutritional value of foods.
3. Describe the components of individual-level nutrition assessment.
4. Identify the basic components of public food and nutrition programs which can impact pregnant women and infants.
5. Identify problem areas related to pregnancy outcomes in the United States.
6. Examine the impact of preconception nutritional status and pregnancy outcomes.
7. Evaluate popular sources of nutrition recommendations for pregnancy and lactation.
8. Plan general menu modifications to address nutrition needs during preconception, pregnancy, lactation and infancy.
9. Identify recommended weight gain ranges for women entering pregnancy based upon pre-pregnancy weight status.
10. Assess prenatal weight gain.
11. Describe reasons why pregnant women and their fetuses are more vulnerable to certain foodborne illnesses.
12. Assess three common health problems during pregnancy and the evidence-based approach dietary interventions.
13. Summarize the consequences of excess alcohol intake during pregnancy and discuss the relationship between alcohol intake and the outcome of pregnancy.

14. Discuss nutrient recommendations for healthy postpartum women who are breastfeeding.
15. Discuss nutrient recommendations for healthy non-breastfeeding postpartum women.

Course Outcome(s):

Generate education plans for new mothers that include answers to common questions about infant feeding.

Objective(s):

1. Summarize the benefits of breastfeeding for mothers and their babies.
2. Identify how the benefits of breastfeeding could be included in education for expecting mothers, their partners and family members.
3. Describe infant behaviors that indicate readiness to feed, and vitamin supplement recommendations for breastfeeding infants.
4. Identify at least two breastfeeding promotion programs that have demonstrated effectiveness at increasing breastfeeding initiation and duration.
5. Assess growth patterns of infants using age-appropriate growth charts.
6. Assess infant feeding practices.
7. Summarize factors known to be related to higher and lower breastfeeding rates and the gap between current rates and the breastfeeding goals for the United States.
8. Discuss how feeding and food choices during infancy can affect later health status.
9. Cite examples of nutritional interventions that can reduce risk for nutrition and health problems in infancy.
10. Describe guidelines and tools that can be used to identify appropriate energy and nutrient needs of infants.

Methods of Evaluation:

1. Quizzes
2. Examinations
3. Participation and discussion
4. Case studies
5. Assignments

Course Content Outline:

1. Life Cycle
 - a. Preconception
 - b. Effect of nutrition status on pregnancy outcomes
2. Effect of health status on pregnancy outcomes
 - a. Non-nutritive substances
 - b. Age
 - c. Other risk factors
3. Nutritional requirements during Pregnancy and Lactation
 - a. Energy
 - b. Carbohydrate
 - c. Protein
 - d. Fat
 - e. Vitamins and minerals
 - f. Fluids
 - g. Complications of pregnancy with nutritional implications
 - h. Nutritional supplements during pregnancy and lactation
 - i. Nutrition assessment: pregnancy and lactation
4. Normal infant nutrition
 - a. Nutrient requirements
 - b. Energy
 - c. Protein
 - d. Fatty acids
 - e. Iron
 - f. Zinc
 - g. Vitamin D
 - h. Supplements
5. Adequate growth during infancy

- a. Development of growth charts
 - b. Adequate growth during infancy
 - c. Development of growth charts
 - d. Assessment of growth
6. Feeding guidelines
 - a. Early feeding/complementary feeding
 - b. Transitioning from milk to family foods
 - c. Food trends and preferences
 7. Feeding skills and neuromuscular development
 - a. Reflexes
 - b. Advanced motor skills
 - c. Chewing ability
 - d. Determinants of food acceptance
 - e. Caregiver behaviors
 - f. Effect of feeding mode in infancy
 - g. Feeding relationship
 - h. Portion size
 8. Evidence-based practices for lactation
 - a. Social and cultural aspects of breastfeeding
 - b. Nutrition related to lactation
 9. Food safety
 - a. Safe handling and preparation of infant formula
 - b. Safe handling of complimentary foods
 10. Resources and other government programs
 - a. Women infants and children program (WIC)
 - b. Supplemental food and nutrition program (SNAP)
 - c. Expanded food and nutrition program (EFNEP)
 - d. United States Department of Agriculture (USDA)
 11. Common infant health problems related to nutrition
 - a. Colic
 - b. Diarrhea
 - c. Milk allergy
 - d. Iron-deficiency anemia

Resources

The Academy of Nutrition and Dietetics . (2020) *The Academy of Nutrition and Dietetics Nutrition Care Manual*, Chicago: American Dietetic Association. Retrieved August 29, 2020, from <https://www-nutritioncaremanual-org.libauth.tri-c.edu/ncm-toc>

Duyff, R. (2017) *Academy of Nutrition and Dietetics Complete Food and Nutrition Guide*, New Jersey: John Wiley & Sons.

Brown, J.E . (2020) *Nutrition through the Life Cycle*, Boston: Cengage.

Grosvenor, M.B. and Smolin, L.A . (2015) *Visualizing Nutrition Everyday Choices*, Danvers, MA: John Wiley Sons .

Resources Other

1. Government website on the Supplemental Nutrition Women, Infants and Children program: <http://www.fns.usda.gov/wic/>
2. <https://www.choosemyplate.gov/browse-by-audience/view-all-audiences/adults/moms-pregnancy-breastfeeding/nutritional-needs-during-pregnancy>

Top of page

Key: 1385