

DIET-1200: BASIC NUTRITION

Cuyahoga Community College

Viewing: DIET-1200 : Basic Nutrition

Board of Trustees:

May 2024

Academic Term:

Fall 2024

Subject Code

DIET - Dietetic Technology

Course Number:

1200

Title:

Basic Nutrition

Catalog Description:

A scientific study of nutrition designed for nursing students, other health care providers and educators. Students will investigate the roles of the nutrients in the functioning of the human body. Overview of nutrient recommendations, food sources and functions of the nutrients, energy requirements, weight control, vegetarianism, and supplement use. Dietary recommendations and food patterns applied to culture, and prevention of nutrition related diseases in a changing society.

Credit Hour(s):

3

Lecture Hour(s):

3

Lab Hour(s):

0

Other Hour(s):

0

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):

Evaluate personal food records, diet plans and menu's according to US current food guide tools/dietary guidelines and use these tools to create menu plans that meet personal nutrition targets.

Objective(s):

1. Accurately use current US food guide tools for assessment and menu planning.
2. Identify factors that influence a person's food choices and relate that information to current dietary trends.
3. Compare food products according to information contained on food labels.
4. Explain human energy concepts and identify the impact of body weight and body composition on health.
5. Identify significant food sources of the energy yielding nutrients, vitamins and minerals.
6. Examine the physiological functions of the energy nutrients, vitamins, minerals and water.
7. Apply current nutrition knowledge of safe and effective weight management programs to evaluate unsound and/or fraudulent weight loss claims and diets.
8. Evaluate the potential risks and benefits of nutritional supplements.
9. Evaluate nutritional information communicated by the media.

Course Outcome(s):

Apply sound nutrition principles as they pertain to specific stages in the life cycle by evaluating/determining nutritional needs based on stages in the life cycle.

Objective(s):

1. Identify sound nutrition principles as they pertain to pregnancy, lactation, infancy, childhood, adult and older adults to complete the life cycle.
2. Demonstrate an understanding of the importance of food to the physical, psychological and social development of the body.
3. Discuss the relationship between nutrition and disease prevention.

Methods of Evaluation:

1. Quizzes, Tests
2. Examinations: Must pass Final exam with 70% or greater to pass the course
3. Student assignments
4. Diet Analysis Project

Course Content Outline:

1. Evaluation and application of dietary recommendations
 - a. Food choices: nutrients
 - b. Nutrition guidelines
 - i. Recommended nutrient intakes
 - ii. Using the dietary reference intakes (DRI) and acceptable macronutrient distribution ranges (AMDR)
 - iii. Dietary guidelines for Americans
 - iv. Food group plans
 - v. Diet-planning principles
 - vi. Food label consumer education
 - c. The science of nutrition
 - i. Nutrition research
 - ii. Research vs. testimonial and product promotion
 - d. Nutrition assessment: purpose
2. Carbohydrates
 - a. Characteristics, classification, and food sources
 - i. Simple sugars
 1. Monosaccharides
 2. Disaccharides
 - ii. Complex carbohydrates
 1. Starch
 2. Fiber
 3. Glycogen
 - iii. Major functions
 1. Glucose
 2. Fibers
 - iv. Recommendations for intake
 - v. Evaluating intake
3. Lipids
 - a. Characteristics, classification, and food sources
 - i. Triglycerides
 - ii. Fatty acids
 1. Saturated fats
 2. Unsaturated fats
 3. Essential fatty acids
 4. Trans fats
 - iii. Phospholipids
 - iv. Sterols: cholesterol
 - b. Health effects of lipids

- i. Saturated fats
 - ii. Cholesterol
 - iii. Alternatives to fat
- 4. Protein: amino acids
 - a. Characteristics, classification and food sources
 - i. Structure and classification
 - 1. Complete proteins
 - 2. Incomplete proteins
 - 3. Complementary proteins
 - b. Functions
 - c. Metabolism and nitrogen balance
 - d. Protein and health
 - i. Recommended intake
 - ii. Protein-energy malnutrition
 - e. Vegetarian diets
- 5. Vitamins, Minerals and Water
 - a. Characteristics, classification and food sources
 - b. Deficiency indicators
 - c. Toxicity indicators
 - d. Supplementation
 - i. Appropriate uses
 - ii. Abuse, misuse and contraindications
- 6. Energy metabolism
 - a. Energy balance
 - i. Sources of energy
 - ii. Energy needs
 - iii. Overweight, obesity, underweight, BMI
 - b. Health risks
 - c. Body Composition
 - i. Techniques to determine
 - ii. Significance
 - d. Weight Management
 - i. Obesity levels
 - ii. Body weight and health
 - iii. Balance of energy
 - iv. Body types: what determines
 - v. Managing body weight
 - vi. Medications
 - vii. Bariatric surgery for weight loss
 - viii. Eating disorders
 - ix. Behavior change
 - x. Diets
 - xi. Exercise
 - xii. Weight loss goals
 - xiii. Diets and determining product frauds and fads
 - xiv. Underweight causes classification, dietary interventions
- 7. Nutrition through the life cycle
 - a. Impact of nutrition on the outcome of pregnancy and development of the infant.
 - i. Energy needs
 - ii. Distribution of carbohydrate, lipids and proteins
 - iii. Appropriate use of supplements
 - b. Food use in pregnancy
 - i. To reduce morning sickness
 - ii. Weight gain and other health concerns
 - c. Lactation
 - i. Food guidance for quality milk production
 - ii. Advantages and barriers
 - iii. Contraindications to breast feeding

- d. Infancy and childhood
 - i. Nutrition needs for growth
 - ii. Introduction of breast or bottle and solids
 - iii. Feeding techniques
- e. Adults and older adults
 - i. Disease prevention (cancer, cardiovascular, hypertension, diabetes)
 - ii. Relationship of food to psychological and social well being
- 8. ACEND 2022 Standards
 - a. KNDT 1.1 Demonstrate how to locate, interpret, evaluate and use professional literature to make ethical, evidence-based practice decisions related to the dietetics technician level of practice
 - b. KNDT 1.2 Select and use appropriate current information technologies to locate and apply evidence-based guidelines and protocols
 - c. KNDT 1.3 Apply critical thinking skills
 - d. KNDT 2.5 Demonstrate cultural humility, awareness of personal biases and an understanding of cultural differences as they contribute to diversity, equity and inclusion
 - e. KNDT 4.3 Apply safety and sanitation principles related to food, personnel and consumers

Resources

Grosvenor, M. B., Smolin, L. A. and Christoph, Laura R. "e-book and Wiley Plus access included in first day access" *Visualizing Nutrition: Everyday Choices*. 5th. Danvers, MA: Wiley & Sons, 2021.

Resources Other

USDA website

<https://www.usda.gov/topics/food-and-nutrition>

Instructional Services

OAN Number:

Transfer Assurance Guide OHL016

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Key: 1357