

# DIET-2320: MEDICAL NUTRITION THERAPY III

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## Cuyahoga Community College

**Viewing: DIET-2320 : Medical Nutrition Therapy III**

**Board of Trustees:**

January 2021

**Academic Term:**

Fall 2021

**Subject Code**

DIET - Dietetic Technology

**Course Number:**

2320

**Title:**

Medical Nutrition Therapy III

**Catalog Description:**

Application of evidence based practice of medical nutrition therapy in cardiovascular disease and diabetes.

**Credit Hour(s):**

2

**Lecture Hour(s):**

2

## Requisites

**Prerequisite and Corequisite**

DIET-2311 Medical Nutrition Therapy II, or concurrent enrollment, or departmental approval.

## Outcomes

**Course Outcome(s):**

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 Knowledge Requirements for Nutrition and Dietetics (KNDT) 1.1

**Objective(s):**

1. Discuss the dietary management for hyperlipidemia, congestive heart disease, acute myocardial infarction, and stroke.
2. Discuss the dietary management for type 1 and type 2 diabetes and hypoglycemia.
3. List the effects of cardiovascular disease and diabetes on nutritional status.
4. Relate the disease conditions of the cardiac and endocrine systems to nutritional status.
5. Identify the role of carbohydrate in diabetes.
6. 6. Identify the role of fat in cardiovascular disease, obesity, and diabetes.

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**Course Outcome(s):**

Use the Nutrition Care Process for nutrition screening and referral to the registered dietitian nutritionist, collection of assessment data, nutrition interventions, and monitoring strategies appropriate for the technician level of practice. KNDT 3.1

**Objective(s):**

1. Discuss the dietary management for hyperlipidemia, congestive heart disease, acute myocardial infarction, and stroke.
  2. Discuss the dietary management for type 1 and type 2 diabetes and hypoglycemia.
  3. List the effects of cardiovascular disease and diabetes on nutritional status.
  4. Discuss the complications of diabetes and cardiovascular disease.
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**Course Outcome(s):**

Modify recipes and menus for acceptability and affordability that accommodate the cultural diversity and health status of various populations, groups, and individuals. Competency Requirements for Nutrition and Dietetics (CNDT) 3.7

**Objective(s):**

1. Plan menus for cardiovascular disease and diabetes using evidence based criteria.
2. Successfully complete case studies assigned.
3. Modify a diet for a patient with cardiovascular disease and all types of diabetes.

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**Course Outcome(s):**

Develop nutrition education materials for disease prevention and health improvement that are culturally and age appropriate and designed for the literacy level of the audience. CNDT 3.5

**Objective(s):**

1. Successfully complete case studies assigned.
2. Relate the disease conditions of the cardiac and endocrine systems to nutritional status.
3. Identify the role of carbohydrate in diabetes.
4. Identify the role of fat in cardiovascular disease, obesity, and diabetes.

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**Methods of Evaluation:**

1. Quizzes
2. Examinations
3. Student assignments, including case studies
4. Simulations
5. Discussion boards

**Course Content Outline:**

1. Diabetes Nutrition Care Process
  - a. Introduction to Nutrition Care process and Medical Nutrition Therapy for persons with diabetes
  - b. Reimbursement for Medical Nutrition Therapy and diabetes self management training
  - c. Introduction to motivational interviewing and behavior change
  - d. Diabetes classification, diagnosis, and prevention
  - e. Diabetes classification, pathophysiology and diagnosis
  - f. Diabetes prevention
  - g. Diabetes management
    - i. Evidence based nutrition care and recommendations
    - ii. Physical activity and exercise
    - iii. Oral diabetes medications
    - iv. Insulin therapy
    - v. Monitoring of blood glucose levels
    - vi. Pattern management
    - vii. Hypoglycemia and hyperglycemia
  - h. Short and long term complications of diabetes
    - i. Depression celiac disease, and cystic fibrosis related to diabetes
    - j. Life stages and special populations
      - i. Birth through adolescence
      - ii. Diabetes in adults, older adults
    - iii. Diabetes in pregnancy and lactation nutrition education
      1. Meal planning, including carbohydrate counting
      2. Diabetes meal planning strategies
  - k. Diabetes in diverse populations and ethnicities
    - i. Nutrition education for diabetes comorbidities
      - i. Overweight and obesity
      - ii. Cardiovascular disease, dyslipidemia, and hypertension in diabetes
      - iii. Cardiovascular disease: Prevalence to prevention
2. Cardiovascular disease nutrition care process

- a. Introduction to nutrition care process and medical nutrition therapy for persons with cardiovascular disease
- b. Reimbursement for medical nutrition therapy
- c. Introduction to motivational interviewing and behavior change
- d. Medical nutrition therapy and physical therapy
- e. Medical nutrition therapy in prevention and management of cardiovascular disease
- f. Metabolic Syndrome
- g. Lifestyle modification in the prevention and treatment of hypertension
- h. Preventing cardiovascular complications in diabetes
- i. Special populations and cardiovascular disease
- j. Management of cardiovascular disease risk in children and adolescents
- k. Women and risk of cardiovascular disease
- l. Complementary and alternative approaches:
  - i. Functional foods in the prevention of cardiovascular disease
  - ii. Antioxidants and other dietary supplements
  - iii. Popular diets in the management of obesity including the DASH diet
3. Culturally diverse nutrition strategies to meet the needs of the population
  - a. Review multicultural nutrition strategies to support the needs of the community
  - b. Discuss access to food and implications on food choices

## Resources

Nelms, Sucher, Lacey. *Nutrition Therapy and Pathophysiology*. 4e. Boston, Cengage Learning, 2020.

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Academy of Nutrition and Dietetics. *Nutrition Care Manual*. 2020.

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## Resources Other

National Diabetes Education Program:

<https://www.cdc.gov/diabetes/ndep/index.html>

DASH Diet:

<https://www.nhlbi.nih.gov/health-topics/dash-eating-plan>

Heart Healthy foods:

<https://health.gov/myhealthfinder/topics/health-conditions/heart-health/heart-healthy-foods-shopping-list>

African American Heart Healthy :

<https://www.nhlbi.nih.gov/files/docs/public/heart/cooking.pdf>

Top of page

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