

**NOVA COLLEGE-WIDE COURSE CONTENT SUMMARY
DNH 150 - NUTRITION (2 CR.)**

Course Description

This course studies nutrition as it relates to dentistry and general health. Emphasizes the principles of nutrition as applied to the clinical practice of dental hygiene. Lecture 2 hours per week.

General Course Purpose

A study of the principles of nutrition including food sources, digestion, absorption, and metabolism of nutrients essential to the health of individuals throughout the life cycle. Emphasis is placed upon the application of these principles to dentistry including the role of diet in dental health and disease. Students will gain experience in the techniques of nutritional counseling for dental health.

Course Prerequisites/Co-Requisites

None

Course Objectives

Upon completing the course, the student will be able to:

- Define nutrition, nutrient, food, diet, vitamins, minerals and calories.
- Identify the basis for and state the recommendations of the RDA and US Food Pyramid.
- List the five food groups and the major nutrients obtained from each.
- Prepare a personal 24 hour and three-day diet diary and also one for a patient.
- Describe the factors that influence caloric requirements.
- Explain what energy balance is and state the energy provided by the energy containing nutrients in kcals per gram.
- List the basic functions and dietary sources of carbohydrates, proteins, fats, vitamins, and minerals.
- Explain the properties of digestion, metabolism, and absorption of nutrients from ingestion to excretion.
- State the oral signs of nutrient deficiencies and the symptoms of mega dose toxicity.
- Discuss the role of nutrition in caries formation to include cariostatic and cariogenic properties.
- Explain the role of artificial sweeteners as they relate to dental health.
- Discuss the role of nutrition in periodontal disease as well as health.
- Describe how food is digested and metabolized beginning with ingestion and concluding with excretion.
- Use knowledge of food safety and labeling to improve one's own food selections and those of the patients.
- Recognize false nutritional claims concerning specific foods and/or diets.
- Discuss the similarities and differences in nutritional needs at various times throughout the life cycle (i.e. prenatal, infancy, early childhood, adolescence, later adulthood). State rationale for the differences.
- Consider special needs of patients with handicaps, dietary restrictions, systemic disorders, food allergies, new prosthetic appliances and those recovering from periodontal and/or oral surgery when making dietary recommendation for dental health.
- Relate and apply theories of motivation to dietary habit modification. Identify the psychological, environmental, educational, social, cultural and physiological factors affecting food habits.

Major Topics to be Included

- The rationale for My Pyramid dietary recommendations.
- The digestion, metabolism and absorption from ingestion to excretion.
- The requirements, sources and hypo-states and hyper-states of proteins, carbohydrates, lipids, vitamins, minerals, and water.
- The nutritional requirements affecting oral health in women, infants, toddlers, pre-school and school-aged children, adolescents, adults, elderly and special needs individuals.
- The dietary suggestions for people with differing cultural or religious food patterns.
- The nutritional aspects of dental caries, periodontal disease, gingivitis and necrotizing periodontal disease.
- The nutritional aspects of other oral alterations to include orthodontics, xerostomia, dentition status, surgery and temporomandibular disease.