

GENL 411: Human Nutrition: Macronutrients and Micronutrients

This course covers macronutrients (carbohydrates, lipids, and proteins) and micronutrients (vitamins, minerals, trace elements, accessory nutrients and various phytochemicals) from a mind/body perspective. Nutrients will be addressed in terms of ingestion, digestion, absorption, transportation, metabolism, and storage. Consideration will be also given to nutrient building blocks as well as psychological and physical reasons for and health effects of insufficiency, excess, supplementation, and interaction.

Learning Objectives

- Assess an individual's diet and modify behavior, choice, and intake to optimize health outcomes
- Discuss structure, physiological roles, digestion, absorption, and metabolism of macronutrients
- Describe absorption, bioavailability, metabolism, food sources, dietary requirements, excess, and toxicities of micronutrients
- Explain factors contributing to increased need for B vitamins, vitamin C, fat-soluble vitamins, and major minerals
- Evaluate clinical symptoms of vitamin and mineral deficiencies and toxicity

Credits: 3

Class Type: Graduate Course

Program: Languages and General Studies