

Course Code	Course Name	Credits
26PE603	Sports Nutrition and Health Education	04

Course Objectives

- Introduce the meaning, scope, and importance of sports nutrition and health education.
- Explain basic nutritional components and balanced diet for athletes.
- Understand macronutrients, micronutrients, and their role in energy metabolism.
- Apply concepts of hydration, BMI, and nutritional planning in sports.
- Analyse communicable and non-communicable diseases and their prevention.
- Evaluate the role of health organizations in promoting public health awareness.

Learning Outcomes

Upon successful completion of this course, it is intended that a student will be able to:

- Understand basic concepts of sports nutrition and health education.
- Apply principles of balanced diet and hydration in physical activity.
- Analyse the role of nutrients in energy production and exercise performance.
- Evaluate BMI and nutritional status for fitness assessment.
- Understand causes, spread, and prevention of major diseases.

Unit 1 - Introduction to Sports Nutrition:

Meaning and Definition of Sports Nutrition - Basic components of Nutrition - Balance diet and its components, Nutritional deficiencies - Understanding of malnutrition and nutritional supplements.

Unit 2 - Nutrients: Ingestion to energy metabolism:

Meaning, functions, importance and classification of Carbohydrates, Meaning, functions, importance and classification of Protein, Meaning, functions, importance and classification of Fats.

Unit 3 - Ingestion to energy metabolism:

Role of carbohydrates, Fat and protein Digestion during exercise - Vitamins, Minerals, Water – Meaning, classification and its function- Role of hydration during exercise - Concept of BMI (Body mass index).

Unit 4 - Health Education:

Meaning - Definition of Health Education – Aim, Scope of Health Education- role of International Organizations (WHO, UNICEF), National, State Level Health Organizations.

Unit 5 – Diseases:

Communicable Diseases - Causes, modes of spread – Prevention of Tuberculosis, Malaria, Dengu, small pox, Chicken pox, Covid 19 and AIDS- Non- communicable diseases- Diabetes, Obesity, BP, Cancer

Reference Books:

1. Nutrition and Dietetics by shubhangini A. Joshi, Tata McGraw-Hill, New Delhi, india
2. Krause's food & the nutrition care process" by L. Kathleen mahan and janice L.Raymond
3. Nutrition for health, Fitness, and sports"by Melvin H. Williams, Eric Rawson, and David Branch
4. Sports Nutrition: A practice manual for professionals "by marie Dunford
5. Nutrition for sport and Exercise "by marie spano, Laura Kruskall, and D.Travis.
6. The complete Guide to sports Nutrition" by Anita Bean