

**DSC-NHE-A1**

**Introduction to Foods**

Credits: 4 (Theory-3, Practical-1)

Theory- 45 Periods, Practical-30 Periods

**Objectives:**

1. To familiarize students with definition and functions of food.
2. To explain the nutritional contribution, selection, changes in cooking and storage of different food groups.
3. To create awareness about various methods of cooking.

**Learning Outcomes:**

After completion of the course, the students will be able to:

1. Know various functions of food and factors affecting food choices.
2. Understand how to select, purchase and store food safely.
3. Describe various methods of cooking and principles underlying them.

**Unit 1: Basic Concepts of Food**

**8 Lectures**

- *Unit Description:* This unit will introduce the concept of food, functions of food and factors affecting food choices.
- *Subtopics:*
  - Definition of food including organic food, genetically modified foods, convenience foods, health foods.
  - Functions of food.
  - Factors affecting food choices.

**Unit 2: Plant Based Food Groups**

**15 Lectures**

- *Unit Description:* This unit will introduce nutritional contribution, selection, changes in cooking and storage of the plant-based food groups.
- *Subtopics:*
  - Nutritional contribution, selection, changes in cooking and storage of the following:
    - Cereal and cereal products
    - Pulses
    - Vegetable and fruits
    - Sugars
    - Oils and fats

**Unit 3: Animal Based Food Groups**

**8 Lectures**

- *Unit Description:* This unit will introduce nutritional contribution, selection, changes in cooking and storage of the animal-based food groups.
- *Subtopics:*
  - Nutritional contribution, selection, changes in cooking and storage of the following:
    - Milk and milk products
    - Eggs and flesh foods

#### **Unit 4: Methods of Cooking Foods**

**14 Lectures**

- *Unit Description:* This unit will introduce advantages and principles of cooking and various cooking methods.
- *Subtopics:*
  - Advantages of cooking
  - Principles of cooking
  - Preliminary steps in food preparation
  - Cooking methods:
    - Moist heat methods
    - Dry heat methods
    - Methods using fat as a medium
    - Others – microwave, solar cooking

#### **Practical-30 Periods**

#### **Unit 1: Cooking methods I**

**16 Periods**

- *Subtopics:*
  - Cooking employing dry heat methods
  - Cooking employing moist heat methods

#### **Unit 2: Cooking methods II**

**14 Periods**

- *Subtopics:*
  - Cooking using frying as a cooking method
  - Cooking using microwave

#### **Essential Readings:**

1. Rekhi, T., & Yadav, H. (2015). *Fundamentals of Food and Nutrition*. Delhi: Elite Publishing House Pvt. Ltd.
2. Mudambi, S. R., & Rajagopal M. V. (2012). *Fundamentals of food, nutrition and diet therapy*; (6<sup>th</sup> ed.). Delhi: New Age International (P) Ltd.
3. Sethi, P., & Lakra, P. (2015). *Aahar Vigyan, Poshan Evam Suraksha*. Delhi: Elite Publishing House Pvt. Ltd.
4. Srilakshmi, B. (2018). *Food science* (7<sup>th</sup> ed.) Delhi: New Age International (P) Ltd.
5. Raina, U., & Kashyap, S. (2010). *Basic Food Preparation – a complete manual* (4<sup>th</sup> ed.). Delhi: Orient Black Swan.

**Suggested Readings:**

1. Roday, S. (2013). *Food science and nutrition*. (2<sup>nd</sup> ed.). Oxford University Press.
2. Wardlaw, G. M., & Hampl, J. S. (2019). *Perspectives in nutrition*. (11<sup>th</sup> ed.). New York, NY: McGraw Hill.
3. Agarwal, A., & Udipi. S. (2014). *Textbook of human nutrition*, Jaypee Brothers Medical Publishers (P) Ltd, New Delhi.
4. Chadha, R., & Mathur, P. (2015). *Nutrition: A life cycle approach*. Delhi: Orient Blackswan.

**Teaching learning Process**

Conventional Chalk and Board Teaching, Power Point Presentation, Quiz, Interaction and Discussions, Demonstration

**Assessment Methods**

As per University of Delhi guidelines.

**Keywords**

- Food
- Food Groups
- Food Choices
- Cooking Methods