Introduction to Nutrition

1. What is Nutrition?

Nutrition is the science that studies how food and drink affect our bodies with special regard to the essential nutrients necessary to support human health. It focuses on the physiological and biochemical processes involved in nourishment, absorption, and utilization of nutrients.

2. Importance of Nutrition for Health:

Good nutrition is crucial for:

- Growth and development
- Maintaining immune function
- Preventing chronic diseases
- Enhancing mental and physical performance
- Promoting overall well-being

3. Macronutrients vs Micronutrients:

Macronutrients:

- Required in large amounts
- Provide energy
- Includes carbohydrates, proteins, and fats

Micronutrients:

- Needed in small amounts
- Do not provide energy but are essential for bodily functions
- Includes vitamins and minerals

4. Recommended Daily Allowances (RDA):

RDA refers to the average daily dietary nutrient intake level sufficient to meet the requirements of nearly all (9798%) healthy individuals in a particular life stage and gender group.

It helps guide dietary planning and food labeling.

5. Role of Diet in Preventing Disease:

A balanced and nutrient-rich diet helps reduce the risk of:

- Cardiovascular diseases
- Obesity
- Type 2 diabetes
- Certain cancers
- Osteoporosis

Nutrient-dense foods such as fruits, vegetables, whole grains, and lean proteins can protect against disease.

6. Factors Affecting Nutritional Needs:
- Age
- Gender
- Physical activity level
- Health conditions
- Stress and environmental factors

7. Nutrition Myths vs Facts:
- Myth: All fats are bad Fact: Healthy fats are essential for body function
- Myth: Skipping meals helps lose weight Fact: It may slow metabolism and cause overeating

8. Summary:
Nutrition plays a fundamental role in maintaining health and preventing disease. Understanding the basics of nutrition, including essential nutrients and daily requirements, sets the foundation for making informed food choices throughout life.