

Introduction to Human Nutrition

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Outlines



Definitions

• Basic concepts of Human Nutrition

Nutrition and its effect on health



Human nutrition, process by which substances in food are transformed into body tissues and provide energy for the full range of physical and mental activities that make up human life.

Human nutrition is the study of how the body uses food and nutrients to maintain health, growth, and overall well-being.



Human nutrition is a multidisciplinary field that combines biology, chemistry, and physiology understand how the body processes food, absorbs nutrients, and uses them for energy, tissue repair, immune function, and other vital processes.



The Relationship between Health Nutrition







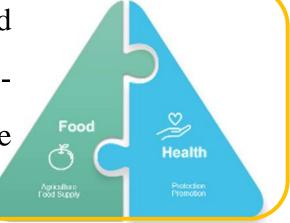
Health, according to the World Health Organization, is "a state of complete physical, mental and social well-being and not merely the absence of disease and infirmity."



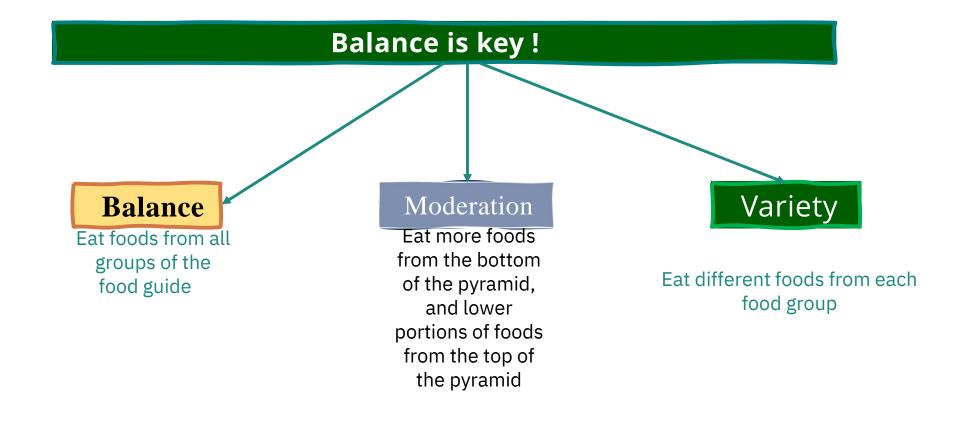


Human Nutrition

Nutrition is a link between food and health regarding nutrient and non-nutrient requirements in the human life cycle.



Nutritional well-being for all



You are what you eat!





Nutrition is a critical part of health and development. Better nutrition is related to improved infant, child and maternal health, stronger immune systems, safer pregnancy and childbirth, lower risk of non-communicable diseases (such as diabetes cardiovascular disease), and longevity.



Nutrition: Process by which living organism receives

material and uses them to promote it's vital activities.

Nutrient: Any substance which is digested and

absorbed to promote body function



Diet:

Selection of food which is normally eaten by person or population

Food:

Substance when eaten, digested, absorbed provide at least one nutrient

Balanced diet:

Diet that provide adequate amount of all nutrients



Malnutrition:

Caused by incorrect amount of nutrient intake

Nutritional status:

Health status that produced by balanced between requirements and intake.

Nutritional assessment:

Measurement of nutritional status by anthropometrics, biochemical data, dietary history



1. Energy and Growth: The body requires energy to function, which comes from the calories in food. Nutrients like carbohydrates, proteins, and fats provide energy, while proteins are particularly important for growth and tissue repair, especially during periods of development or recovery from illness.



2.Immune Function: Nutrients such as vitamins (especially vitamins A, C, D, and E), minerals (like zinc and iron), and proteins are essential for a healthy immune system. A well-nourished body is better equipped to fight off infections and illnesses.



3. Disease Prevention: A balanced diet can reduce the risk of chronic diseases like heart disease, diabetes, obesity, and certain types of cancer. For example, foods rich in fiber, antioxidants, and healthy fats can help maintain heart health, while a diet low in saturated fats and high in vegetables and fruits can reduce the risk of chronic disease.



4.Mental Health: Nutrition also plays a role in mental health. Certain nutrients, such as omega-3 fatty acids, B vitamins, and minerals like magnesium, contribute to brain function and emotional well-being. Poor nutrition can contribute to issues like depression, anxiety, and cognitive decline.



5. Weight Management: Proper nutrition is key to achieving and maintaining a healthy weight. A balanced diet that includes the right amount of calories for an individual's activity level helps prevent obesity, while proper portion control and mindful eating can support weight management.



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Home work



1. Mention five (5) Global Nutritional Issues

2. Mention five (5) Local Nutritional Issues

