

INTRODUCTION TO NUTRITION



CONCEPT OF NUTRITION



Nutrition is an essential pillar of human life, health and development across the entire life span. From the earliest stages of fetal development, at birth, through infancy, childhood, adolescence into adulthood and old age, proper food and good nutrition are essential for survival, physical growth, mental development, performance and productivity, health and well-being.

Nutrition is the science of food, the study of nutrient and other substance, their actions, interactions, and balance concerning health and disease.



SPECIFIC DEFINITIONS USED IN NUTRITION

***NUTRITION**

- >It is a scientific discipline, concerned with the access and utilization of food
- right and nutrient for health, growth, development and well-being of an individual.
- ➤It is defined as the science of food and its relationship of food and its relationship to health.
- ➤ It is concerned with the part played by nutrient in the body growth, development
- > and maintenance.
- ➤ It is food work in the body.
- ➤ It includes everything that happens to food.



***NUTRIENT**

These are constituents of food which are essential for the body in proportional amount. These are proteins, fats, carbohydrates, vitamin, minerals and water.

***DIETETICS**

The application of the science of nutrition to the human being in health and disease.



***HEALTH**

- Health is a common theme in most cultures. All communities have their concepts of health as a part of their culture. The oldest definition of health is "absence of disease". Health is a term which most people find different to define, although they are confident of its meaning.
- ➤It is a state of complete physical, mental, social and spiritual well being and not merely the absence of disease or infirmity.
- To maintain good health and nutrition status, one must eat a balanced food, which contain all the nutrients in the correct proportion.



***MALNUTRITION**

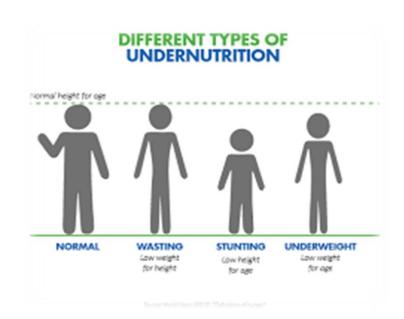
MALNUTRITION IS DIVIDED INTO TWO MAIN TYPES:-

- **UNDER NUTRITION**
- **DOVER NUTRITION**

1. UNDER NUTRITION

This type of malnutrition arises from the lack of protein, micronutrients and a sizeable proportion of calories. This leads to the following health consequences -

- ☐ Underweight (low weight based on age).
- □Stunting (low height as per the age).
- □Wasting (low weight as per the height).
- □Children are more likely to suffer from under nutrition.





2. OVER NUTRITION

It results from overconsumption of nutrients such as protein, fat and other nutrients. It leads to being overweight or obese. Overweight adults often consume excessive calories, which include processed or fried foods. These food items lack nutritional value. Also, the diets of people who consume more processed food lack good fats, sodium, and other essential nutrients.



ROLE OF NUTRITION MAINTAINING HEALTH

Nutrition is a basic element of health. Nutrition influence the health from birth to death.

ROLE OF NUTRITION IN MAINTAINING HEALTH

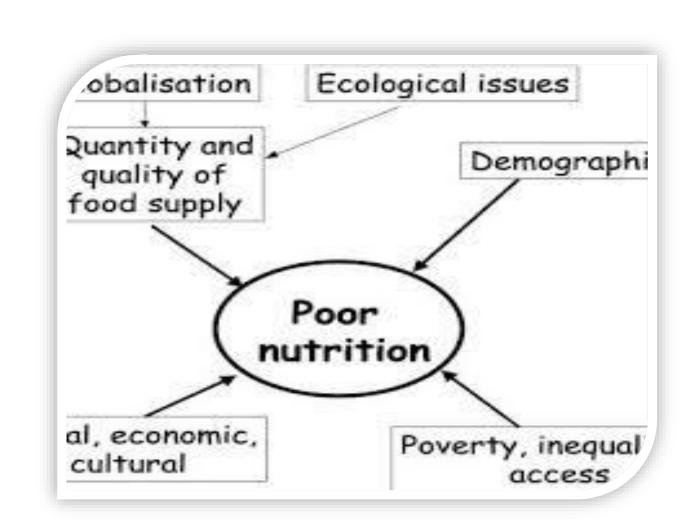
- *Resistance to infections
- **❖** Mortality and morbidity
- Specific deficiency
- Growth and development





FACTORS AFFECTING FOOD AND NUTRITION

- **❖**Basal metabolic rate
- *****Weight
- **Age**
- *Sex
- **❖**Climate and environment
- **❖Physical activities**
- **❖**Physiological state
- **❖**Socio economic factors
- **Cultural factors**
- Life style and food habits
- > Food fads
- ➤ Cooking practices
- ➤ Child rearing practices
- *****Religion





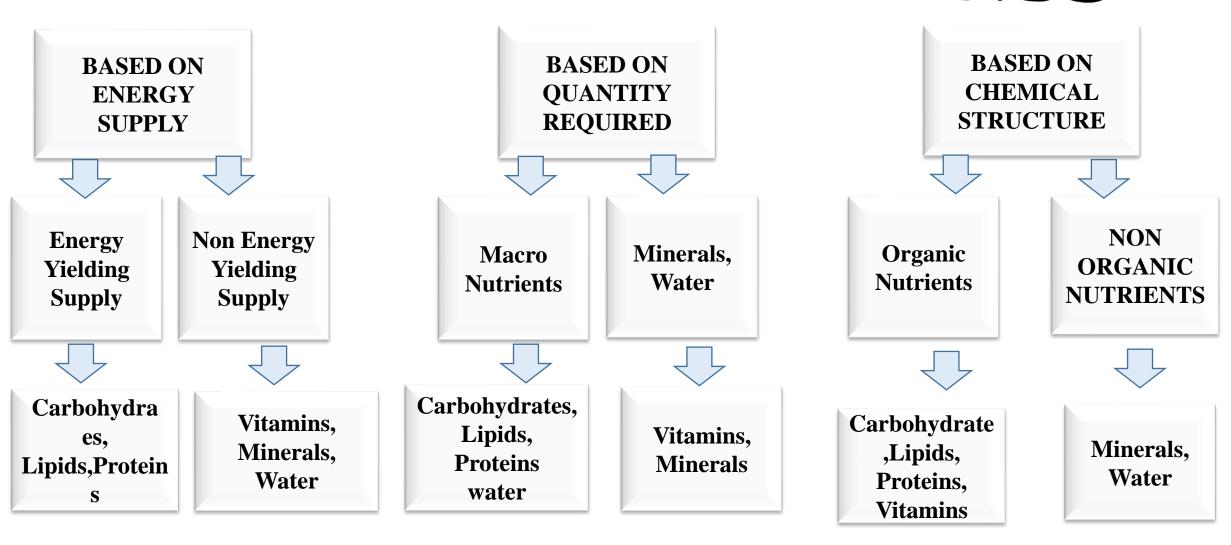
NUTRIENTS

Nutrients are the substances found in foods that allow body to make energy, build and maintain tissues and regulate bodily processes. Nutrients are very important for the human body's health. They are categorized as proteins, fats, carbohydrates (sugars, dietary fiber), vitamins, minerals and water perform the following vital functions.

- 1. Building all parts of the body such as muscle, bone, teeth, and blood.
- 2. Producing energy (power and heat).
- 3. Keeping the body in good working order.



CLASSIFICATION OF NUTRIENTS





1) BASED ON ENERGY SUPPLY

1. Energy Yielding Nutrients

Human body need energy (calories) to function. The energy components of food includes.

Carbohydrate (Sugar and Starches): Its are the body's main source of energy and the sole fuel for the brain.

Proteins: These are necessary for building, repairing and renewing all the organs of the body.

Lipids: Its also called fats

2. Non-Energy Yielding Nutrients

Vitamins and Minerals: The daily required amount of vitamins and minerals is low but essential to life. The body's daily need for vitamins and minerals is generally satisfied by a balanced diet that includes a variety of foods from each food group.

Dietary Fiber: This is a vegetable element not digested by the body. It helps to promote intestinal regularity. When fibers are eaten in large amounts, it slows down the absorption of sugar and controls the level of cholesterol in the blood.

Water: Our bodies use water to do many important things including regulating our body temperature, boosting our energy, and delivering important organic and inorganic nutrients throughout our body to our cells and organs.

II) BASED ON QUANTITY REQUIRED

1. Macronutrients

2. Micronutrient

Both are equally important for good health. The amount needed to ensure good health varies from individual to individual depending on their age, gender, body size, activity and state of health.



##