

SNS COLLEGE OF PHARMACY AND HEALTH SCIENCES

Coimbatore -641035



COURSE NAME: SOCIAL AND PREVENTIVE PHARMACY (BP 802T)

IV YEAR / VIII SEM

TOPIC: CONCEPT OF HEALTH (UNIT I)

**SUB TOPIC: CONCEPT OF HEALTH AND DISEASE & HYGIENE &
HEALTH, SOCIAL AND HEALTH EDUCATION**

WHAT IS HEALTH ?

- “A state of complete physical, mental and social well-being and not merely the absence of disease or infirmity”
(World Health Organization, 1948)
- “The extent to which an individual or group is able to realize aspirations and satisfy needs and to change or cope with the environment.”
(World Health Organization, 1984)

B. Pharm. Degree Program (CBCS) Regulations 2014 - PCI

General Regulations (Chapter I)



Assessment and Grading

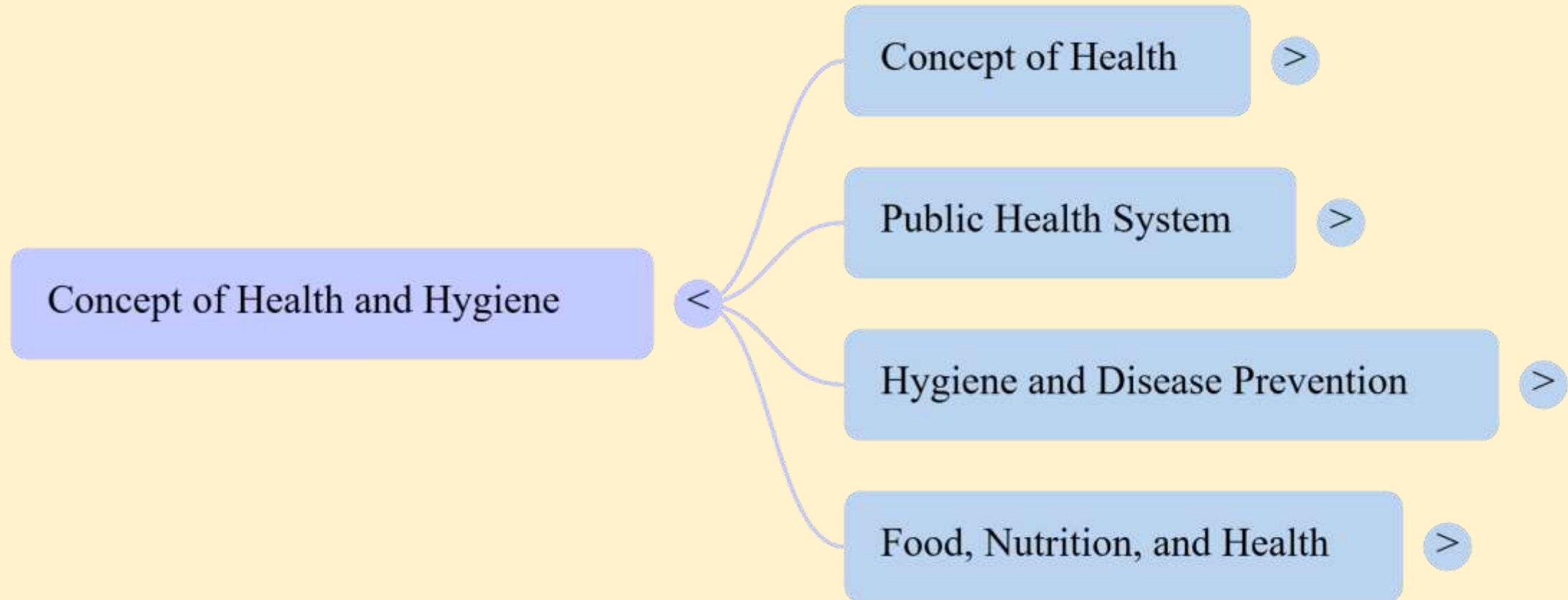


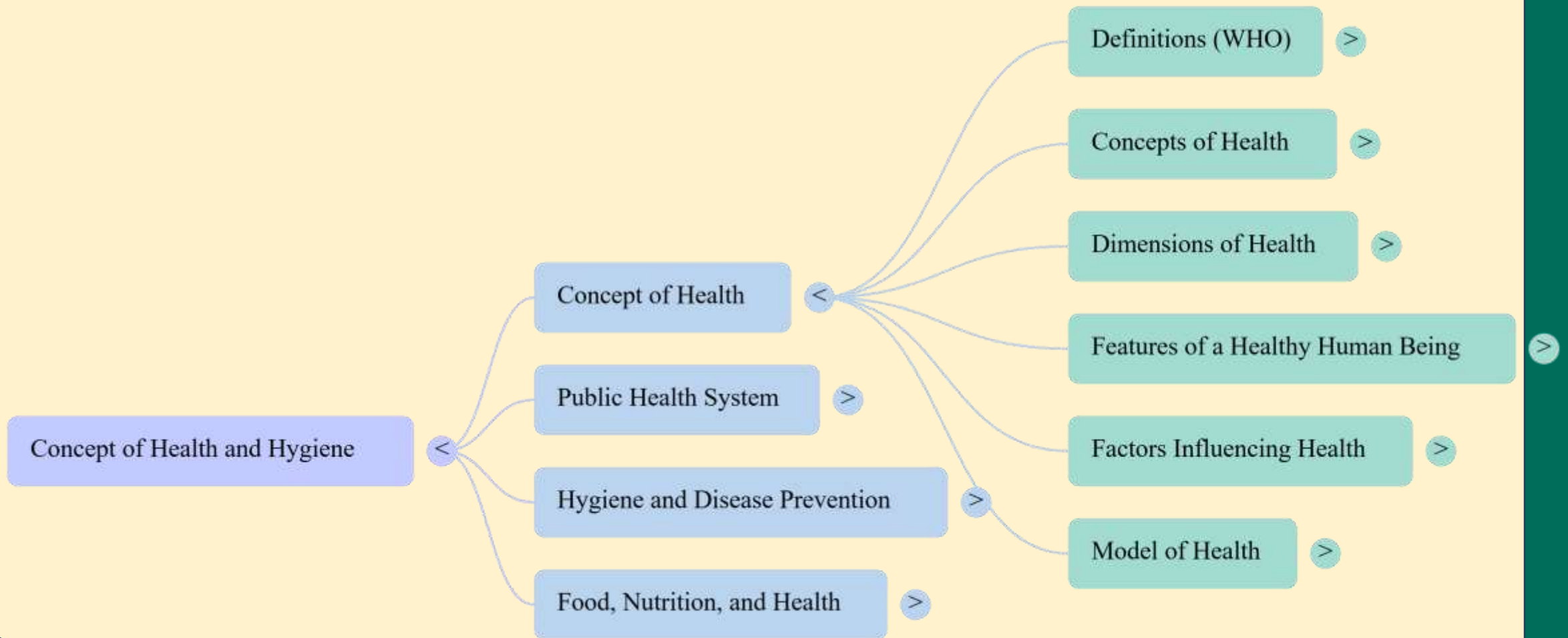
Practical Requirements & Training

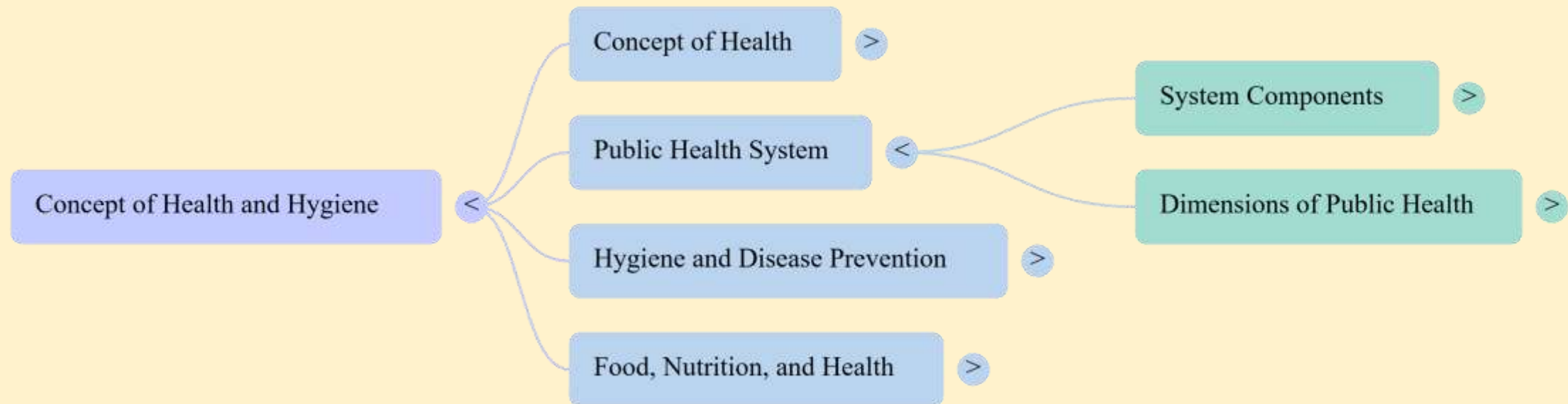


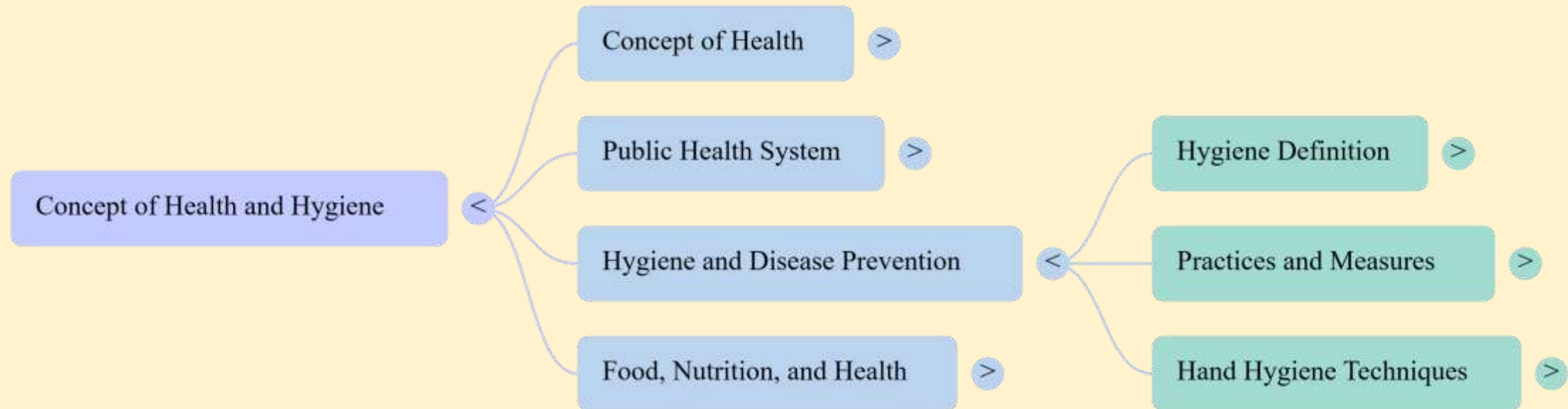
Course of Study (Semester I - VIII)

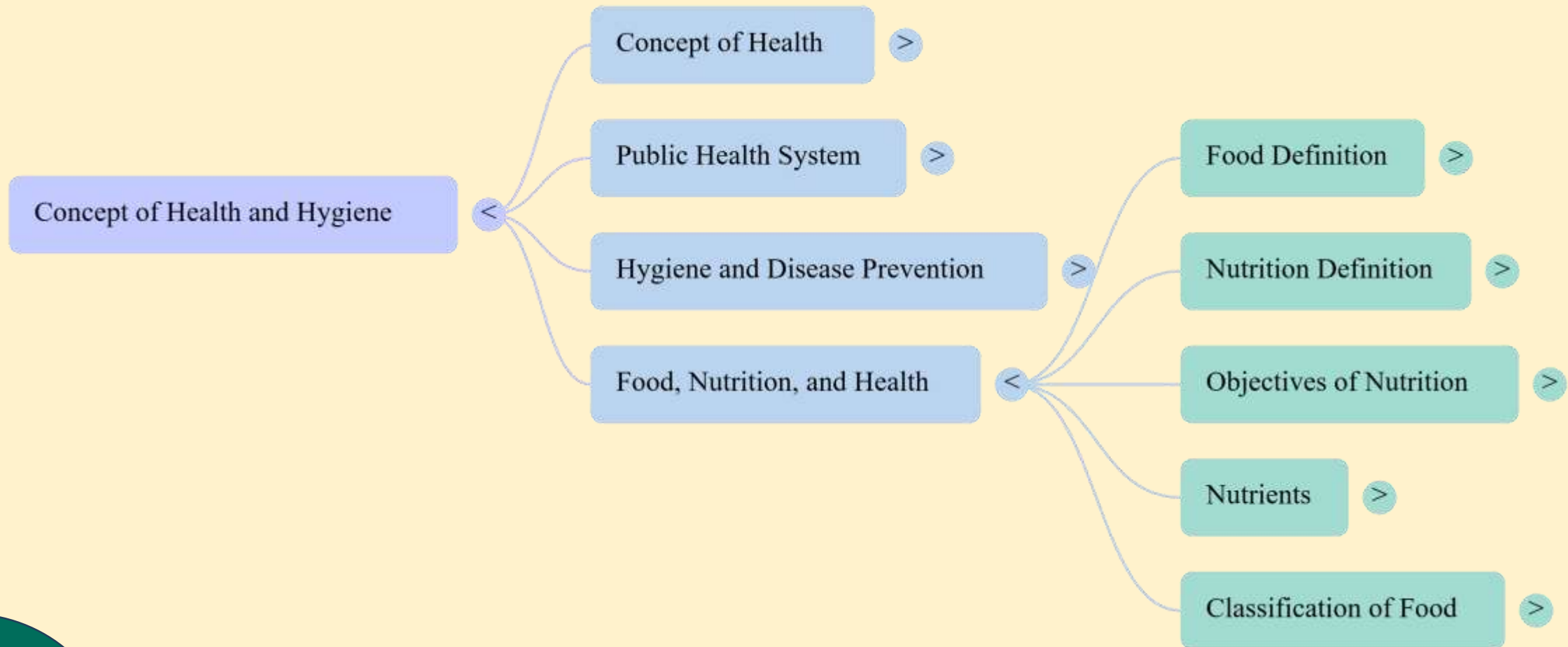




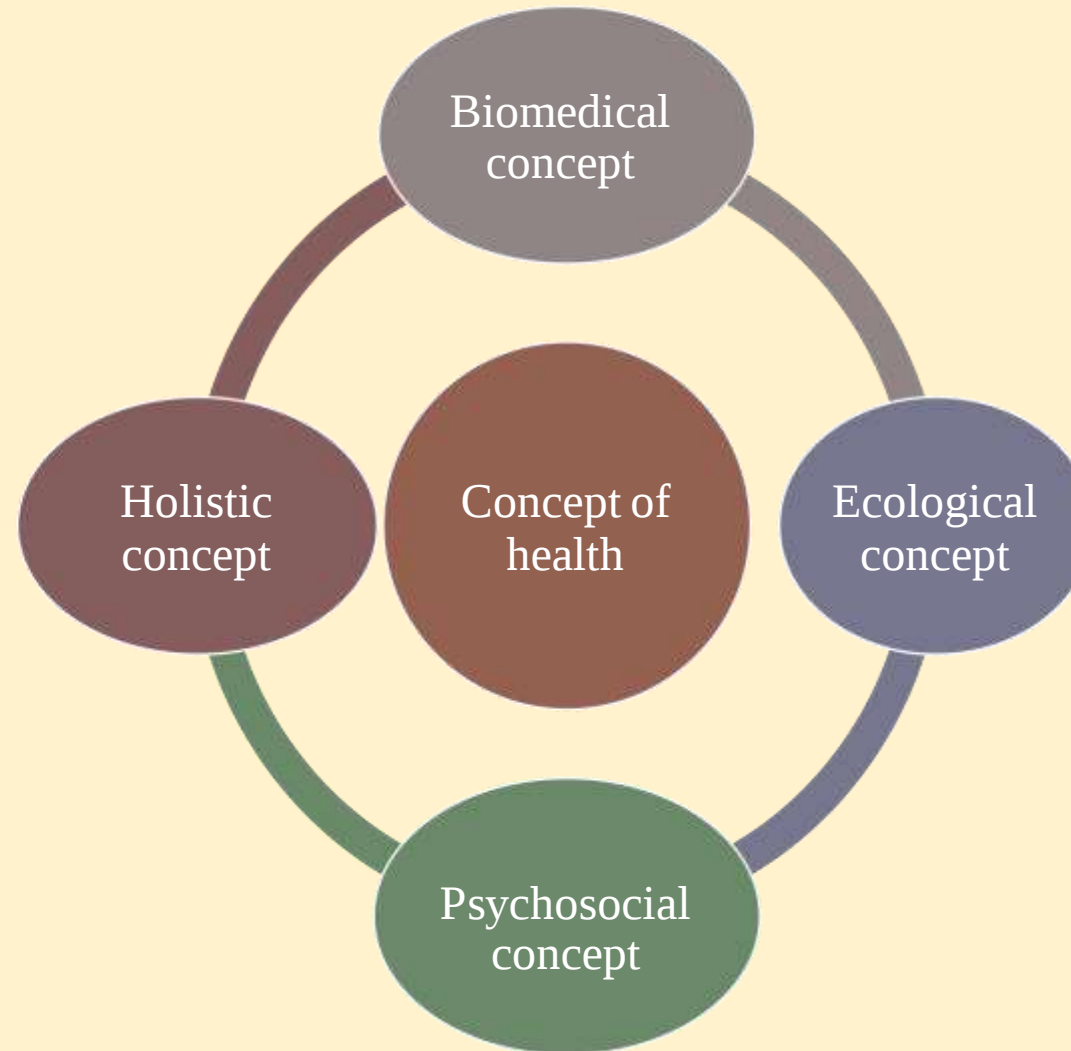




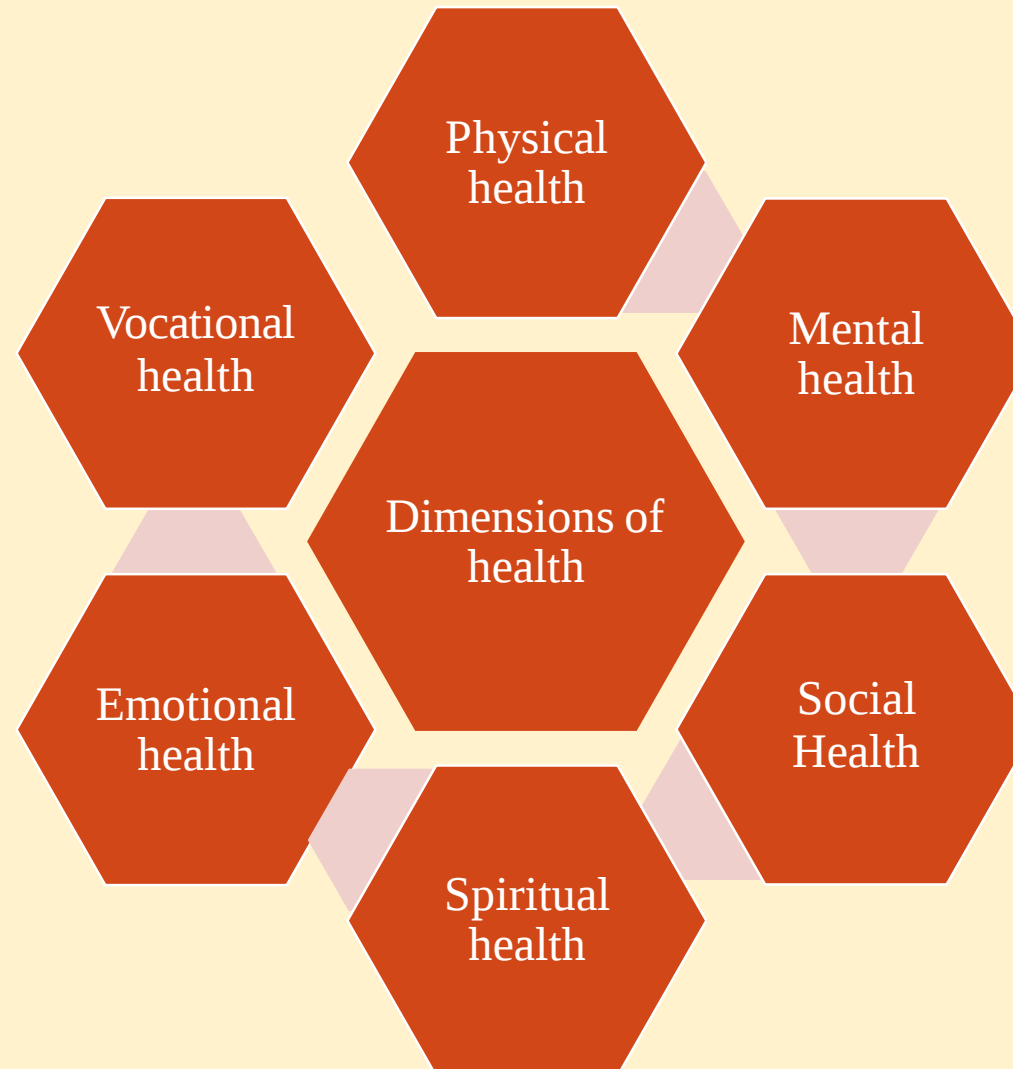




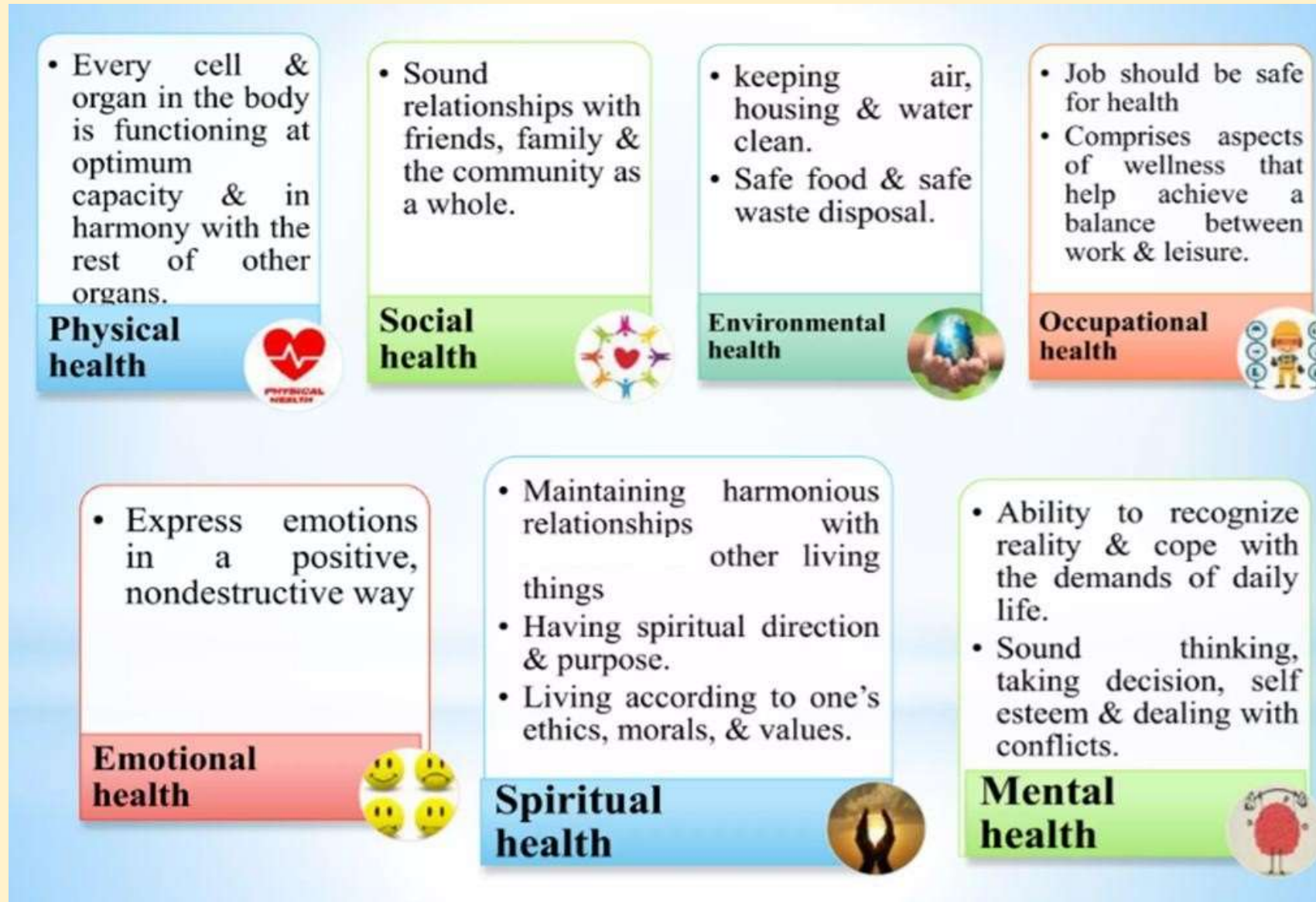
CONCEPT OF HEALTH



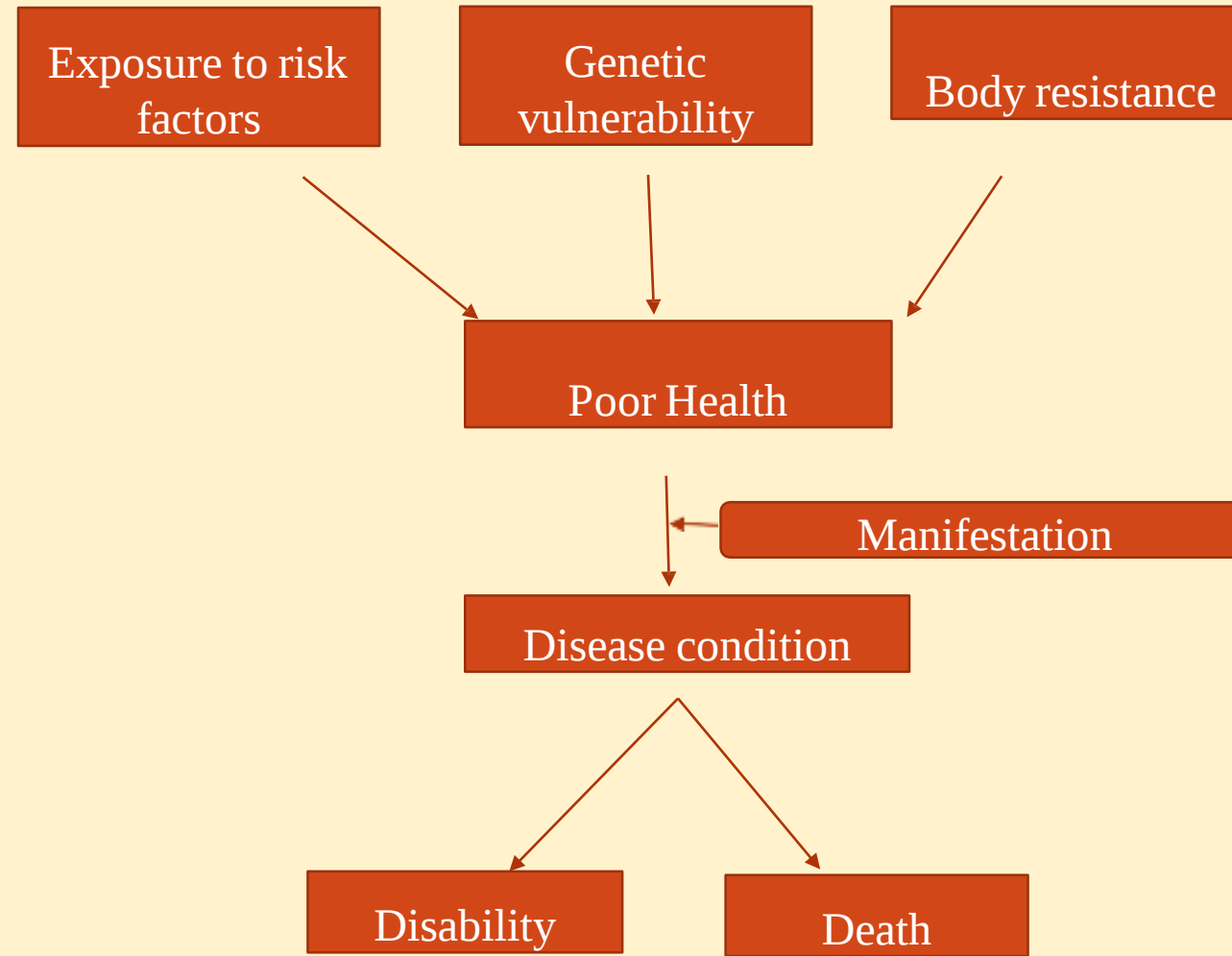
Dimensions of health



Dimensions of health



A MODEL OF HEALTH



FACTORS INFLUENCING HEALTH AND WELL BEING

Social and economic factors (40%)

Health behavior
(30%)

Clinical care (10%)

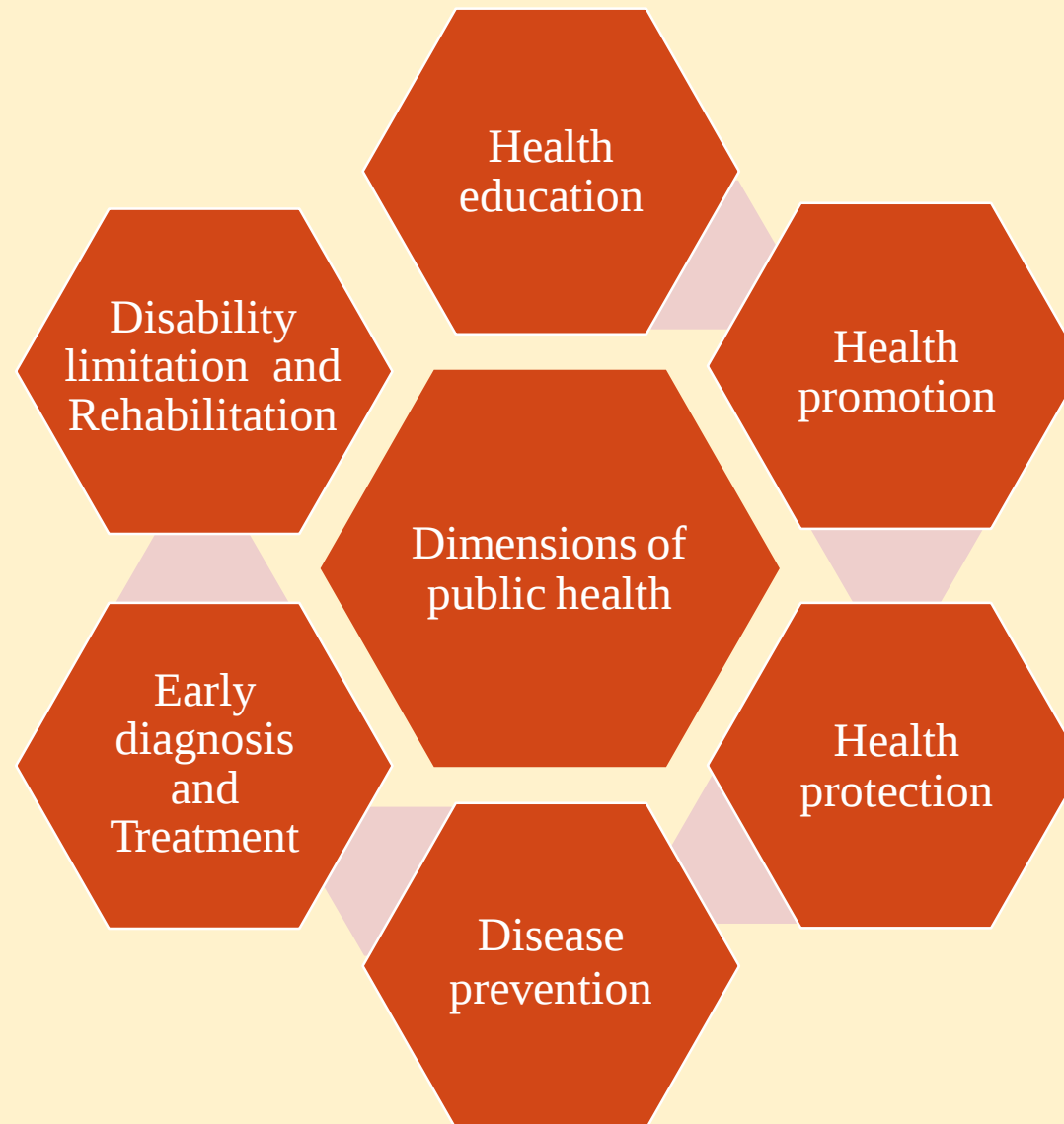
Physical
environment (10%)

Genes and
biology(10%)

PUBLIC HEALTH SYSTEM



Dimensions of public health



Items	Community medicine	Clinical medicine
Objective	To prevent diseases	To cure diseases
Customers	Population or all community (healthy and diseased)	Individual patients (diseased only)
Tools of diagnosis	Epidemiological & Statistical studies	History, clinical exam, & investigations.
Management	Community health programs	Medical/surgical treatment
Evaluation	Assessment of health programs & health status of a community by calculation of rates.	Follow up of patients
Branches	Epidemiology, statistics, nutrition, health services & management	Pediatrics, gynecology, general medicine, surgery

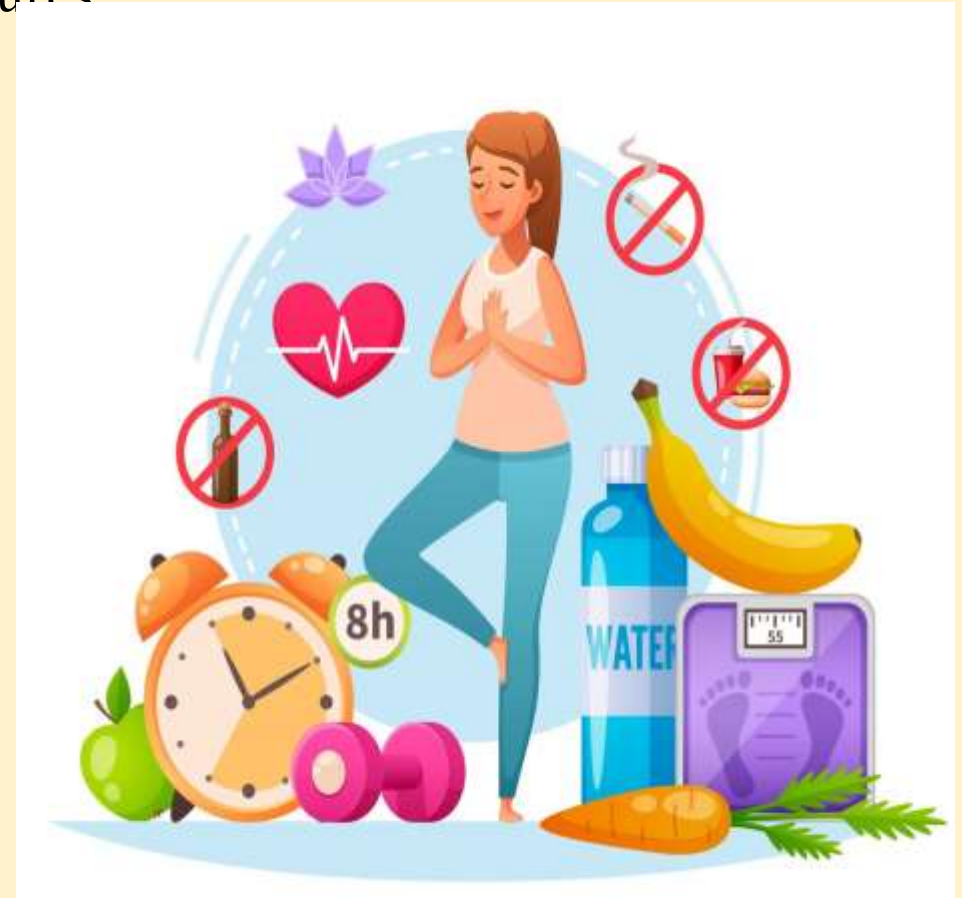
HYGIENE AND HEALTH

- ❑ Health is defined as a state of complete physical, mental and social-being and not merely an absence of disease or infirmity.
- ❑ Physical health and mental health are inter-related. A sound mind in a sound body is an old and appropriate saying for good health.



A healthy human being has generally the following features

- ☐ A clear skin
- ☐ Bright, clear eyes
- ☐ A body neither too fat nor too thin
- ☐ Fresh breath
- ☐ Good appetite, Regular activity of bladder and bowels
- ☐ Sound sleep
- ☐ Coordinated body movements



1. HYGIENE

- Hygiene refers to conditions and practices that help to maintain health and prevent the spread of diseases. Medical hygiene therefore includes a specific set of practices associated with this preservation of health.

2. PUBLIC HYGIENE

- Sewage and chemical wastes should not be released into the water bodies. Sewage should be chemically treated first before being released into the water bodies to avoid water- borne diseases.

3. IMMUNIZATION

- Immunization and vaccination can prevent infectious diseases.



4. Personal hygiene

- Hand washing
- Careful dental care
- Bathing
- Put on clean clothes.



5. Healthy environment

- Garbage in covered bins
- Proper water treatment or disposal
- Covered drains
- Proper sewer lines connected to sewage treatment plants.
- Use of latrines and urinals
- Maintain a healthy environment to prevent the spreading of diseases due to the breeding of mosquitoes, house flies and microorganisms.



- Garbage should be kept in covered bins so that flies do not breed on them.
- Do not allow water to stagnate outside your house and in your neighborhood.
- All drains should also be covered. This will avoid breeding of mosquitoes.
- There should be proper sewer lines connected to sewage treatment plants.
- Contamination of drinking water with a little amount of feces (human excreta) causes a number of diseases.



GOOD HYGIENE HABITS



Oral Hygiene



Bathing Ritual



Hair Care



Foot Hygiene



Toileting Hygiene



Hand Hygiene



Coughing and
Sneezing Hygiene

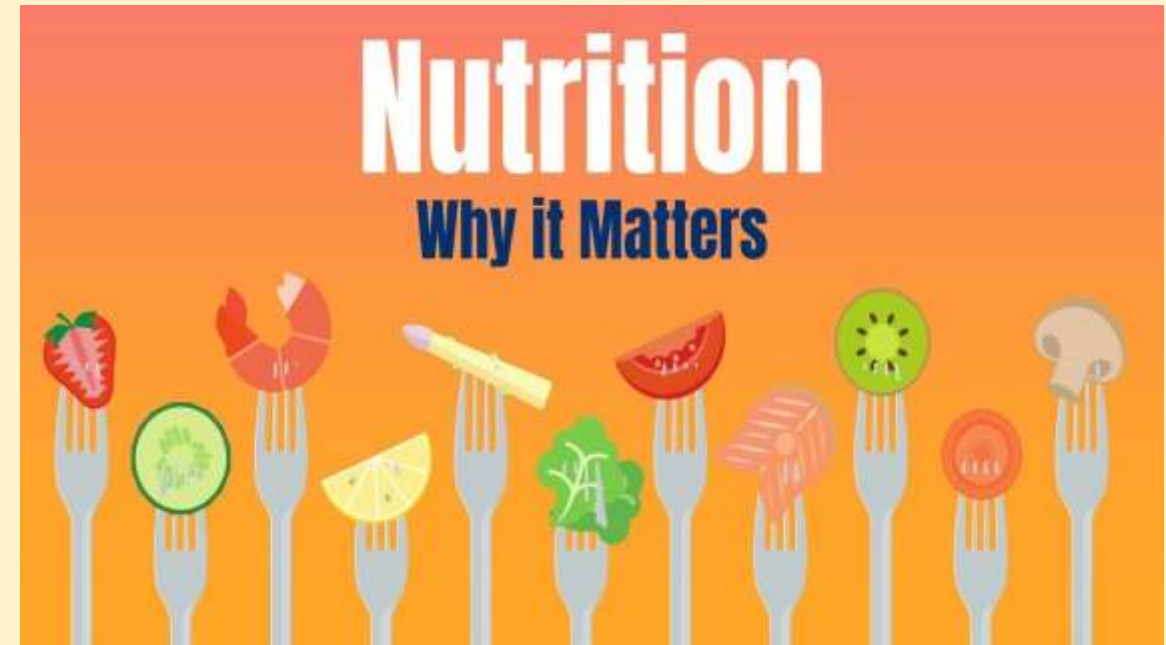


Home Hygiene

FOOD IN RELATION TO NUTRITION AND HEALTH

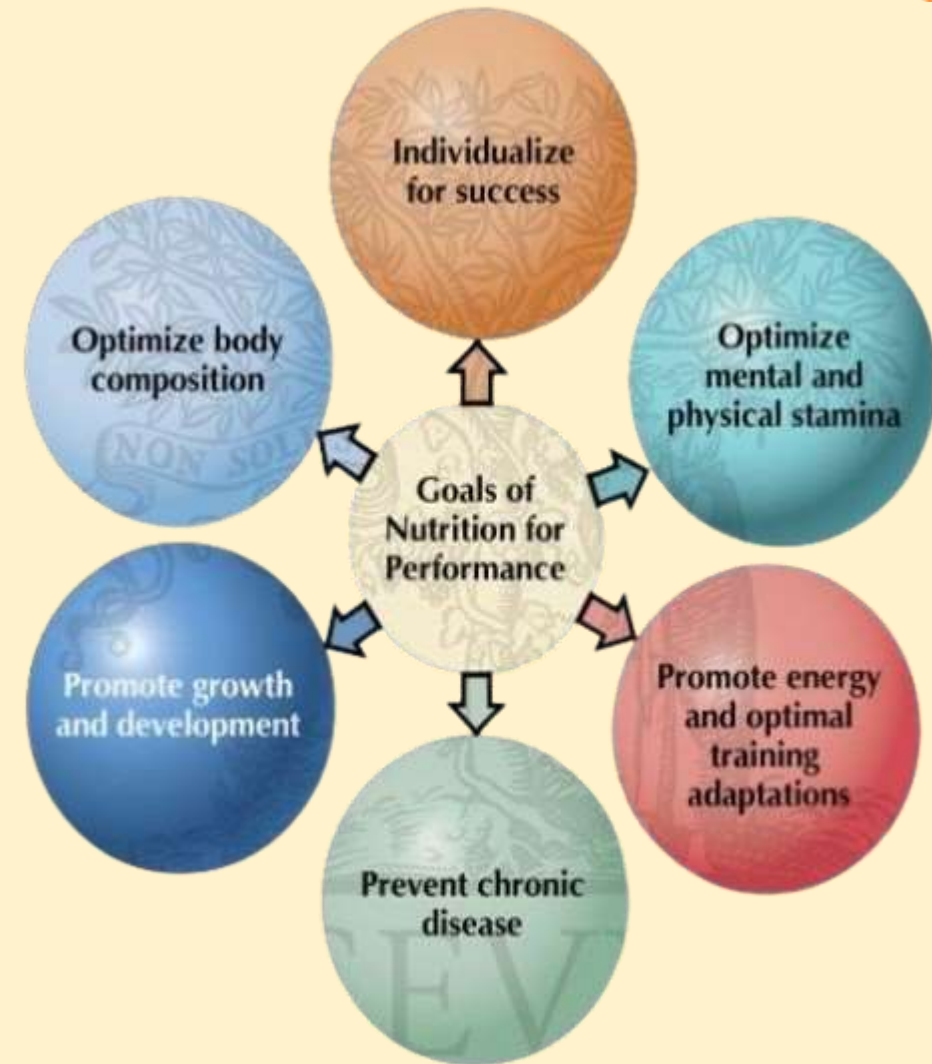
NUTRITION

- Nutrition is the process by which body utilizes food for growth and maintenance and healthy living.
- Nutrition is the combination of processes by which the living organism receives & uses the food materials necessary for growth, maintenance of functions & repair of component parts.



Objectives of nutrition

- ❑ To promote the physical and mental growth and development of human beings
- ❑ Building and repairing of tissues and cell damaged by infection and injuries.
- ❑ To provide energy for doing works.
- ❑ To protect the human beings from infections and deficiency disorders.



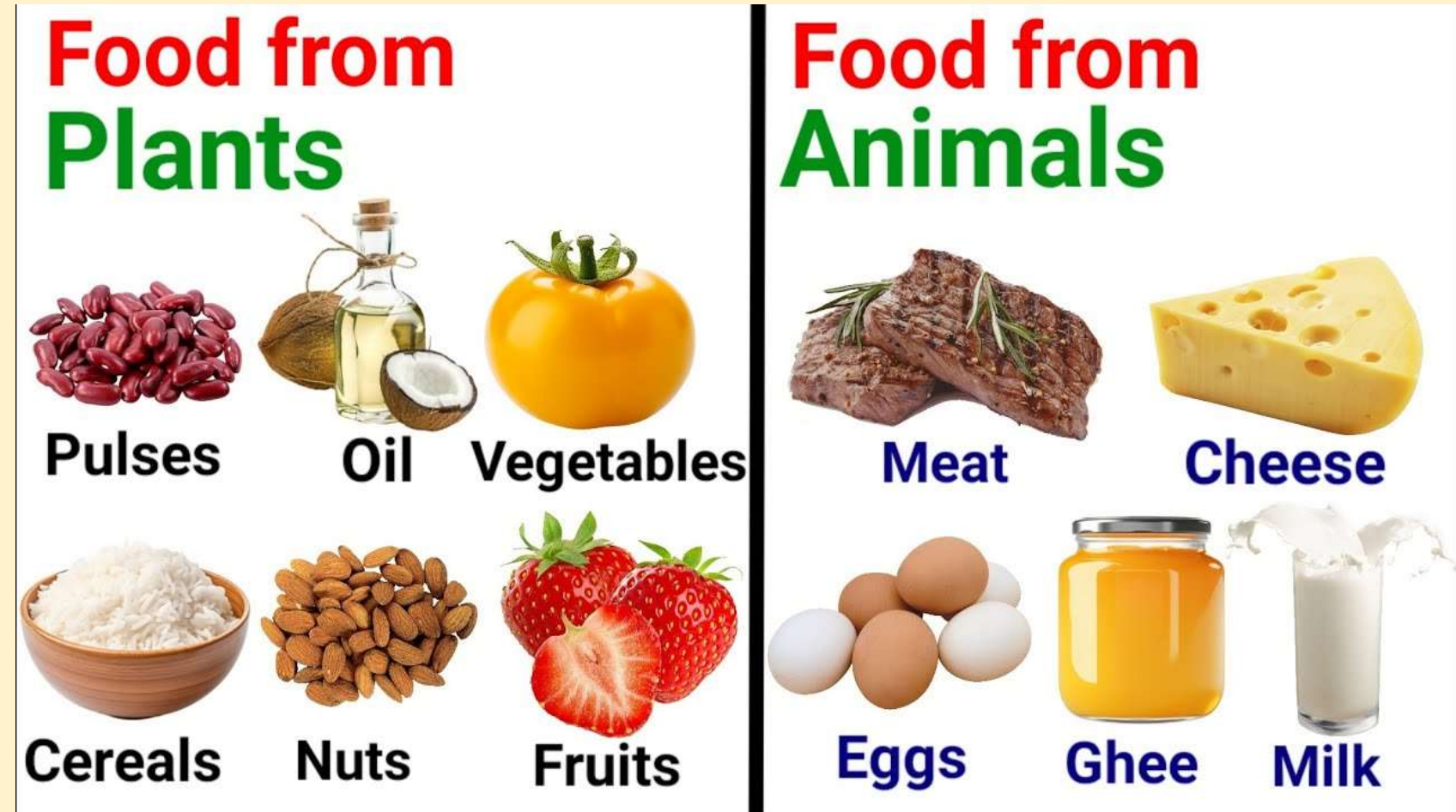
Classification of Foods

By chemical nature	• Carbohydrates, Protein, Fats, vitamins, Minerals, Dietary fiber, Water
By functions in the body	• Energy Giving • Body Building • Protective
By chemical properties	• Organic • Inorganic
By mass	Macro Nutrients Micro Nutrients
By Origin	Plant Foods Animal Foods
By nutritive value	12 Categories

Classification of food

Classification of foods by origin

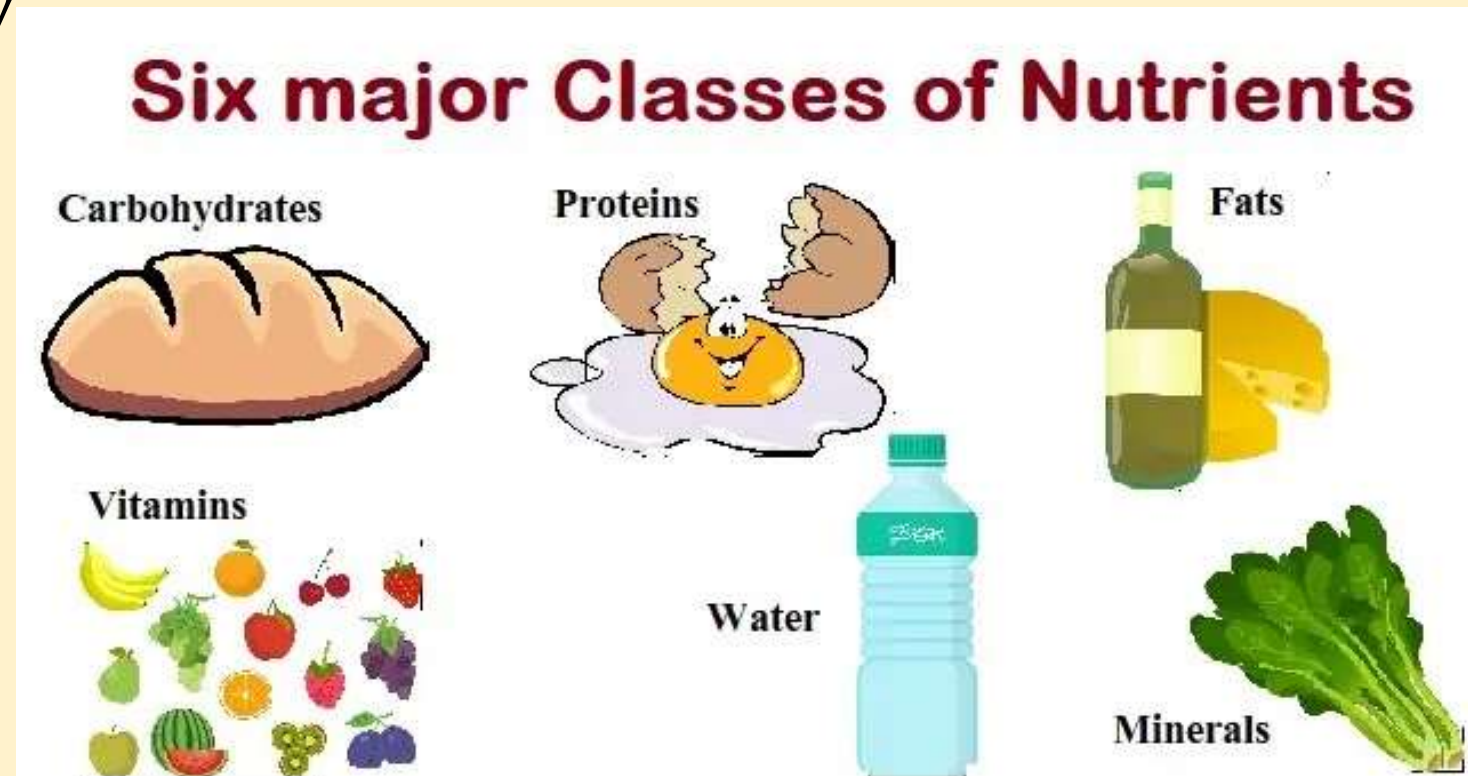
- Foods of plants origin
- Foods of animal origin



Classification of food

Classification of foods by chemicals

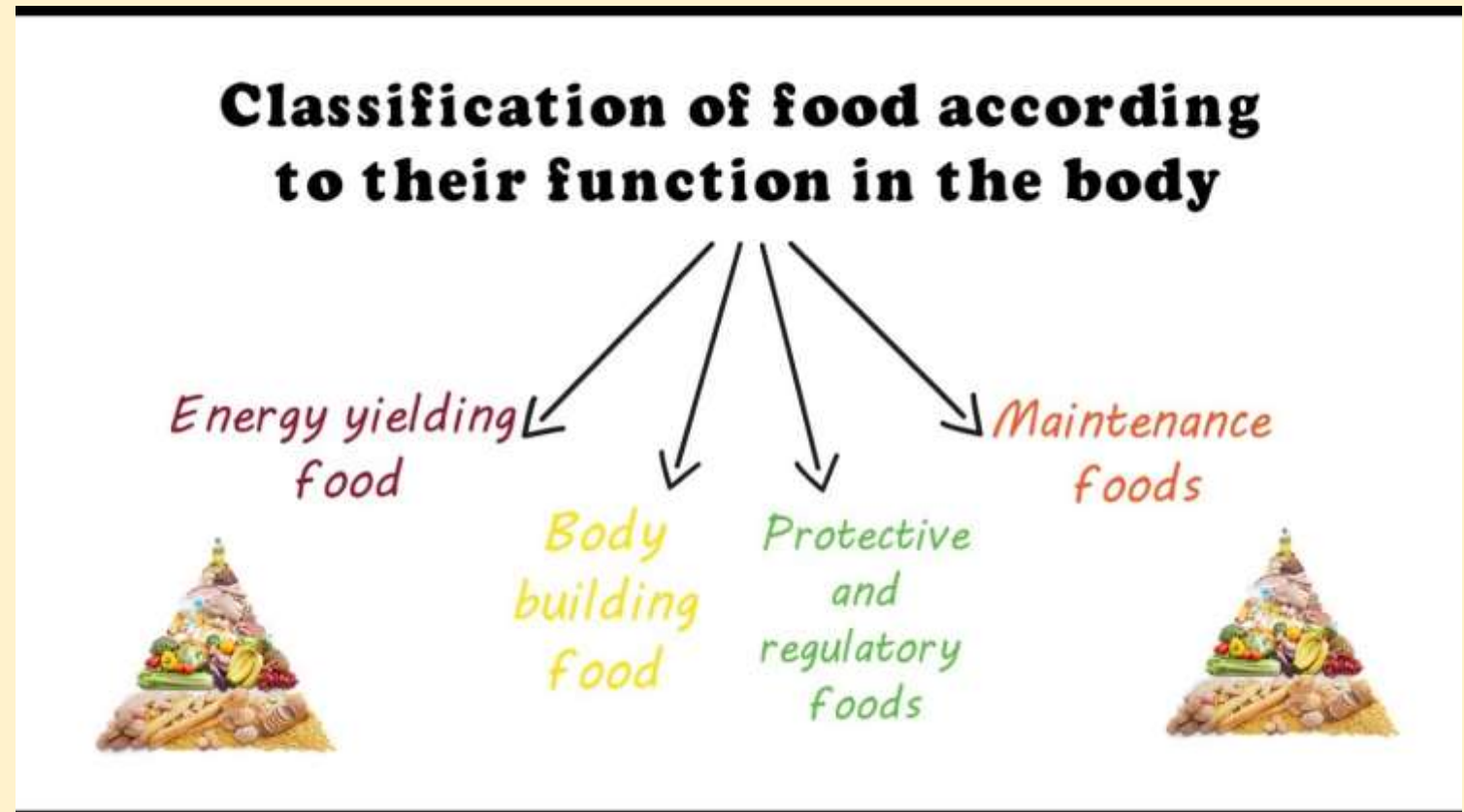
- ☐ Carbohydrates
- ☐ Proteins
- ☐ Fats
- ☐ Vitamins
- ☐ Minerals



Classification of food

Classification of foods by Predominant Functions:

- ❑ Energy supplying food: Cereals, sugars, roots, tubers, fats and oils.
- ❑ Body building foods: Milk, meat, poultry, eggs, fish, pulses and groundnuts.
- ❑ Repairing and Maintenance Foods: Vegetables, Fruits and Milk.

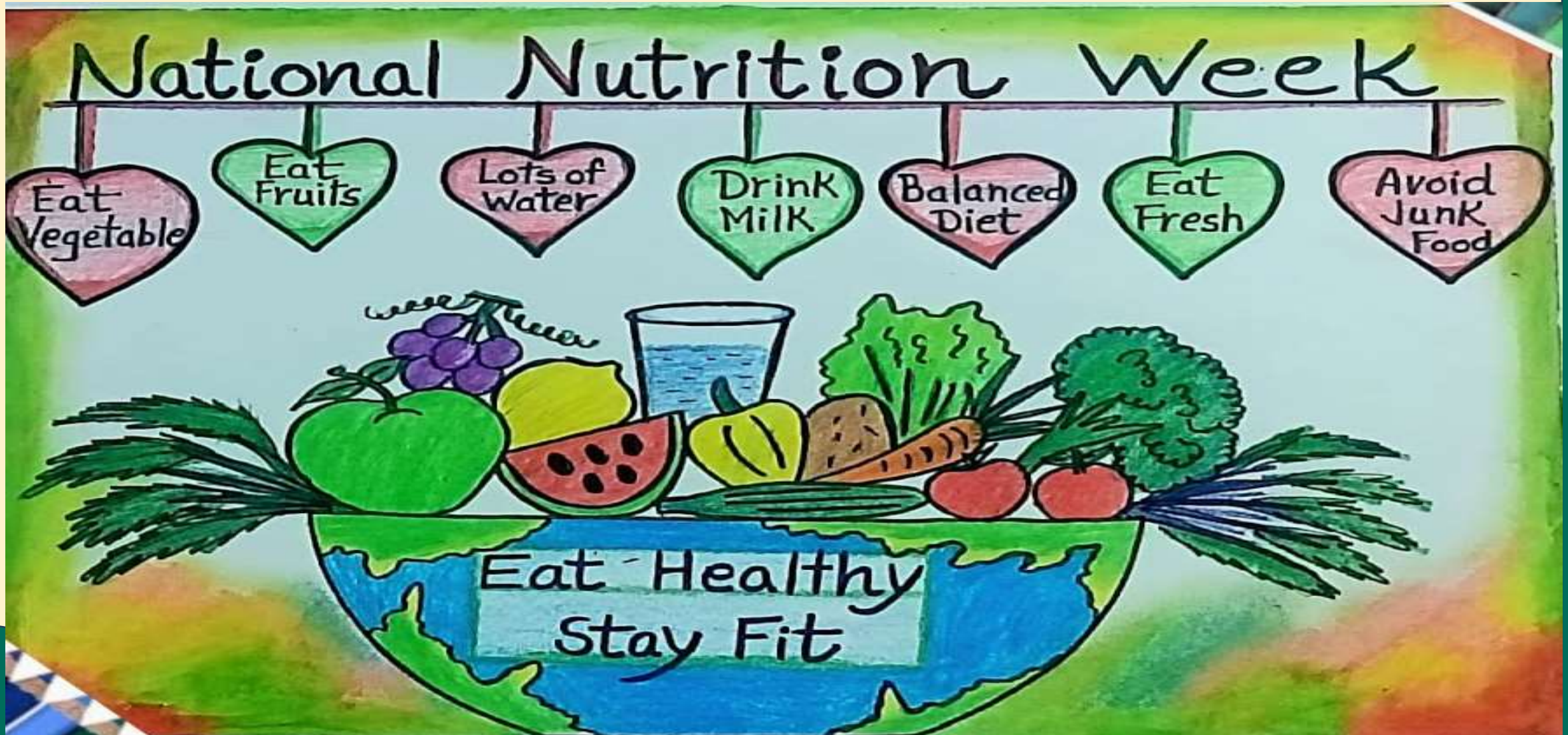


NUTRIENTS

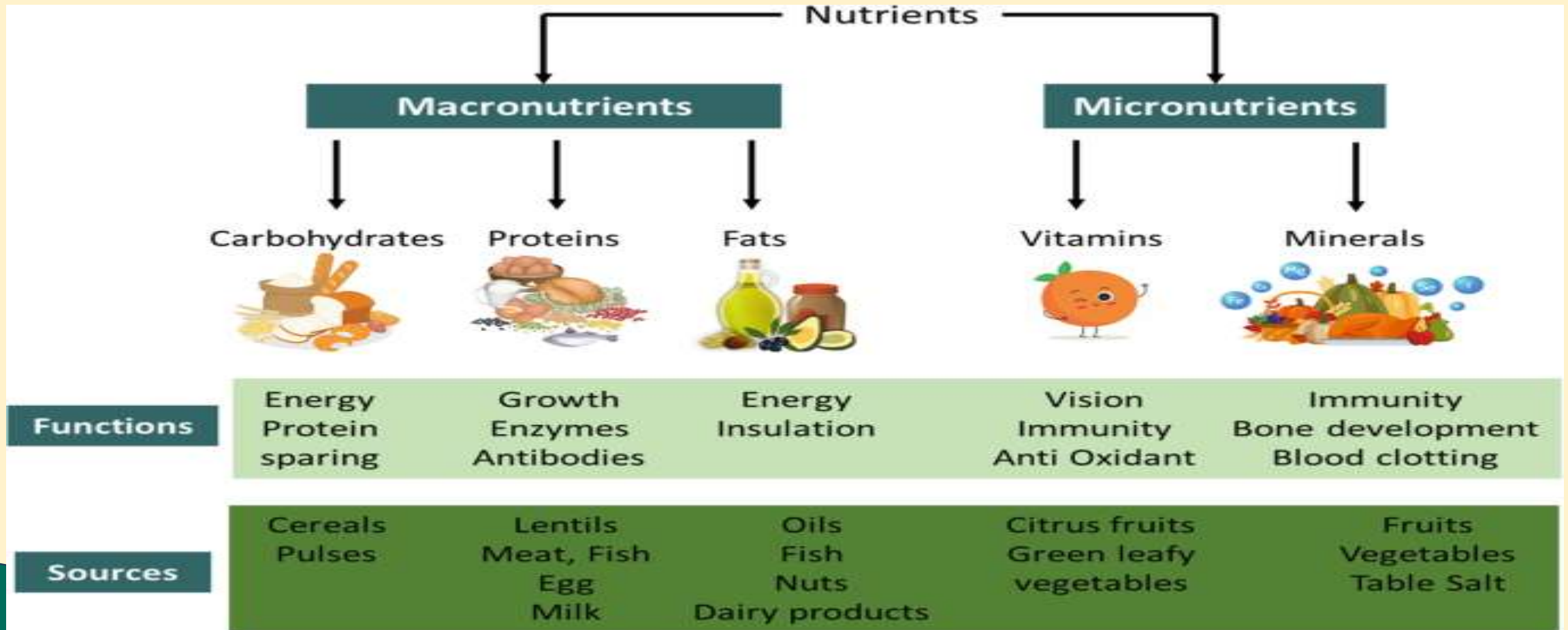
- ❁ Organic and inorganic complexes contained in food are called as nutrients.
- ❁ Useful chemical substances derived from food by the body are called nutrients.
- ❁ Nutrient provides energy, helps to grow well and normal development and repair of tissues.
- ❁ 50 different nutrients supplied by foods to our body.
- ❁ Each nutrient has its own specific function.
- ❁ Most of the foods contain more than one nutrient.



NUTRIENTS



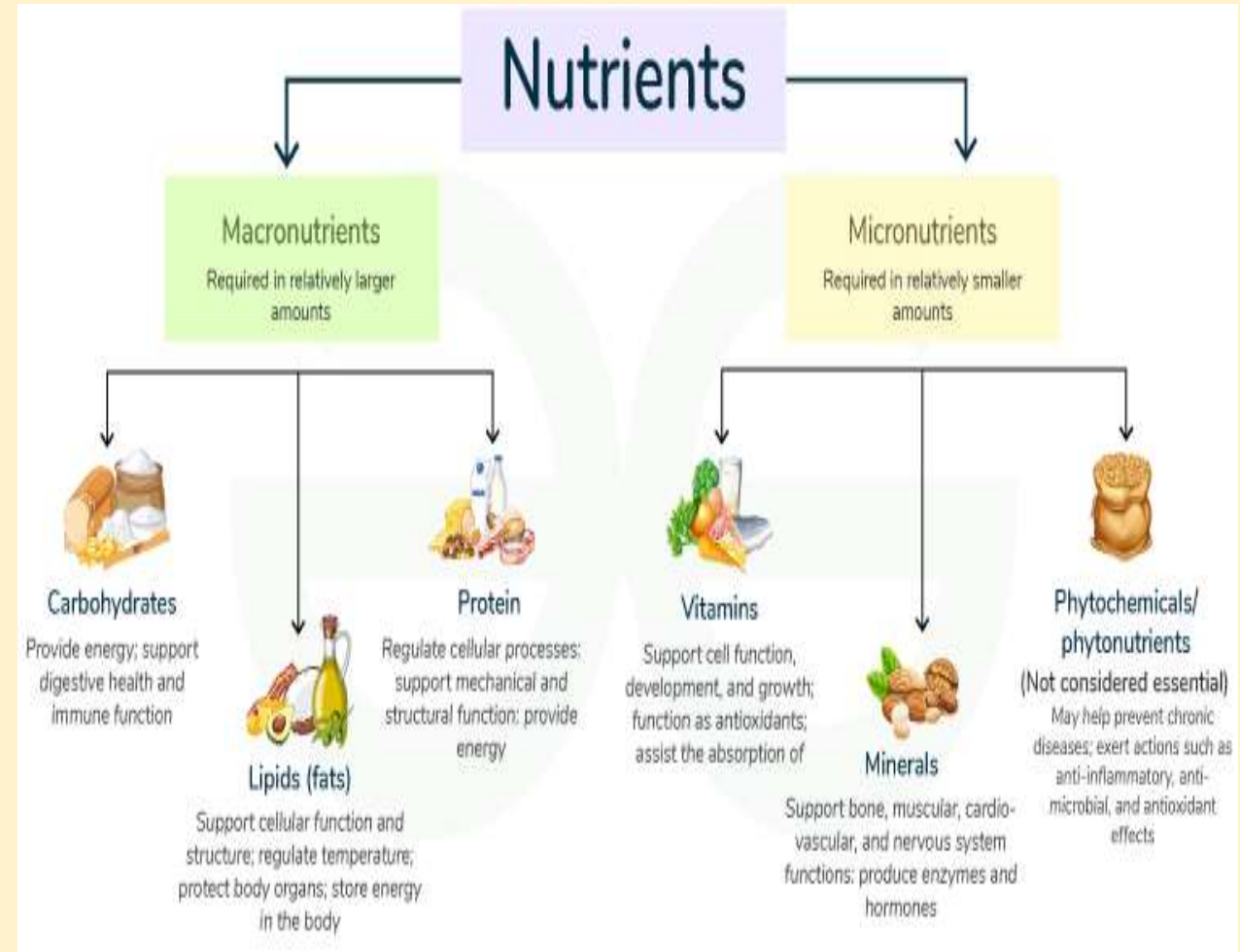
CLASSIFICATION OF NUTRIENTS



CLASSIFICATION OF NUTRIENTS

Nutrients are divided into two parts mainly as Macro-nutrients and Micronutrients.

- ✓ Macronutrients are proteins, fats and carbohydrates which are often called “Proximate Principles” because they form the main bulk of food.
 - ✓ They contribute to the total energy intake as
 - ❑ Carbohydrates 60-80 %
 - ❑ Fats 10 - 30 %
 - ❑ Proteins 7-15 %
- ✓ Micronutrients are requires in small quantity and they are vitamins and minerals. The quantity of nutrients required depends upon age, sex, weight, physical activity and health status of the body.



CARBOHYDRATES

STARCHY CARBS

Bread



Potatoes



Rice



Pulses



SUGARS

Natural Sugars

Fruit sugar (fructose)



Milk sugar (lactose)



Free Sugars

Table sugar (sucrose)



Biscuit



Honey



Unsweetened fruit juice

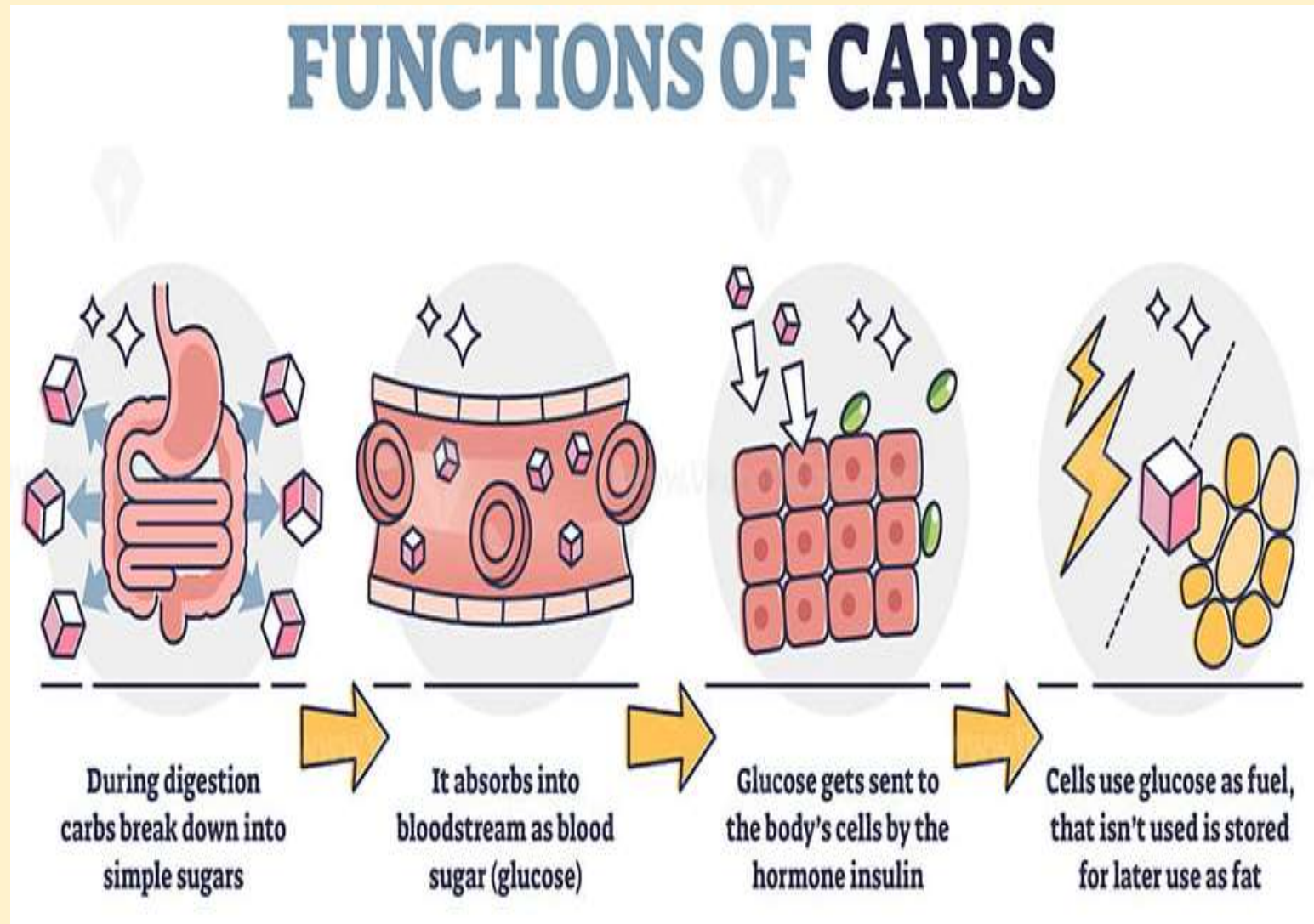


CARBOHYDRATES

- ❑ Carbohydrates provides energy 4 Kcal/gm
- ❑ In balanced diet, carbohydrates provide 50-60% of total calories taken.
- ❑ In excess, the carbohydrates are converted into body fat.

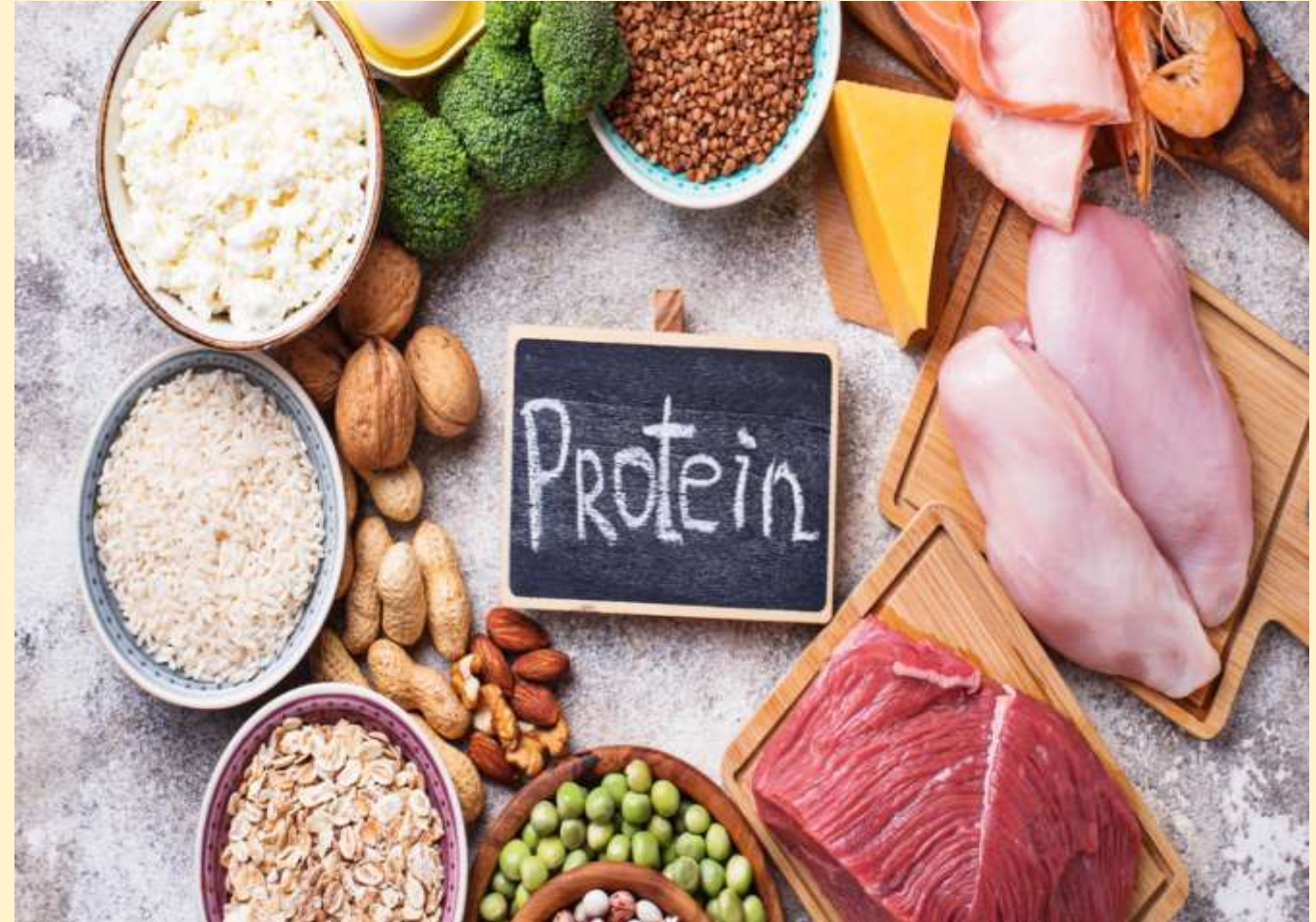
Functions:

- ❑ Energy production in the body;
- ❑ Useful in Oxidation of Fat.
- ❑ Useful in growth of good bacteria.
- ❑ Useful in the synthesis of Vitamin B complex: absorption of minerals & prevention of constipation



PROTEINS

- ❖ Protein is the building material for all body parts, such as muscle, brain, blood, skin, hair, nails, bones and body fluids.
 - ❖ Protein constitutes 20% of adult body weight and made up of amino acids.
- Functions
- ❖ Acts as Building blocks of cells and tissues.
 - ❖ Regulates hemoglobin.
 - ❖ Regulates muscle contraction, formation of enzyme, hormones and other secretions which help synthesis of enzymes and produces digestive juices and antibodies.
 - ❖ Act as a source of energy: 1 gm of protein gives 4 kcal.



SOURCES OF PROTEIN

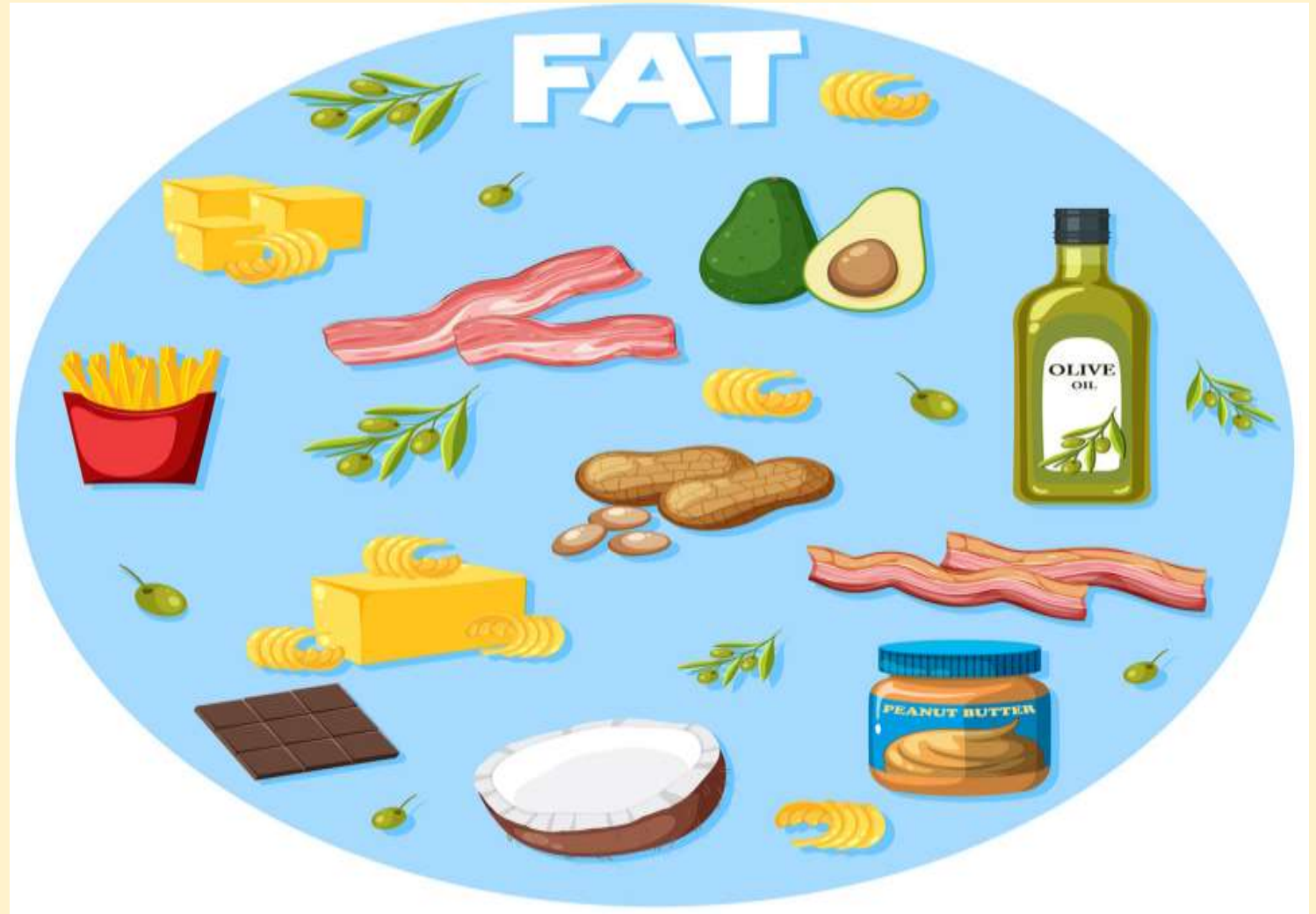
❑ There are 2 main sources of protein.

- Animal sources:
Milk, eggs, meat, fish, cheese etc.
- Plant sources:
Pulses, cereals, beans, nuts, soya bean etc.

PLANT BASED PROTEIN			ANIMAL BASED PROTEIN		
PROTEIN PER 100G					
CHICKPEAS  7g protein	OATS  11g protein	TOFU  13g protein	EGGS  14g protein	TURKEY MINCE  25g protein	CHICKEN BREAST  25g protein
BROWN RICE  3g protein	QUINOA  4g protein	LENTILS  6g protein	PRAWNS  18g protein	TUNA  25g protein	SALMON  25g protein
CASHEWS  18g protein	PEANUT BUTTER  28g protein	ALMONDS  29g protein	PORK CHOP  19g protein	RIBEYE  19g protein	DUCK  27g protein
AVOCADO  2g protein	BROCCOLI  4g protein	EDAMAME  12g protein	SEMI SKIMMED MILK  4g protein	GREEK YOGURT  9g protein	EDAM CHEESE  26g protein

FATS

- ❖ Fats are composed of smaller units called fatty acids.
- ❖ Saturated fatty acids: All animal fats except fish oil.
- ❖ Saturated fatty acids are cholesterologenic, i.e. They increase cholesterol level.
- ❖ Unsaturated fatty acids: All vegetable oils except coconut and palm oils.



Functions:

- ❑ Fats provide energy: 1 gram of fat provides 9 calories of energy.
- ❑ Dietary fats supplies essential fatty acids needed for growth and maintenance of the integrity of the skin.
- ❑ They maintain our body temperature.
- ❑ Fats provide support for many organs in our body such as heart, kidneys, intestine etc.

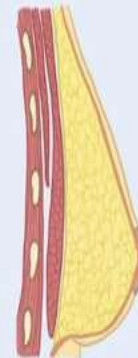
FATS



**MAJOR SOURCE
of ENERGY**



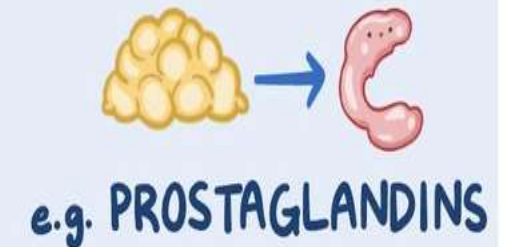
**COMPONENT of
CELLS & TISSUES**



**ABSORB
VITAMINS**



**CONVERTED into
OTHER MOLECULES**



GOOD VS BAD FATS

@DAVEYMAHER_FITNESS



LENTILS



AVOCADO



SALMON



NUT BUTTER



FLAXSEEDS



OLIVE OIL



FULL FAT
GREEK YOGURT



CHIA SEEDS



DARK CHOCOLATE



WHOLE EGGS



PIZZA



FRIES



ICE CREAM



COOKIES



DONUTS



CANOLA OIL



CHIPS



CAKE



PROCESSED MEATS

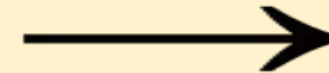


FRIED CHICKEN

REPLACE BAD FATS WITH GOOD ONES



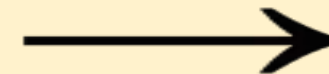
Butter
(for sauteing)



Olive Oil



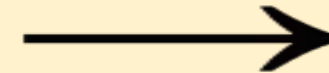
Butter
(for baking)



Avocado



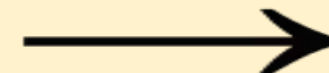
Steak



Salmon



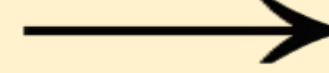
Ground Beef



Tofu



Processed Food



Nuts

