SNS COLLEGE OF PHARMACY AND HELATH SCIENCES

COIMBATOE – 641 035

COURSE NAME: Social and Preventive Pharmacy (BP 802T)

IV YEAR / VIII SEM

TOPIC: Concept of Health (Unit I)

SUB TOPIC: Social and Health Education

FOOD IN RELATION TO NUTRITION AND HEALTH

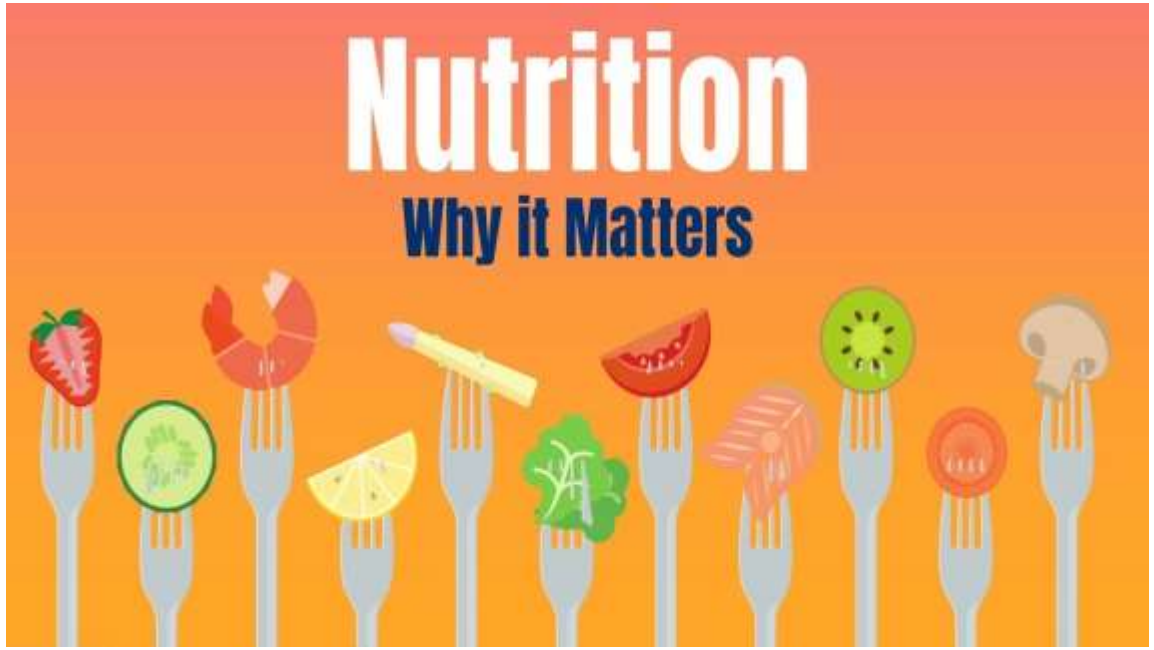
FOOD

- Food is any edible material that supports growth, repair and maintenance of the body.
- Any edible substance that we consume to fulfill our daily requirement of nutrition is known as food.

FOOD IN RELATION TO NUTRITION AND HEALTH

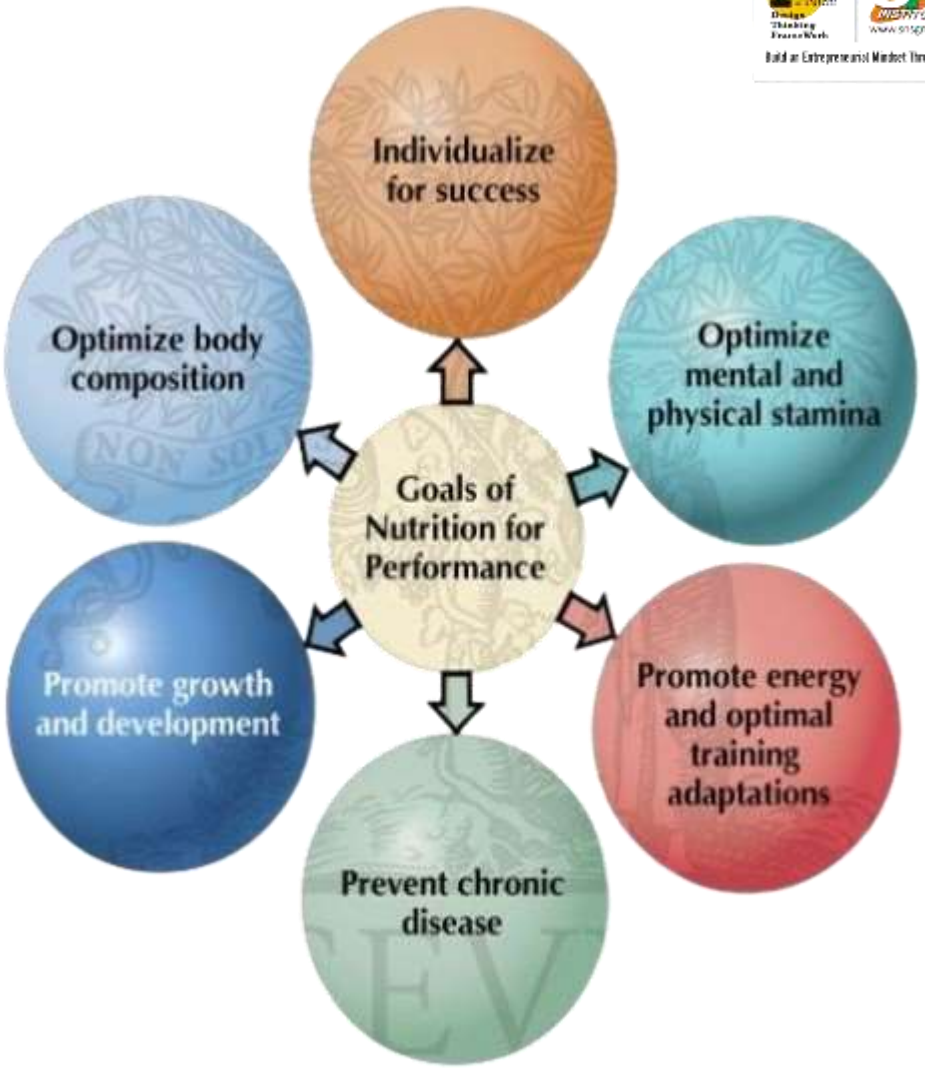
NUTRITION

- 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.



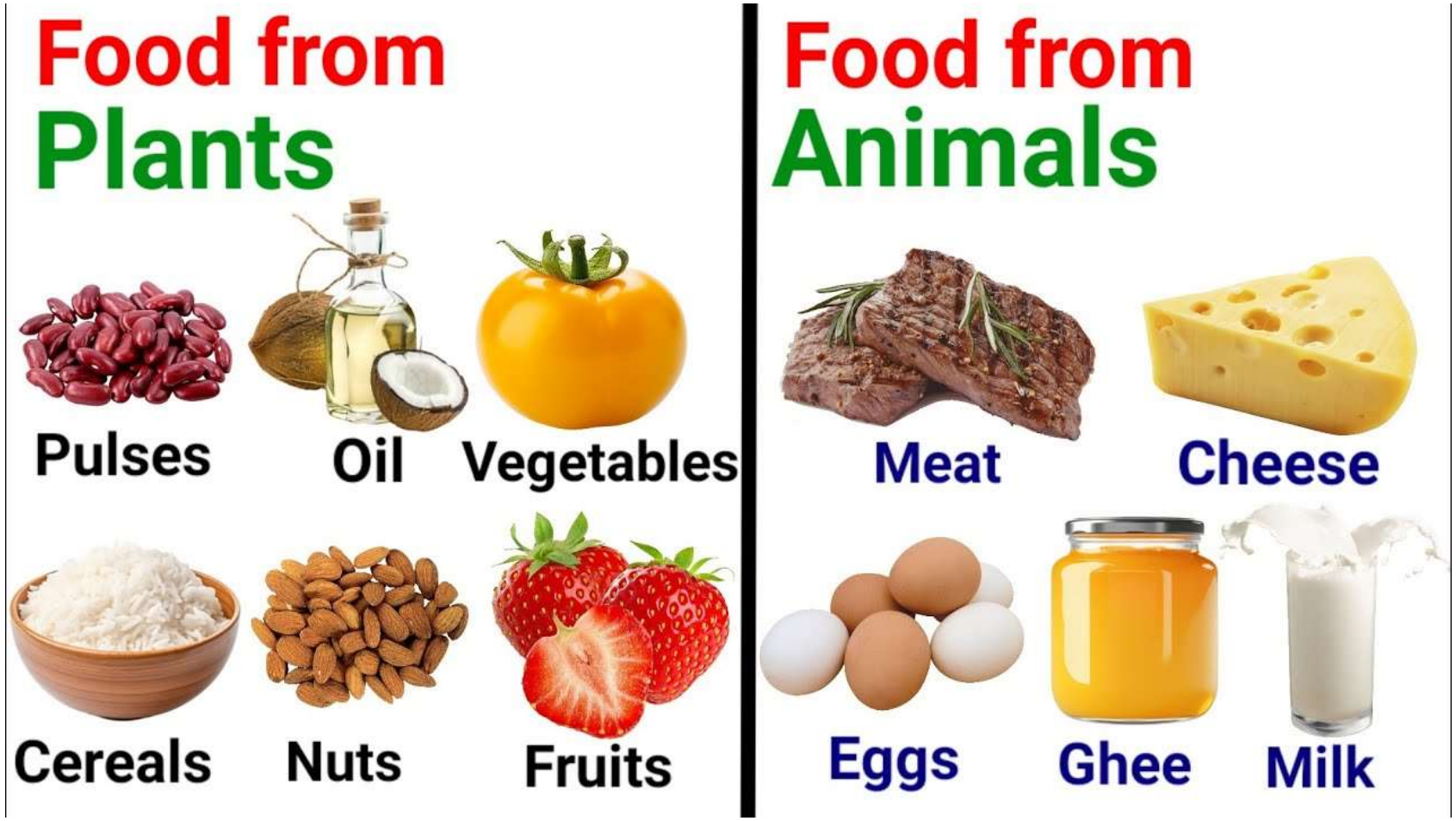
Classification of Foods

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

Classification of food

Classification of foods by origin

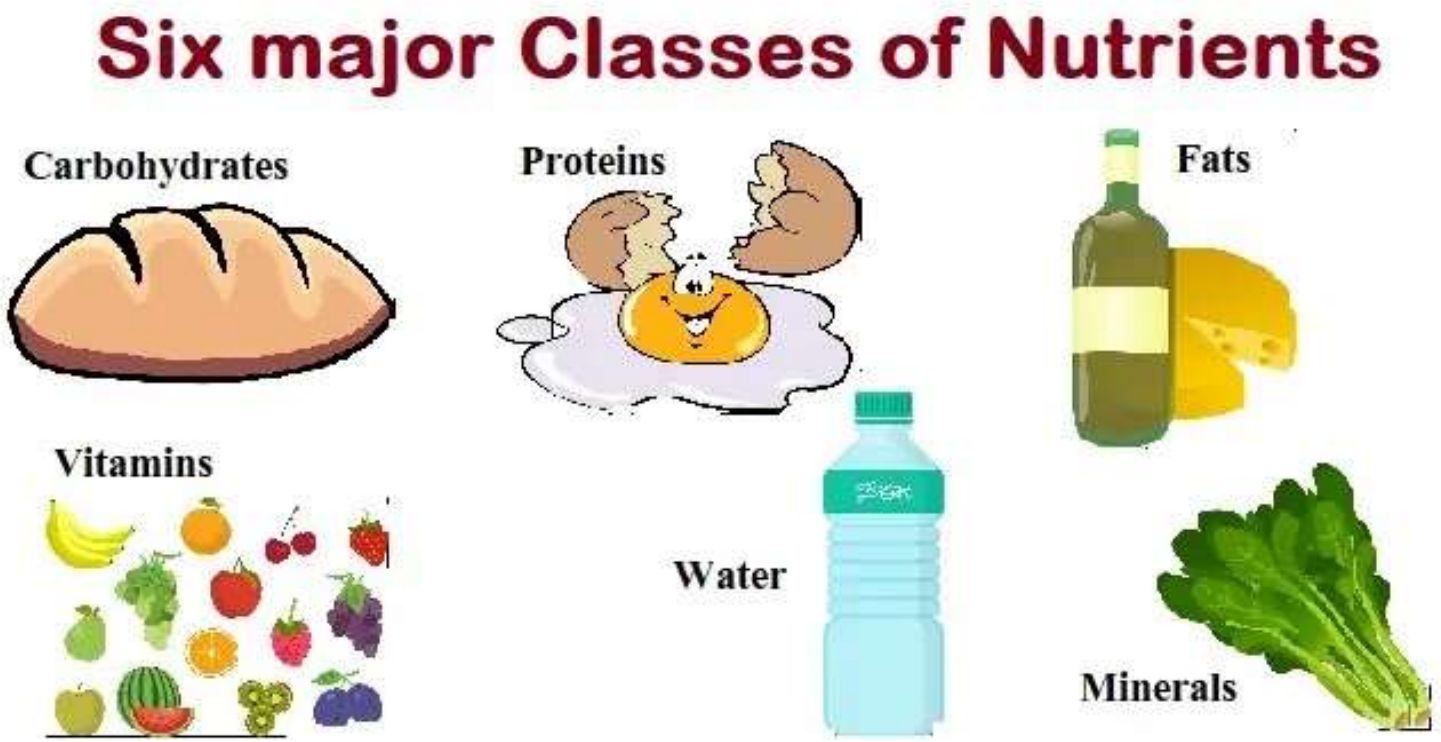
- Foods of plants origin
- Foods of animal origin



Classification of food

Classification of foods by chemicals

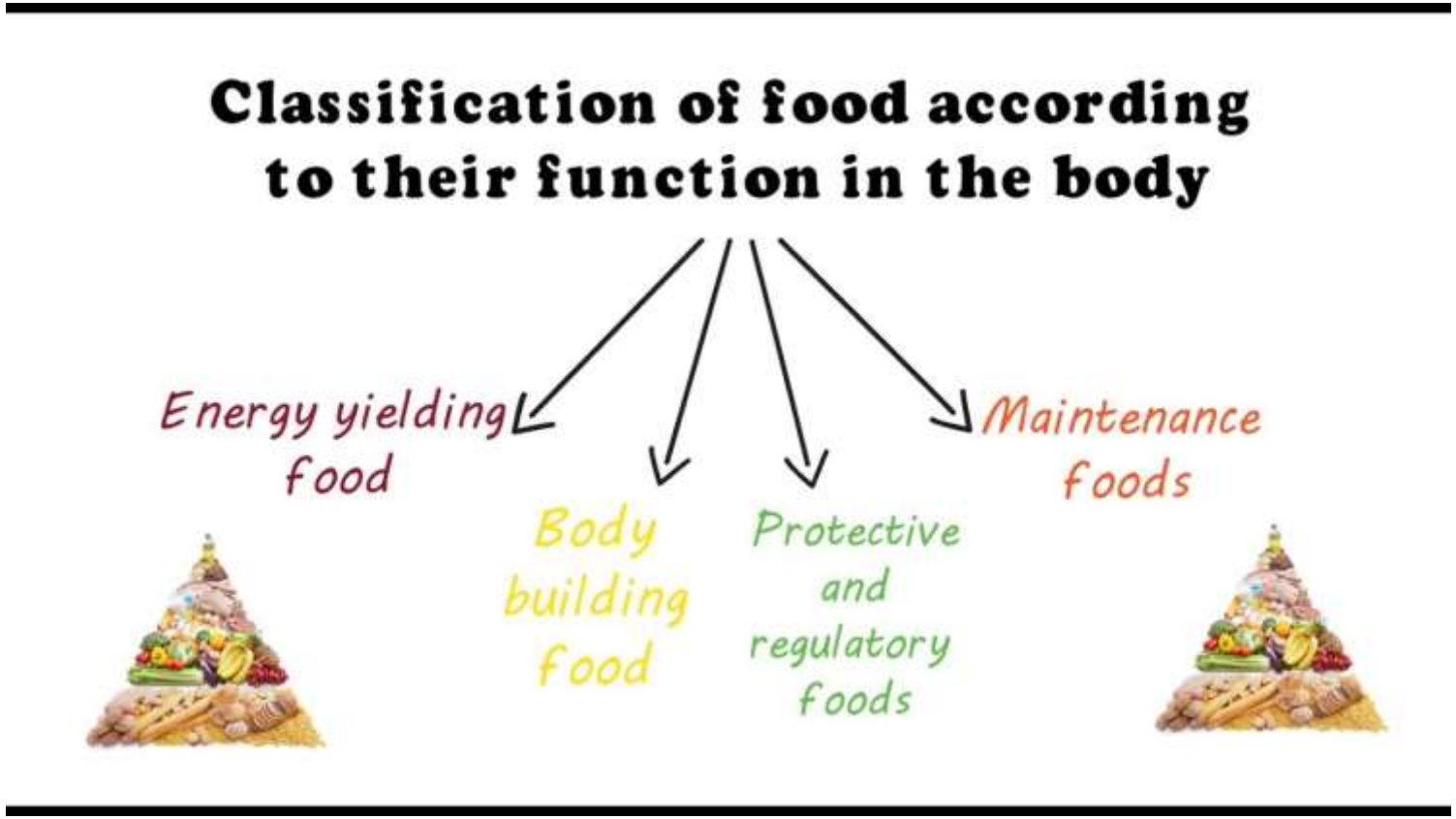
- Carbohydrates
- Proteins
- Fats
- Vitamins
- Minerals



Classification of food

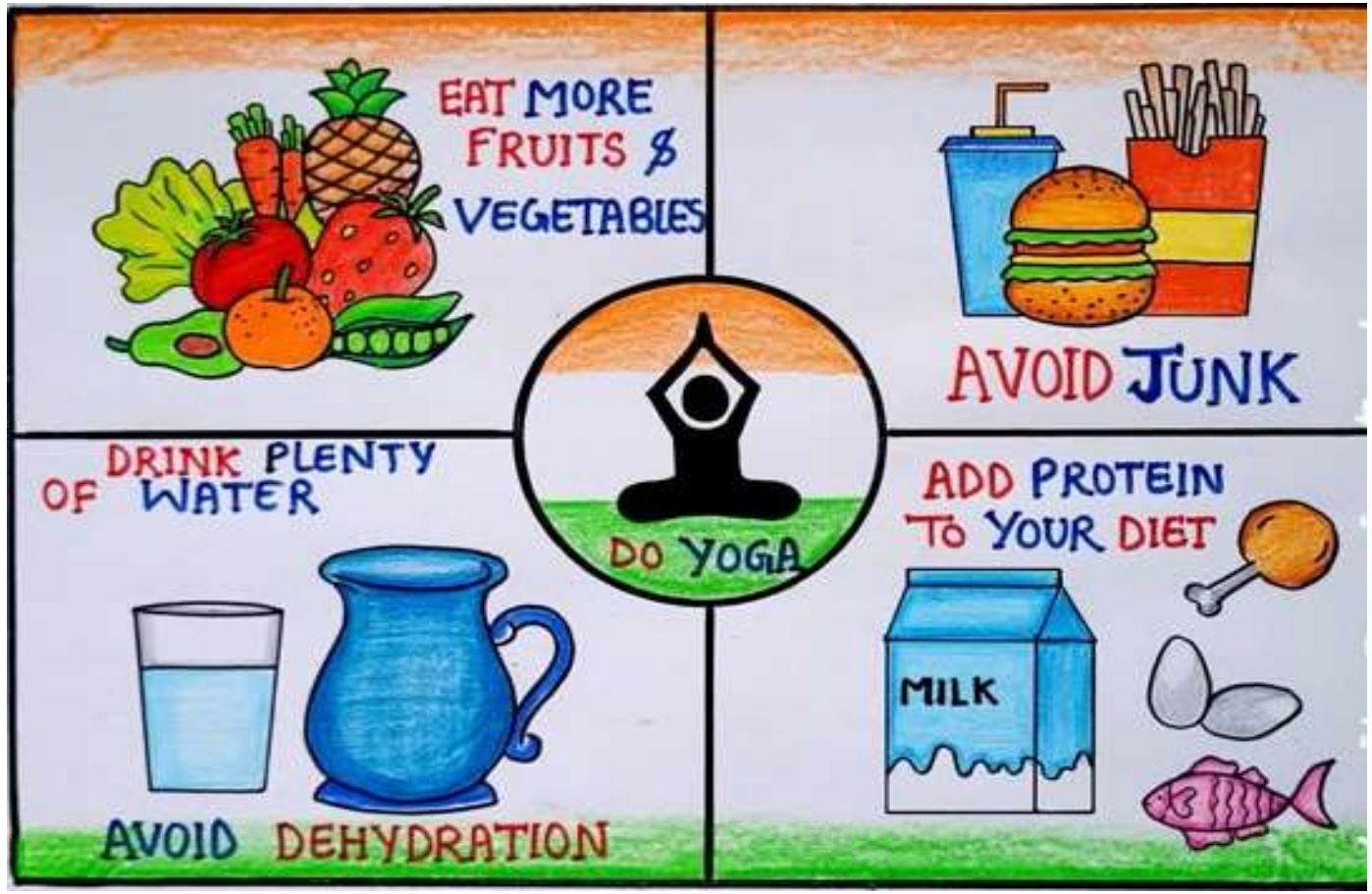
Classification of foods by Predominant Functions:

- 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.

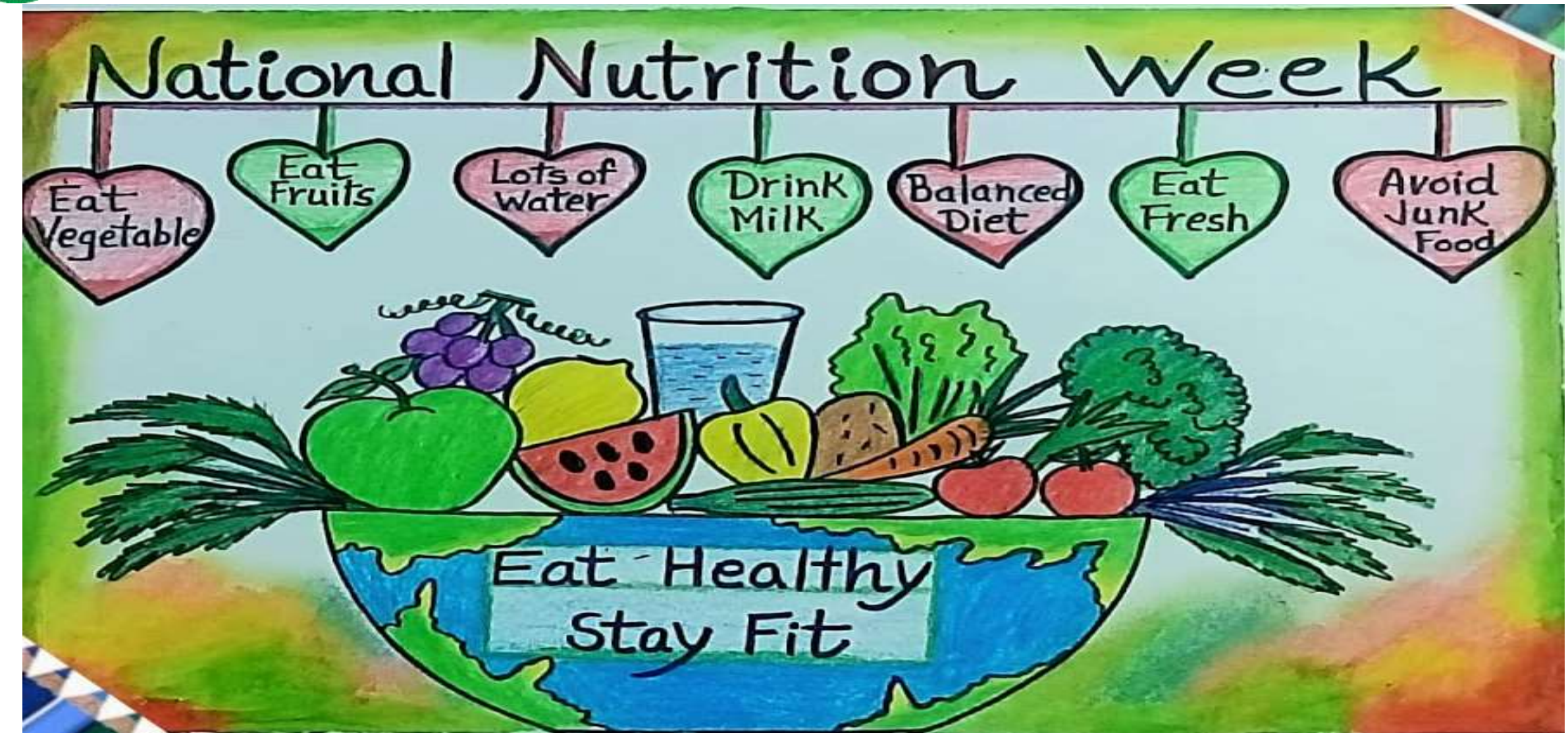


NUTRIENTS

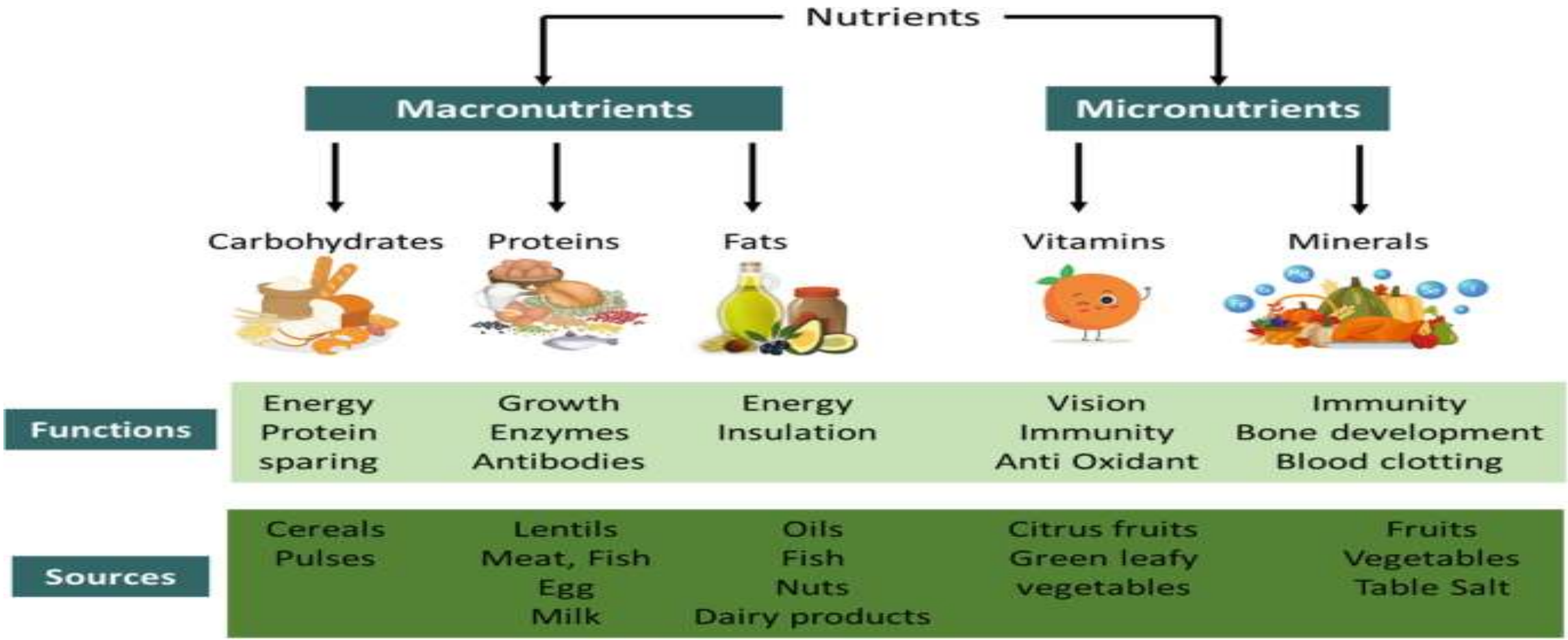
- Organic and inorganic complexes contained in food are called as nutrients.
- Useful chemical substances derived from food by the body are called nutrients.
- Nutrient provides energy, helps to grow well and normal development and repair of tissues.
- 50 different nutrients supplied by foods to our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



NUTRIENTS


National Nutrition Week
Eat Vegetable
Eat Fruits
Lots of Water
Drink Milk
Balanced Diet
Eat Fresh
Avoid Junk Food
Eat Healthy
Stay Fit

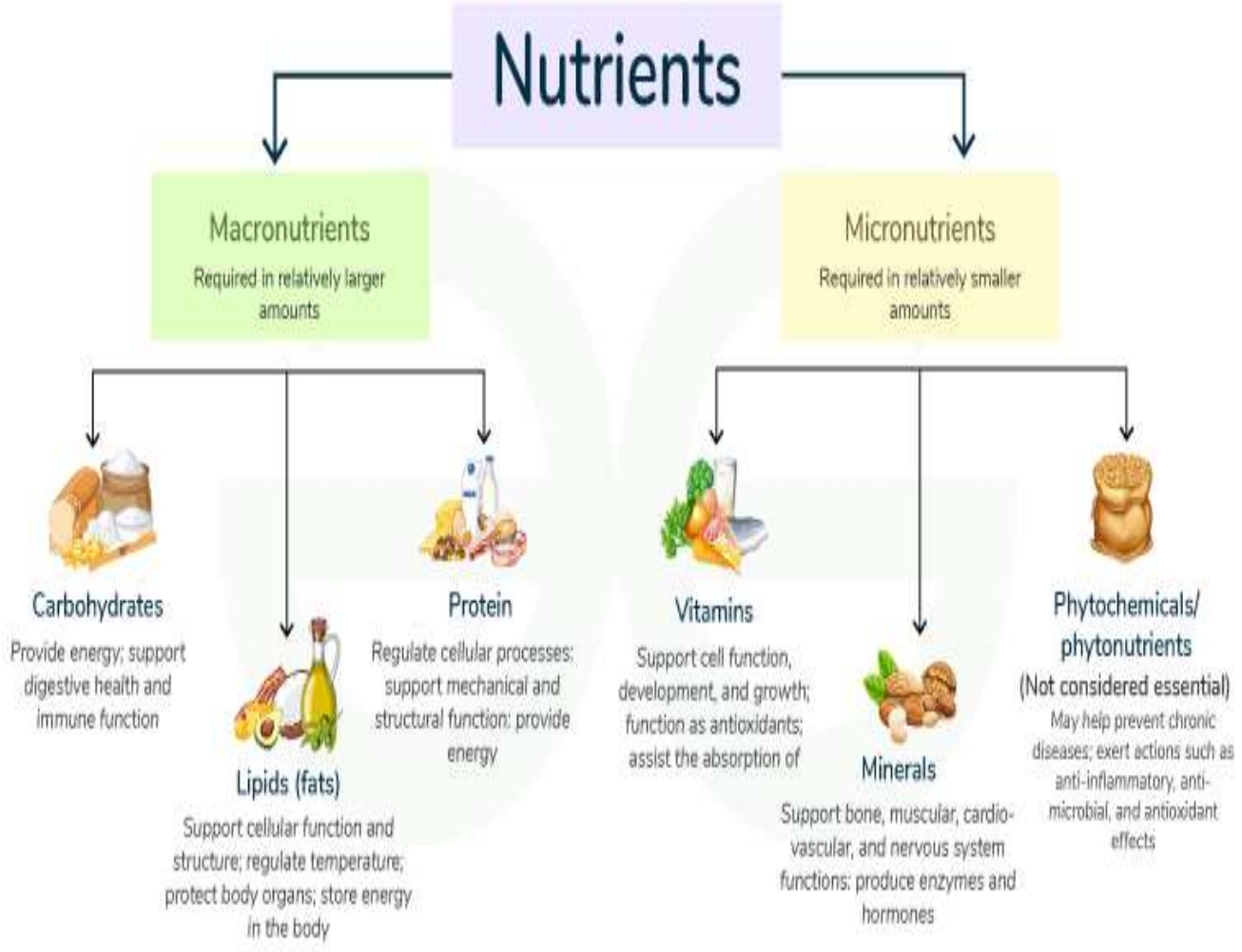
CLASSIFICATION OF NUTRIENTS



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

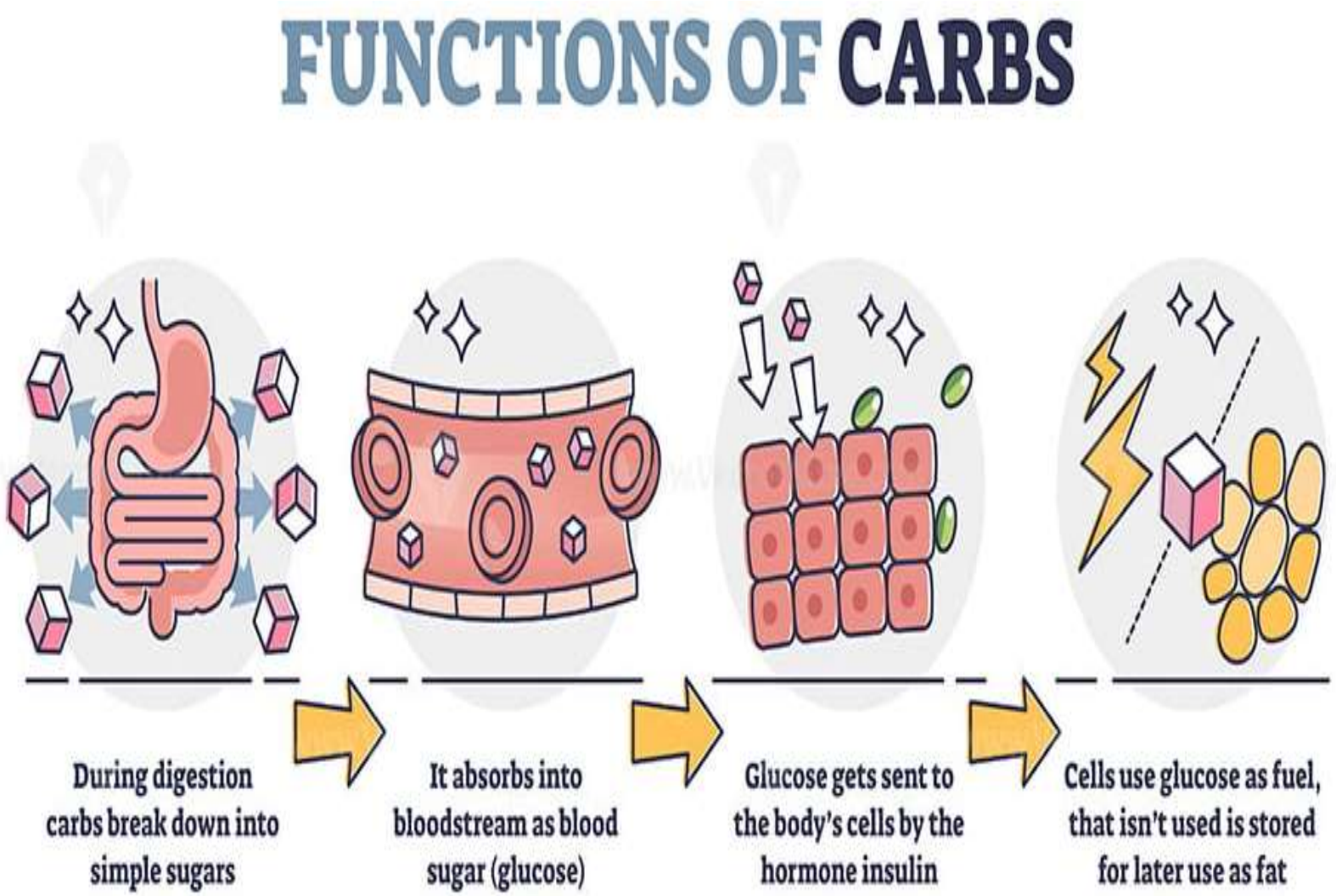
Unsweetened fruit juice

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.

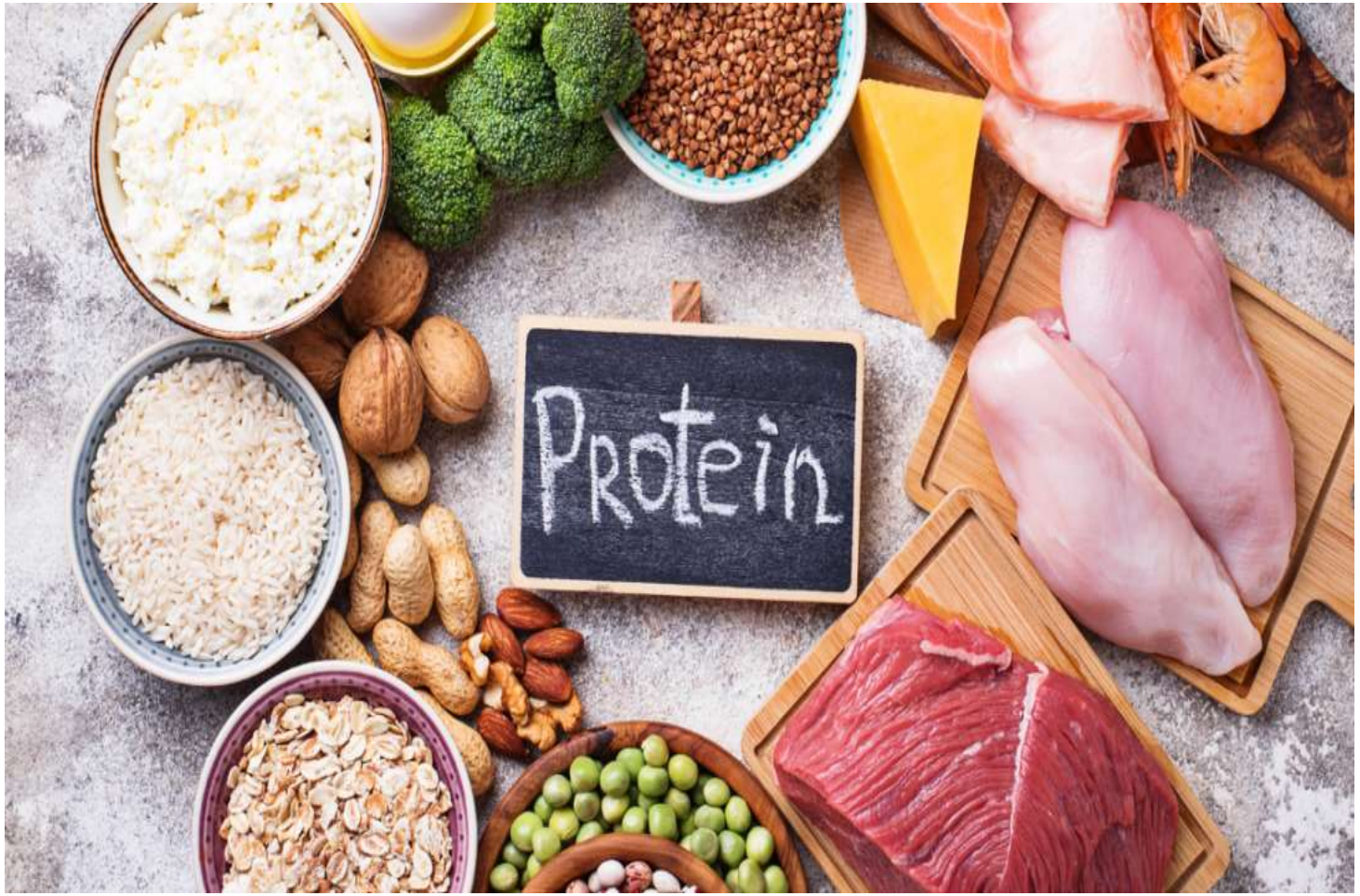
Functions:

- 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



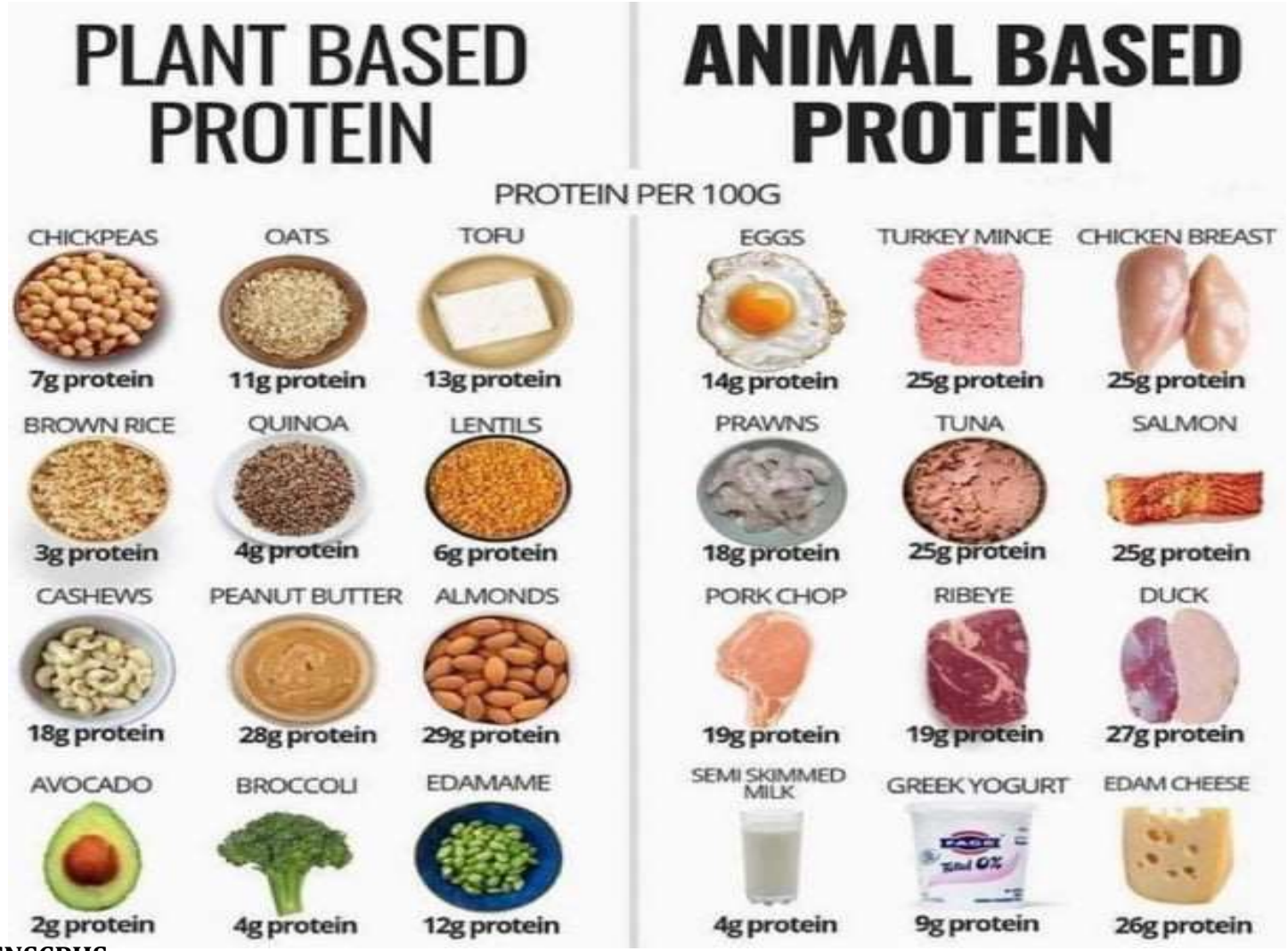
PROTEINS

- 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.



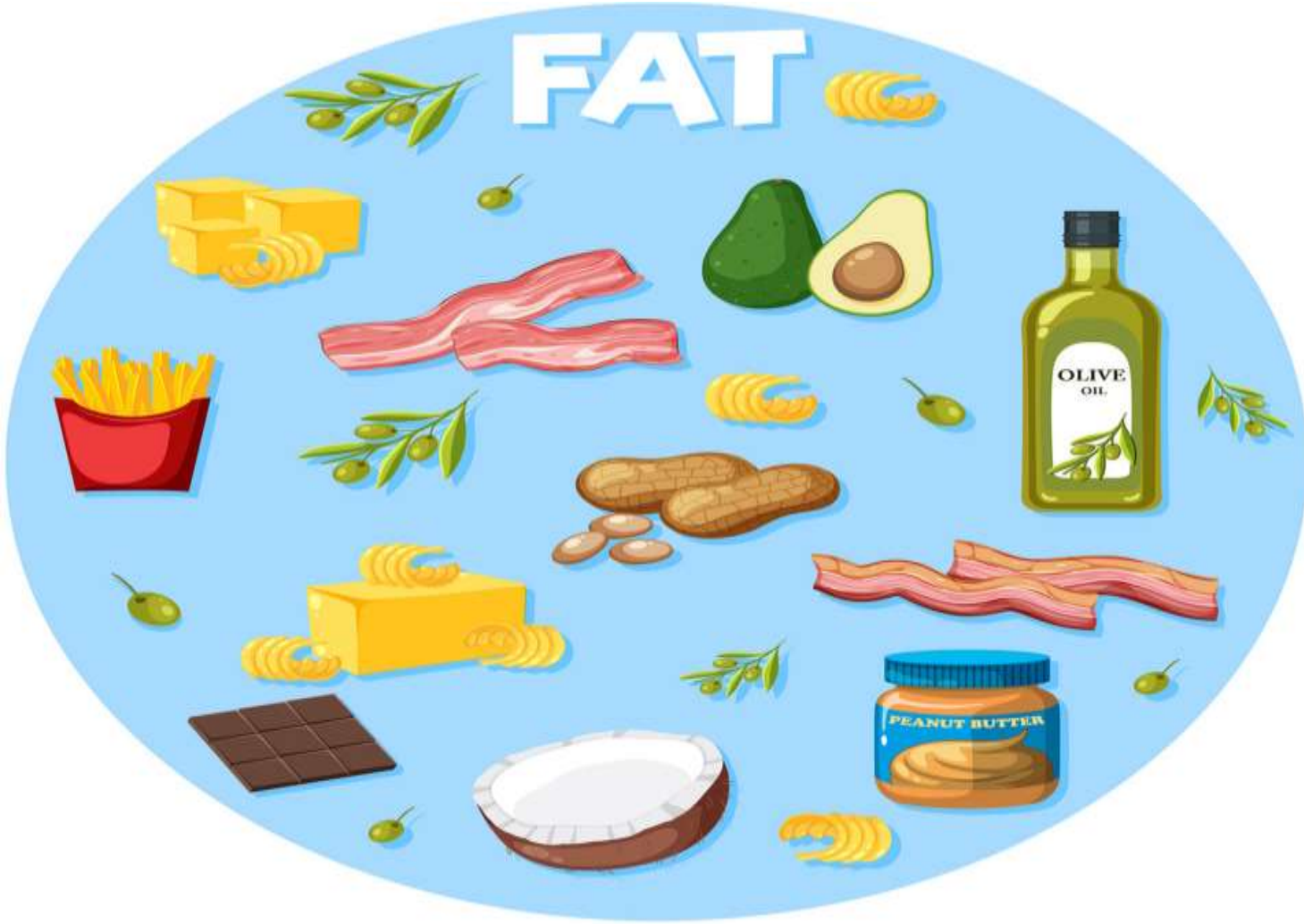
SOURCES OF PROTEIN

- There are 2 main sources of protein.
  - Animal sources: Milk, eggs, meat, fish, cheese etc.
  - Plant sources: Pulses, cereals, beans. nuts, soya bean etc.



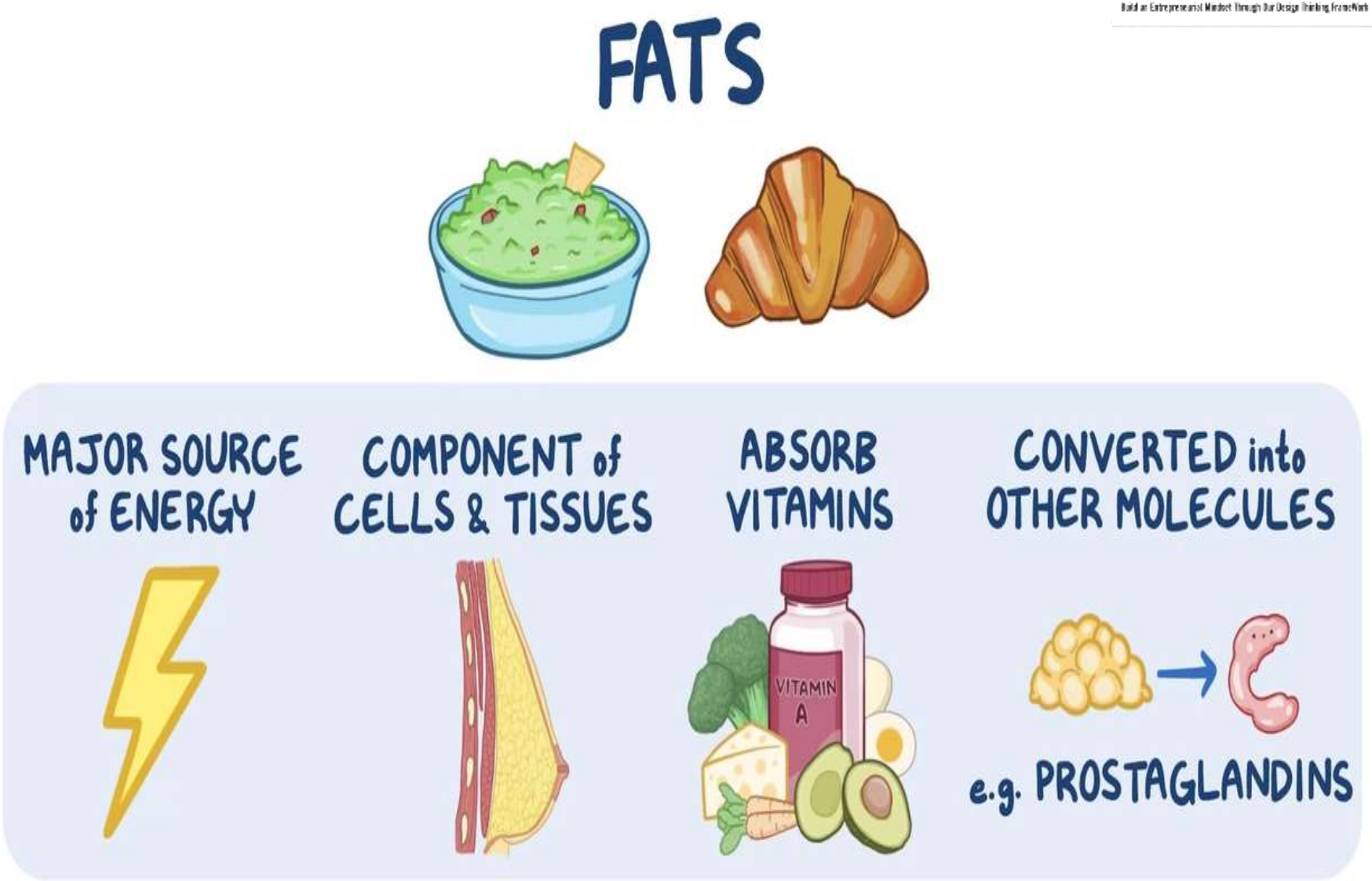
FATS

- 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.

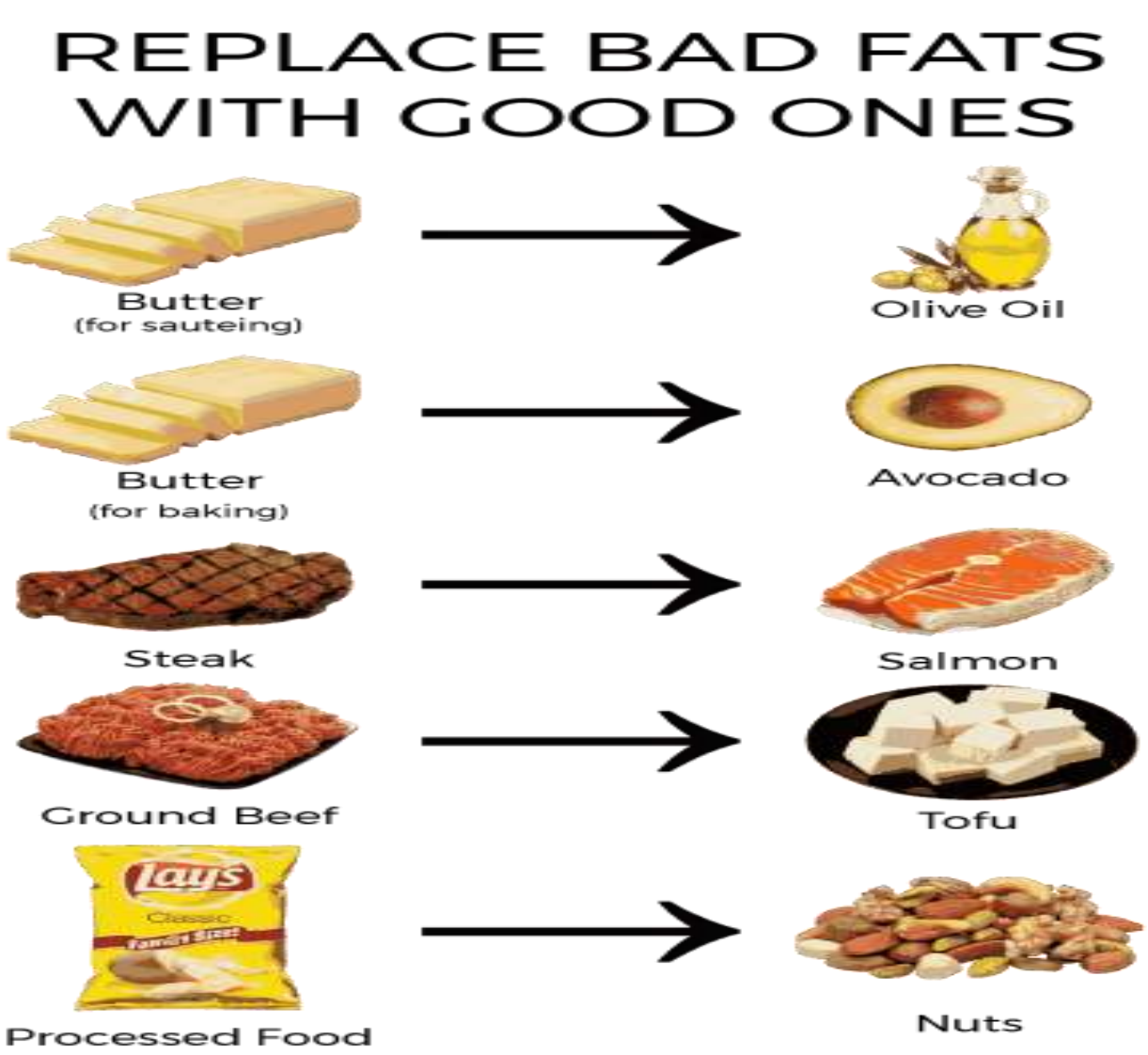


Functions:

- 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.




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


Thank you