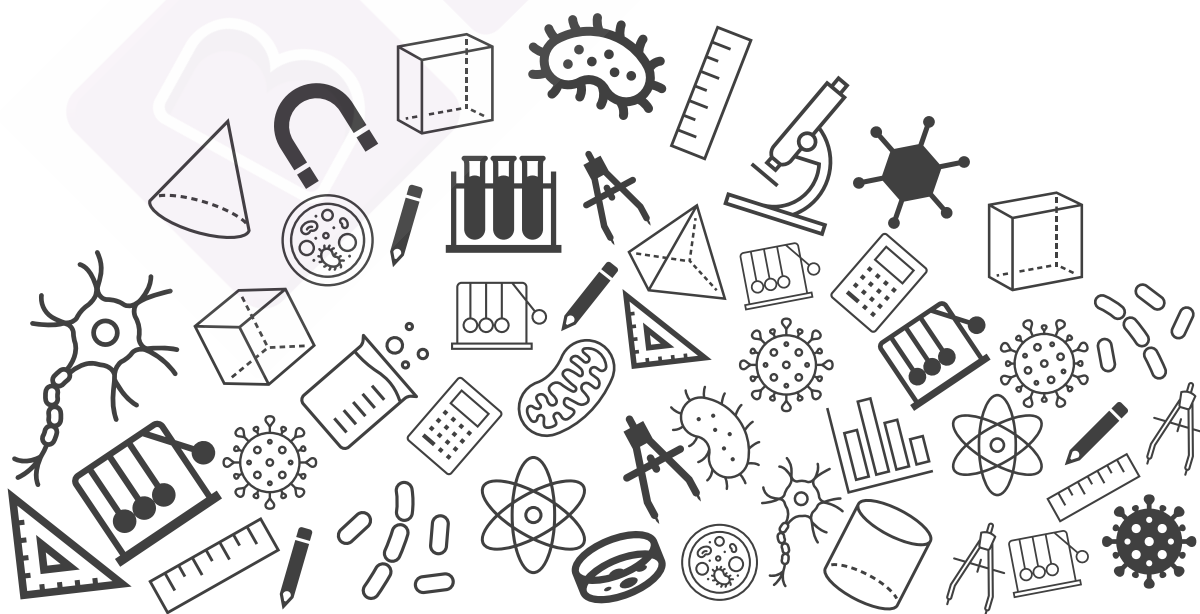




# Grade 06

## Chapter Notes





# Components of Food



# Topics to be covered



1

## Nutrients

1.1 Macronutrients

1.2 Micronutrients

2

## Macronutrients

2.1 Carbohydrates

2.2 Proteins

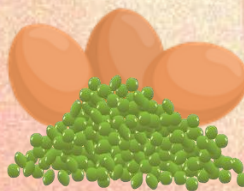
2.3 Fats

3

## Micronutrients

3.1 Vitamins

3.2 Minerals





# Topics to be covered

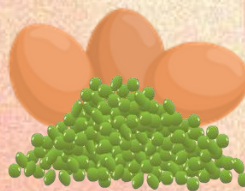


4

Roughage and Water

5

Balanced Diet





# 1. Nutrients

## Definition

Nutrients are components of food that provide energy for the growth, functioning and maintenance of the body.

## 1.1 Macronutrients

Nutrients that are required in larger quantities by the body.

1. Carbohydrates
2. Proteins
3. Fats

## 1.2 Micronutrients

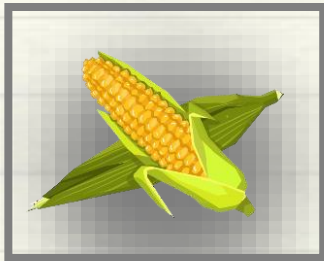
Nutrients that are required in smaller quantities by the body.

1. Vitamins
2. Minerals

## 2. Macronutrients

### 2.1 Carbohydrates

#### Sources and Functions



Maize



Bread

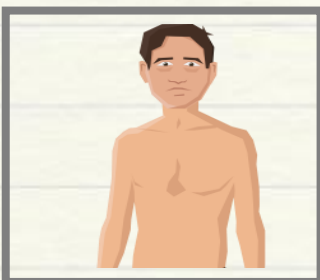


Rice

#### Functions:

- Provide energy to our body
- Help to sleep better
- Help to prevent diseases
- Help to improve memory

#### Effect of Deficiency of Carbohydrates



Weak body



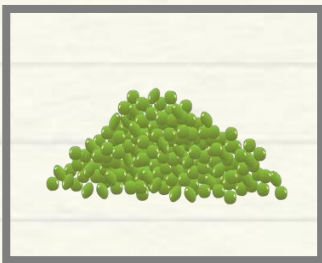
Lethargy



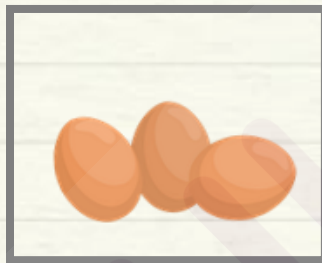
## 2. Macronutrients

### 2.1 Proteins

#### Sources and Functions



Gram



Eggs

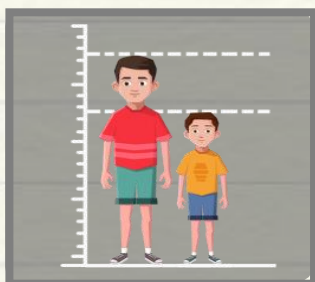


Fish

#### Functions:

- Help in maintaining proper functioning of the body
- Help in building the muscle mass
- Help to prevent various diseases

#### Effect of Deficiency of Proteins



Stunted growth



Discoloration of hair



Diarrhoea

## 2. Macronutrients

### 2.3 Fats

#### Sources and Functions



Groundnut



Butter



Oil

#### Functions:

- Help us to store energy for future use
- Act as a protective barrier against injuries
- Work as an insulator and thus, maintains body temperature

#### Effect of Deficiency of Fats



Dry Skin



Hair fall



## 2. Macronutrients

### Test for Carbohydrates – Iodine test



Bread

+



Iodine



Turns blue-black

### Test for Proteins – Biuret test



Protein powder

+

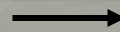


Caustic soda solution

+



Copper sulphate



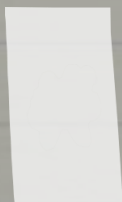
Violet-coloured solution

### Test for Fats – Paper test

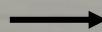


Butter

+



Paper



Oily spot

## 3. Micronutrients

### 3.1 Vitamins

#### Types

#### Sources

Vitamin A



Carrots, spinach, milk, etc.

Vitamin B



Crabs, fish, cheese, etc.

Vitamin C



Citrus fruits, papaya, etc.

Vitamin D



Cheese, eggs, butter, etc.



### 3. Micronutrients

#### Types

Vitamin A

Vitamin B

Vitamin C

Vitamin D

#### Functions

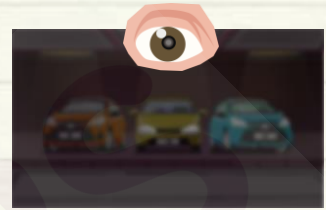
Important for healthy skin and eyes.

Helps in growth and preventing infections

Helps body to fight against many diseases

Helps our body to use calcium for bones and teeth.

#### Deficiency Diseases



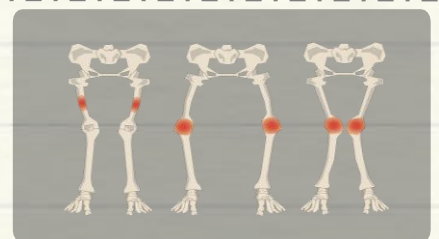
Night Blindness  
Blurred vision in low light



Beri-Beri  
Weak muscles and low energy



Scurvy  
Bleeding gums



Rickets  
Bones become soft and weak

## 3. Micronutrients

### 3.2 Minerals

Minerals	Sources
Calcium	 Milk, eggs, etc.
Iodine	 Salt, peas, etc.
Iron	 Spinach, fish, etc.



### 3. Micronutrients

#### Types

Calcium

#### Functions

Strengthening bones and teeth

#### Deficiency Diseases



Weak bones & teeth

Iodine

Ensures proper functioning of thyroid



Goitre

Iron

Essential for blood production



Anaemia

# 4. Roughage and Water

## 4.1 Sources and Functions

- Roughage is mainly provided by plant products in our foods.
- Roughage and water does not provide any nutrient to our body, but are an essential components of our food

### Roughage



Leafy vegetables, potatoes, fruits and wheat products.



Fruits, cucumbers, and tomatoes.

### Function

Helps in the removal of undigested food.

Helps in the absorption of nutrients and the removal of wastes.

## 5. Balanced Diet

### Definition

- Balanced diet consists of all the components of food in proper proportion for each meal.
- Not having balanced diet can lead to deficiency diseases, obesity, etc.



### Fun Facts



- Overcooking and excessive washing of vegetables lead to loss of nutrients.





# Mind Map



Roughage and Water

Balanced Diet

Components of Food

Nutrients and its Types

Micronutrients

Macronutrients

Vitamins

Minerals

Carbohydrates

Fats

Minerals