

# Minerals



# What are Minerals?

- Minerals are inorganic substances that are found in soil and rocks.
- They are essential nutrients that the body needs to survive and carry out daily functions and processes.

You receive minerals by eating plants that absorb them from the earth

- and by eating meat from animals, which graze on plants.



calcium



magnesium



potassium



iron



zinc

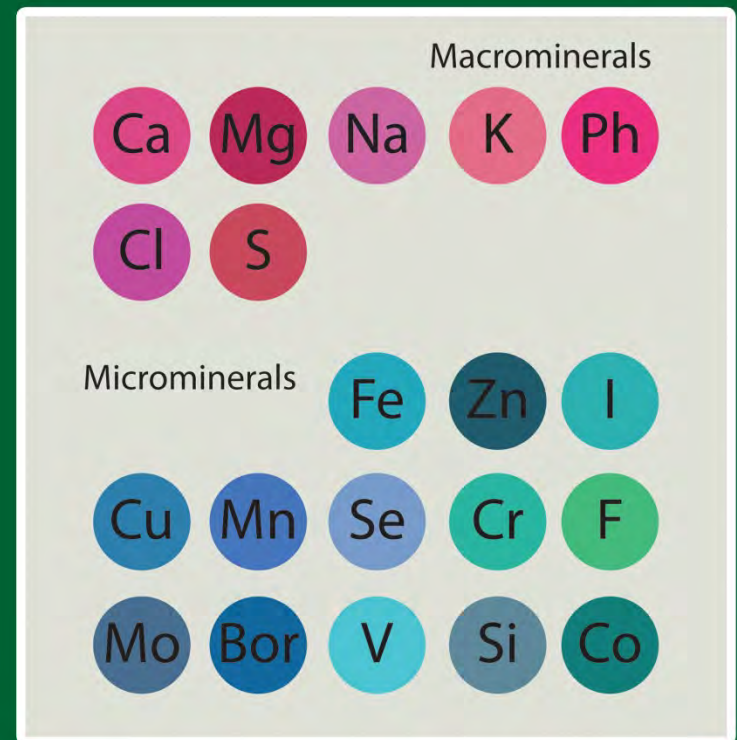
# Classification of Minerals?

- Macrominerals:

These are minerals your body requires in larger amounts. Typically in mg/day. e.g., Calcium, Phosphorous, Potassium & Magnesium.

- Microminerals:

These are minerals your body requires in smaller amounts. Typically in mcg/day. Iron, Copper, Zinc, Chromium, Selenium, etc.



# Macro Minerals

- Calcium :  
Source : Milk, Cheese, Yogurt, broccoli, fish.  
Function :  
Optimization of bone mass, Nerve impulses,  
Heart contraction, Muscle contraction.
- Magnesium :  
Source : Whole grains, seeds, nuts  
Function :  
Heart function,  
Development of bone and teeth.



# Macro Minerals

- Phosphorous :

Source : Milk, meat, fish, whole grains, corn, rye.

Function :

Maintenance and formation of teeth and bone, Acid base balance.



- Potassium :

Source : Bananas, tomatoes, spinach, orange, lentils, broccoli, potatoes with skin.

Function :

Acid base balance, Heart function, Nerve function.



# Micro Minerals

## Chromium :

### Source :

Mushrooms, meat, nuts, whole grains.

### Function :

Glucose and energy metabolism.



## Zinc :

### Source :

Cashews, Almonds, peanuts, beans, chicken.

### Function :

Immune system and enzyme function.



## Selenium :

### Source :

Fish, Dates, barley, wholegrains, eggs, chicken.

### Function :

Immune system and antioxidant



# Micro Minerals

## Iron :

### Source :

Beans, Potato, Broccoli,  
whole grains, liver, egg.

### Function :

Component of  
hemoglobin



## Copper :

### Source :

Kale, Peas, Pumpkin, fish,  
cashews, soya beans,  
wheat, sunflower seeds.

### Function :

Aids iron absorption.  
Enzyme function.



## Molybdenum :

### Source :

Milk, Dried beans

### Function :

Activation of  
enzymes.



# Summary

- Minerals are non-energy inorganic nutrients.
- Minerals have key roles in several body functions.
- One element augments the absorption and function of other.