Minerals

A mineral is a solid homogenous crystalline chemical element or compound that results from the inorganic processes of nature.

Minerals can be grouped as:-

A.Macro minerals:-

The minerals present at levels more than 0.05% in the human body are defined as *macro minerals*.

The Macro minerals needed by human body are calcium, Phosphorus, magnesium Sodium and potassium.

B.Micro minerals:-

The minerals present at levels less than 0.05% in the human body are defined as *micro minerals* or *trace elements*.Some of these are - iron, Iodine, zinc, copper, chlorine, selenium chromium etc.

❇️Macro minerals ❇️

💠Calcium💠

🔺Calcium is a macro mineral that is present in the body in large portion.

✴️**Sources:-**

Calcium is present in both plant and animal food abundantly in nature.

1.Plant source :-

Pulses like Bengal gram, Rajma, cereals and millets like Ragi, nuts and oilseed like mustard, poppy seeds, green leafy vegetables like amaranth, fenugreek etc contains high amount of calcium.

2.**Animal source**:-

Milk and milk products like cow milk or buffalo milk, cheese etc and fish and sea foods like shrimps, crab, rohu etc. contains high amounts of calcium.

💠**Functions:-**

Calcium has a number of important functions that makes it one of the most dispensable minerals.

Calcium has the following important functions:-

🔶***Bone formation :-***

Calcium helps in bone formation by forming two types of bone.

A.Cortical bones.

B.Trabecullar bone.

🔶***Nerve function :-***

Calcium is a key factor in normal transmission of nerve impulses.The movement of calcium into Nerve cells triggers the release of neurotransmitters at the junction between nerves.Insufficient calcium can inhibit nerve transmission.

🔶***Blood clotting :-***

Calcium is essential for the formation of fibrin,the fibrous protein that makes up the structure of blood clots.

🔶***Muscle contraction :-***

The flow of sodium and Calcium is crucial for mechanical contraction of muscle.

🔶***Cellular metabolism :-***

calcium helps in regulation of cellular metabolism.