



# Components of Food Nutrients and Their Importance for a Healthy Body





# What is Food and Why Do We Eat?



## Food's Role

Essential for all animals, including humans.



## Components

Food contains different components: nutrients.



## Nutrients Defined

Substances needed for growth and healthy body function.

# Six Main Components of Food



# Carbohydrates and Fats: Energy Sources

## Carbohydrates

Provide energy for daily activity.

**Sugar (Simple):** Fruits, honey, table sugar.

**Starch (Complex):** Rice, wheat, potato, bread.

## Fats

Also provide energy.

**Saturated:** Solid at room temp (butter, ghee).

**Unsaturated:** Liquid at room temp (vegetable oil).

**Sources:** Meat, oil, nuts, cheese, milk.

**Caution:** Excess leads to obesity, heart disease.





# Proteins: Building and Repairing



## Muscle Building

Proteins essential for muscle growth.



## Tissue Repair

Needed for repairing worn-out tissues.



## Body Composition

Muscles, organs, blood mostly protein.



## Sources

Animal (meat, fish, egg, milk) & Plant (pulses, soybeans, nuts).

# Vitamins: Essential for Body Function

## Function

Proper body function, healthy eyes, bones, teeth, gums.

## Types

**Fat-Soluble (A, D, E, K):** Stored in fat tissues. Vitamin D from sunlight.

**Water-Soluble (B, C):** Not stored, need regular supply.

## Key Vitamins & Roles

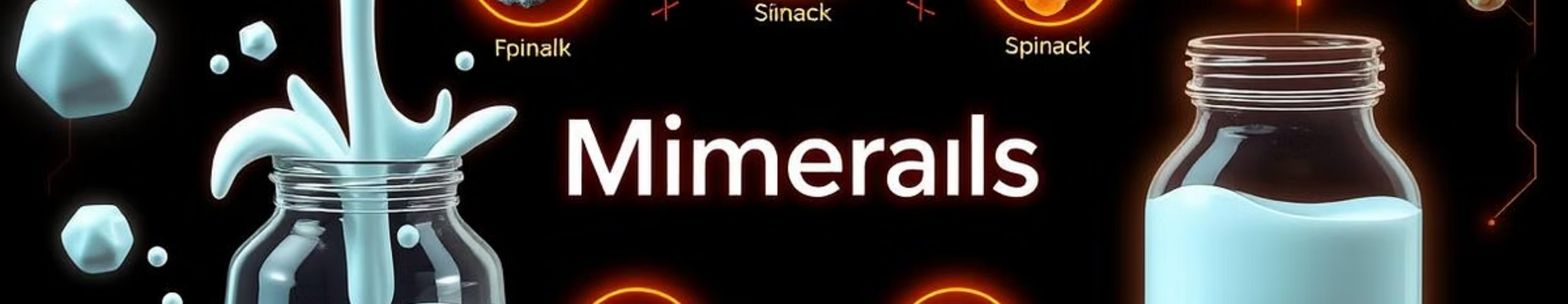
**Vitamin A:** Eyes, hair, skin health. Deficiency: Night blindness.

**Vitamin C:** Resists infections, healthy gums. Deficiency: Scurvy.

**Vitamin D:** Bone growth. Deficiency: Rickets.

**Vitamin K:** Blood clotting. Deficiency: Hemorrhage.





# Minerals: Supporting Health

## Function

Healthy body, bone/teeth formation, blood cells, heartbeat.

## Macrominerals

Needed in larger amounts: Calcium, magnesium, sodium, potassium.

## Trace Minerals

Needed in small amounts: Iron, zinc, copper, iodine.

## Durability

Cooking does not destroy minerals.

# Roughage, Water, and Balanced Diet

## Roughage (Fibers)

Undigested plant food, provides bulk.

**Function:** Healthy digestive system.

**Types:** Soluble (apple), Insoluble (whole grain).

**Deficiency:** Constipation.

## Water

70% of body weight, essential for health.

**Functions:** Transport, nutrient absorption, temperature regulation, digestion.

**Sources:** Drinks, fruits, vegetables.

**Intake:** 2-3 liters daily.

**Dehydration:** Loss of salts, weakness.

## Balanced Diet

Adequate nutrients, roughage, water.

**Importance:** Proper body function.

**Food Groups:** Milk, Meat, Fruits/Vegetables, Grain.