

Importance of Minerals

D.1 Human Nutrition

Why do we need minerals?

- Required in daily diet in small quantity
- Lacking minerals from a diet can cause deficiency diseases
- Important for building strong bones and teeth, blood, skin, hair, nerve function, muscle and for metabolic processes

Calcium deficiency

- Calcium can stabilise blood pressure and build strong bones and teeth
- Food rich in calcium: milk, cheese
- Increases the risk of developing diseases like osteoporosis and Hypocalcemia
- Consequences: bones (and nails) become brittle and fragile from loss of tissue, easy fracturing of bones, muscle cramps,

Iron Deficiency

- Iron is critical for producing hemoglobins
- Food rich in iron: red meat, beans
- May cause anemia
- Consequences: shortness of breath, chest pain, fatigue, headache, dizziness

Iodine Deficiency

- Iodine is needed by the thyroid gland for synthesis of the hormone thyroxin
- Food rich in Iodine: cranberries, strawberries
- May cause iodine deficiency disorder (IDD)
 - Pregnant women with IDD may give birth to children with permanent brain damage
 - For children after birth, it may affect their mental development and impaired intelligence