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QUESTION

Outline the toxicity value and deficiency manifestation of the following minerals

A. Potassium

B. Calcium

C. Magnesium

D. Chloride

E. Iron

ANSWERS

A. Potassium:

Toxicity value for potassium : Ingestion of potassium higher than 6.0mmol/L leads to severe toxicity.

Deficiency manifestation :

i. Muscle weakness

ii. Paralysis

iii. Mental confusion

iv. Acidosis

B. Calcium :

Toxicity value for calcium : ingestion of calcium higher than 2.63mmol/L leads to severe toxicity.

Deficiency manifestation :

i. Tetany

ii. Muscle Cramps

iii. Convulsion

iv. Osteoporosis

v. Rickets

C. Magnesium :

Toxicity value for magnesium : Ingestion of magnesium higher than 1.74 - 2.61mmol/L leads to severe toxicity.

Deficiency manifestation :

i. Muscle spasms

ii. Tetany

iii. Confusions

iv. Seizures

v. Poor calcium absorption

D. Chloride :

 Toxicity value : ingestion of more than 107mEq/L results in severe toxicity

Deficiency manifestation :

i. Deficiency secondary to vomiting and diarrhoea

E. Iron:

Toxicity value for iron: ingestion of more than

60mg/kg results in severe toxicity

Deficiency manifestation :

i. Microcytic anaemia