



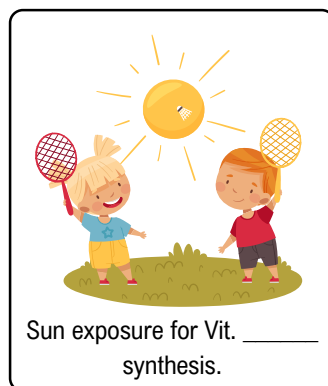
CONCEPT: ESSENTIAL MICRONUTRIENTS

◆ Vitamins and minerals are necessary in _____ amounts for various body processes.

5. Vitamins

◆ Essential _____ compounds, classified as _____ soluble or _____ soluble. Fat soluble Water soluble

Vitamins		
Fat Soluble 	<ul style="list-style-type: none"> Absorbed with aid of _____ Excess stored in _____ and fat tissues. 	<ul style="list-style-type: none"> A, D, E, K <div style="border: 1px solid black; padding: 2px; display: inline-block;"> A D E K </div>
Water Soluble 	<ul style="list-style-type: none"> Absorbed _____ into bloodstream. Excess excreted through urine. 	<ul style="list-style-type: none"> All others





◆ **Folate (B₉)**: essential for _____ synthesis and fetal development.

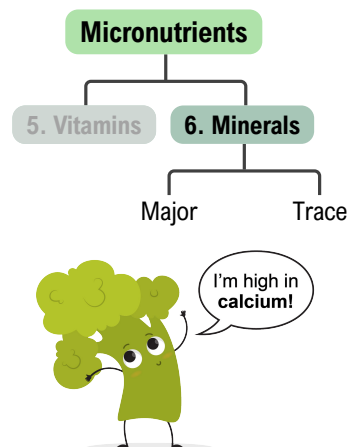
▸ FDA requires all grain products to be fortified with folic acid.

6. Minerals

◆ Essential _____ organic compounds, classified as _____ or _____ minerals.

Minerals		
 Major	<ul style="list-style-type: none"> Need > 100mg/day 	<ul style="list-style-type: none"> _____ : regulates fluid balance.
 Trace	<ul style="list-style-type: none"> Need a very _____ amount. 	<ul style="list-style-type: none"> Iron*: helps transport O₂ in blood.

***Note:** the most _____ nutrient deficiency.



CONCEPT: ESSENTIAL MICRONUTRIENTS

EXAMPLE

Why are vitamins and minerals classified as essential micronutrients?

- a) Can be synthesized in enough quantities by the body.
- b) Although needed in small quantities, they are essential for immunity, metabolism and overall health.
- c) Are essential as direct energy sources.
- d) Are needed in large amounts to maintain overall health.

PRACTICE

Which vitamin can become toxic to the body if consumed in more amount than needed?

- | | | | |
|--------------|--------------|--------------|------------|
| a) Vitamin B | b) Vitamin C | c) Vitamin E | d) Calcium |
|--------------|--------------|--------------|------------|

PRACTICE

Which of the following statements about vitamins and minerals is incorrect?

- a) Folic acid is added to bread, cereals and pastas to replace lost fiber during processing.
- b) Green leafy vegetables are an excellent source of calcium.
- c) Iron deficiency is the most common nutrient deficiency worldwide.
- d) Due to limited sun exposure, dietary sources of vitamin D are important.