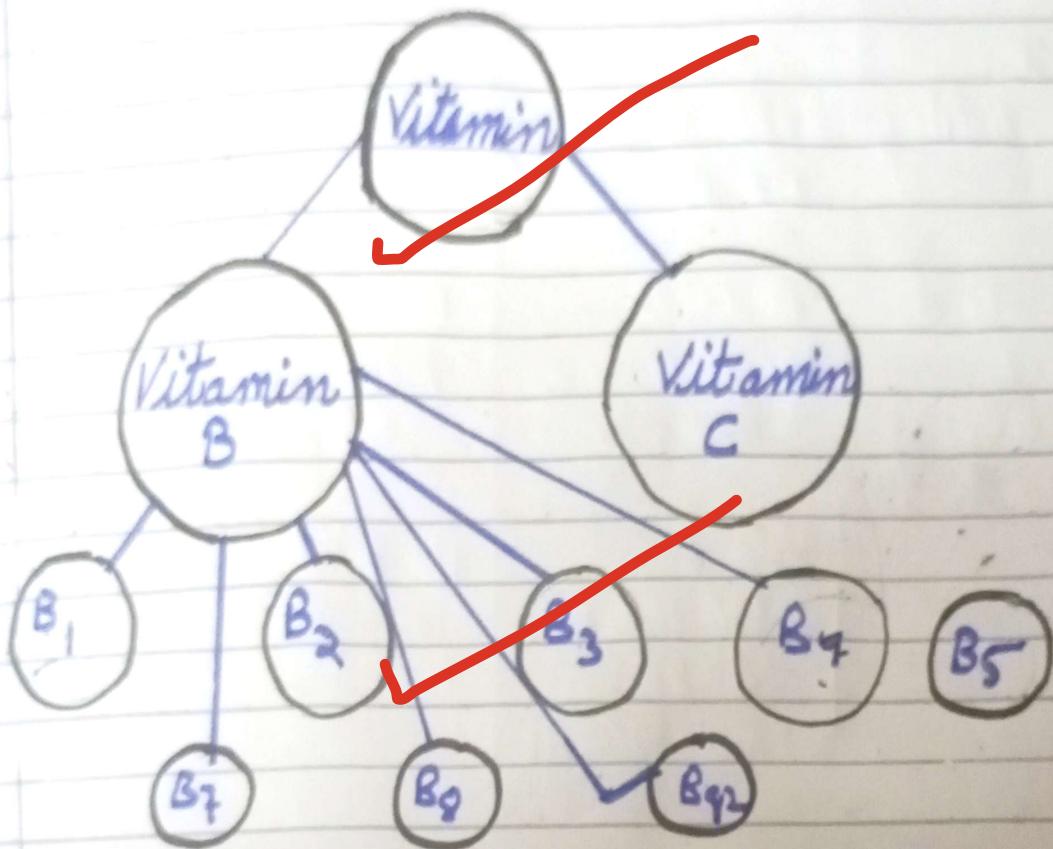


Q) Write a note on water-soluble vitamins?

Vitamins are divided into two categories

Vitamin B

2- Vitamin C



Vitamin B₁
Scientific name
Thiamine
RDA = 1.1-1.4mg

Disease
Beri-Beri

Wet beri-beri
Dry beri-beri
Infant beri-beri

It is anti-

beriberi at anti-nutritive

B₂
Scientific name
Riboflavin
RDA = 0.6mg/day

Diseases:
Angular stomatitis

Source - Milk,

Egg, meat

B₃
Scientific name
Niacin/nicotinamide

Diseases
Pellagra
also called
as 4- D

Disease

D = Diarrhoea

D = Dermatitis

D = Dermatitis

D = Death

B₅

Called as
Pentose
acid

Source:
liver, kidney,
heart

also called
Disease
Foot burning
disease

B₆

Called as
Pyridoxine

Source: Egg,
milk, rice,
cereals

Disease
Myelocytic
Anemia

Help in
Carbohydrates,
fat, protein
metabolism

B₇

Called
as Biotin

Source: Egg, milk,
meat

Disease
hair loss,
skin dry

Help in carbohydrate
fat, protein, metabolism

* Vitamin C

Water soluble vitamin,
it is present in amla, lime and
also in fruits

Its scientific name is = Ascorbic acid
Diseases: Scurvy, Scurvy, systemic anemia.

B₁₂

Called as
cyano-cobal
amine.

Help in
formation of
folic acid

Help in maturation
of RBC

Diseases
Pernicious
disease.

4

Q) Write a brief note on Minerals?

Minerals: These are inorganic compound. They intake from diet. They make body stronger and protect body from disease.

Types of mineral

need more than 100 mg/day

Macro-Minerals

- ① Calcium
- ② Phosphorus
- ③ Sodium
- ④ Phosphate

Trace Mineral

- Fluoride
- Zinc
- Iodine
- Copper

less than 100 mg/day

Micro-Minerals

Iron

→ required in less quantity

: Macro minerals :

Calcium

Macro mineral

RDA = 500-600 mg/day

Pregnancy = 1000 mg/day

Present in Bone and teeth

Phosphorus

Macro mineral

RDA = 200-300 mg

- 1000 mg/day

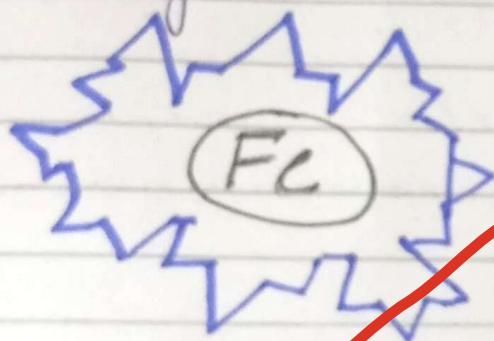
Present in DNA, RNA, Bones and teeth

Deficiency	Hypocalcemia less than 8.5 mg/dl curly Osteoporosis	<ol style="list-style-type: none"> DNA and RNA structure malfunctioning Teeth demineralization Bone demineralization
Tortony disease	when less than 6 mg Calcium	

Micro Mineral

IRON

Presence	Sources	Deficiency	Hemoglobin
Iron is only 4 gm present in our body	Beetroot, vegetable, leaf fruits, meat	Anemia	Iron is the main component present in Hemoglobin
Iron is micro mineral and require less than 100 mg			



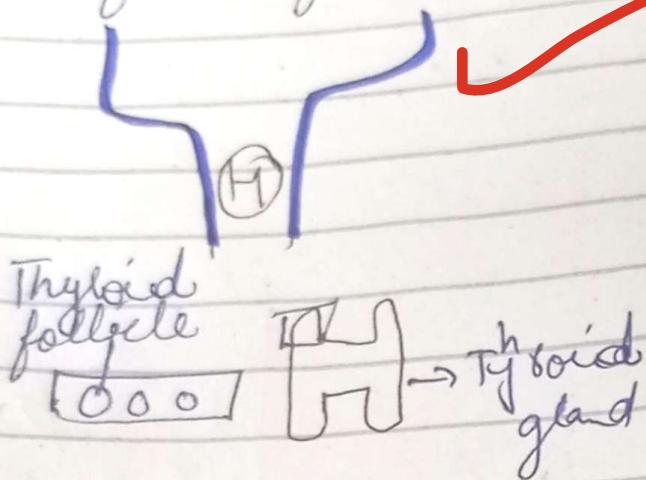
Iron is present in RBC and absorb in Pedomenum.

Trace Molecule

Iodine

Trace mineral

Iodine is required
from the prevention
of Thyroid disease



~~T₃ and T₄ present~~
in Thyroid follicles
in Thyroid gland

Iodine attach with
 T_2 and T_4 to form
 T_3 iodo tyrosine and
 $Tetra$ - iodo tyrosine

Fluoride

Trace mineral
Present 0.8 mg
in drinking
water

RDA = 0.5-0.8 mg

If fluorine is
present more
than 300 mg in
body it will
cause Endemic
porosis

~~Hornowides~~

Dietary Fibers

This is indigestible carbohydrate like cellulose, gums.

Plant source: vegetables, fruit and grain

Significance of dietary fibers:

- Absorb water and Tes viscoelastic increase gastric emptying

Mouth: Stimulates Saliva excretion
Stomach: delays stomach emptying
Colon: helps in absorption of water and minerals
small intestine: Helps in delaying absorption

: Benefits on Health:

- ① It helps to absorb H₂O and increases bulk of stool.
- ② Help to prevent from constipation and piles.
- ③ Help to prevent cholesterol level. Fenugreek reduces cholesterol level 40% fibers present in it.
- ④ It binds with bile and prevent from extraction.
- ⑤ It helps to extract out toxic and carcinogenic compounds.

POOS On Health

- ① It can extract out essential vitamins and minerals from body.

good attempt. but the answer is lengthy and might affect your time management,