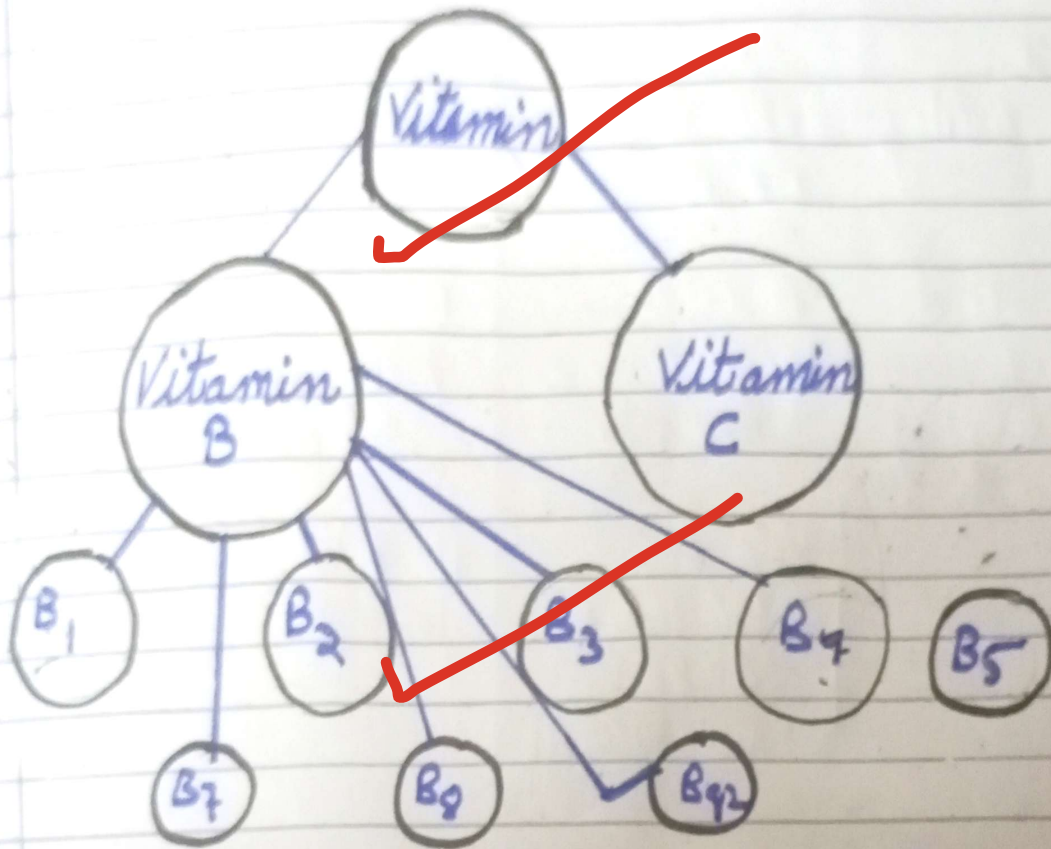


Q) Write a note on water soluble vitamins?

Water soluble vitamins are divided into two categories

1- Vitamin B

2- Vitamin C



| Vitamin B ₁ | B ₂ | B ₃ |
|--|--|--|
| Scientific name Thiamine | Scientific name Riboflavin | Scientific name Nicotinic acid |
| RDA = 1.1-1.4mg | RDA = 0.6mg/day | |
| Disease Beri-Beri | Diseases: Angular stomatitis | Diseases Pellagra also called as 4-D |
| Wet beri-beri Dry beri-beri infant beri-beri | Source = Milk, egg, meat | Disease D = Diarrhea D = Dermatitis D = Dermatitis D = Death |
| It is anti-beriberi or anti- neurotic vitamin | | |

B₅

Called as
Pantothenic acid

Source:
liver, kidney,
heart

~~also called~~
Disease
Foot burning
disease

B₆

Called as
Pyridoxine

Source: Egg,
milk, rice,
cereals

Disease
~~Hypochloric~~
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
ascorbic fruits

Its Scientific name is = Ascorbic acid
Diseases: ✓ Scurvy, Systemic anemia.

B₁₂

Called as
Cyanocobal
amine.

Help in
formation of
folie acid

Help in maturation
of RBC

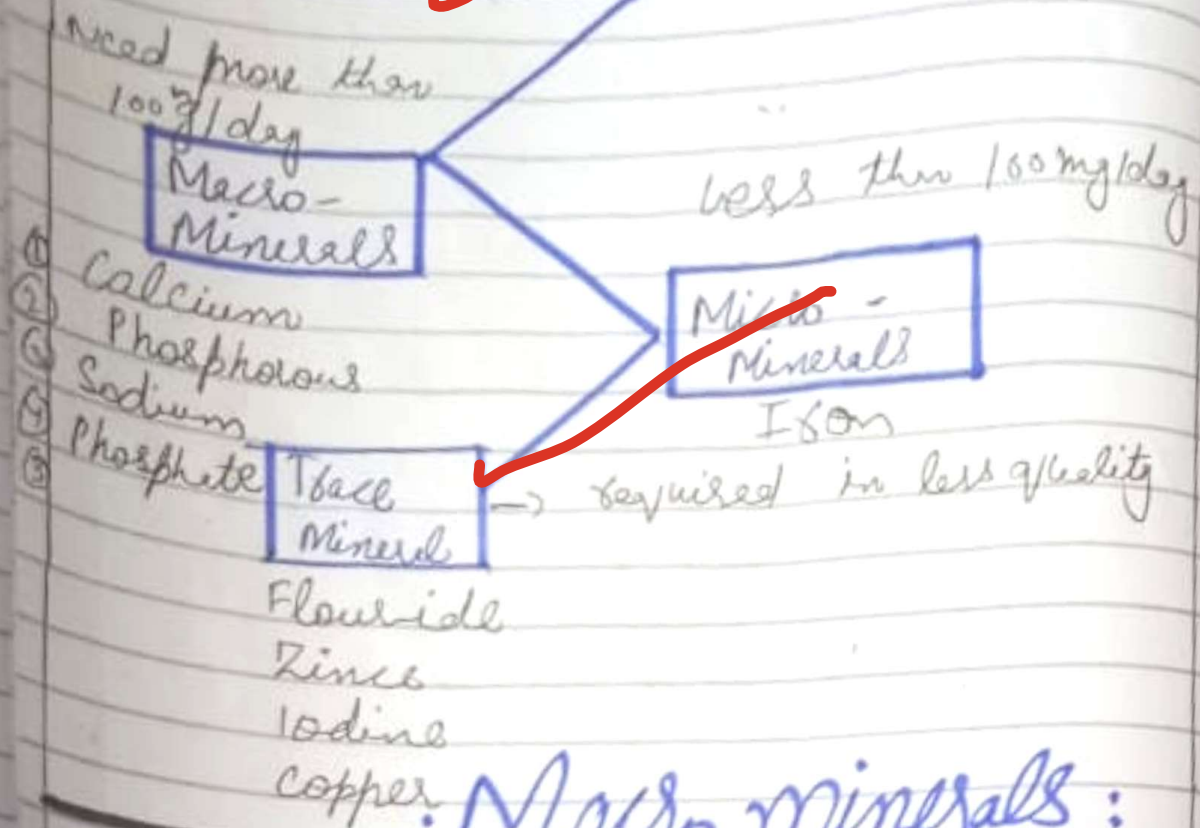
Disease
Pernicious
disease.

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 diseases.

Types of mineral



: Macro minerals :

Calcium

Macro mineral
RDA = 500-600mg/day
Pregnancy = 1000mg/day

Present in Bones and teeth

Phosphorous

Macro mineral
RDA = 200-300mg
1000mg/day

Present in DNA, RNA, Bones and teeth

Deficiency

Hypocalcaemia
less than 2.5 mg/dl
serum Osteoporosis

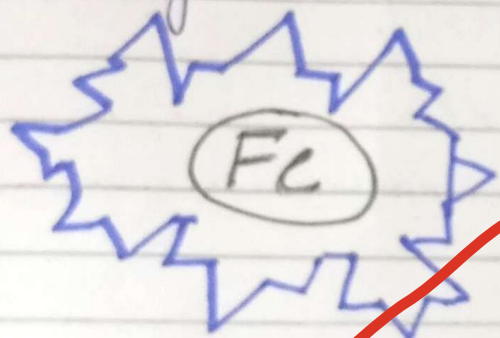
Tertiary disease
when less than
6 mg Calcium

① DNA and RNA structure
malfunctioning

② Teeth demineralization
③ Bone demineralization

Micro Mineral IRON

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



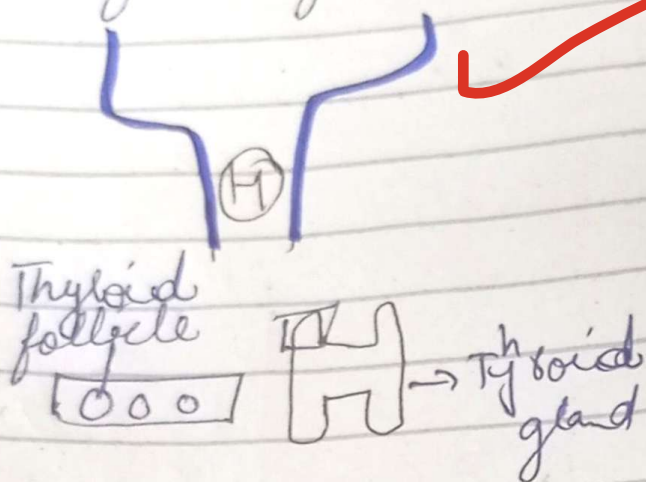
Iron is present in RBC and absorb in Duodenum.

Trace molecule

Iodine

Trace mineral

Iodine is required from the prevention of Thyroid disease



T_3 and T_4 present in Thyroid follicles in Thyroid gland

Iodine attach with I_2 and T_4 to form Tri-iodo thyroxine and Tetra-iodo thyroxine

Flouride

Trace mineral
Present 0.8 mg in drinking water

RDA = 0.5-0.8 mg

If flourine is present more than 300 mg in body it will cause **Endemic fluorosis**

Homework

Dietary Fibers

This is indigestible carbohydrates
like cellulose, gums.

Plant Source: ✓ Vegetables, fruits and grains

Significance of Dietary fibers:

• Absorb water and Ter viscosit
increase gastric emptying

Mouth: Stimulates Saliva excretion

Stomach: delays stomach emptying

Colon: help in absorption

Small intestine: Helps in delaying
absorption of water and minerals

: Benefits on Health:

- ① It helps to absorb H_2O and increases bulk of stool.
- ② Help to prevent from constipation and Piles
- ③ Help to prevent cholesterol level. Free fengreek reduces cholesterol level 40% fibers present in it.
- ④ It binds with Bile and prevents from extraction.
- ⑤ It helps to extract out toxic and carcinogenic compounds.

Pros 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,