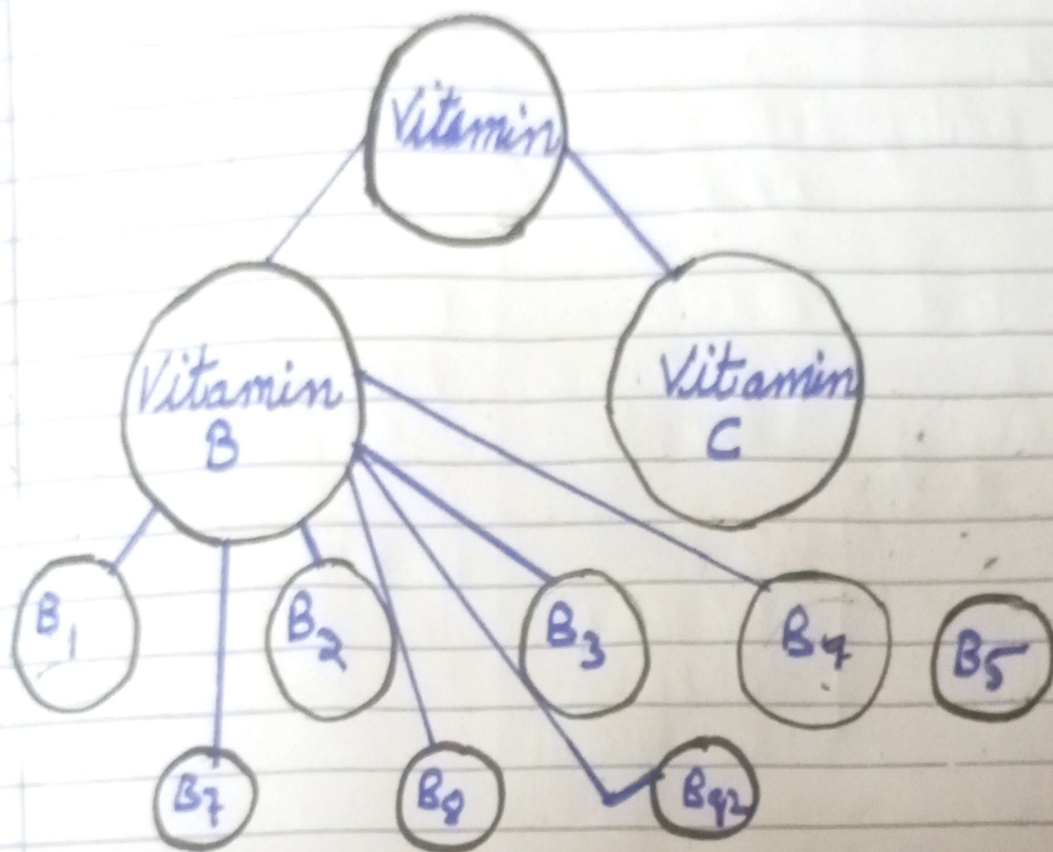


Q) Write a note on water soluble vitamins?

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-neuritic 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,
Hypochromic
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

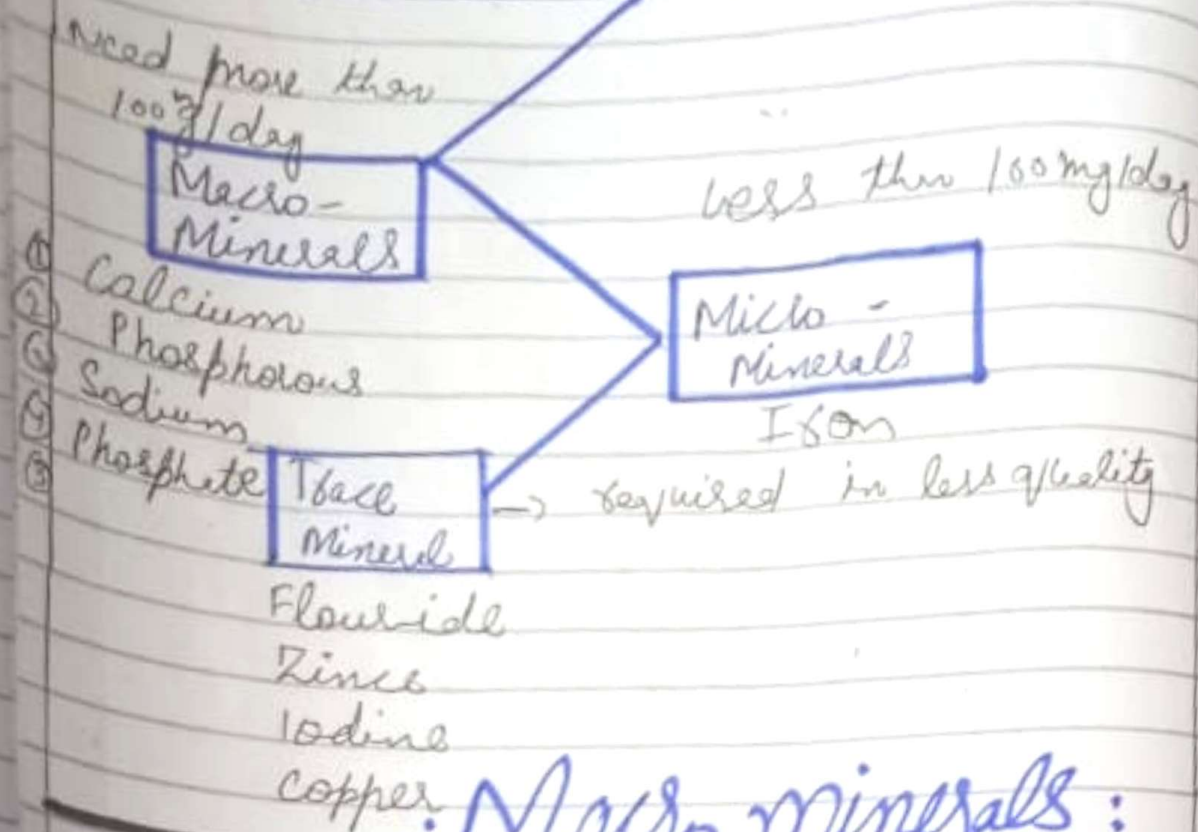
Help in maturation
of RBC

Disease
Pernicious
disease.

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 = 1200mg/day

Present in Bones and teeth

Phosphorus

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			



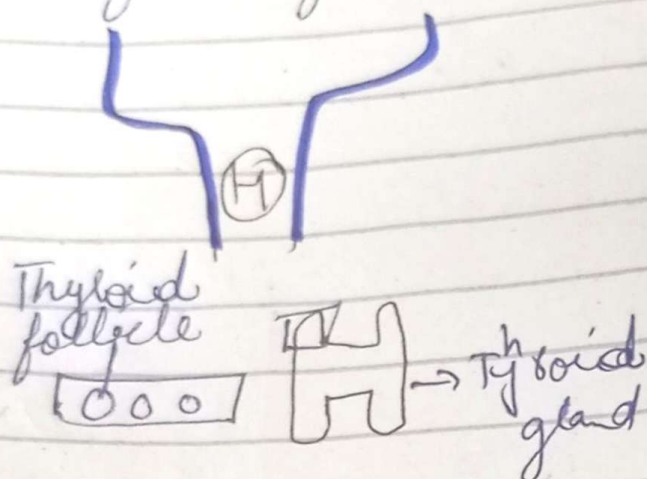
Iron is present in RBC and absorb in Duodenum.

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** **Neurosis**

Homework

Dietary Fibers

This is indigestible carbohydrates
like cellulose, gums.

Plant Source: vegetables, fruits and grains

Significance of Dietary fibers:

- Absorb water and Ter viscositas
increase gastric emptying

Mouth: Stimulates Saliva excretion
Stomach: delays stomach emptying
Colon: help in reabsorption
of water and minerals
Small intestine: Helps in delaying
absorption

: 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.