

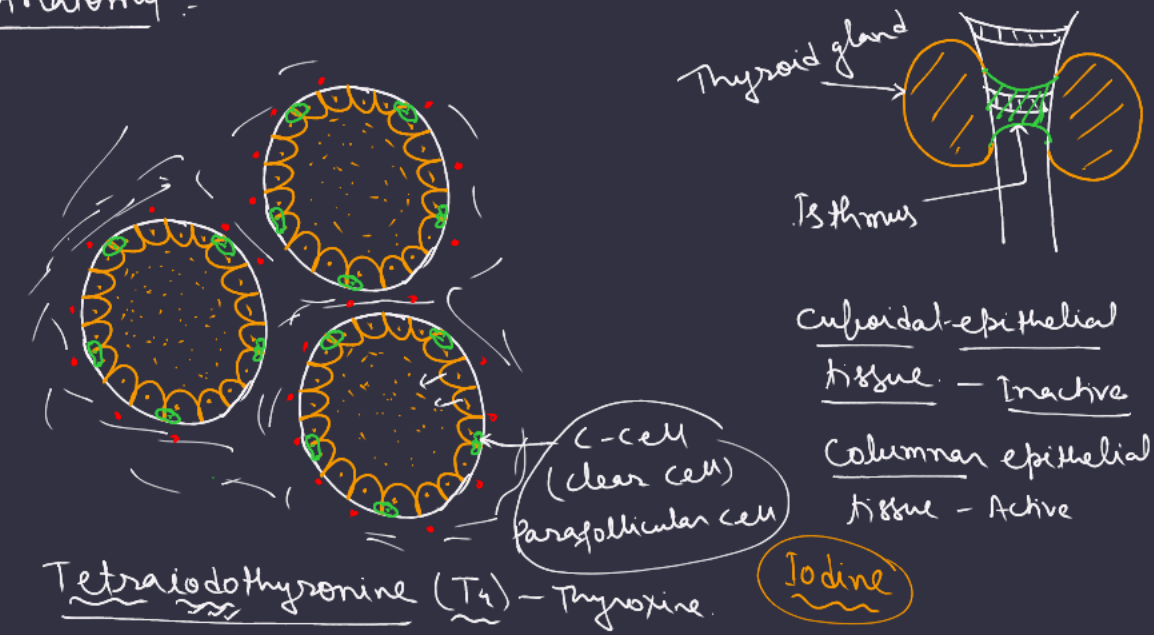
Thyroid gland

→ Largest endocrine gland

Origin - Endodermal in origin

Location - Present on either side of trachea in neck region.

Anatomy:-



Tetraiodothyronine (T_4) - Thyroxine

Triiodothyronine (T_3)

C-cell → Calcitonin

$T_4 : T_3 = 19 : 1$

Deiodinase - Brain Liver & kidney $T_4 \rightarrow T_3$ - Release blood

T_4 (Inactive form) → T_3 (Active form)

Derivative of amino acid "Tyrosine"

Function:-

→ Metamorphosis.

→ Development & formation of organ in pre-natal life & in post-natal life.

→ Development of CNS.

Oxidative metabolism:- Oxygen metabolism - Increased.
↳ Except - Brain & Testis.

→ It increases lipolysis (Metabolism of fat)

→ BMR - Increases.

Basal metabolism Rate - Increased.

[160 KJ/hour]

Metabolism of sugar is increased

→ Adrenaline - Adrenal gland or Supra-renal gland or 3rd gland or 4th gland or Gland of emergency.

↳ Glycogenolysis - Increases.
(Breaking of glycogen)

↳ Gluconeogenesis - Increases.

Glucose New generate

$1 m^2$ - Body surface
↓
Energy
↓
One hour.

Disorder ! →

Goitre : Hypothyroidism

↳ size of thyroid gland is increased.

