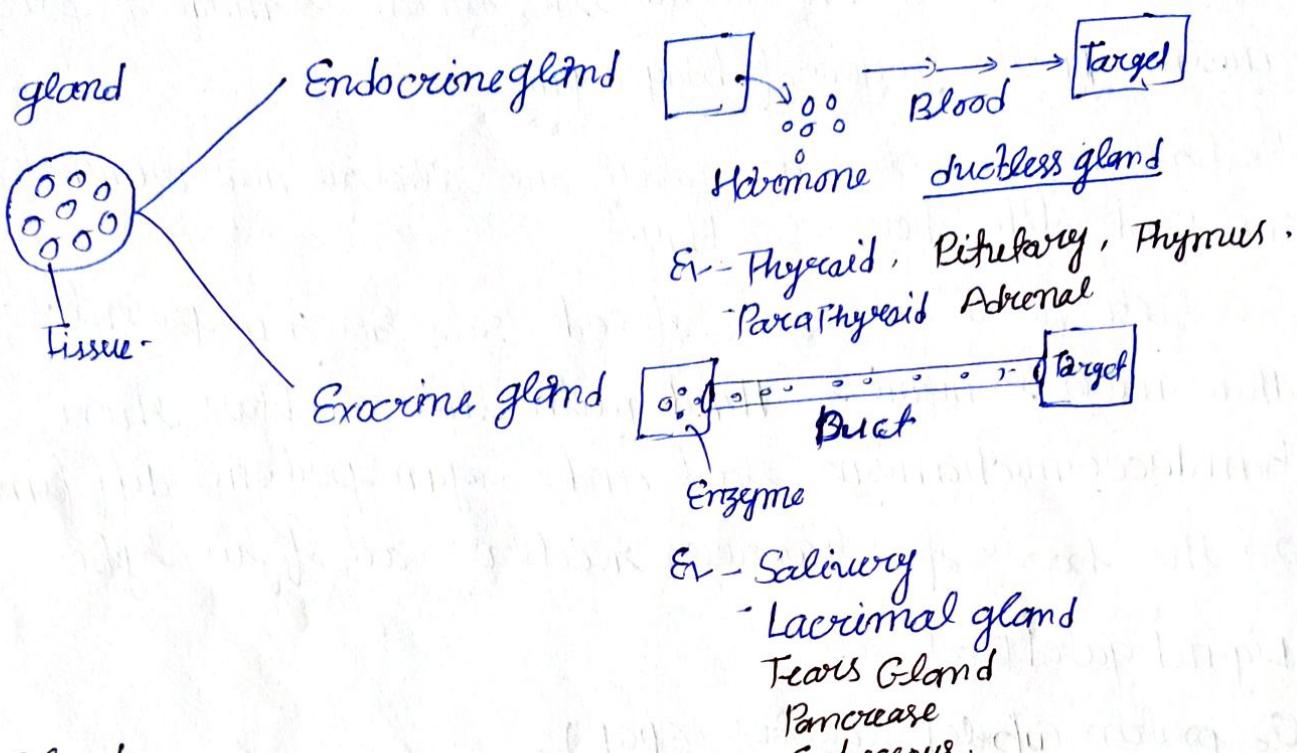


Unit-4 Endocrine System:-



Gland :-

Cells are combined and they form tissue. The main function of these cells to secrete certain chemical like Enzyme and Hormone.

Endocrine Gland :- Endocrine gland is a ductless gland that transmits its chemical to the target by the help of blood. and the chemical it's released is the name of the hormone.

Exocrine Gland :- The tube is found in it and the exocrine gland transmits its chemical through the duct to the target and the chemical which releases it is named enzyme.

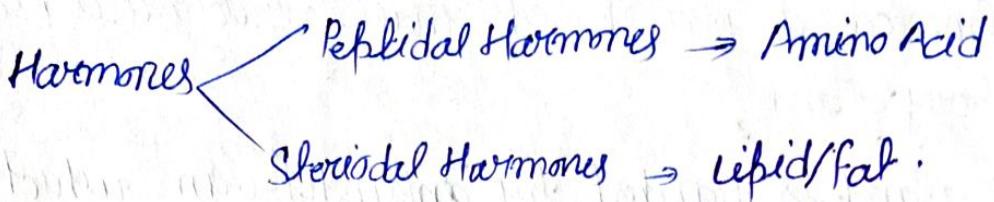
What is Hormone

Hormones are the chemical messenger which is released from the endocrine gland.

- These hormones are released in blood stream and reaches into the target side through blood.

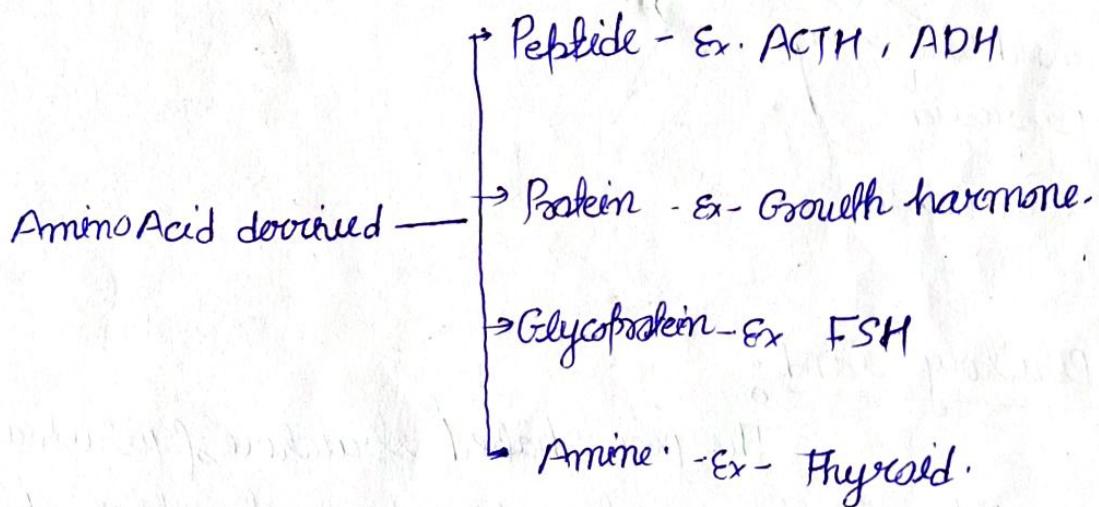
- Hormones play a critical role in the growth and development, metabolism, reproduction, and behavior.

On the basis of chemical nature hormones are of two type.



Hormones derived from amino acid :-

Amino acids are used to synthesize diff. hormone and they can further classify into following type.



Amino Acid derived from lipid :-

Lipid and cholesterol is used as precursor for diff. steroid hormones.

Ex - Estrogen, Progesterone, Testosterone

Endocrine gland and their hormone :-

- i) Pituitary Gland.
- ii) Thyroid Gland.
- iii) Parathyroid Gland
- iv) Adrenal Gland

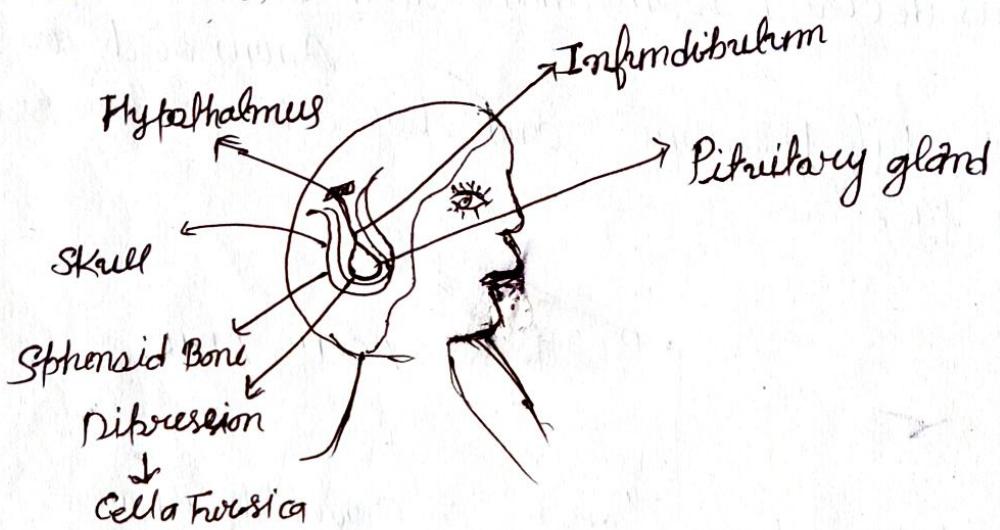
- v) Pancreas Gland
- vi) Pineal Gland
- vii) Thymus Gland

1) Pituitary Gland :-

Pituitary gland is situated in the sphenoid bone of skull.

In sphenoid bone a depression is present which is k/a sella turcica
In sella turcica a pea shaped small structure is present which is k/a pituitary gland.

- pituitary gland is hanged by infundibulum which is present on the roof of hypothalamus.



Structure of Pituitary Gland :-

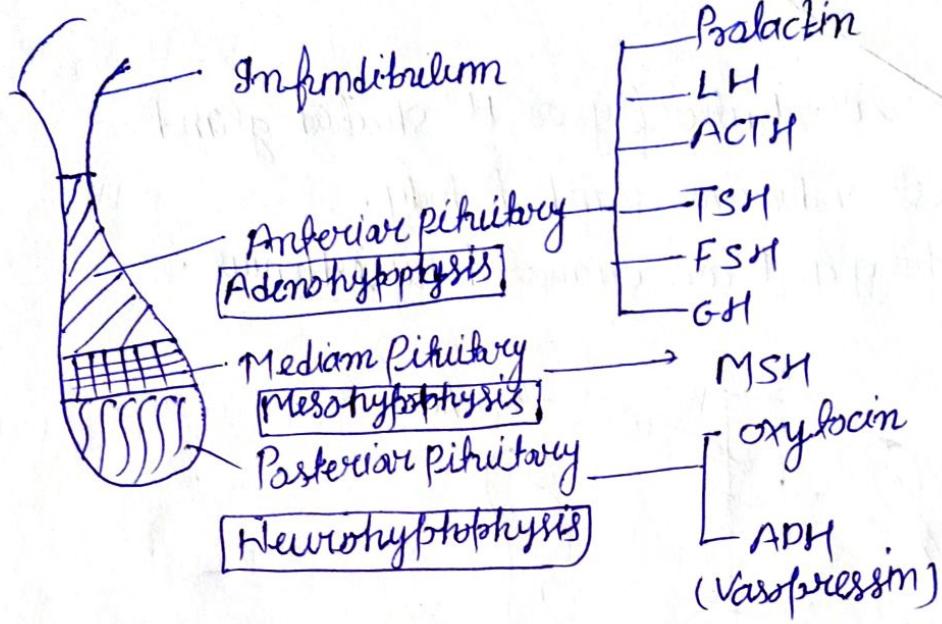
The pea shaped structure of pituitary gland is divided into three part and each part release diff diff hormone.

i) Anterior Pituitary (Adenohypophysis)

ii) Median Pituitary (Merohypophysis)

iii) Posterior Pituitary (Neurohypophysis)

Each part of pituitary gland release following hormones.

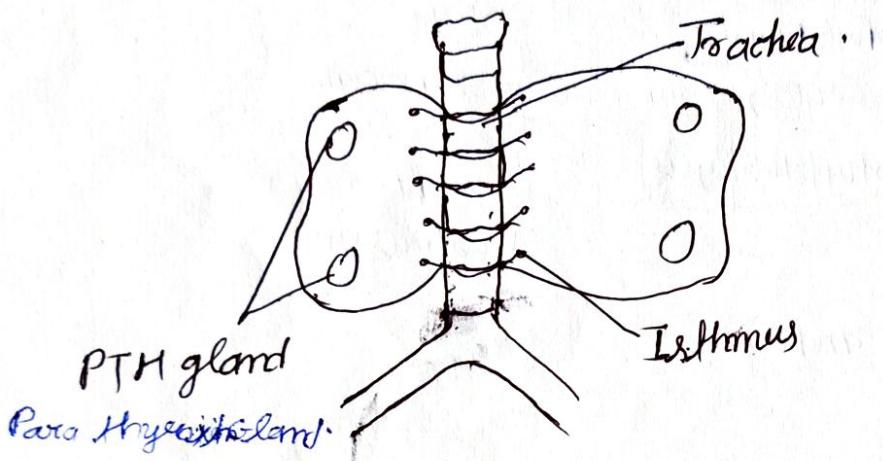


Function of Pituitary gland

Thyroid Gland

Thyroid gland is situated in the neck and both side of trachea.

- It is a pink color, butterfly or 'H' shaped gland
- It is the largest endocrine gland of body.
- Both part of this gland are connected by Isthmus.



The weight of Thyroid gland is about 25g.

Hormones of Thyroid gland =