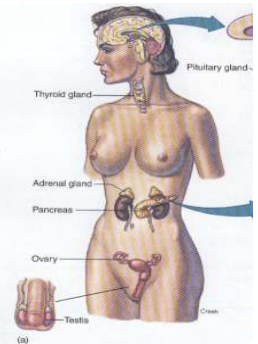


Endocrine System

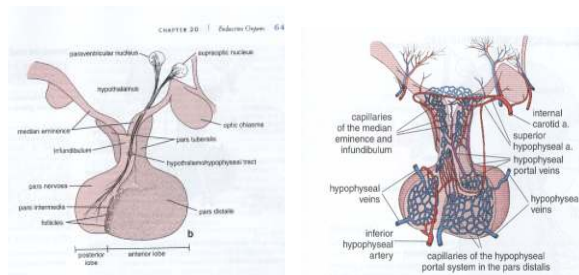
- Hypophysis
- Thyroid and Parathyroid glands
- Adrenal Glands

Overview of the endocrine System

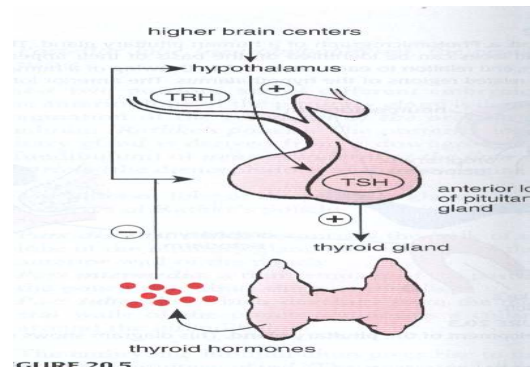
- Endocrine glands secrete hormones directly into the blood stream.
- Hormones are chemical activators, controlling many vital functions of the body.
- The endocrine System is depicted in the following diagram.



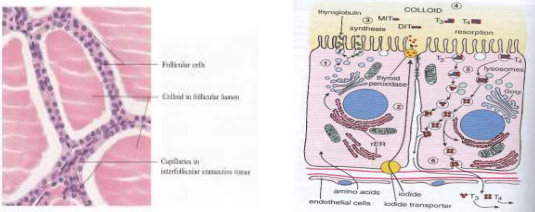
Pituitary Gland (Hypophysis) 1. Structure



Pituitary Gland (Hypophysis) 2. Functional Mechanism

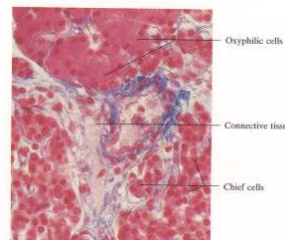


Thyroid Gland



- Thyroid hormone, thyroxine has a metabolic effect
- Also necessary for growth, maturation and mental activity.

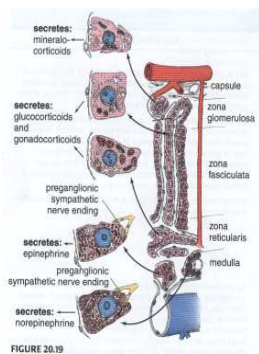
Parathyroid Gland



- Parathormone is responsible for maintaining the plasma calcium levels of about 10 mg/100 ml of blood.

Adrenal Gland

- Adrenal gland consists of right and left gland resting on the upper surface of each kidney.
- Like hypophysis, adrenal gland is functionally two distinct glands: the outer epithelial adrenal cortex and the adrenal medulla.
- Adrenal has a rich network of capillaries and sinusoids around the cortical and medullary cells (dia)



Endocrine Tumors

- Adenocarcinoma of the thyroid
- Pheochromocytoma (Chromaffin Cell tumor of the adrenal medulla)