

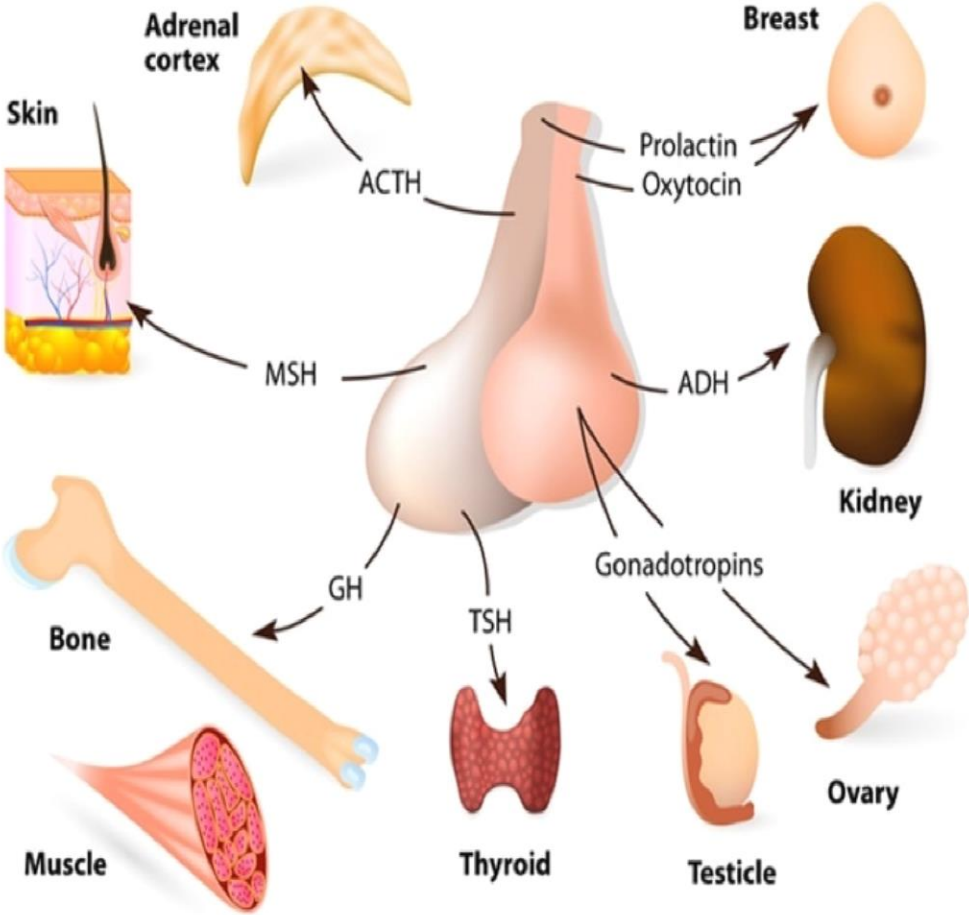
Topic: Pituitary Gland
Class: B.Sc Part –III (Hons.)
Paper: V
Group – A

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PITUITARY GLAND



- **Hormones of Adenohypophysis**
- **Somato-Tropic Hormone (STH) or GH**
- **Thyroid Stimulation Hormone (TSH)**
- **Adreno – Cortico-Tropic Hormone(ACTH)**
- **Follicle Stimulating Hormone (FSH)**
- **Luteinizing Hormone (LH)**
- **Prolactin (Galactin or LTH)**
- **Melanocyte Stimulating Hormone (MSH)**
- **Somato – Tropic Hormone (Growth Hormone)**
- Growth hormone (GH) promotes the movement of amino acids into cells and the incorporation of these amino into proteins, thus promoting overall tissue and organ growth.

- Growth hormone exerts its cell division stimulating (mitogenic) effect not directly on cells but rather indirectly through the mediation of a mitogen whose synthesis and release are induced by growth hormone.
- This mitogen is called insulin-like growth factor 1 (IGF-1). Under the influence of growth hormone IGF-1 is secreted by the liver, enters the blood and functions as a hormone.
- **Thyrotropin**
- Thyroid Stimulating Hormone (TSH) stimulates the synthesis and secretion of hormones produced by thyroid gland.
- **Adreno - Cortico - Tropic Hormone (ACTH)**
- Adrenocorticotrophic hormone (ACTH) is a polypeptide hormone synthesized in the anterior lobe of the pituitary gland in response to the corticotrophin - releasing hormone (CRH) released by the hypothalamus. It consists of 39

- **Follicle Stimulating Hormone**

- Follicle- stimulating hormone stimulates gamete(ova and sperm) Production in both sexes. In females, it stimulates growth and development of ovarian follicles, within which the ova or eggs, develop. It also promotes secretion of the **estrogen** by the ovaries. In males , FSH targets seminiferous tubules in testes and stimulates sperm production.

- **Luteinizing hormone (LH)**

- In females, LH triggers ovulation from Graafian follicles with the release of a secondary oocyte (future ovum) by an ovary. LH also stimulates formation of the corpus luteum (structure formed after ovulation) in the ovary and the secretion of **progesterone** by the corpus luteum. In males, it is called interstitial cell stimulating hormone (ICSH). It stimulates cells in the testes to secrete **testosterone**. LH and FSH stimulate gonadal activity and hence are called **gonadotropins**.