

MODULE 1 L03

Hypothalamic Control of the Pituitary Gland

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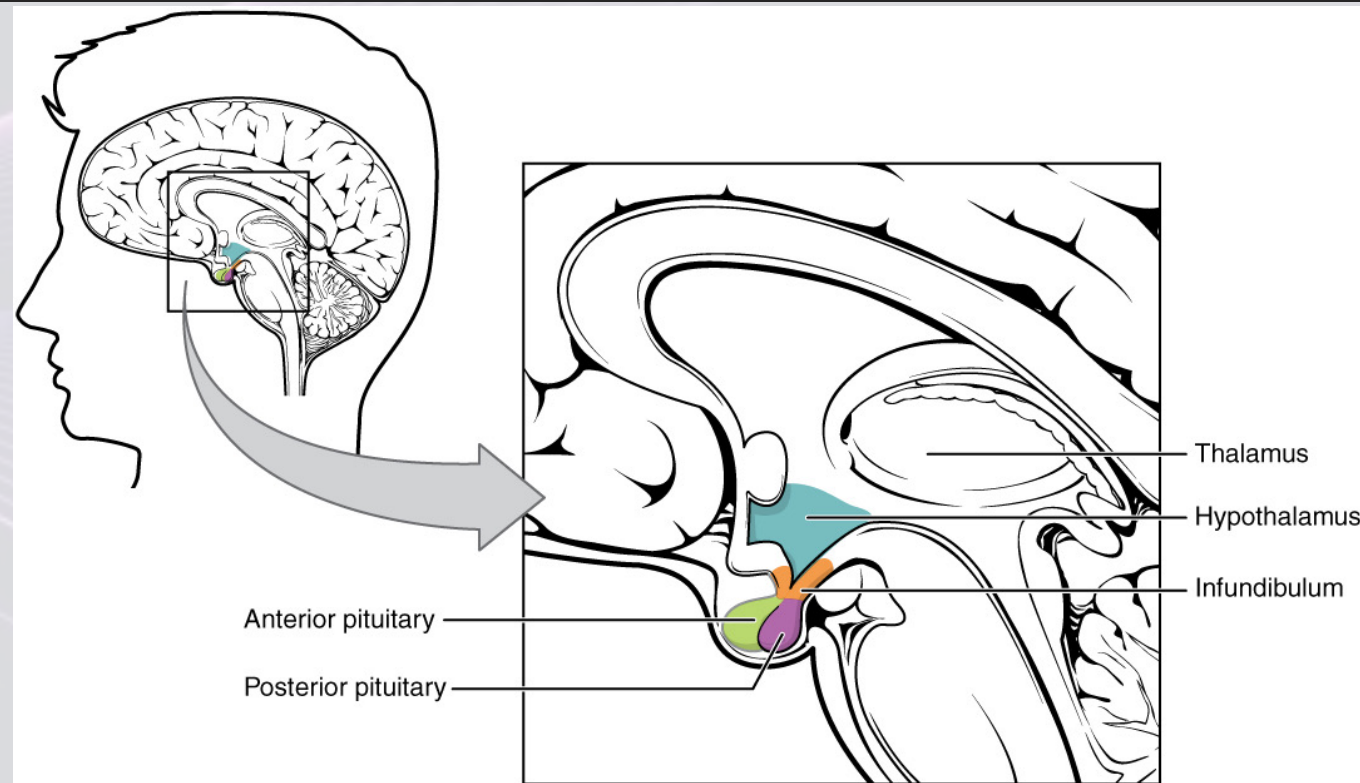
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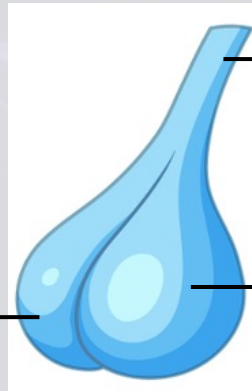
3. Hypothalamic Control of Pituitary Gland

Hypothalamus

- Controls:
 - ❖ Homeostasis
 - ❖ Hormone release
- Hypothalamus + pituitary gland
 - ❖ Regulate for example growth and metabolism



Pituitary Gland



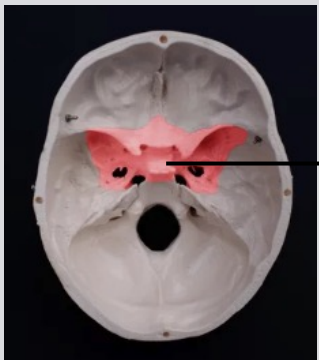
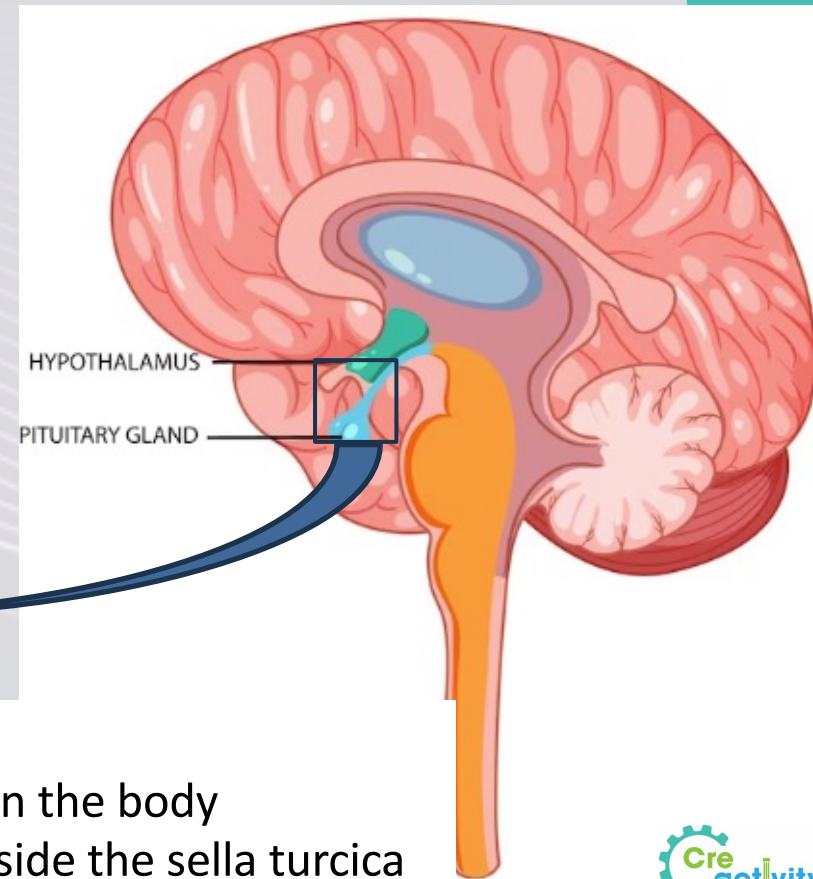
Infundibulum

Posterior pituitary lobe
(neurohypophysis)

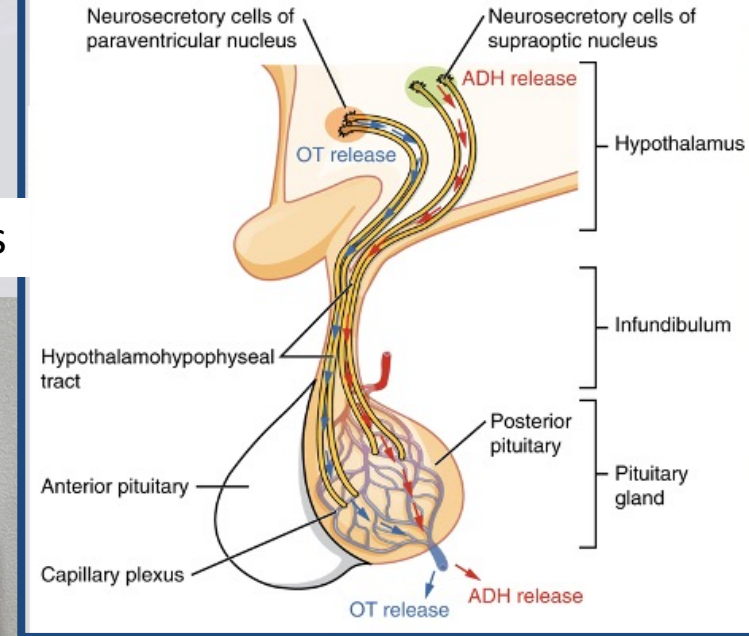
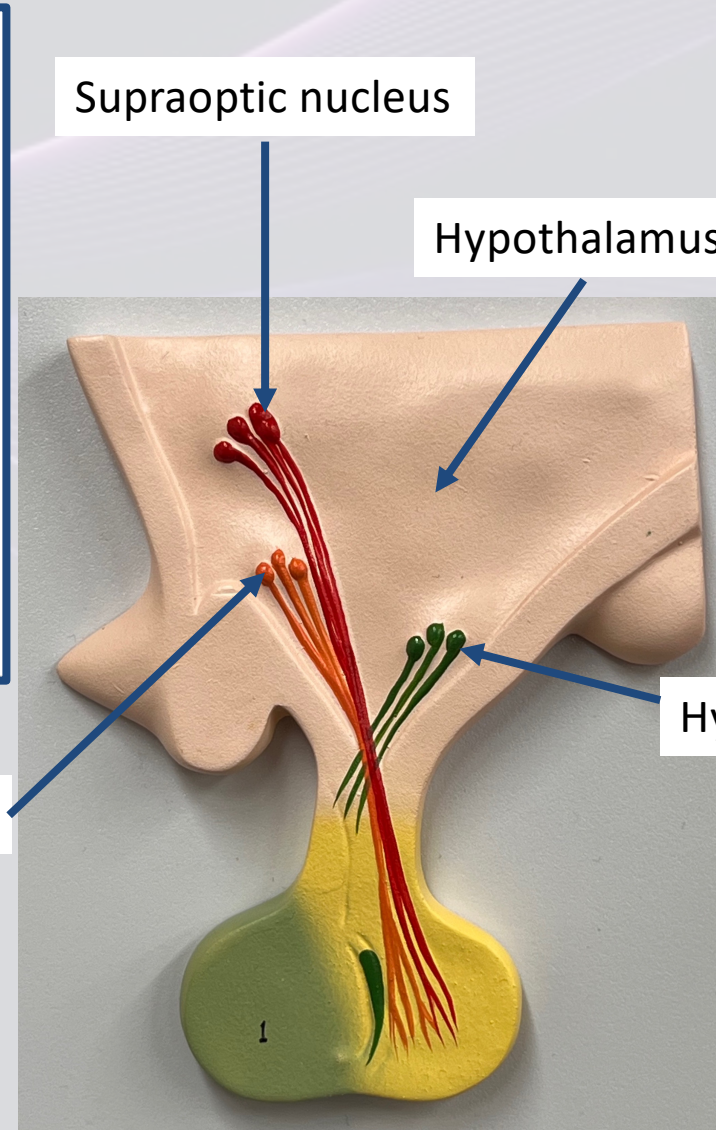
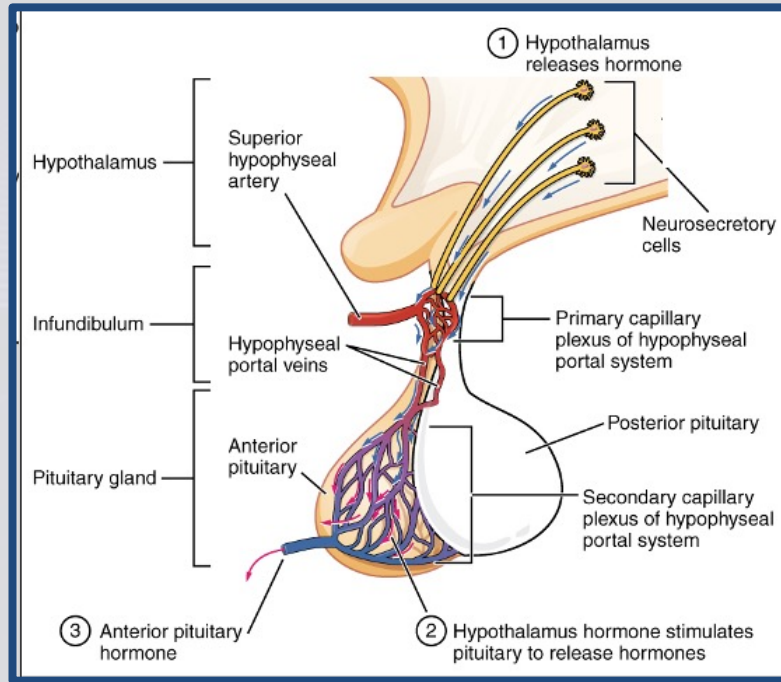
Anterior pituitary lobe
(adenohypophysis)

Sella turcica

- Used to be called hypophysis
- Most compact chemical factory in the body
- Lies inferior to hypothalamus, inside the sella turcica



Hypothalamic Neuronal Cell Bodies



Paraventricular nucleus

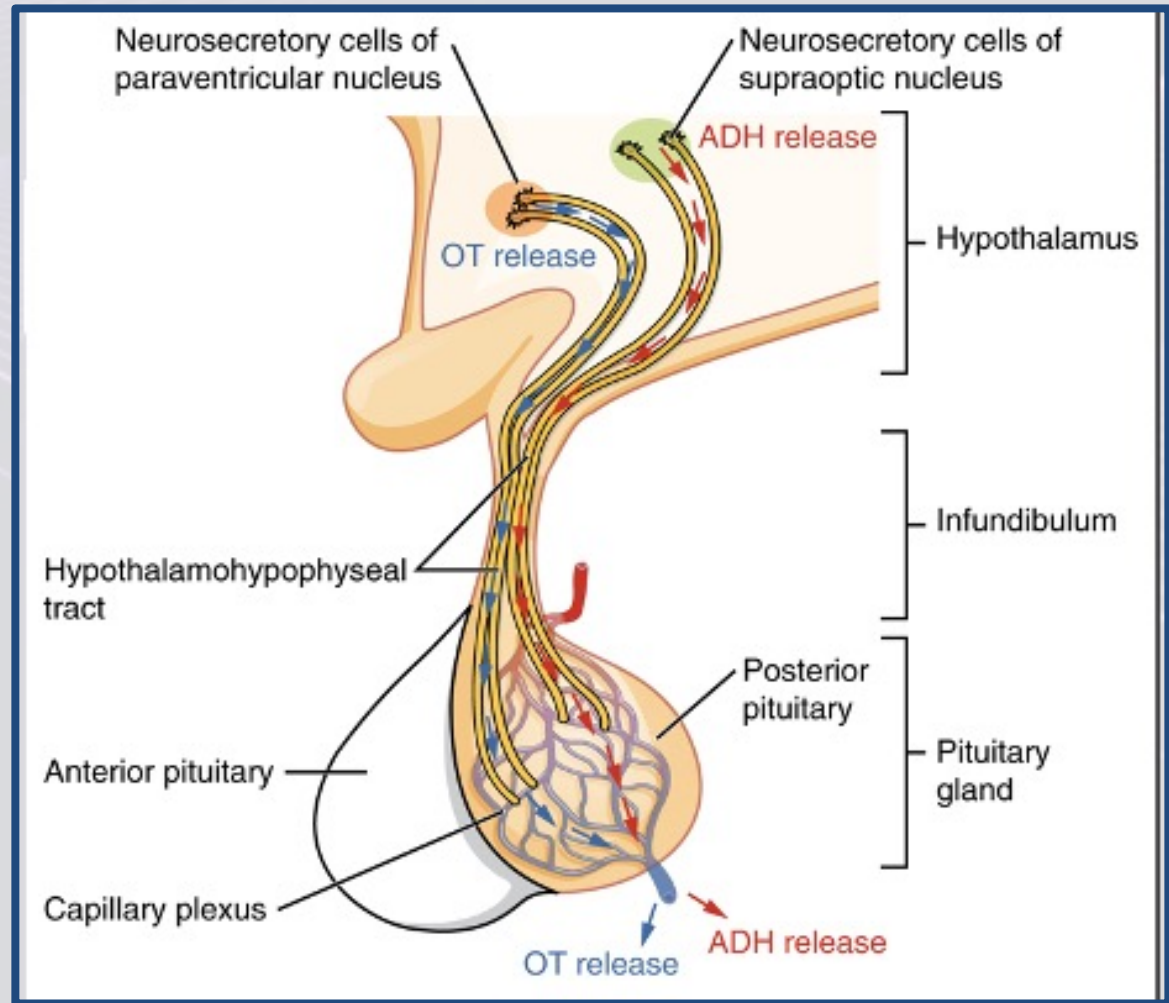
Hypothalamic neurons

Hypothalamic Hormones in Posterior Pituitary

- Hormones released by the hypothalamus will influence:

- ❖ Posterior Pituitary Lobe

- ADH – antidiuretic hormone
- OT - Oxytocin



Hypothalamic Hormones in Anterior Pituitary

- Hormones released by the hypothalamus will influence:

- ❖ Anterior Pituitary Lobe

- GHRH (growth hormone releasing hormone)
- TRH (Thyrotropin releasing hormone)
- CRH (corticotropin releasing hormone)
- GnRH (gonadotropin releasing hormone)
- PRH (prolactin releasing hormone)

Tropin =
stimulating effect

