

The pituitary gland is known as the “master gland” because it regulates many body functions by controlling other endocrine glands like the adrenal glands, gonads, and thyroid. It also plays a direct role in growth and water balance. It has two main parts:

- The anterior lobe (adenohypophysis): Produces and releases most pituitary hormones. Its function is controlled by hormones from the hypothalamus via the hypophyseal portal system.
- The posterior lobe (neurohypophysis): Doesn't produce hormones, but stores and releases oxytocin and antidiuretic hormone (ADH), which are made in the hypothalamus.

The pituitary gland helps regulate:

- Growth
- Metabolism
- Reproduction
- Response to stress or injury
- Lactation
- Water and salt balance
- Labor and childbirth

Certain diseases can affect the pituitary gland directly or indirectly. For example, people with excess iron deposits (from conditions like hemochromatosis or frequent blood transfusions) may develop hypogonadism, especially men. Also, tuberculosis can affect the sellar region (where the pituitary sits), potentially leading to pituitary hormone deficiencies