

Topic: Pituitary Gland
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Prolactin (PRL)

- Prolactin (PRL) is a peptide hormone synthesized and secreted by the adenohypophysis.
- Prolactin has many effects, the most important is to stimulate the mammary glands to produce milk(lactation).
- Increased serum concentration of prolactin during pregnancy causes enlargement of the mammary glands of the breasts and increases the production of milk.

Melanocyte Stimulating Hormone (MSH)

- Melanocyte – stimulating hormones act on the melanocytes and increases pigmentation of the skin in amphibians. Its exact role in humans is unknown.

Hormones of Neurohypophysis

Anti-Diuretic Hormone (ADH) or Vasopressin (Pitressin)

Oxytocin or Pitocin

Anti-Diuretic Hormone (ADH) or Vasopressin (Pitressin)

Vasopressin (or pitressin) increases the resorption of water by the distal convoluted tubule and collecting duct of the nephron and thereby reduces loss of water through urine (diuresis). Hence, it is also called **antidiuretic hormone (ADH)**. The urine becomes more concentrated as water is reabsorbed. In the absence of ADH, urine output increases more than tenfold. Drinking alcohol often causes frequent urination because alcohol inhibits secretion of ADH. ADH also causes vasoconstriction, thereby, increasing blood pressure.

Oxytocin or Pitocin

- Oxytocin (or Pitocin) stimulates uterine contractions at the time of child birth that

are needed to move the child out through the birth canal.

- The hormone stimulates the release of milk from the mammary glands by causing surrounding cells to contract. After birth, stimulation of the breast by the infant feeding stimulates the posterior pituitary to produce Oxytocin.
- It is often called as birth hormone. The function of Oxytocin in males and in nonpregnant females is not clear.