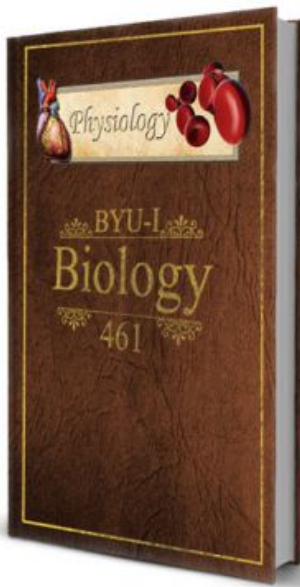


5.5.5

Prolactin

Prolactin is released from the anterior pituitary gland and plays a major role in mammary gland (breast) enlargement during pregnancy in preparation for milk production (lactation). In fact, the cells that produce prolactin can increase in number to represent over 50% of the entire pituitary gland in response to estrogens released during pregnancy. After childbirth, prolactin levels fall but the suckling response of an infant on the nipple produces an immediate increase in prolactin secretion which helps promote continued milk production. Prolactin also is thought to contribute to the stimulation of progesterone after ovulation. Prolactin isn't just the "female" hormone because it has been implicated in over 300 different body effects in both women and men. Interestingly, prolactin levels are elevated in fathers and expectant fathers. The control of prolactin release is not fully understood. Prolactin inhibiting hormone (dopamine) from the hypothalamus inhibits its release but a prolactin stimulating hormone is postulated but has not been identified yet.



Shaw, J. & Hunt, J. (n.d.). *BIO 461 Principles of Physiology*. EdTech Books.
https://edtechbooks.org/bio_461_principles_o