

## MODULE 6

Answer the following questions.

- Explain two reasons why a woman with low levels of LH would not be able to become pregnant.

(1) LH acts on the ovary to cause ovulation to occur. (2) LH causes progesterone release to facilitate potential fertilization of the egg and pregnancy. Progesterone is a key hormone for the maintenance of pregnancy.

- Would you expect a male to have estrogen in their bloodstream? Explain why or why not.
- Yes. Both male and female bodies produce “all” the sex hormones. However, the ratios are different.
- The adrenal glands are largely responsible for producing this “opposite” hormone that the testis would not.

1. Explain two reasons why a woman with low levels of LH would not be able to become pregnant.

LH, luteinizing hormone, stimulates the ovaries in females. Low levels of LH can indicate a problem with the ovaries. This can result in problems with ovulation. Low levels of LH can also indicate a problem with the pituitary gland, which is the master gland that produces LH.

1. Explain the concept of positive feedback. Give an example of a hormone that works through positive feedback.

- Positive feedback is the action of a hormone increasing the production of that hormone. (This is the opposite of negative feedback).

- One example is the action of oxytocin causing the uterus to contract during labor. Oxytocin enhances the effect of the uterus contractions, causing more oxytocin to be released. The positive feedback loop is stopped once the baby is born and the uterus no longer needs to contract, stopping the production of oxytocin.

Positive feedback system increases the amount of the hormone that is regulated. An example of a hormone that works through positive feedback is oxytocin. This hormone is involved with childbirth by causing the uterus to contract. As the uterus is contracting, this causes more oxytocin to be released. The feedback is stopped once the baby is born and the uterus does not need to contract. This stops the release of oxytocin.

- **List the hormone best describes each of the four statements below:**

- **I lower the level of calcium in the blood by depositing calcium into bone.**

**Calcitonin**

- **I am the secreted by the pituitary and stimulate the gonads.**

**FSH or LH (Gonadotropic hormones)**

- **I am secreted by the pituitary to stimulate the adrenal cortex.**

**ACTH**