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HW #30 SLS44-15

Human Reproduction Review Questions

1. Sperm start and are produced in the seminiferous tubules. Then they move to the epididymis to be stored and matured and travel to the vas deference when a male is stimulated to the ejaculate. At the end of the vas deference they reach the ampulla where they receive secretions from the seminal vesicles. Afterwards, they are moved into the urethra through the ejaculatory duct while passing the prostate gland which gives the sperm a milky fluid. The combined liquid, semen, move through the urethra and is ejaculated outside the body. The fluids from accessory organs in sperm are provided by the organs called the seminal vesicle, prostate gland and cowper’s gland. The role of these fluids is to lower the acidity of the vagina to help the sperm pass through, provide high levels of fructose and to lubricate the urethra before the sperm comes through.
2. Ovarian Cycle

-Occurs in the ovary

-Series of events that occurs before and after ovulation

Uterine Cycle

-Occurs in the uterus

-Prepares the uterine lining for the egg implantation

As the progesterone and estrogen levels in the ovarian cycle increases and the egg matures further, the endometrium lining during the uterine cycle.

1. Male Reproductive System

- Luteinizing Hormone (LH): Stimulates secretion of testosterone

- Follicle-Stimulating Hormone (FSH): Stimulates spermatogenesis

- Testosterone: Stimulates development of genitalia and secondary sex characteristics; stimulates spermatogenesis

Female Reproductive System

- Luteinizing Hormone (LH): Stimulates ovulation, growth of corpus luteum, and the secretion of estrogen and progesterone

- Follicle-Stimulating Hormone (FSH): stimulates growth of follicles, secretion of estrogen and ovulation

- Estrogen: Causes the development of secondary sex characteristics and maturation of eggs; promotes growth of uterine lining

- Progesterone: Stimulates development of the uterine lining and formation of placenta

4. The function of the zona pellucid is to allow spermatozoa to bind to it and initiate acrosome reaction and to prevent other sperm from entering once it hardens and for protection. It forms by glycoproteins when it is a plasma membrane and then hardens later on.

5. The placenta is an [organ](http://en.wikipedia.org/wiki/Organ_%28anatomy%29) that connects the developing [fetus](http://en.wikipedia.org/wiki/Fetus) to the [uterine](http://en.wikipedia.org/wiki/Uterus) wall to allow [nutrient](http://en.wikipedia.org/wiki/Placenta) uptake, waste elimination, and gas exchange via the mother's blood supply. The umbilical cord connects the developing fetus to the placenta.

APA Citations

Audesirk, T & Audesirk, G. (1996) Biology: Life on Earth. Prentice Hall. Upper Saddle River, New Jersey.