

MALE AND FEMALE REPRODUCTIVE SYSTEMS

(Chapter 3, pp. 80-85)

Introduction (pg. 80):

Male and female _____ produce _____ (ie. sperm and eggs). What makes the gonads start producing gametes? It all begins with _____, which are substances that act like _____ in the body. They travel through the _____ and cause certain cells to respond in specific ways.

Humans and Puberty (pg. 80): Examine Fig. 3.1

Most humans first experience the effects of reproductive _____ in their early to mid _____. This period, called _____, is when hormonal signals change the body so that it is able to _____. When puberty begins, the _____ gland at the base of the brain starts to produce _____ hormone (FSH). FSH travels to the _____ -- the _____ in females and the _____ in males. FSH signals the testes to produce _____ and the ovaries to produce mature _____. Other hormones help in development and maintenance of additional characteristics associated with male or femaleness, these are called the _____ characteristics.

Puberty in Males (pg. 80):

When _____ reaches the testes, it promotes the development of sperm-producing _____ in the testes and the development of _____ cells. Other cells in the testes start to produce _____ which directs the development of _____ sexual characteristics including deepening of the _____, production of _____, underarm, and _____ hair, and a broadening of the shoulders.

Puberty in Females (pg. 81):

When _____ reaches the _____, they are stimulated to begin maturing and releasing _____. Generally _____ egg is released each month. FSH also stimulates the ovaries to produce _____ which is another reproductive _____. It is responsible for the female secondary _____ characteristics including deposits of _____ in the breasts and _____ and growth of pubic and underarm hair.

Male Reproductive Anatomy (pg. 82-83): Examine Fig. 3.3 and 3.4

Sperm cells are produced in the _____ which are located outside the main body cavity in a sac of tissue called the _____. The external location of the scrotum keeps the _____ slightly _____ than the rest of the body (required for development of healthy sperm).

Sperm cells are produced in tiny tubes in the testes called _____. About _____ to _____ million sperm are produced each day. When they move out of the tubules, the sperm cells are stored in long, coiled tubes called the _____, until it is time for them to leave the body.

From the _____, sperm travel through a tube called the _____. Each of these tubes circles the _____. Since sperm need fluid to swim, fluid is supplied by two glands, the _____ gland and the _____ vesicles that are located at the base of the bladder. These glands produce and release thick, milky fluid into the _____. The sperm cells mix with the milky fluid in the vas deferens. This mixture is called _____. Fluid produced by the _____ gland and seminal _____ is rich in _____ which provide _____ for the sperm to swim.

The vas deferens joins the _____ which also carries _____ from the bladder, through the _____ to the outside of the body. A small _____-like muscle at the bottom of the _____ prevents both urine and _____ from being in the _____

at the same time.

In Fig. 3.4 on pg. 83, you can see that sperm are produced from cells in the walls of the _____ tubules. They begin as _____ cells which are forced away from the tubule walls. After they undergo meiosis, they end up as _____ reproductive cells. Each sperm is unicellular and is made of 2 main parts: a _____ (which includes the _____) and a tail. The tail-like structure, the _____, acts as a kind of propeller to move the sperm towards the _____.

Female Reproductive Anatomy (pg. 84-85): Examine Fig. 3.5, 3.6, and 3.7

Ovaries are located inside a woman's main _____ cavity. They are about _____ cm in length and are _____-shaped. One egg, or _____, is released approximately every _____ days. This process is called _____ and the two ovaries generally _____ releasing an egg.

Near the time of _____, a woman's body temp. may _____ slightly and then _____ a little (see Fig. 3.6). The surface of the ovaries contains many fluid-filled cavities called _____, each of which contains an _____. During ovulation, a mature egg breaks out of its _____. The feathery ends (called "fimbriae") of the _____ or _____ tubes, help to guide the tiny egg into the tube. Hair-like structures lining the _____ keep the egg moving toward the _____. The egg can survive for only _____ to _____ hours after ovulation unless a sperm _____ it. If the egg is not fertilized, it will die and disintegrate.

The _____ is a hollow, pear-shaped organ. It is here that a fertilized egg develops into a _____. The lower entrance to the uterus, the _____, is connected to a muscular passageway, the _____. This passage is sometimes called the _____. Unlike the male, the female has a separate _____ through which _____ leaves the body.