

Structures of the Male Reproductive System

The illustration shows the structures of the male reproductive system. Sperm originate in the testes and leave the male body through the penis. The testes and the penis are located outside the body, while most of the other reproductive structures are located inside the body.

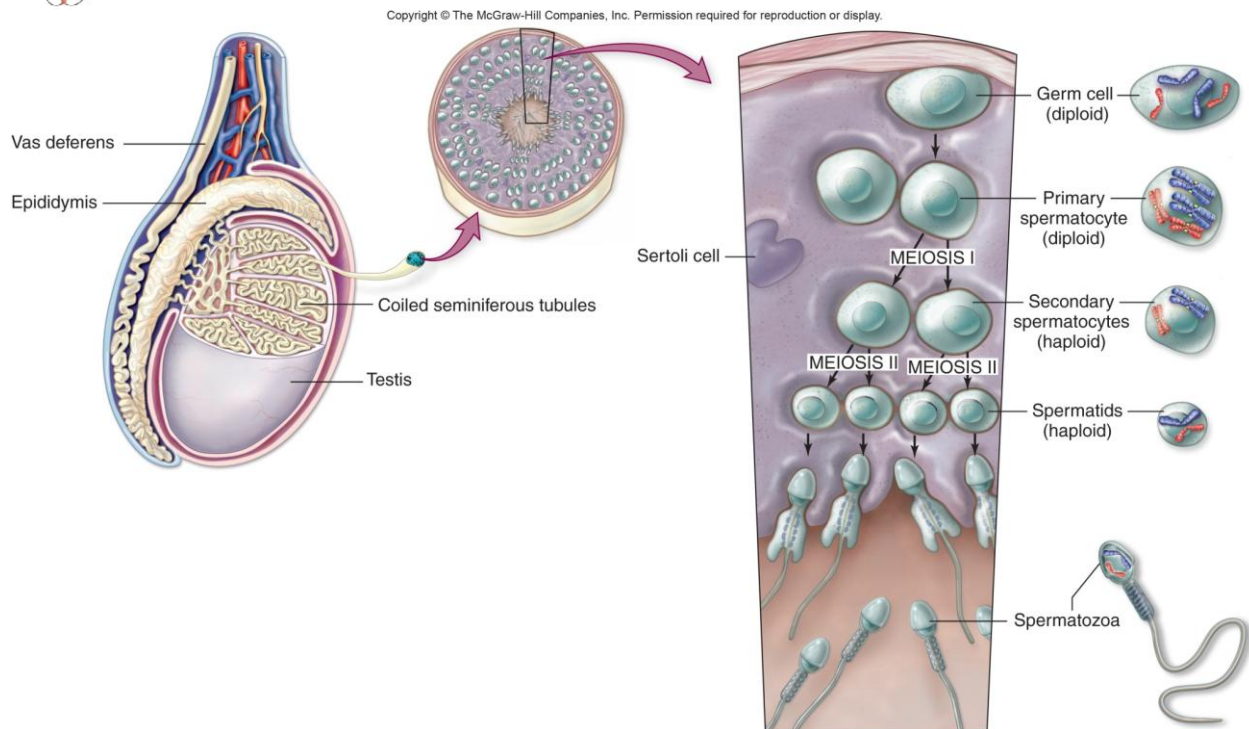
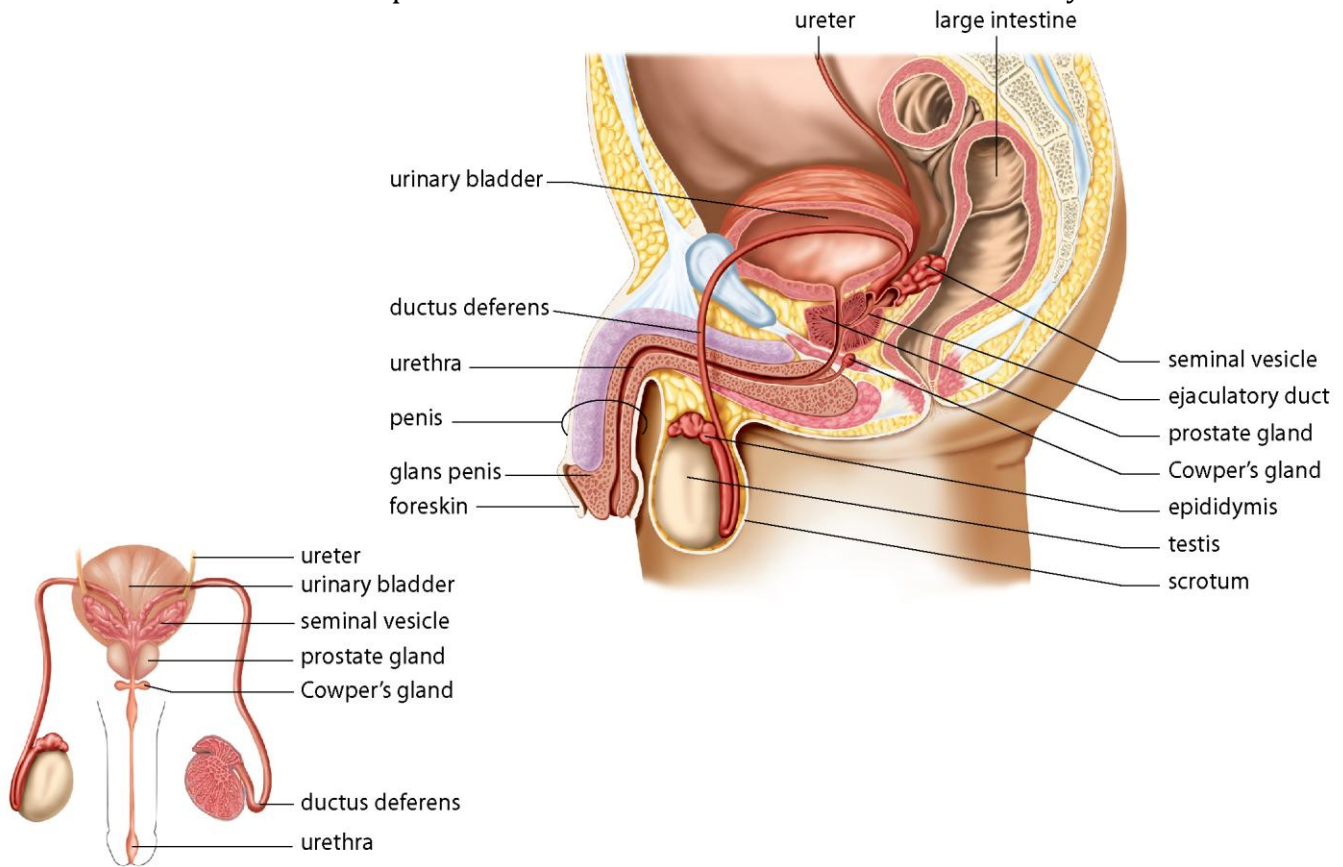


TABLE 53.1**Mammalian Reproductive Hormones****M A L E**

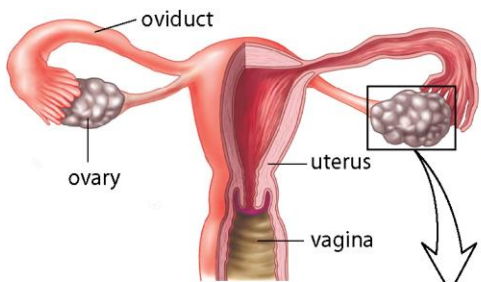
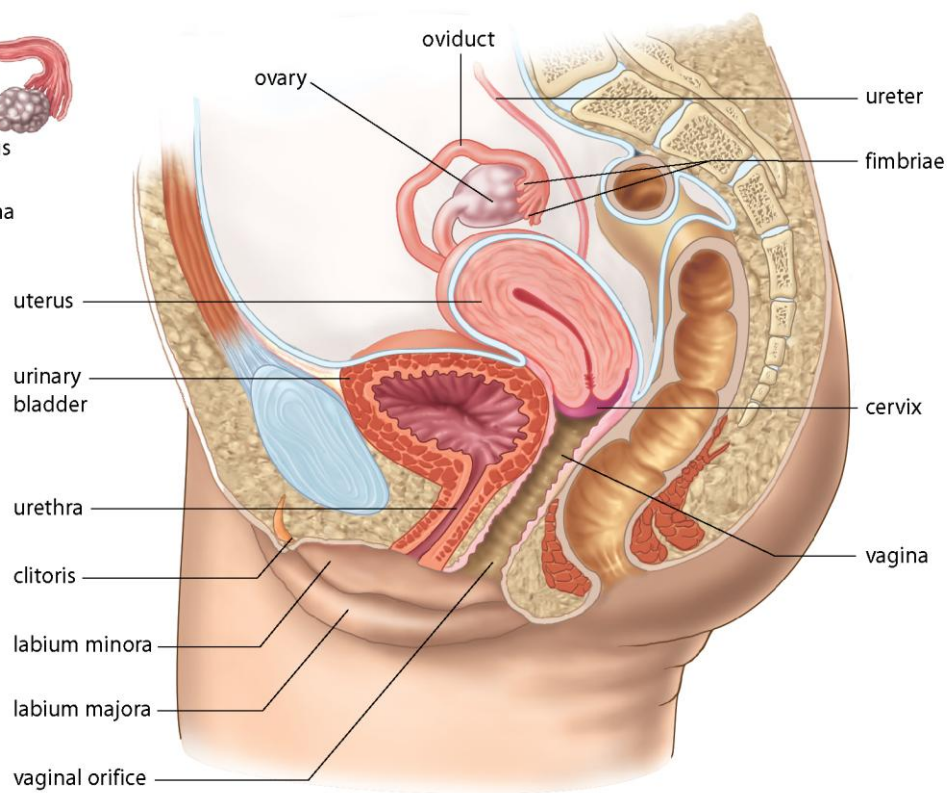
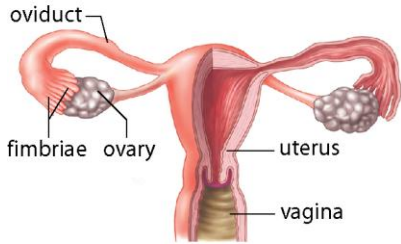
Follicle-stimulating hormone (FSH)	Stimulates spermatogenesis via Sertoli cells
Luteinizing hormone (LH)	Stimulates secretion of testosterone by Leydig cells
Testosterone	Stimulates development and maintenance of male secondary sexual characteristics, accessory sex organs, and spermatogenesis

F E M A L E

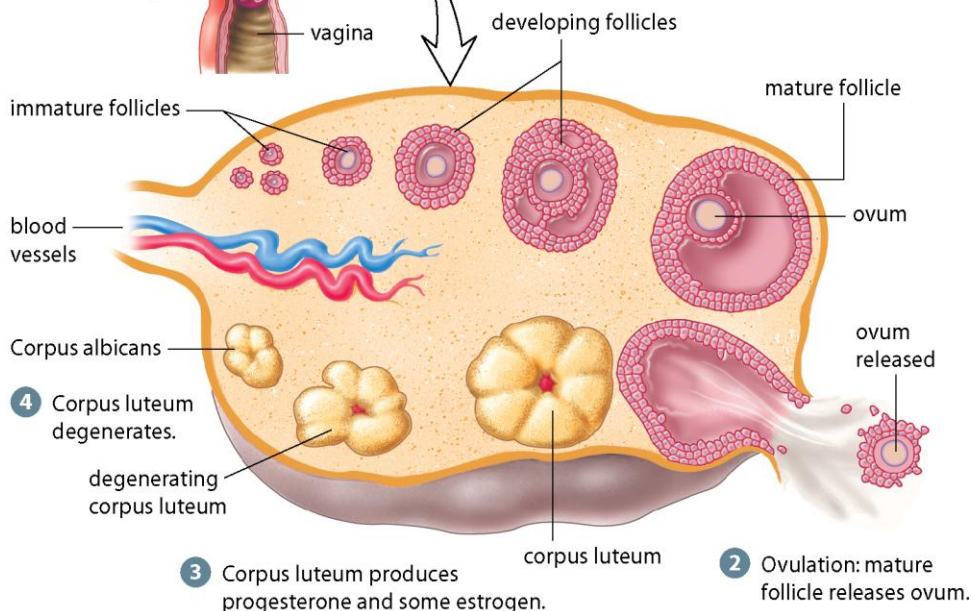
Follicle-stimulating hormone (FSH)	Stimulates growth of ovarian follicles and secretion of estradiol
Luteinizing hormone (LH)	Stimulates ovulation, conversion of ovarian follicles into corpus luteum, and secretion of estradiol and progesterone by corpus luteum
Estradiol (estrogen)	Stimulates development and maintenance of female secondary sexual characteristics; prompts monthly preparation of uterus for pregnancy
Progesterone	Completes preparation of uterus for pregnancy; helps maintain female secondary sexual characteristics
Oxytocin	Stimulates contraction of uterus and milk-ejection reflex
Prolactin	Stimulates milk production

Structures of the Female Reproductive System

In the female reproductive system, the reproductive organs and ducts are inside the body. Gametes are produced in the ovaries, fertilization occurs in the oviduct, and fetal development takes place in the uterus. The vagina is both the organ of sexual intercourse and the birth canal.



1 Developing follicles produce estrogen and some progesterone.



A follicle matures by growing layers of follicular cells and a central fluid-filled vesicle. The vesicle contains the maturing ovum. At ovulation, the follicle ruptures and the ovum is released into the oviduct. The follicle develops into a corpus luteum. If pregnancy does not occur, the corpus luteum starts to degenerate after about 10 days. Note that the follicle does not migrate around the ovary, as shown here for clarity, but goes through all the stages in one place.