

Male Reproductive System

The male reproductive system consists of a number of sex organs that are part of the reproductive process. The following sections describe the function of each part of the male reproductive system.

Penis

The penis is the male reproductive organ. When the male becomes sexually aroused, cavities within the erectile tissue of the penis become filled with blood. This causes the penis to become erect and ready for sexual activity.

Scrotum

The scrotum is a pouch-like structure that hangs outside of the body, behind the penis. It holds and protects the testes. The scrotum and the testes are stored outside the body in order to maintain a temperature that is slightly lower than human body temperature. This is necessary because, in order to remain viable, sperm cells must be stored at a lower temperature.

During times of lower temperatures, muscle contractions pull the scrotum closer to the body, slightly raising the temperature of the testes. During times of higher temperatures, the same muscles relax, allowing the scrotum to hang farther from the body, slightly cooling the testes.

Epididymis

The epididymis is a whitish mass of tightly coiled tubes cupped against the testicles. It acts as a maturation and storage place for sperm before they pass into the vas deferens.

Vas deferens

The vas deferens, also known as the sperm duct, is a thin tube approximately 17 inches long that extends from the epididymis into the pelvic cavity. This tube carries sperm around the bladder and through the prostate gland, eventually connecting to the urethra..

Testes

The testes, also known as the testicles, are the male gonads. They are the organs responsible for producing sperm cells. The testes are egg-shaped structures that grow to be about one inch long and rest inside the scrotum. The testes also produces hormones, including testosterone, which stimulates the production of sperm cells and facilitates male maturation (puberty).

Seminal vesicles

Seminal vesicles are sac-like structures attached to the vas deferens at one side of the bladder. They produce a sticky, yellowish fluid that contains fructose. This fluid provides sperm cells energy and aids in their motility (ability to move).

Prostate gland

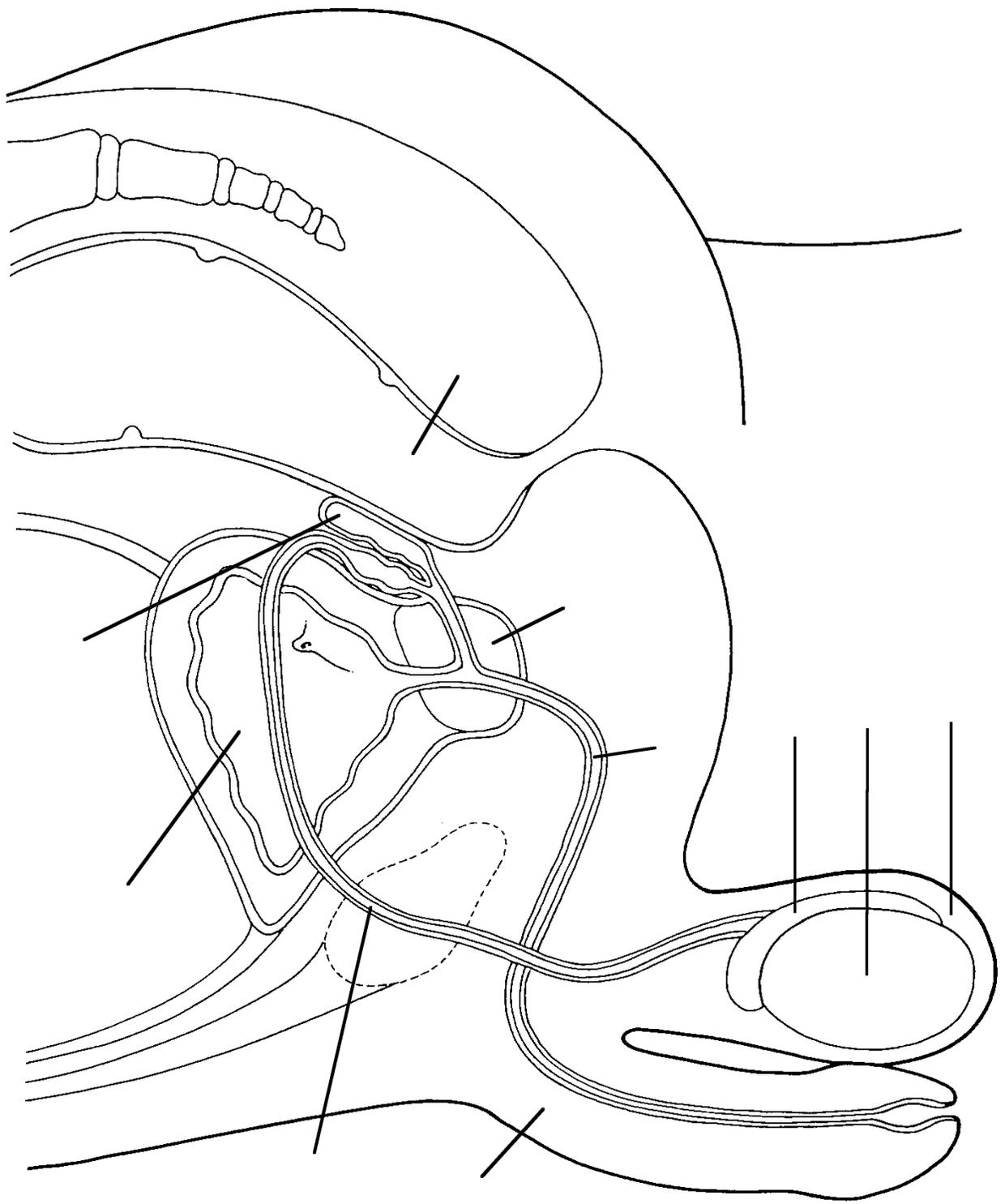
The prostate gland surrounds the ejaculatory ducts at the base of the urethra, just below the bladder. The prostate is responsible for the production of semen, a liquid mixture of sperm cells, prostate fluid and seminal fluid.

Bulbourethral glands

The bulbourethral glands (not shown on diagram), also called Cowper glands, are two small glands located on the sides of the urethra just below the prostate. These glands produce a clear, slippery fluid that empties directly into the urethra. It produces substances related to nourishment of spermatozoa.

Urethra

The urethra is a tube that connects the bladder to the genitals for the removal of fluids out of the body. In males, the urethra is about 8 inches long and opens at the end of the penis. The urethra provides an exit for urine, as well as semen during ejaculation.



Female Reproductive System

The female reproductive system consists of two main parts: the uterus and the ovaries. These parts are internal. The following sections describe the function of each part of the female reproductive system.

Ovaries

The ovaries are a pair of small organs that are located near the side walls of the pelvic cavity. These organs are responsible for the production of the egg and the secretion of hormones. The process by which the ovum is released is called ovulation. The speed of ovulation is periodic and relates directly to the length of a menstrual cycle.

Oviducts

The Fallopian tubes or oviducts are two tubes leading from the ovaries into the uterus.

After ovulation, the egg will leave the ovaries and enter the Fallopian tube. There it travels toward the uterus, pushed along by movements of cilia (tiny hairs) on the inner lining of the tubes. This trip takes hours or days. If the ovum is fertilized while in the Fallopian tube, then it normally implants in the uterus, which signals the beginning of pregnancy.

Uterus

The uterus, or womb, is the major female reproductive organ of humans. The uterus provides mechanical protection, nutritional support, and waste removal for the developing embryo (weeks 1 to 8) and fetus (from week 9 until the delivery). In addition, contractions in the muscular wall of the uterus are important in pushing out the fetus at the time of birth.

The uterus is a pear-shaped muscular organ. Its major function is to accept a fertilized egg (ovum) which becomes implanted into the side-wall of the uterus, and derives nourishment from blood vessels which develop exclusively for this purpose. The fertilized egg becomes an embryo, develops into a fetus, and gestates until childbirth. If the egg does not implant in the wall of the uterus, the female begins menstruation and the egg is flushed away.

Cervix

The cervix is the lower, narrow portion of the uterus where it joins with the top end of the vagina. It is cylindrical or conical in shape and protrudes through the upper vaginal wall. Approximately half its length is visible, the remainder is above the vagina beyond view.

Vagina

The vagina is a muscular, tubular tract leading from the uterus to the exterior of the body in females.

The vagina is the place where semen from the male is deposited into the female's body at the climax of sexual intercourse, commonly known as ejaculation. Pubic hair surrounds the vagina and protects it from infection. The vagina is mainly used for sexual intercourse. The vagina has a thick layer outside and it is the opening where baby comes out during delivery.

