

## A Note on Male Reproductive System and Male Hormones

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### DESCRIPTION

Reproduction is the process of production of offspring. This is common to all living things and separates them from inanimate objects. However, while the reproductive system is essential for the survival of a species, it is not required for the survival of an individual. In human reproduction, two types of sex cells or gametes are involved. Sperm, male gamete and secondary oocyte (along with the first polar body and corona radiata), the female gamete must fuse in the female reproductive system to produce a new one. For reproduction to take place, both female and male reproductive systems are needed. Referring to a woman's geometric cell as an egg or an egg is a common misnomer, but it is impossible. Secondary oocytes must be fertilized by the male gamete before becoming an "egg".

Although both female and male reproductive systems are involved in producing, nourishing, and transporting oocytes or sperm, they differ in shape and structure. Males have reproductive organs or genitals that are inside and outside the pelvis, while females have reproductive organs that are entirely inside the pelvis. The male reproductive system is briefly described here to learn in-depth knowledge.

- The male reproductive system consists of a group of organs that make up the human reproductive and urinary systems. These organs perform the following functions in your body.
- They create, retain, and transport sperm (male reproductive cells) and semen (the protective fluid around sperm). Sperm is ejected into the female reproductive system by them.
- Male sex hormones are produced and secreted by them.

Hormones control the entire male reproductive system. Chemicals that activate or regulate the activity of your cells or organs are known as neurotransmitters. Follicle Stimulating Hormone (FSH), Luteinizing Hormone (LH), and testosterone are the most important hormones in the male reproductive system.

The pituitary gland produces FSH and LH. It is placed at the base of brain and is in charge of a variety of bodily activities. Sperm production necessitates the presence of FSH (spermatogenesis). LH increases the production of testosterone, which is required to continue the spermatogenesis process. Male features such as muscular mass and strength, fat distribution,

bone mass, and sex desire are all influenced by testosterone. Most of the male reproductive system is located outside abdominal cavity or pelvis. The penis, scrotum, and testicles are the exterior elements of the male reproductive system.

### Penis

The penis is the male organ for sexual intercourse. It consists of three parts:

**The Root:** This is the part of the penis that attaches to the wall of abdomen.

**Body or shaft:** In the shape of a tube or cylinder, the body of the penis is made up of three internal chambers. Inside these chambers is a unique, sponge-like erectile tissue that holds thousands of large spaces filled with blood when you are sexually aroused. As the penis is filled with blood, it becomes firm and erect, allowing it to penetrate during sex. The skin of the penis is loose and elastic, which allows for changes in penis size during erection.

**The glans:** This is the cone-shaped end of the penis. The glance, also known as the head of the penis, is covered by a loose layer of skin called the foreskin. This is the penis's cone-shaped end. A loose layer of skin called the foreskin covers the glance, also known as the head of the penis. Circumcision is a procedure that involves the removal of this skin. When the male reaches sexual climax (orgasm), the semen containing the sperm is expelled through the end of the penis (ejaculation). When the penis is erect, the flow of urine from the urethra is blocked and only semen is ejaculated during orgasm.

### Scrotum

The scrotum is a skin pouch that hangs behind the penis. It protects the testicles (commonly known as testes), as well as numerous nerves and blood arteries. The scrotum serves as a protective barrier for testicles as well as a climate control mechanism. The testicles should be kept at a temperature that is somewhat colder than body temperature for proper sperm formation. The unique muscles in the scrotum's wall allow it to contract (tighten) and relax, keeping the testicles close to the body for warmth and protection or far away for cooling.

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## Testicles (testicles)

The testicles are oval organs the size of very large olives, located in the scrotum, which are secured on either side by a structure called the spermatic cord. Most men have two testicles. The testes are responsible for the production of testosterone, the primary male sex hormone, and sperm. The testes contain a swollen mass of tubes called seminiferous tubules. These tubes are responsible for producing sperm cells through a process called spermatogenesis.

## Epididymis

The epididymis is a long, twisted tube at the back of each testicle. It carries and stores the sperm cells created in the testicles. The function of the epididymis is also to bring the sperm to maturity the sperm that emerges from the testicles is immature and unable to fertilize. Contractions drive sperm into the vas deferens during sexual stimulation.

The internal male reproductive organs, which play a major role in the male reproductive system, are also called accessory organs. These organs include:

**Vas Deferens:** Vas Deferens is a long, muscular tube that travels from the epididymis to the pelvic cavity, behind the bladder. In preparation for ejaculation, the vas deferens carries mature sperm to the urethra.

**Ejaculatory ducts:** These vessels are formed by a combination of vas deferens and seminal vesicles. The urethra is where the vas deferens empties.

**Urethra:** The urethra is the tube that connects the bladder to the exterior of body and transports urine. When you reach orgasm, have to do the extra exertion of expelling semen (ejaculation). The flow of urine from the urethra is blocked while the penis is erect during sex, and only semen is ejaculated during climax.

**Seminal Vesicles:** Seminal vessels are sac-like sacs that attach to the vas deferens near the base of the bladder. The seminal vesicles make up the sugar-rich fluid (fructose), which supplies the sperm with energy and aids in the ability of the sperm to move. The seminal vesicles' fluid makes up the majority of the volume of your ejaculatory fluid.

**Prostate gland:** The prostate gland is a walnut-sized structure located just below the bladder in front of the rectum. The prostate gland provides extra fluid for ejaculation. Prostate fluids also help nourish sperm. The urethra, which carries the ejaculate that is expelled during orgasm, passes through the center of the prostate gland.

**Bulbourethral glands:** Bulbourethral glands, or Cooper's glands, are pea-sized structures on the sides of the urethra below the prostate gland. These glands create a clear, slick fluid that drains into the urethra directly. This fluid lubricates the urethra and neutralizes any acidity induced by urine droplets that remain in the urethra.