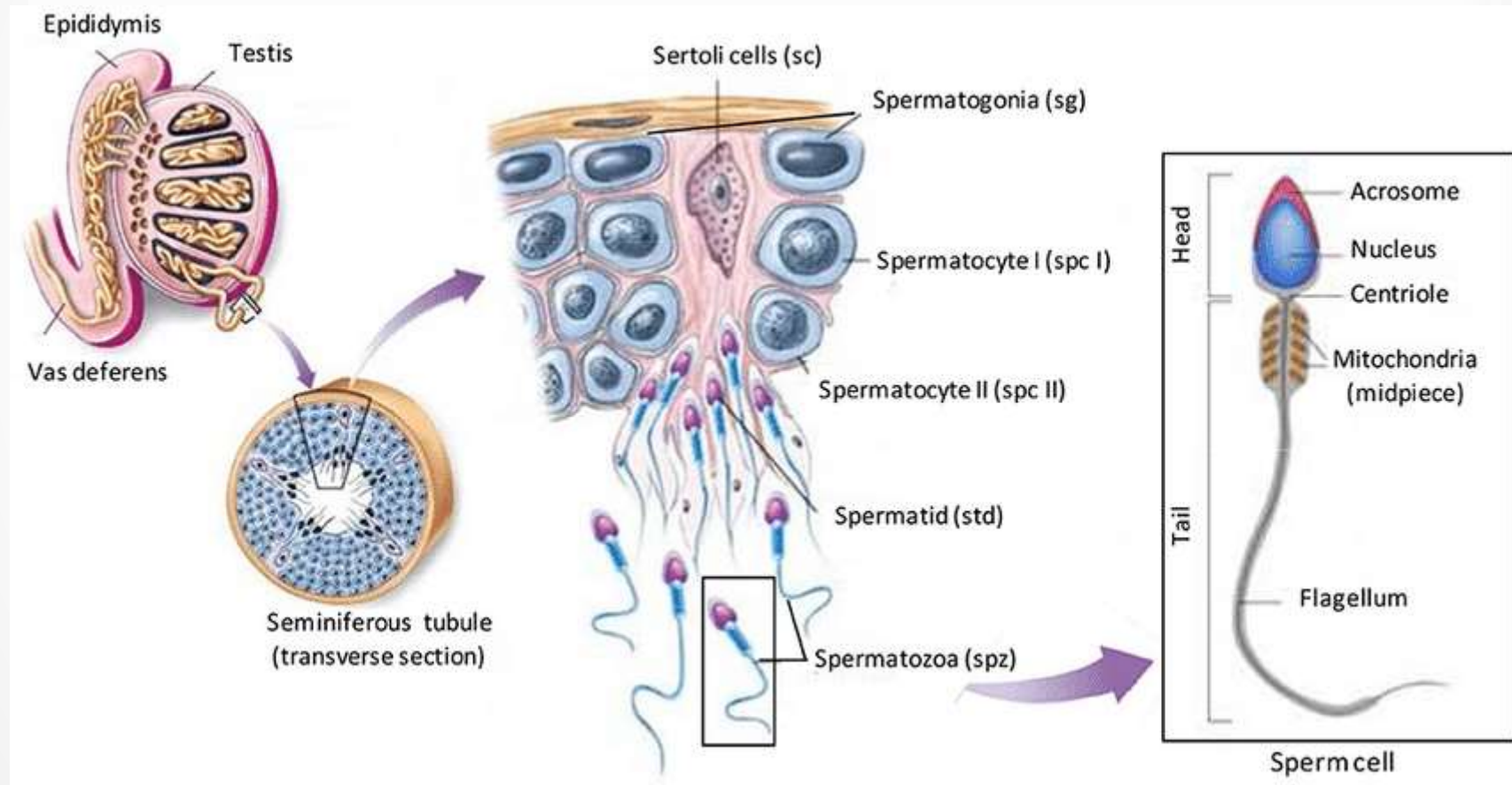


# Hormones in the Male Reproduction System

Unlike other animals, humans can **CHOOSE** when they want to reproduce.



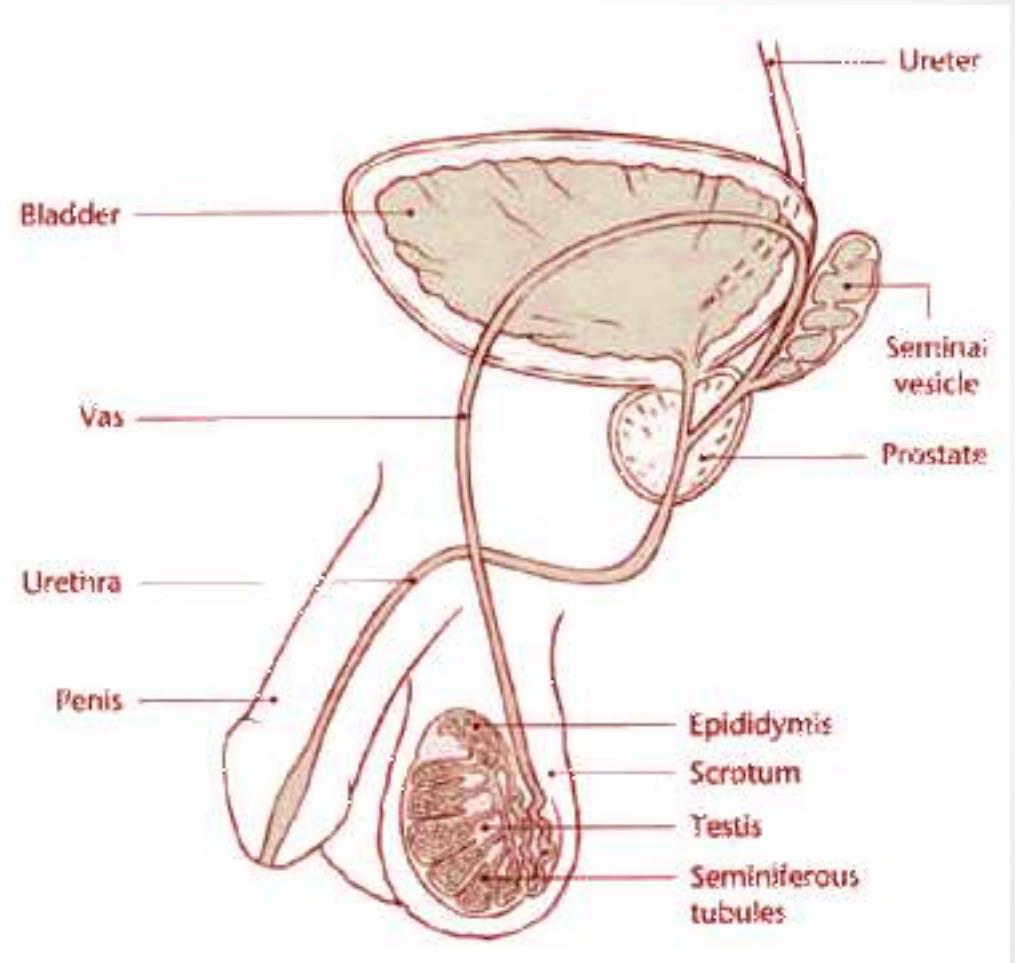
EQ: Why is it important to have a negative feedback loop in testosterone production?

What is the difference between the urethra and a garden hose?

There is a *vas deferens*....

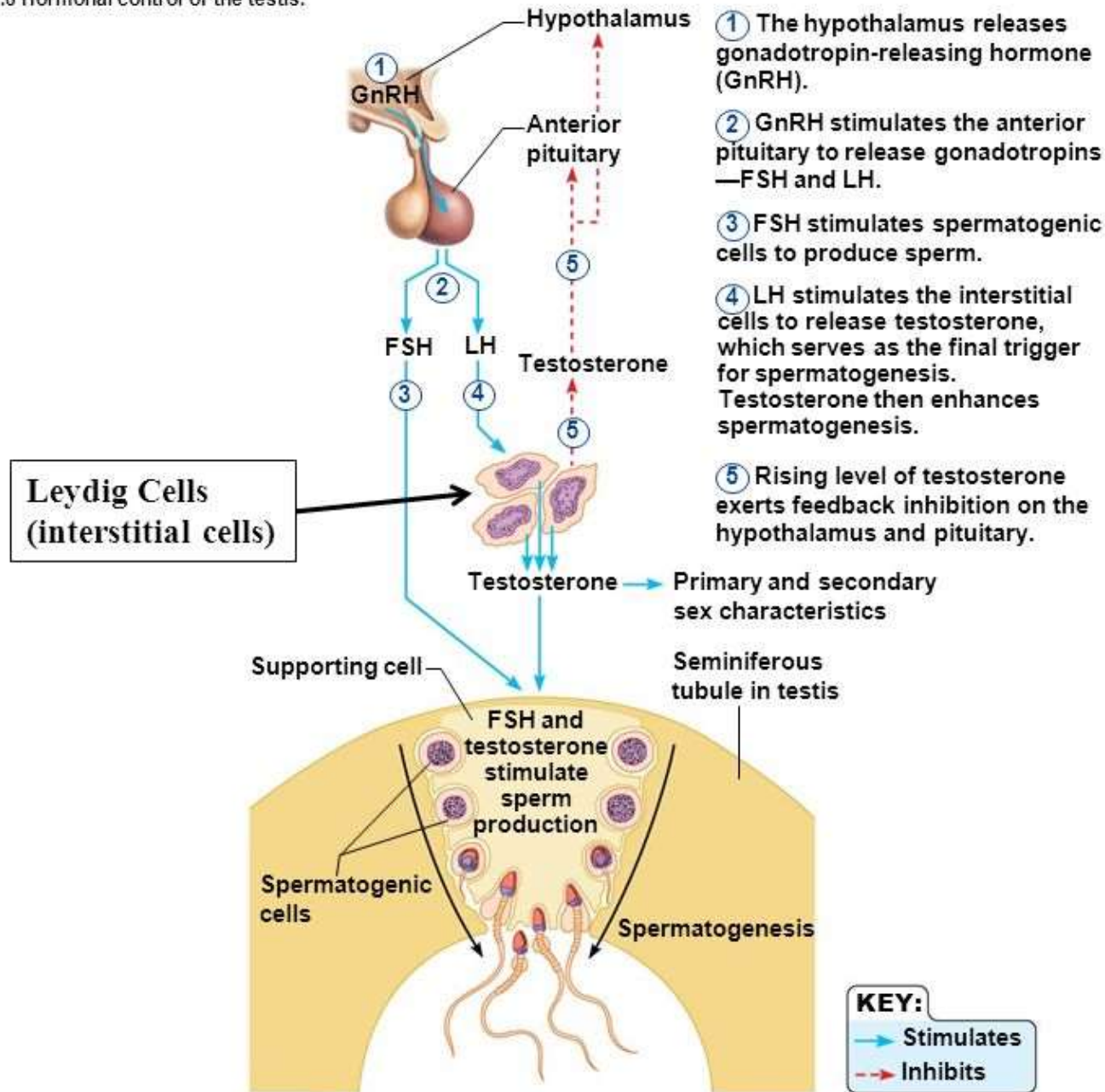
**Testes** - make sperm via meiosis. The testes are also responsible for producing testosterone, the male hormone.

Testosterone is responsible for many of the "male" characteristics.



# Male Hormones

Figure 16.6 Hormonal control of the testis.



# Actions of Testosterone

**\*\*Women have this too.... Just in smaller amounts\*\***

- In Embryo - Differentiation of male reproductive organ (occurs before 6 weeks)
- In Puberty – Develop male secondary sex characteristics
- Spermatogenesis
- Negative Feedback (GnRH and LH)
- Protein Anabolism
- Behavior: sex drive (libido)
  - May affect aggressive behavior
- Stimulates red blood cell production by way of kidney hormone production
- Bone growth

**Epididymus** - collects mature sperm which is eventually propelled through the vas deferense

**Vas deferens** -sperm travel through this tube, joins with urethra

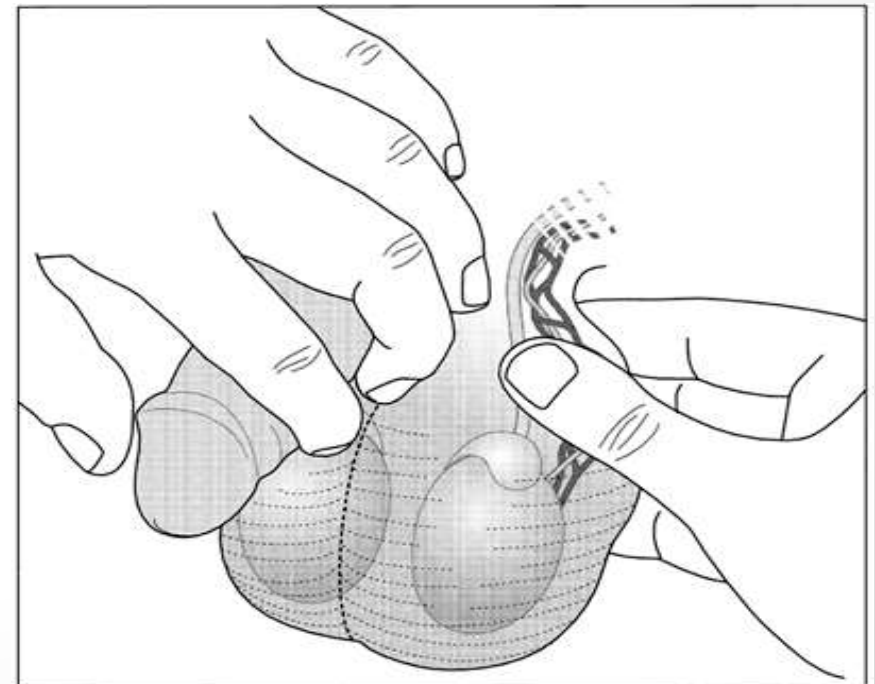
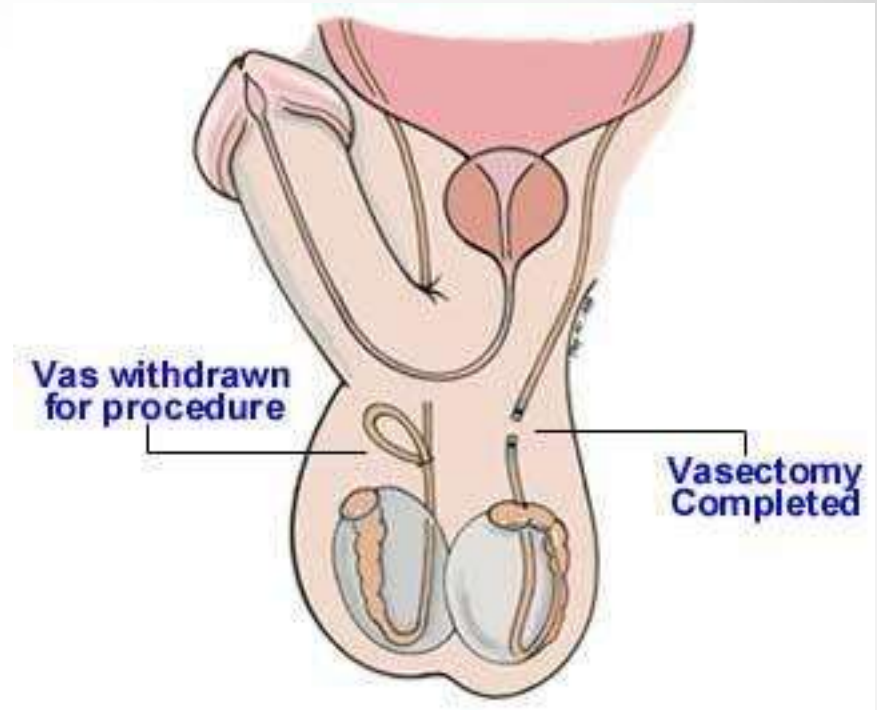
- [Vasectomy Animation](#)

**Vasectomy** - the tube is cut to prevent sperm leaving (and fertilizing an egg)

- [No Scalpel Vasectomy - Actual Procedure](#)

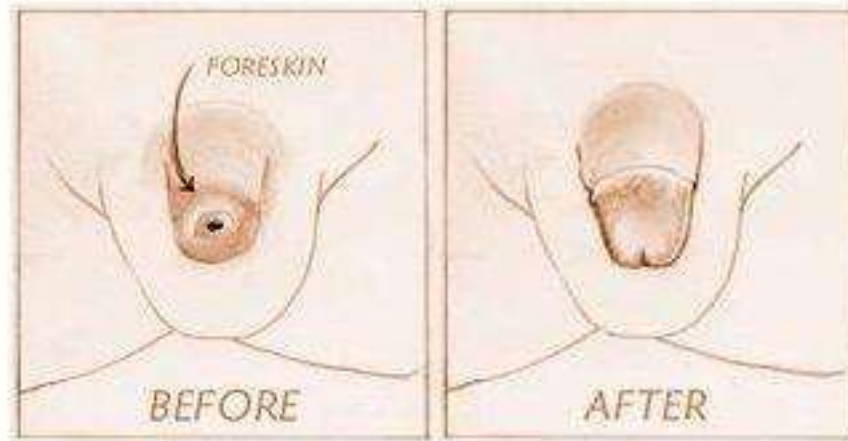
This procedure can be done

- right in the doctor's office

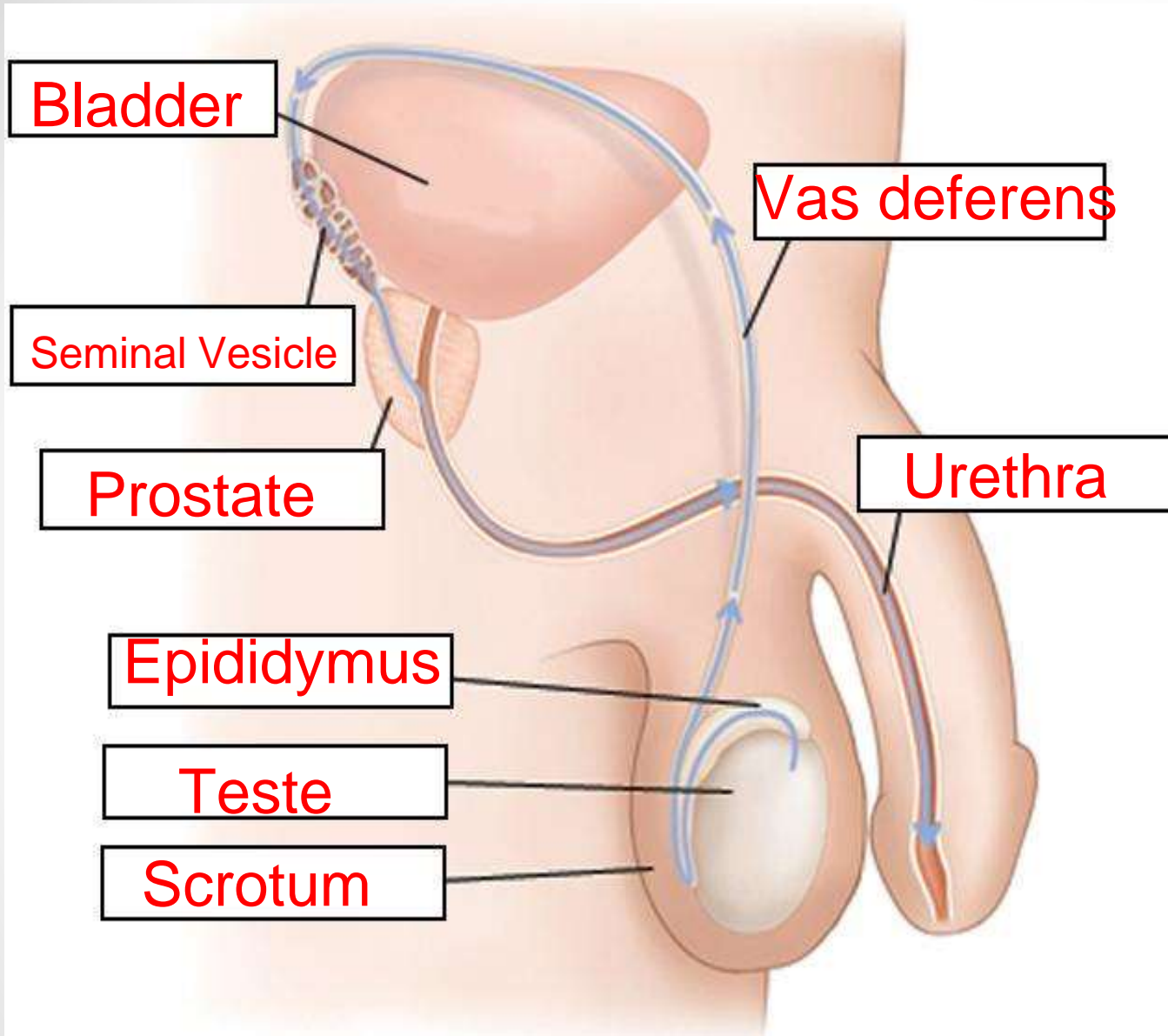


# Circumcision

Boys are born with a hood of skin, called the foreskin, covering the head (also called the glans) of the penis. In circumcision, the foreskin is surgically removed, exposing the end of the penis.



## WORD BANK



Vas deferens

Scrotum

Urethra

Prostate

Epididymus

Bladder

Teste

Seminal Vesicle

# Composition of Sperm

| COMPONENT      | FUNCTION   | SOURCE                         |
|----------------|--|--------------------------------|
| Sperm          | Gametes  | Seminiferous tubules           |
| Mucus          | Lubricant  | Bulbourethral glands           |
| Water          | Provides liquid medium                             | All accessory glands           |
| Buffers        | Neutralize acidic environment of the vagina        | Prostate, bulbourethral glands |
| Nutrients      | Nourish sperm                                      |                                |
| Fructose       |  | Seminal vesicles               |
| Citric acid    |  | Prostate                       |
| Vitamin C      |  | Seminal vesicles               |
| Carnitine      |  | Epididymis                     |
| Enzymes        | Clot semen in vagina, then liquefy the clot        | Seminal vesicles and prostate  |
| Zinc           | Unknown; possible association with fertility       | Unknown                        |
| Prostaglandins | Smooth muscle contraction; may aid sperm transport | Seminal vesicles               |