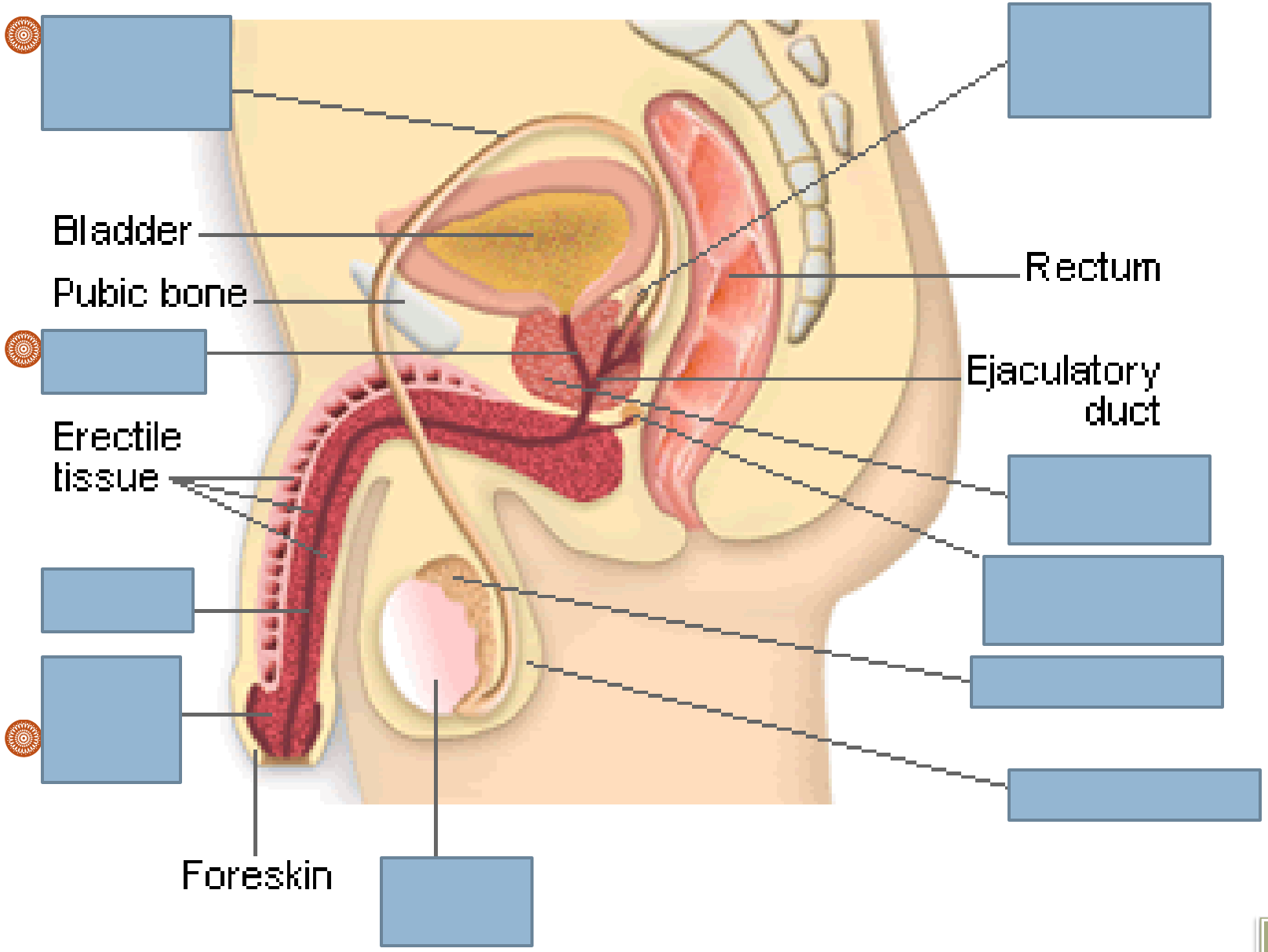
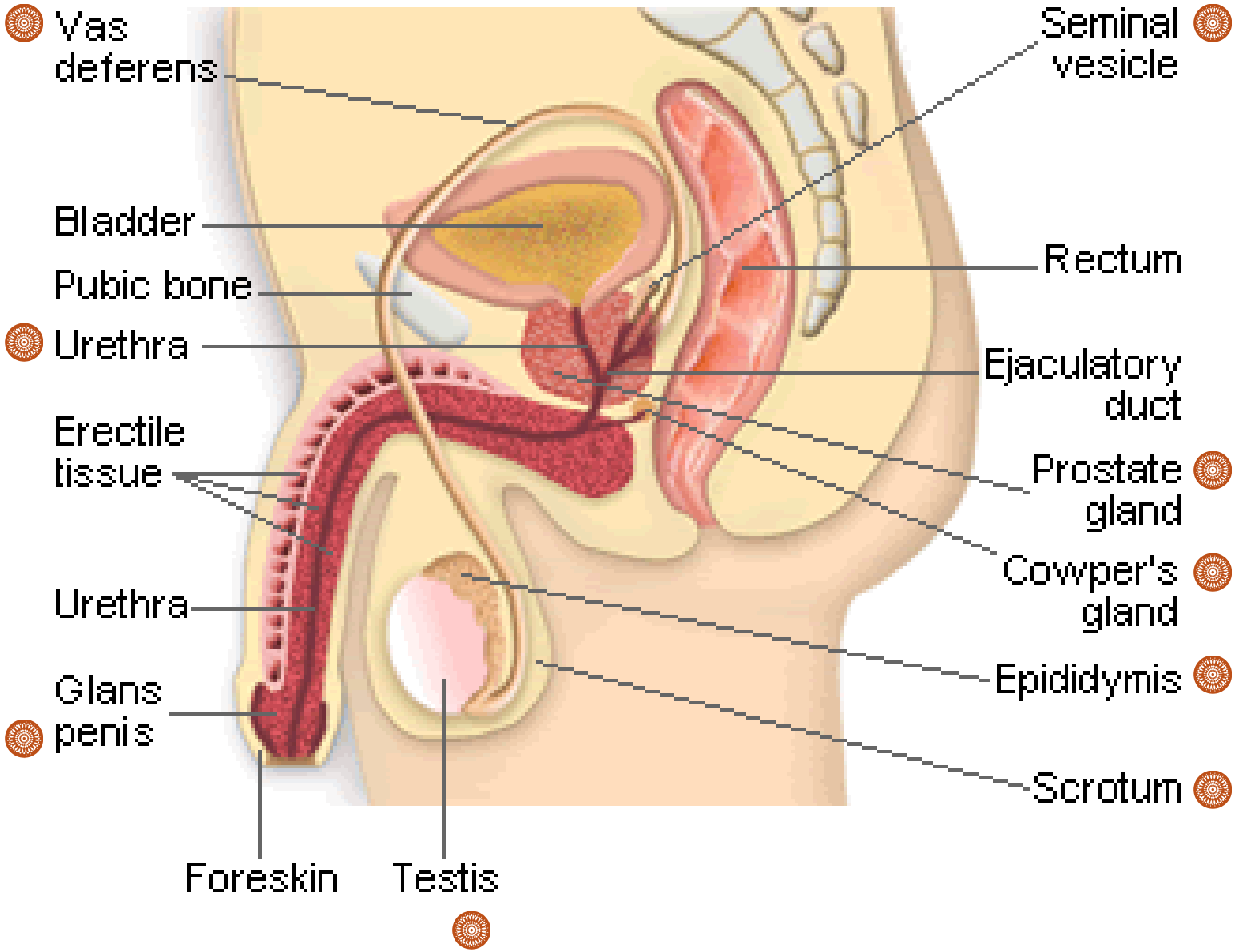
MALE REPRODUCTIVE SYSTEM

Male Anatomy



Male Anatomy



Penis

- *Male organ used for sexual intercourse, reproduction, and urination.*
- **Shaft** is the main part of the penis and the **glans** is the tip (sometimes called the head)
  - At birth the glans is covered by a loosely fitting skin called the foreskin
  - The inside of the penis is made of a spongy tissue that can expand and contract
    - An erection occurs when the sponge-like chambers in the penis fill with blood
    - When the penis is erect it is 5-7 inches long

Penis

- Reproductive purpose is to deposit semen in the vagina during sexual intercourse
  - Ejaculation
    - *The passage of sperm from the penis, a result of a series of muscular contractions*

Scrotum

- A *sac-like pouch located behind the penis that holds each testes and helps regulate temperature for sperm production*
- Scrotum changes size to maintain the right temperature.
  - When the body is cold, the scrotum shrinks and becomes tighter to hold in body heat.
  - When it's warm, the scrotum becomes larger and more floppy to get rid of extra heat.
  - The brain and the nervous system give the scrotum the cue to change size

Testicles or Testes

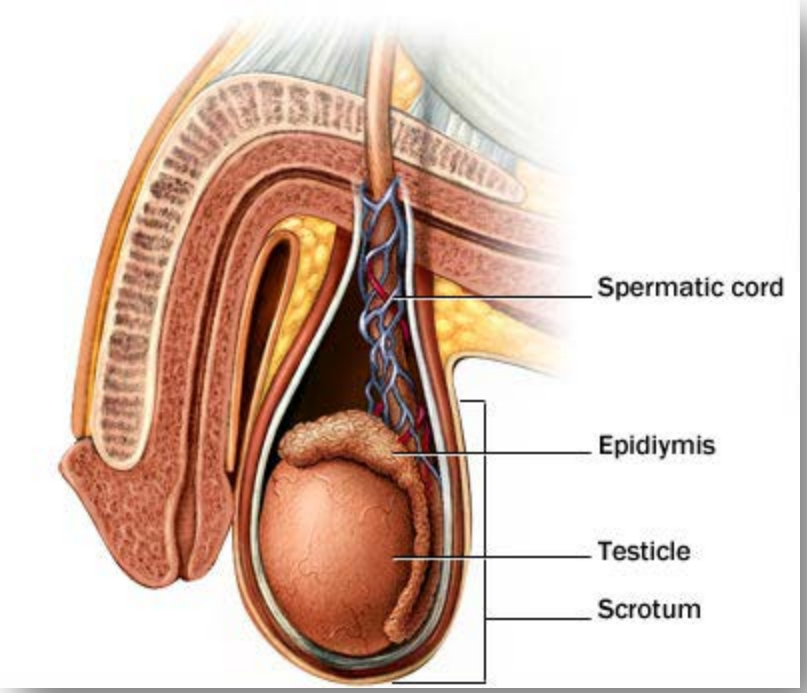
- Male sex gland that is the counterpart to the female ovary
- *Two small organs—about the size of large olives--that lie in the scrotum and produce sperm and the male hormone testosterone.*
- Outside the body because the male sperm that is manufactured in the testes need cooler-than-body temperature for normal growth and development
- Loss of one does not impair the function of the other.
- 4-5 Billion sperm cells are produced each month.

Testosterone

- *Male reproductive hormone made by the testicles which causes the changes of puberty*
  - *Causes boys to develop deeper voices, bigger muscles, and body and facial hair*
- *Stimulates the production of sperm and sexual urges*
- It is produced in the testicles and enters the bloodstream at a fairly constant rate

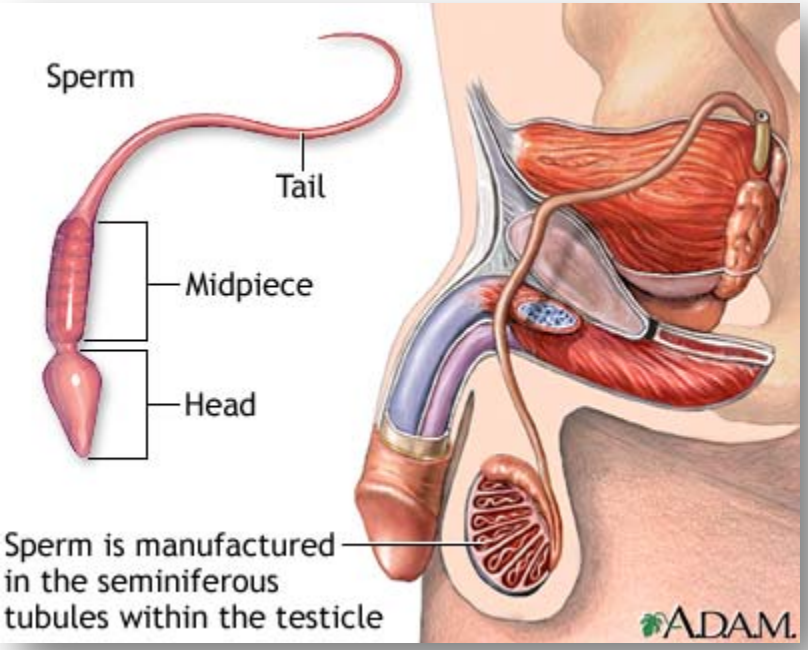
Epididymis

- *Structure that forms a mass over the back and upper part of each testes*
- *Sperm are stored there for as long as six weeks while they ripen to maturity*



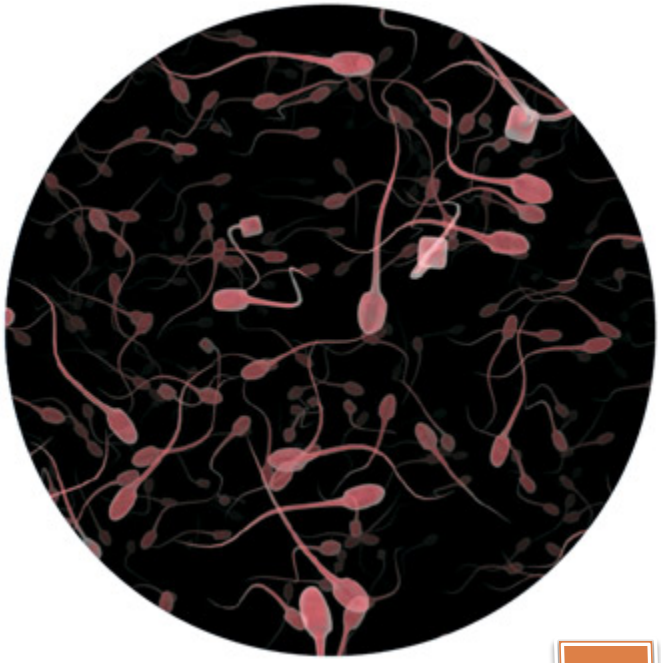
Sperm

- *Microscopic cells produced by the male's testicles which can fertilize the female's ovum*
- Tiny, living cells 100 times smaller than a pencil dot
  - The smallest cell in a mans boc



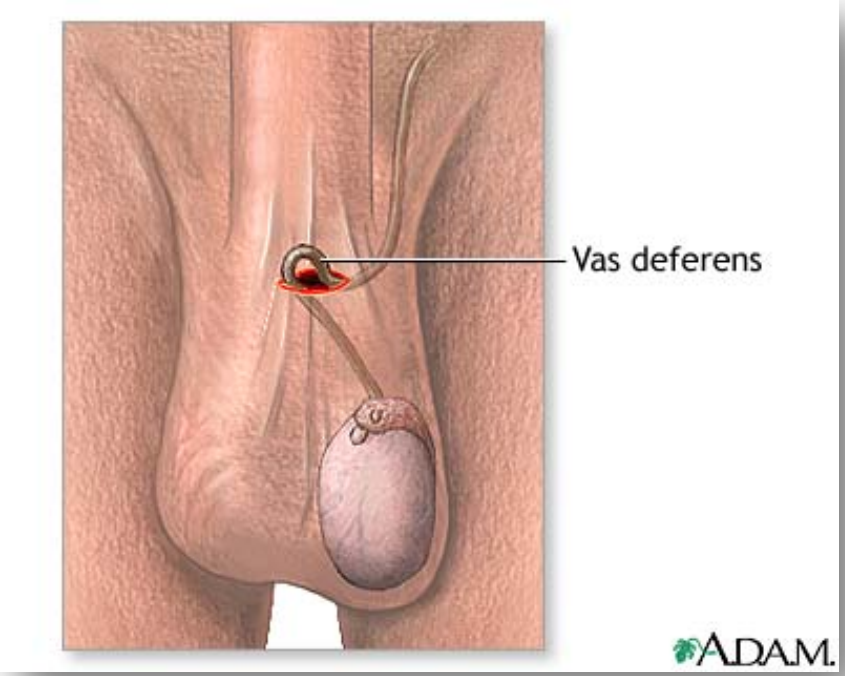
Sperm

- Enough sperm would fit on the head of a pin to re-populate the earth if each sperm fertilized an egg
- It is destroyed by warm body temperature
- Survives in a women's body for 3-5 days
- Any sperm not ejaculated is passed in the urine



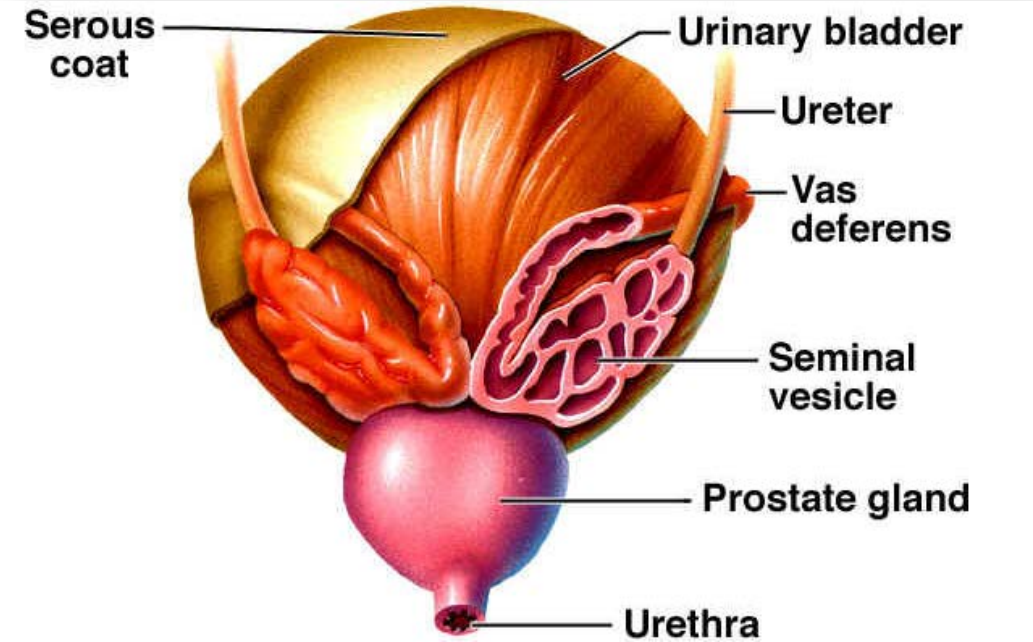
Vas Deferens

- *Two long, thin tubes that serve as a passageway for sperm and a place for sperm storage*
- The contraction of the vas deferens along with the action of the cilia help transport the sperm through the vas deferens



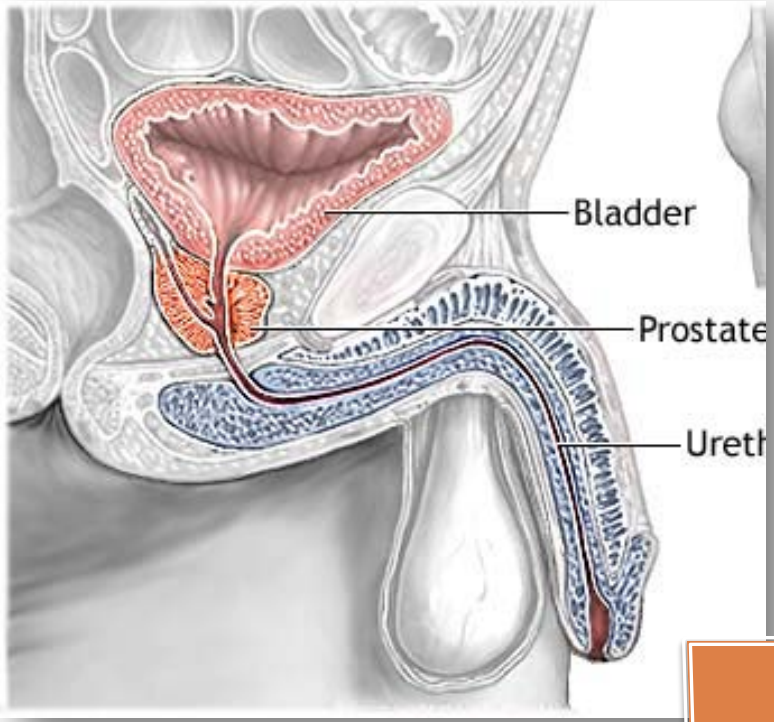
Seminal Vesicles

- *Two small glands that secrete a fluid that nourishes and enables the sperm to move*



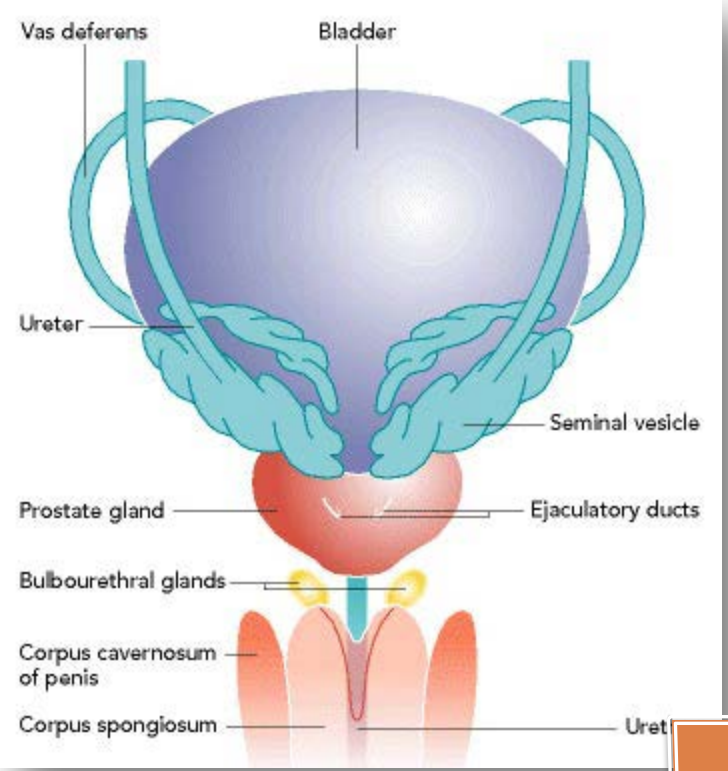
Prostate Gland

- Surround the urethra beneath the bladder
- *Secretes an alkaline fluid that neutralizes the acid found in the male urethra and the female reproductive tract*
- Without the action of the secretions of the prostate gland, many sperm would die and fertilization of an ovum would be impossible



Cowpers Gland

- Two small pea-sized glands located beneath the prostate gland on both sides of the base of the penis
- *They secrete a clear, sticky fluid that helps to neutralize the acidity of the urethra*



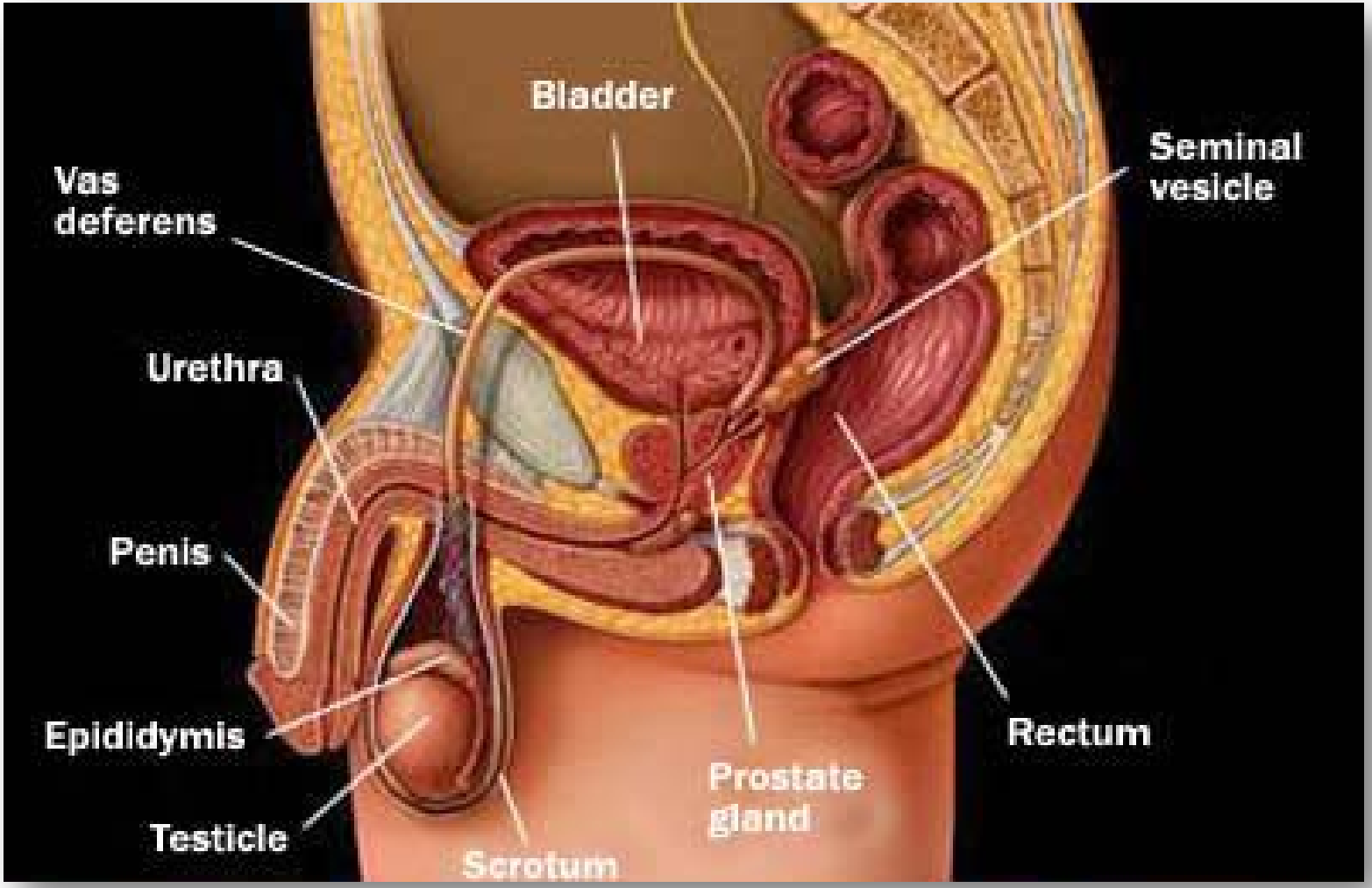
Semen

- *A combination of fluid that is produced in the seminal vesicles, prostate gland, and Cowper's gland*
- This fluid nourishes and helps sperm move through the urethra

Urethra

- *A dual purpose tube that both semen and urine pass through to leave the body*
  - Semen and urine never mix.
- Special muscles or sphincters surround the urethra.
  - During urination, one sphincter will relax so that the pressure from the bladder will push urine out from the body.
  - During ejaculation, another sphincter will relax so that semen can flow through the urethra to the outside of the body.

Male Reproductive System



TIME LINE:

- Infancy
  - Erections begin
- Ages 11-14
  - Secondary sex characteristics appear
- Ages 13-16
  - Sperm begins to be produced in adult amounts (puberty)
- Late teens
  - Peak sexual urges for boys
- Throughout life
  - If good health is present, there is the sex urge and ability to father children

Other

- **CIRCUMCISION**
  - *Removal of the glans of the penis.*
  - Usually done a few hours or days after birth
  - Commonly done for religious reasons or to make it easier to keep clean.
  - Uncircumcised and circumcised penises look a different, but function the same way
- **NOCTURNAL EMISSION (WET DREAM)**
  - *A normal, involuntary ejaculation of semen while a male is asleep*

Other

- **IMPOTENCE**
  - *The failure to get or maintain an erection*
  - The reasons for impotence may be emotional or physical
- **VASECTOMY**
  - *Surgical procedure for sterilization of the male*
  - The vas deferens are severed or a portion is cut out to prevent sperm from entering the semen

Causes of Infertility

- Low Sperm Count
- Viability of Sperm
  - 60% must be normal shape and able to swim a straight line
- Undescended Testes
- Retrograde Ejaculation
- Semen is to thick
- Elevated Scrotum Temperature
- Hormonal Imbalance
- Injury to Testicles