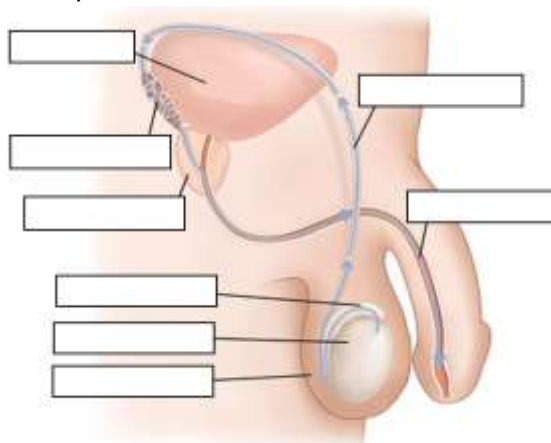


## The Male Reproductive System

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

- I. Testes
  - a. make sperm via meiosis.
  - b. also responsible for produces testosterone, the male hormone
- II. Testosterone
  - a. responsible for many of the "male" characteristics
  - b. Actions of Testosterone
    - i. In Embryo - Differentiation of male reproductive organ (occurs before 6 weeks)
    - ii. In Puberty – Develop male secondary sex characteristics
    - iii. Spermatogenesis
    - iv. Negative Feedback (GnRH and LH)
    - v. Protein Anabolism
    - vi. Behavior: sex drive (libido), may affect aggressive behavior
    - vii. Stimulates red blood cell production by way of kidney hormone production
    - viii. Bone growth
  - c. Male Hormones
    - i. Testosterone is produced in the testes
    - ii. Testosterone production is controlled by negative feedback.
- III. **Epididymis** - collects mature sperm which is eventually propelled through the vas deferens
- IV. **Vas deferens** -sperm travel through this tube, joins with urethra
  - a. **Vasectomy** - the tube is cut to prevent sperm leaving (and fertilizing an egg)
- V. Circumcision
  - a. Boys are born with a hood of skin, called the foreskin, covering the head (also called the glans) of the penis.
  - b. In circumcision, the foreskin is surgically removed, exposing the end of the penis.
- VI. Male Anatomy



- a.
- VII. Composition of Semen
  - a. Sperm
  - b. Mucus
  - c. Water
  - d. Buffer
  - e. Nutrients
  - f. Enzymes
  - g. Zinc
  - h. Prostaglandins

VIII. Male Reproductive Health

a. Prostate Exam

- i. Recommended after age 50
- ii. Check for enlargement of prostate (sign of prostate cancer)
- iii. Doctors use the digital rectal exam (DRE) as a relatively simple test to check the prostate

b. Testicular Self-Exam