

Reproduction Physiology

Text: Human Biology, by Mader. pp. 352-363

1. Overview
2. Male Reproductive Anatomy and Physiology (p.353 - 356)
 - A. Testes (p. 354 - 355)
 - i. Location and Anatomical Considerations
 - a. Development
 - Inguinal Canal
 - b. Scrotum
 - c. Cremaster Muscles
 - d. Septa
 - ii. Seminiferous Tubules
 - a. Spermatogenic Cells
 - Spermatogenesis
 - b. Sustentacular Cells (Sertoli Cells)
 - Nourishment
 - Inhibin
 - Blood-Testis Barrier
 - c. Interstitial Endocrinocytes
 - B. Sperm (p. 355)
 - i. Anatomy
 - a. Head
 - Acrosome
 - b. Middle Piece
 - c. Tail: Flagellum
 - d. Maturation

- C. Accessory Ducts (p. 353)
 - i. Epididymis
 - a. Functions
 - ii. Ductus (Vas) Deferens
 - iii. Ejaculatory Duct
 - iv. Urethra

- D. Accessory Glands (p. 353)
 - i. Seminal Vesicles
 - a. Location
 - b. Functions
 - ii. Prostate Gland
 - iii. Bulbourethral Glands (Cowper's glands)

- E. Semen

- F. Penis (p. 354, see figure 16.3)
 - I. Urethra
 - II. Erectile tissue
 - a. Vascular Sinuses
 - b. Glans Penis
 - c. Prepuce (Foreskin)

- G. Hormonal Regulation (p. 356; see also handout)
 - i. Interstitial Endocrinocytes
 - a. Testosterone
 - FSH and LH
 - b. Inhibin
-
3. Female Reproductive Anatomy and Physiology (p. 357 - 356)
 - A. Overview
 - B. Ovaries
 - Oogenesis
 - Egg
 - Ovulation
 - C. Oviducts (p. 357 - 358)
 - i. Fimbriae
 - D. Uterus (p. 358)
 - i. Cervix
 - v. Cervical Canal
 - vi. Myometrium
 - vii. Endometrium
 - a. Tissue Layers
 - Stratum Functionalis
 - Stratum Basalis
 - viii. Vagina

4. Ovarian Cycle (p. 360 - 361)
 - A. Ovaries
 - i. Cortex
 - a. Follicles
 - Primordial Follicles
 - * Primary Oocyte
 - Ovarian Follicles
 - Corpus Luteum
 - Corpus Albicans
5. Hormonal Regulation in the Nonpregnant Female (362 - 363)
 - A. Cycles
 - i. Menstrual Cycle
 - i. Ovarian Cycle
 - B. Hormones
 - i. Gonadotropin-releasing Hormone (GnRH)
 - ii. Follicle Stimulating Hormone (FSH)
 - iii. Leutinizing Hormone (LH)
 - iv. Estrogens
 - v. Progesterone

6. Hormonal Regulation in the Pregnant Female (p. 363 - 364)
 - A. Additional Endocrine Bodies
 - i. The Embryo
 - ii. Placenta
 - B. Hormones
 - i. Human Chorionic Gonadotropin
 - ii. Prolactin
 - iii. Oxytocin
 - * Conception