

## Chapter 28, The Female Reproductive System

### “Apply What You Know” Answers

- p. 1065—The conversion of the vaginal mucosa to stratified squamous epithelium preadapts the vagina to the abrasive forces of intercourse and childbirth. No other epithelium is as abrasion-resistant as stratified squamous epithelium.
- p. 1070—During climacteric, the ovaries become less and less functional as follicles are depleted. Thus, the levels of ovarian hormones (estrogen and progesterone) decline and with this, there is less negative feedback inhibition of the pituitary. Without this inhibition, the pituitary secretes more FSH and LH than normal.
- p. 1076—The permissive effect is seen when one hormone primes a target organ, preparing it to respond to another hormone. In the ovarian cycle, estrogen stimulates up-regulation of progesterone receptors in the uterus, so the uterus is prepared to respond to the progesterone surge that comes after ovulation.
- p. 1088—Both breasts will eject milk, because milk ejection is not a direct response to suckling at one nipple, but a response to oxytocin in the bloodstream. Oxytocin cannot be selectively directed to just one breast.