

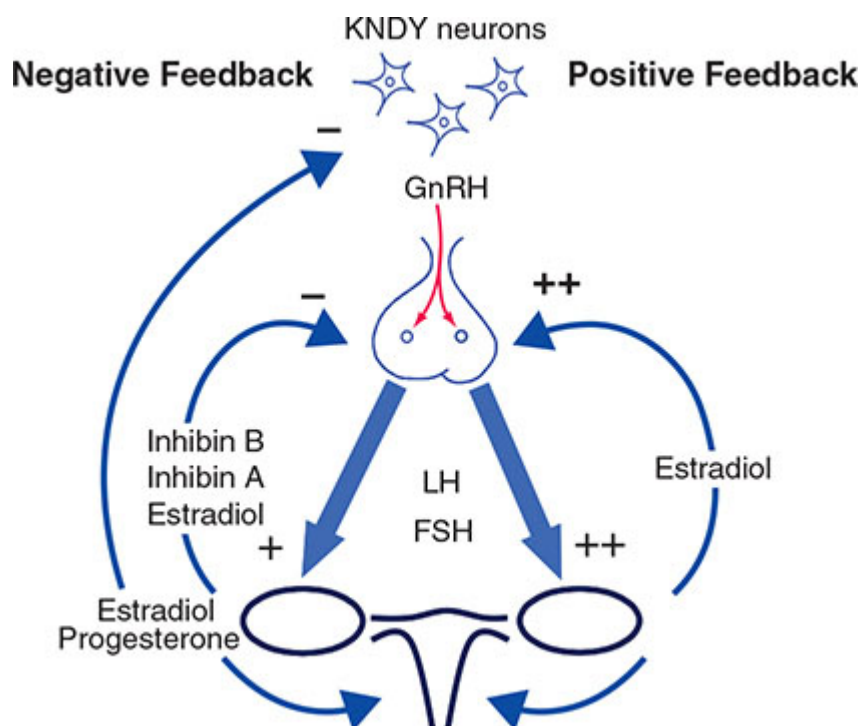


FIGURE 392-7 The reproductive system in women is critically dependent on both negative feedback of gonadal steroids and inhibin to modulate follicle-stimulating hormone (FSH) secretion and on estrogen positive feedback to generate the preovulatory luteinizing hormone (LH) surge. GnRH, gonadotropin-releasing hormone.

■ THE FOLLICULAR PHASE

The follicular phase is characterized by recruitment of a cohort of secondary follicles and the ultimate selection of a dominant preovulatory follicle ([Fig. 392-8](#)). The follicular phase begins, by convention, on the first day of menses. However, follicle recruitment is initiated by the rise in FSH that begins in the late luteal phase of the previous cycle in conjunction with the loss of negative feedback of gonadal steroids and likely inhibin A. The fact that a 20–30% increase in FSH is adequate for follicular recruitment speaks to the marked sensitivity of the resting follicle pool to FSH. The resultant granulosa cell proliferation is responsible for increasing early follicular phase levels of inhibin B. Inhibin B, in conjunction with rising levels of estradiol and inhibin A, restrains FSH secretion during this critical period such that only a single follicle matures in the vast majority of cycles. The increased risk of multiple gestation