



**FIGURE 70-1** The physiologic changes that define the menstrual cycle.

remaining cells in the follicle become the corpus luteum, which produces progesterone during the luteal phase. If fertilization does not occur, progesterone is secreted for about 14 days, and the follicle then involutes. This is associated with decreasing levels of estrogen and progesterone. The endometrium is shed in response to the falling estrogen and progesterone levels, and menstruation occurs.

Normal menstrual cycles usually occur monthly from adolescence until the time of menopause, which begins between the ages of 45 and 55 years. Cycle duration tends to become consistent within several years of menarche due to maturation of the hypothalamic-pituitary-ovarian hormonal axis. The median menstrual cycle length is 28 days, with a normal range between 25 and 35 days. The duration of menses typically is between 2 and 7 days. Delays in the expected onset and abnormalities of menstrual cycles often require evaluation for possible disease, including hormonal and structural disorders.

Estrogen receptors have been identified throughout the body, including reproductive organs and nonreproductive organs such as the brain, arteries, bone, smooth muscle, and urethra. Declining levels of estrogen at menopause explain some of the systemic changes that occur in postmenopausal women. The diagnostic

approach to abnormal genital bleeding and menopause is discussed later in this chapter.

### Gender Differences in Societal Factors

Complex societal factors, including processes of socialization, expectations about work and home, lifestyle behaviors, and other psychosocial factors, can explain differences in the health of men and women. Research shows that women still occupy different positions in society than men. Women are less likely to be employed and more likely to have lower incomes, live in poverty, and be single parents than men. Men are more likely than women to smoke, consume alcohol, eat an unbalanced diet, and be overweight. Women are more likely than men to be physically inactive. However, both men and women of lower socioeconomic status (SES) have a higher prevalence of risky lifestyle behaviors. Women are more likely to report health problems, in part due to higher social demands and perceived obligations. Gender differences exist in perceived control and self-esteem, with women reporting lower levels of both than men, although women do report higher levels of social support.

Research has documented a relationship between health inequalities and socioeconomic inequalities in income,