



## Patient Information

# Understanding Menopause

For centuries, people believed that the end of menstruation, an event known as menopause, was influenced by the moon. Thus, the term menopause stems from the Greek and Latin words for “moon” and “stop.” But menopause is a natural occurrence that all women ultimately experience.

### Hormones and Follicles

At the time of birth, your ovaries hold between 200,000 and 400,000 follicles, or tiny sacks that contain the materials needed to produce mature eggs or ova. The ovaries produce two major female hormones: estrogen and progesterone.

Estrogens affect about 300 different tissues throughout a woman's body. For example, estrogen is essential for the reproductive process and for the development of the uterus and breasts. These hormones are also involved in tissues in the central nervous system (including the brain), the bones, the liver and the urinary tract. The most potent form of estrogen is estradiol; less powerful forms are estrone and estrinol.

Progesterone is necessary for thickening and preparing the uterine lining for the fertilized egg.

As you age, your supply of eggs declines. Menopause occurs naturally after your supply of follicles has been depleted.

### Perimenopause

Menopause begins with a stage called perimenopause that can begin in your 30s, but most often it starts between ages 40 and 44. During this time, you'll experience changes in menstrual flow and the length of your cycle, and possible abrupt increases in estrogen. As perimenopause progresses, your periods become irregular. Eventually, your periods will stop all together.

### Menopause

About 6 months before menopause begins, estrogen levels drop significantly. The following hormonal changes occur when menopause begins:

- Ovarian secretion of estrogen and progesterone ends.
- The ovaries continue to produce small amounts of testosterone, which can be converted to estradiol in body fat.
- The adrenal gland continues to produce androstenedione,

which is converted to estrone and estradiol in body fat.

The most common side effects of menopause include: hot flashes (it's possible to have up to 20 a day), night sweats, mood swings and irritability, depression, sleep disturbances, vaginal dryness, decreased libido, nausea, hair coarseness or loss, increased bladder infections, and palpitations.

### Managing Early Symptoms

You can cope with early symptoms of menopause by:

- Wearing light-colored clothing made of natural fibers or layers to help reduce the impact of daytime hot flashes.
- Avoiding caffeine and hot, spicy foods at night.
- Sleeping nude or in cotton pajamas to reduce night sweats.
- Using vaginal lubricants or moisturizers to alleviate any vaginal discomfort or dryness during intercourse.
- Attending a support group for menopausal women.

### Estrogen Depletion Problems

With a life expectancy of more than 80 years and an average age of menopause of 51, women can expect to live 30 or 40 years in the postmenopausal state. During these decades, you may be at greater risk for conditions associated with estrogen depletion, including cardiovascular disease and osteoporosis. See your NP to assess your risk for these conditions.

If your risks are increased, your NP may suggest estrogen replacement therapy (ERT) or hormone replacement therapy (HRT). Your NP will discuss each treatment's pros and cons to help you make the appropriate decision.

Take into consideration issues such as age, race, family and personal health history. If you have had certain types of cancer or liver disease, for instance, you should not take estrogen. In some cases, regular exercise and calcium supplements may be the optimum way to prevent osteoporosis.

For more information about menopause, talk to your NP.

### *Additional Notes:*

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