

# Hormone Replacement Therapy

**A**t menopause, a woman's body makes less estrogen and she stops having menstrual periods. This is a natural stage in a woman's life. The lack of estrogen can bring on symptoms such as hot flashes and vaginal dryness. It also can increase the risk of **osteoporosis** (bone loss). Because of this, women may choose to take hormone therapy after menopause. This handout will explain:

- How hormone therapy works
- Types of hormone therapy
- Benefits and risks

## Your Body's Hormones

Hormones are substances that control when and how certain organs work. They are made by glands in the body, but also can be made in a lab.

Androgens, so-called male hormones, are made by the ovaries (two glands on either side of the uterus) in women and by the testes in men. In women, androgens are used by the ovaries to make estrogen, the so-called female hormone. The ovaries make estrogen from puberty until menopause.

In women, the hormone estrogen plays a key role in the reproductive system. Changes in the level of estrogen lead to menstrual periods each month. Estrogen also affects a woman's bones and the health of her heart and blood vessels. Estrogen is made during the entire menstrual cycle. It causes the lining of the uterus (the endometrium) to thicken each month.

The amount of estrogen produced by the ovaries decreases as a woman ages. At some point, the ovaries stop making enough estrogen to thicken the uterine lining. This is when the menstrual periods stop and menopause occurs. The average age when a woman has her last menstrual period is 51 years, but the normal range is from ages 45 to 55 years.

If a woman's ovaries are removed during surgery, her estrogen level will decrease suddenly. In most women, this brings on symptoms of menopause. Women can take hormones to relieve symptoms of menopause.

When a woman chooses to take hormone therapy, her options depend on whether she has had her uterus removed. A woman who has had her uterus removed can take just estrogen. This is because using estrogen alone causes the lining of the uterus to grow and increases the risk of endometrial cancer. To reduce this risk, your doctor will recommend using a combination of estrogen and another hormone called progestin if you have a uterus. The progestin keeps the lining of the uterus from growing too much.

## Uses of Hormone Therapy

Hormone therapy can help relieve the symptoms of low estrogen levels (hot flashes and vaginal dryness) and decrease the risk of osteoporosis. The decision to take hormone therapy depends on your personal needs:

- Medical and family history
- Symptoms
- Risk of bone loss
- Age at menopause

## **Reduce Hot Flashes**

About 75% of all women going through menopause have hot flashes (hot flashes). A hot flush is a sudden feeling of heat that spreads over the face and body. The skin may redden like a blush. You also may break out in a sweat. A hot flush may last from a few seconds to several minutes or longer.

Hot flashes may come on a few times a month or several times a day, depending on the woman. Hot flashes can happen anytime—day or night. When they occur at night, they can disrupt your sleep. Estrogen can help relieve hot flashes.

## **Relieve Vaginal Dryness**

Loss of estrogen causes changes in the vagina. Its lining may become thin and dry. These changes can cause pain during sexual intercourse. They also can make the vagina more prone to infection, which can cause burning and itching.

The urinary tract also changes with age. The urethra (the tube that carries urine from the bladder) can become dry, inflamed, or irritated. Some women may need to urinate more often. Women may have an increased risk of bladder infection after menopause. Hormone therapy can help relieve the symptoms of these changes.

## **Help Prevent Osteoporosis**

In many cases, osteoporosis in women results from low estrogen levels. Estrogen helps protect against bone loss. After menopause, a woman's bones slowly lose strength and become more fragile. As a result, older women are more likely to break bones. The hip, wrist, and spine are affected most often.

Hormone therapy can help slow bone loss after menopause. Estrogen helps preserve bone and works with other hormones to increase bone mass. Estrogen also helps bones absorb calcium, which gives them strength. If you are taking hormone therapy to relieve other symptoms of menopause, you will get the benefit of protecting your bones for as long as you take it. However, it only protects bones for as long as you use it. When you stop taking hormone therapy, bone loss resumes. You should take the smallest dose of hormone therapy that works for you, for the shortest amount of time. You and your doctor should decide whether this treatment is right for you. Other drugs are available to help prevent bone loss if you choose not to take hormone therapy.

Exercise also can help prevent bone loss. Weight-bearing exercise, such as walking, strengthens bones just as it strengthens muscles.

## **Concerns and Risks**

Like most treatments, hormone therapy is not free of risk. Using a progestin seems to increase the risk for breast cancer. Also, monthly bleeding may resume. Although bleeding may occur for only a short time, many women do not want to have menstrual cycles at all and may find this side effect bothersome.

Findings of the Women's Health Initiative, a study by the National Institutes of Health, raised concerns about the risks of hormones for postmenopausal women. Because of these findings, the U.S. Food and Drug Administration (FDA) announced that all products used for postmenopausal women that contain estrogen must include a warning label stating that prolonged use of these

hormones could increase the risk of heart attacks, strokes, blood clots, and breast cancer for some women.

The study found that changes in the incidence of disease per 10,000 women on combined HRT in one year were:

- Seven **more** cases of coronary heart disease (37 on combined HRT versus 30 on placebo)
- Eight **more** cases of strokes (29 vs 21)
- Eighteen **more** cases (34 vs 16) and a **twofold greater rate** of total blood clots in the lungs and legs
- Eight **more** cases of invasive breast cancer (38 vs 30)
- Six **fewer** cases of colorectal cancer (10 vs 16)
- Five **fewer** cases of hip fractures (10 vs 15)

The study results suggest that the increased risk of health problems from hormone therapy may vary from woman to woman depending on how far a woman is past menopause. For example, a woman who is 15 years past menopause may be at greater risk than a woman who is 2 years past menopause.

A woman should take the smallest dose of hormone therapy that works for her, for the shortest possible time. For this reason, women who are prescribed these drugs to treat vaginal dryness should consider using a topical cream or gel product.

## Treatment

When they choose to take hormone therapy, most women who have a uterus take estrogen and a progestin. The amount of each hormone needed to prevent symptoms varies from person to person. Over time, changes in the dose may be needed. Hormone therapy can be given in many ways. Your doctor may prescribe one of several types of therapy orally, vaginally (cream, pill, or ring), or transdermally (through the skin):

- Cyclic therapy: Estrogen is taken for 25 days or more and progestin is added on certain days. The exact times may vary. During the time when the progestin is not taken, you may have some bleeding.
- Combined therapy: Estrogen and a low dose of progestin are taken every day. It is common to have irregular bleeding the first few months, but within 1 year, most women stop all bleeding.
- Estrogen only therapy: Estrogen is taken every day for 25 days per month or more. Because estrogen is taken alone, some bleeding may occur.

Sometimes, your doctor may prescribe other nonhormonal medications to manage symptoms or to protect against various conditions. Talk to your doctor about other medications you may wish to take instead of hormone therapy.

## Other Options

Some women concerned about hormone therapy may try other options, such as antidepressants, herbal products, or bioidentical hormones, to relieve symptoms of menopause. For many of these products there are limited facts available. Some products may be helpful in the short-term treatment of symptoms, whereas others are not. Still others may cause harm. Herbal products and bioidentical hormones are not approved by the FDA.

## **Antidepressants**

Although most women do not get depressed during menopause, there is treatment available for women who do. Antidepressants, selective serotonin reuptake inhibitors (SSRIs), can help lessen mood symptoms in some menopausal women. These drugs also have the added benefit of helping to relieve hot flashes.

## **Herbal Products**

Herbal products may help relieve some symptoms of menopause for some women. There are many different types of products available. What works for some women may not work for others.

Soy products may help relieve some symptoms of menopause, such as hot flashes and vaginal dryness. Black cohosh, a North American plant that may act like estrogen, may help reduce hot flashes.

## **Bioidentical Hormones**

Bioidentical hormones are hormones from plants that are combined together (compounded) by a pharmacist using instructions from a doctor. These hormones have the same risks as hormone therapies approved by the FDA and may have additional risks.

## **Follow-up**

When taking hormone therapy or other medications, you should follow your doctor's advice carefully and get regular checkups. Let your doctor know if you have any unexpected vaginal bleeding. Follow-up visits will include a review of your reasons for taking hormone therapy, a blood pressure check, and breast and pelvic exams. A Pap test and a mammogram also may be included. An endometrial biopsy may be advised, especially if you are taking estrogen without a progestin or if you have irregular bleeding. If you choose to take hormone therapy for relief of menopausal symptoms, take the smallest possible dose for the shortest amount of time that works for you.