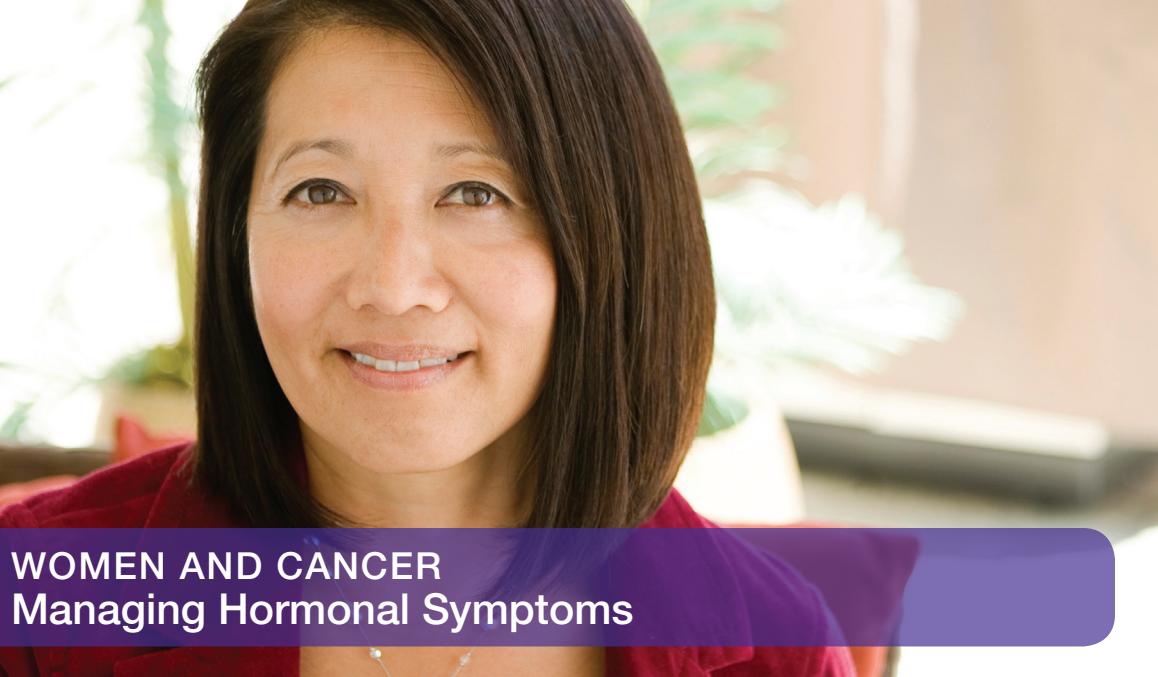




THE HORMONE
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WOMEN AND CANCER Managing Hormonal Symptoms

How does cancer treatment affect female hormones?

Cancer treatment can affect your **hormones** in a number of ways. Some cancer treatments, like chemotherapy or pelvic radiation, can harm your ovaries and stop them from making the hormones estrogen and progesterone. Also, damage to your pituitary gland from radiation to the brain can affect your hormones. The pituitary gland, located at the base of the brain, signals the ovaries to produce hormones and develop eggs.

Because estrogen and progesterone control menstruation, your periods may become irregular or stop for awhile (temporary **menopause**) during and after cancer treatment.

Your periods may continue or return after treatment, but you should know that having periods does not always mean that you are fertile. In some cases, periods may never return. There is still a small chance of pregnancy even if you are not having periods.

Cancer treatment raises the chance you will go into permanent menopause early (natural menopause is usually around age 50). If your menstrual periods stop before you are 40, this is “premature” menopause.

Surgery to remove both ovaries causes a sudden drop in estrogen levels, and you will go through menopause right away. This is called surgical menopause.

Some drugs used to treat breast and ovarian cancer—aromatase inhibitors and selective estrogen receptor modulators (SERMs) like tamoxifen—affect hormones. They may cause symptoms of menopause.

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What are the symptoms of menopause?

Temporary or permanent menopause may cause any of these **symptoms**, among others:

- Hot flashes or night sweats
- Vaginal dryness or itching
- Painful sex
- Need to urinate often or urgently
- Trouble sleeping
- Irritability, mood swings, anxiety, or depression

Sudden menopause due to surgery or cancer medicines may cause worse symptoms than natural menopause. These symptoms can have a major impact on **a woman's quality of life**. Some symptoms may go away over time without treatment; others can be treated by your doctor. Early menopause also raises the risk for long-term health problems.

What are the long-term health risks of early menopause?

Women who have early menopause and do not take hormones live more years with lower levels of estrogen than do women who enter menopause later in life. Therefore, they are at greater risk for diseases linked to lack of estrogen, including heart disease and osteoporosis. Osteoporosis is a disease that thins the bones and makes them more likely to break.



Is hormone treatment after menopause safe for women with cancer?

Hormone therapy (HT) is the most effective treatment for menopausal symptoms. For women with a uterus, HT combines two hormones, estrogen plus progesterone. Progesterone helps protect the uterus against uterine cancer. Women who had a hysterectomy (surgical removal of the uterus) take estrogen alone.

Besides **relieving hot flashes** and other menopausal symptoms, HT helps prevent osteoporosis. HT does not harm future fertility if your infertility is temporary. However, in older, postmenopausal women, HT may raise the risk of breast cancer, heart disease, and stroke. In younger women, these risks are likely much lower and the benefits of HT generally outweigh the risks.

Some women should not take hormones. Women with breast cancer, or at high risk for breast cancer, and those with heart disease, a past stroke, or prior blood clots should not use HT.

You can get HT as a pill or through a vaginal ring, or apply it to your skin as a patch, gel, lotion, or spray. Low-dose estrogen in vaginal rings, creams, or tablets inserted into the vagina can help vaginal symptoms.

Hormone therapy is the most effective treatment for menopausal symptoms.

How long can you take hormone treatment?

HT may continue until the mid-40s to early 50s. If you are already in this age group and are starting HT for hot flashes, your doctor may want you to take the lowest dose that works for the shortest time needed to **improve your symptoms**. Ask your doctor how long you should stay on HT. If needed, some young women may be on HT for many years.

What are the options besides hormone treatment?

Because some women cannot or do not want to take hormones, researchers are studying many treatments without estrogen to find if they relieve hot flashes. Prescription medicines that decrease hot flashes include:

- Antidepressants called SSRIs (selective serotonin reuptake inhibitors) and SNRIs (serotonin norepinephrine reuptake inhibitors)
- Gabapentin, a drug used to treat epilepsy and nerve pain
- Clonidine, a drug used to treat high blood pressure

Treatments for menopausal symptoms that do not need a prescription include:

- Relaxation techniques: Paced breathing and hypnosis seem to help some women with hot flashes.
- Lifestyle changes: If your hot flashes are mild, you may find relief from keeping your body cool. Wear loose clothes, sip cold drinks, and keep rooms cool. Avoid spicy food and anything else that you know triggers your hot flashes.
- Vaginal moisturizers and lubricants: These do not contain estrogen but may help with vaginal dryness and painful sex.

Natural remedies such as soy products, black cohosh, and herbal supplements do not seem to help hot flashes in research studies. However, some women report benefits. Black cohosh may harm the liver, and soy products contain a weak form of estrogen. The safety of many other natural products is not yet clear. Talk to your doctor before using these remedies.

Researchers are studying many treatments without estrogen to find if they relieve hot flashes.



What are other treatments for the long-term health risks of menopause?

To maintain bone health after menopause, you should get 1,200 to 1,500 mg (milligrams) of calcium each day through what you eat and from supplements as needed. Women should take at least 600 IU (International Units) a day of vitamin D, though some women may need higher doses. Also, **exercising each day** can protect your bones and heart health.

Some medicines that treat or prevent bone loss in women after menopause include bisphosphonates, raloxifene (a drug that also lowers the risk of invasive breast cancer), and calcitonin.

Cholesterol levels can become too high after menopause. If needed, statins or other medicines can lower cholesterol.

Because cancer survivors may go through menopause at a much younger age than women who have not had cancer treatments, these issues are especially important for long-term health.

How does cancer treatment affect sexual health?

Cancer treatment and early menopause can affect the physical and emotional aspects of sexuality. Vaginal dryness and thinning can make sex painful. Fatigue from treatment may lower your energy for sex. Menopause and some medicines can decrease sex drive. Side effects of cancer treatment also can make some women feel unattractive or uncomfortable. Ask your doctor which treatments will relieve your symptoms and what else you can do to **improve your sexual health**. Your doctor can also refer you to a specialist in this field.

What should you do with this information?

Talk to your doctor if your cancer treatment is causing bothersome side effects or you have concerns about future problems. Here are some questions to ask your doctor:

- Will my cancer treatment cause me to go into menopause?
- If my periods stop, will they start again?
- Is there anything I can do to prevent early menopause?
- What are the problems of early or premature menopause?
- Can I take hormone therapy? What are the benefits and risks?
- If I shouldn't take HT, what are my other options?
- How can I protect my bone and heart health after menopause?
- How will cancer treatment or early menopause affect my sexual relationships? What can I do about it?
- Are there other issues about early menopause that I should be aware of?

Resources

Save My Fertility
SaveMyFertility.org

Find-an-Endocrinologist
www.hormone.org/FindAnEndo/index.cfm

The Hormone Foundation
www.hormone.org/Resources/menopause-and-womens-health.cfm

American Cancer Society
www.cancer.org

American Society of Clinical Oncology
(cancer information)
www.cancer.net

North American Menopause Society
www.menopause.org

Oncofertility Consortium
myoncofertility.org
oncofertility.northwestern.edu or call
1-866-708-FERT (1-866-708-3378)

EDITORS:

Clarisa Gracia, MD
Gwendolyn Quinn, PhD
Lynn Westphal, MD

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The Oncofertility Consortium® is a national, interdisciplinary initiative designed to explore the reproductive future of cancer survivors.

The development of this fact sheet was supported by educational grants from Merck and EMD Serono.