

How Hormones Affect **BREAST CANCER RISK**



Birth control pills (oral contraceptives)

Current or recent use of birth control pills is linked to a slight increase in breast cancer risk. However, this extra risk is quite small because the risk of breast cancer is low for most young women.

Once a woman stops taking the pill, her risk goes down. Over time, this extra risk goes away.

If you take birth control pills, talk with your doctor about the risks and benefits.

Hormones are chemicals made by the body that control how cells and organs work. Estrogen is a female hormone made mainly in the ovaries. It's important for sexual development and other body functions. From your first monthly period until menopause, estrogen stimulates normal breast cells.

Higher lifetime exposure to estrogen is linked to an increased risk of breast cancer. For example, starting your period at a young age or going through menopause at a later age are linked to risk. Other hormone-related risks are described below.

Menopausal hormone therapy

Pills

Menopausal hormone therapy (MHT) is also known as postmenopausal hormone therapy or hormone replacement therapy. Many women use MHT pills to relieve hot flashes and other menopausal symptoms. MHT should be used at the lowest dose and for the shortest time needed to ease menopausal symptoms. Long-term use can increase your risk of breast cancer and other health conditions. If you're taking or thinking about taking MHT pills, talk with your doctor about the risks and benefits.

There are 2 main types of MHT pills: estrogen plus progestin and estrogen only.

MHT with estrogen plus progestin

MHT pills with estrogen plus progestin are used by women who still have a uterus. Estrogen plus progestin MHT pills increase breast cancer risk. Once a woman stops taking them, her risk goes down over time.

MHT with estrogen only

MHT pills with estrogen only are used by women who don't have a uterus (women who've had a hysterectomy).

Taking MHT pills with estrogen only for 10 years or more may increase the risk of breast cancer.

Vaginal creams, suppositories and rings

Vaginal forms of MHT don't appear to increase the risk of breast cancer. However, if you've been diagnosed with breast cancer, vaginal estrogen rings and suppositories are preferred over vaginal estrogen creams.

Patches

Whether hormone patches affect breast cancer risk is under study.

Note: MHT is different from **hormone therapies used to treat breast cancer** or reduce breast cancer risk (which act as "anti-hormone" therapies).

This fact sheet is intended to be a brief overview. For more information, visit komen.org or call Susan G. Komen's Breast Care Helpline at 1-877 GO KOMEN (1-877-465-6636) Monday through Friday, 9 a.m. to 10 p.m. ET or email at helpline@komen.org. Se habla español.

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Resources

Susan G. Komen®
1-877 GO KOMEN
(1-877-465-6636)
komen.org

Related educational resources:

- [Risk Factors and Risk Reduction](#)
- [Breast Cancer & Risk](#)
- [Hormone Receptor-Positive Breast Cancer](#)

But what about...

the link between estrogen and breast cancer?

Some breast cancer cells need estrogen to grow. When estrogen attaches to special proteins called estrogen receptors, the cancer cells with these receptors grow. Estrogen receptor-positive breast cancers have many cells with hormone receptors and can be treated with hormone therapy.

women who've been diagnosed with breast cancer? Should they avoid MHT?

MHT is not usually recommended for breast cancer survivors because it may increase the risk of breast cancer recurrence (the return of cancer) and cancer in the opposite breast. Talk with your doctor about other ways to help ease menopausal symptoms.

women with a family history of breast cancer?

It's not clear if women with a family history of breast cancer should avoid birth control pills or MHT. This topic is under study. Talk with your doctor about how your family history may affect your risk. Use the [family health history tool](#) to record and organize your family health history.

Other natural hormones linked to breast cancer risk include:

Androgens (such as testosterone) are natural hormones important for sexual development. Women with higher blood levels of testosterone have a higher risk of breast cancer after menopause than women with lower levels. Higher blood levels of testosterone may also be linked to an increased risk of breast cancer before menopause.

Insulin-like growth factor 1 (IGF-1) is a natural hormone that plays a role in growth and development. Women with higher levels of IGF-1 in the blood may have a higher risk of breast cancer than women with lower levels of IGF-1.

Prolactin is a hormone mainly produced in the pituitary gland (a small gland near the brain). It plays a role in breast growth and the production of milk during breastfeeding. Women with higher blood levels of prolactin have a higher risk of breast cancer than women with lower levels.

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