

The hormone story

Hormones are chemicals made by the body that control how cells and organs do their work.

Estrogen is a female hormone made mainly in the ovaries. It is important for sexual development and other body functions. From your first monthly period until menopause, estrogen stimulates normal breast cells. Having a higher lifetime exposure to estrogen may increase breast cancer risk. For example, your risk increases if you start your period at a young age or go through menopause at a later age. Other hormone-related risks are described below.

Birth control pills (oral contraceptives)

Current or recent use of birth control pills slightly increases breast cancer risk. Once a woman stops taking the pill, her risk goes down. Over time, this risk even goes away. Most studies looked at breast cancer risk with older, higher dose forms of the pill. The effects of lower-dose birth control pills are still under study.

If you take some form of birth control, talk with your doctor about its risks and benefits.

Menopausal hormone therapy (hormone replacement therapy)

Many women use menopausal hormone therapy (MHT) to relieve hot flashes and other menopausal symptoms. MHT is approved for short-term relief of these symptoms. Long-term use can increase breast cancer risk and other serious health conditions. There are two main types of MHT: estrogen plus progestin and estrogen alone.

Estrogen plus progestin MHT is used by women who still have a uterus. Estrogen plus progestin MHT increases breast cancer risk. Over time, this risk goes down once a woman stops taking it.

Estrogen alone MHT is used by women who don't have a uterus (hysterectomy). Some studies show estrogen alone MHT may increase breast cancer risk, but others don't. More research is needed.

Any woman currently taking or thinking about taking MHT should talk with her doctor about the risks and benefits.

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



But what about...

- **the effects of estrogen when breast cancer cells are already present?**

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

- **the benefits of birth control pills in preventing pregnancy and reducing the risk of ovarian cancer?**

Together with her doctor, each woman should weigh the risks and benefits of taking birth control pills and make an informed decision.

- **the benefits of MHT in reducing symptoms of menopause?**

MHT is approved for the short-term relief of menopausal symptoms and should be used at the lowest dose and for the shortest time needed to ease symptoms. There are other things you can do to manage symptoms. Each woman should talk about risks and benefits of all options with her doctor and make an informed decision.

- **women who have been diagnosed with breast cancer? Should they avoid MHT?**

Today, the best choice for most breast cancer survivors is to avoid MHT. Although still under study, MHT may increase the risk that breast cancer will come back. Talk with your doctor about other ways to help ease menopausal symptoms.

- **women with a family history of breast cancer?**

It is not clear whether or not women with a family history of breast cancer should avoid birth control pills or MHT. This area is under study. Talk with your doctor about how your family history may affect your risk.

Related terms

Menopause — The time in a woman's life when menstrual cycles stop and the level of estrogen in her body decreases

Oral contraceptive (birth control pills) — Hormone-based drugs used to prevent pregnancy or help regulate a woman's menstrual cycle

Progesterone — A hormone that is released by the ovaries during every menstrual cycle and helps prepare a woman's body for pregnancy

Progestin — Any substance (man-made or natural) that has some or all of the effects of progesterone in the body

Resources

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

Related fact sheet in this series:

- Types of Breast Cancer Tumors