The endocrine system is a network of glands and organs that produce, store, and secrete hormones. Women, over the course of a lifetime, are exposed to many hormones. From her first period until menopause, a woman makes estrogen and progesterone, which support normal breast cells. But, this lifetime of exposure to hormones may place women at an increased risk for breast cancer.

Breast cancer is one of the most common cancers in American women, especially for those who start their periods before age 12 or reach menopause after age 55. It is more common among women who:

- Are older
- Have no children
- Didn’t get pregnant until after age 30
- Take birth control pills
- Have used hormone replacement therapy for more than five years
- Have a family member, such as a mother, sister, or daughter, who has had breast cancer
- Are obese and/or have dense breasts
- Drink alcohol to excess

Your genes and your hormones play a role in breast cancer but we don’t know exactly how. We know that estrogen (the major female hormone) and progestin (a synthetic form of progesterone, another female hormone) can cause breast tissue to grow faster than normal. Cancer usually appears in tissue that grows fast.

Most people will initially only notice one or two symptoms, and the presence of these do not always mean you have breast cancer. If, however, you notice one of these symptoms, you should check with your healthcare provider:

- A lump in the breast
- A change in the size or shape of the breast
- Puckering, dimpling, and redness of the breast skin
- A nipple discharge from one breast but not the other
- Bloody discharge from a nipple

Visit endocrine.org for more information.

Editor: Richard J. Santen, MD
QUESTIONS TO ASK YOUR DOCTOR

- What is my risk for breast cancer?
- If I’m at high risk, should I take medication to prevent breast cancer?
- How often should I get a mammogram?
- Should I seek genetic testing?

TIPS FOR STAYING HEALTHY

- Begin mammogram screening at age 50 (age 40, if you’re at a higher risk)
- Limit alcohol use
- Control your weight
- Stay physically active
- For menopausal women with symptoms, use hormone therapy at lowest dose and for a limited period of time unless there is an increased risk of breast cancer or heart disease

PREVENTION AND DIAGNOSIS

It’s important to diagnose breast cancer early as when it’s caught early, your chances of a cure are much greater. Imaging tests can often find breast cancer before you notice any symptoms:

- MAMMOGRAMS: x-ray the breasts to get a closer look for changes in breast tissue
- BREAST ULTRASOUND, or sonography, uses sound waves to look at breast changes, such as those that can be felt but not seen on a mammogram
- MAGNETIC RESONANCE IMAGING (MRI) uses radio waves and magnets to note patterns in breast tissue and look for cancer

A breast biopsy is the only way to know for sure if breast changes are cancerous. For a biopsy, a sample (tiny piece) of the area is removed and tested in a lab.

DID YOU KNOW?

- Breast pain during the menstrual cycle occurs in up to 80% of women but it is important to know that breast pain is not a symptom of breast cancer
- Lifestyle changes, such as regular exercise, maintaining a normal weight, and avoiding excess alcohol, may be helpful in preventing breast cancer
- About 1 in 8 women will develop breast cancer during her lifetime
- More than 3 million women are living with breast cancer in the US
- The 5-year survival rate for breast cancer that hasn’t spread to other parts of the body is 98.8%

Source: National Institutes of Health National Cancer Institute

PATIENTS HAVE QUESTIONS. WE HAVE ANSWERS.

Endocrine Society is your trusted source for endocrine patient education. Our free, online resources are available at endocrine.org/patient-engagement