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The monthly Navigator is your way of reading about the national health subject of the month and "navigating" your way through what you should know to get and stay healthy. Enjoy!



Navigator

October

October is National Breast Cancer Awareness Month

DISCLAIMER. Representations in the Navigator issues are based on information gathered from multiple healthcare websites and advisors. The content is for informational purposes only. We have not implied any representation confirming this information as accurate or complete. Readers are responsible to consult with their own healthcare advisors regarding their specific healthcare needs.

About Breast Cancer

Breast cancer is the most common cancer among women worldwide. In the United States, it is the second most common cancer after skin cancer. Every year, more than 200,000 women in the U.S. are told they have breast cancer. The 5-year survival rate for women was 75% in 1974. Today, it's 90%. Although rare in men, they are also at risk.



For more information, visit the Susan G. Komen website at: <https://www.komen.org/>

Your Breast Cancer Risk

Whether you're concerned about your risk of breast cancer, have a history of breast cancer or other cancers in your family, the first step is learning more about risk. Research can't explain why one person develops cancer and another doesn't. Nor do we know that having one or more risk factors will result in cancer. But we do know some people are at higher risk due to the following:

Factors linked to increased risk. Being born female is the most common risk factor for breast cancer. Although men can get breast cancer, it's about 100 times more common in women. Age is another common risk factor. As you get older, you're more likely to get breast cancer. Being overweight or obese after menopause, drinking alcohol and taking menopausal hormone therapy are all linked to an increased risk of breast cancer. Smoking may also be linked to an increased risk.

Factors linked to a decreased risk. Some factors are linked to a decreased risk of breast cancer, such as breastfeeding and exercise. Eating fruits and vegetables may also be linked to a decreased risk of breast cancer.

Factors not linked to an increased risk. Some factors are not linked to an increased breast cancer risk, such as breast implants and caffeine.

If you're at a higher risk for cancer. Talk with your doctor about a screening plan that's best for you. Talk with your doctor about whether you should consider genetic counseling and genetic testing if, for example, a family member has an inherited gene mutation related to breast cancer.

Warning Signs

If you have any of the warning signs described below, see a health care provider. These changes can occur and not be breast cancer, but the only way to know is to get it checked.

Warning signs of breast cancer in women and men:

- Lump in the breast, chest or underarm arm (usually painless)
- A change in the look or feel of the breast
- Dimpling, puckering or redness of breast skin
- Itchy, scaly sore or rash on the nipple
- Pulling in of nipple (inverted nipple)
- A change in the look or feel of the nipple
- Nipple discharge

Risk factors for men include:

- Family history
- Exposure to radiation
- Infertility
- Testicular abnormalities
- Liver problems
- Sex chromosome abnormalities

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For more information, contact your doctor.

Breast Cancer Screening, Early Detection and Diagnosis

Breast cancer screening and early detection play an important role in your health. Screening tests can help detect breast cancer at an early stage when the chances of survival are highest. The American Cancer Society recommends an annual mammogram for women beginning at age 40. An MRI may be recommended if there is a strong family history of breast cancer.

Cancer Screening. The most common tests to detect breast cancer are screening mammograms and/or ultrasounds and clinical breast exams. Screening tests are used to find breast cancer in a person without warning signs or symptoms.

Blood tests (e.g., CBC) are typically not done in the preliminary screening unless the patient and/or doctor decide to do additional tests to help with the diagnosis (see page 4). In addition, blood tests can be helpful in testing for overall health especially if a person is preparing for surgery or chemotherapy.

Other Blood Tests can be added if your doctor wants to research your particular risk further even though blood tests, as mentioned above, are not the first screening tests typically done.

- **CA-125 and CA15-3** blood tests are used to detect the level of the protein, CA-125, which is referred to as a “tumor marker.” CA125 is proposed as a serum biomarker for ovarian cancer, but elevated levels have been observed in up to 84% of metastatic breast patients. In breast cancer, CA-125 and CA15-3 are the most widely used serum tumor markers in clinical routine, although their usefulness remains controversial. Cancer antigen 125 (CA-125) may also be able to signal a breast cancer recurrence.
- **BRCA1 and BRCA2** (Breast Cancer genes 1 and 2) are the most well-known genes linked to breast cancer. Mutations (abnormal changes in your genetic code) can be inherited; this doesn’t mean, however, that if one of your parents has a mutation, you will have the mutation. In the U.S., 5%-10% of breast cancers are related to a known inherited gene mutation, and about 1 in 400 to 800 individuals have the mutation. The test requires a sample of blood.
- **Biomarkers.** If you’ve been diagnosed with breast cancer, biomarkers can help you and your doctor in a number of ways. Biomarkers help doctors figure out the subtype of the breast cancer. Knowing the breast cancer subtype helps you and your doctor decide on the best treatments for your unique situation. Biomarkers help doctors figure out how likely early-stage breast cancer is to come back and make decisions about whether treatments after surgery would offer benefits. Biomarkers may help doctors monitor how the cancer is responding to treatment. Biomarkers may also help determine prognosis. If you’ve been diagnosed with metastatic breast cancer – cancer that has spread to parts of the body, testing for certain biomarkers can help identify treatment options.
- **Circulating tumor DNA** are fragments of the cancer cells’ DNA that enter the bloodstream. A blood test, also called a liquid biopsy, is done to look for ctDNA. Because ctDNA may be in the blood even if just a few cancer cells are present, the test can allow doctors to diagnose cancer recurrence before you have any physical symptoms, such as a lump or pain.

We recommend that patients with elevated CEA, CA125 and CA153 levels suggestive of breast cancer receive subsequent examinations or clinical interventions.

Breast Cancer Diagnosis. If you’ve had an abnormal finding on a screening mammogram or other breast screening test or felt a lump in your breast, you’ll have follow-up tests. These tests could include additional mammograms and/or ultrasounds, an MRI and some of the additional testing for blood markers as indicated above. These tests may rule out breast cancer. If not, you’ll have a breast biopsy. A biopsy is the only test that can diagnose breast cancer. Most of the time, findings from a biopsy don’t turn out to be breast cancer.

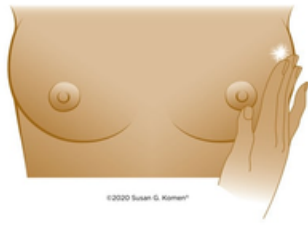
***For more information,
contact your doctor.***

Warning Signs

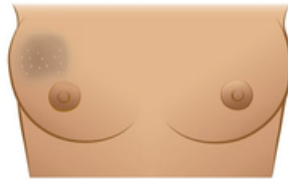
Detailed, with images

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- Lump, hard knot or thickening inside the breast or underarm area



- Swelling, warmth, redness or darkening of the breast



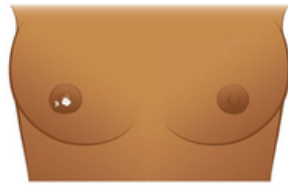
- Change in the size or shape of the breast



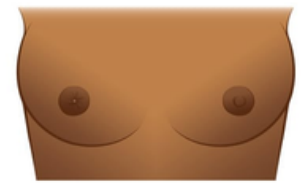
- Dimpling or puckering of the skin



- Itchy, scaly sore or rash on the nipple



- Pulling in of your nipple or other parts of the breast



- Nipple discharge that starts suddenly



- New pain in one spot that does not go away



Most individuals can survive breast cancer early. Please get checked regularly by your doctor.

For more information, visit the Susan G. Komen website at: <https://www.komen.org/>

Tools for Breast Cancer Prevention

- Keep Weight in Check.
- Be Physically Active.
- Don't Smoke or Drink Alcohol Excessively.
- Eat Your Fruits & Vegetables
- Don't Forget Mammograms

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Don't delay seeing a health care provider. Some individuals may be embarrassed about a change in their breast or chest area. Others may not know it's important to see a health care provider about a change. However, putting off seeing a provider may result in a delay in breast cancer diagnosis. Survival is highest when breast cancer is found early and treated.

Prevention of Breast Cancer with Vitamins, Micronutrients and Diet

Numerous dietary components and vitamins have been found to inhibit the molecular events and signaling pathways associated with various stages of breast cancer development.

Vitamins, Micronutrients. Testing by the NIH (National Institute of Health) has identified the following that have been associated with lower risks of breast cancer risk and/or recurrence.*

- 4 vitamins: vitamin D3, folate, vitamin B6, and beta carotene;
- 2 spices: curcumin and piperine; and
- 5 micronutrients: sulforaphane, indole-3-carbinol, quercetin, epigallocatechin gallate (EGCG) and omega-3 polyunsaturated fatty acids (PUFAs)



*<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6689356/>

Diet. The following dietary factors may be related to breast cancer by either possibly contributing to the cancer, or it may help prevent cancer: **

Possibly may contribute to breast cancer or allow it to grow more aggressively:

- Drinking 2 or more alcoholic drinks/day had 20% higher risk.
- Tobacco use of any kind and to any degree.
- Obesity
- Diets high in acrylamides (chemicals found in foods cooked at high temperatures), excessive caffeine (coffee and tea), sugar (especially sugar-sweetened beverages).

Possibly help prevent breast cancer or lessen its progress:

- Olive oil is packed with polyphenols – compounds that exert anticancer effects.
- Fruits, vegetables, and whole grains contain fiber, which is considered cancer-preventive.
- Carotenoids (melons, carrots & sweet potatoes) had a lower risk.
- Fish (wild salmon, tuna, mackerel, sardines, and anchovies), nuts (walnuts), and seeds (flax seed) contain omega-3 fats that can help fight breast cancer.
- Herbs and seasonings such as onions, garlic, oregano, rosemary, thyme, or turmeric add delicious flavor and reduce inflammation. Inflammation may promote cancer growth.



For more information, contact your doctor.

**<https://news.llu.edu/health-wellness/foods-fight-breast-cancer>

Many thanks to the Susan G. Komen Foundation, Cleveland Clinic, Mayo Clinic, NIH, BreastCancer.org and National Breast Cancer Foundation for supplying some of the documentation and images for the above information relating to Breast Cancer.