

Breast Cancer Awareness



Changes in the Breast

A change in breast tissue doesn't automatically mean you have cancer. Some changes in the breast are normal for your stage of life.

If you're concerned, of course call the doctor, but there's probably not a reason to panic.

PROBABLY NOT ANYTHING TO WORRY ABOUT

Many changes in the breast are because of fluctuating hormones, such as when a woman is about to start her menstrual cycle or when she's pregnant. Here are some times you may notice a difference in your breasts that's not worrisome.

Before or during your cycle. Your breasts may feel swollen or tender, and that's normal. You may even feel a lump because of extra fluid in your breast. You should always call a doctor if you feel a lump, but the doctor may schedule a return visit when you're not on your cycle to check the breast.

During pregnancy. Your body undergoes a lot of changes during pregnancy, and one of them may be larger and more painful breasts. They may even feel lumpy as the glands that produce milk gear up for breastfeeding. While breastfeeding, you may also get a painful condition called mastitis when a milk duct becomes blocked. Mastitis causes the affected breast to become warm and feel lumpy and painful. You can get medications from your doctor to help.

Before and after menopause. Your hormone levels are changing, and that can make your breasts feel tender and

lumpy. As your levels drop off after menopause, these conditions usually stop.

If you're taking hormones, such as menopausal hormone therapy or birth control. These hormones may cause your breasts to become more dense, making a mammogram more difficult to read. Let your provider know about these and all other medications you take.

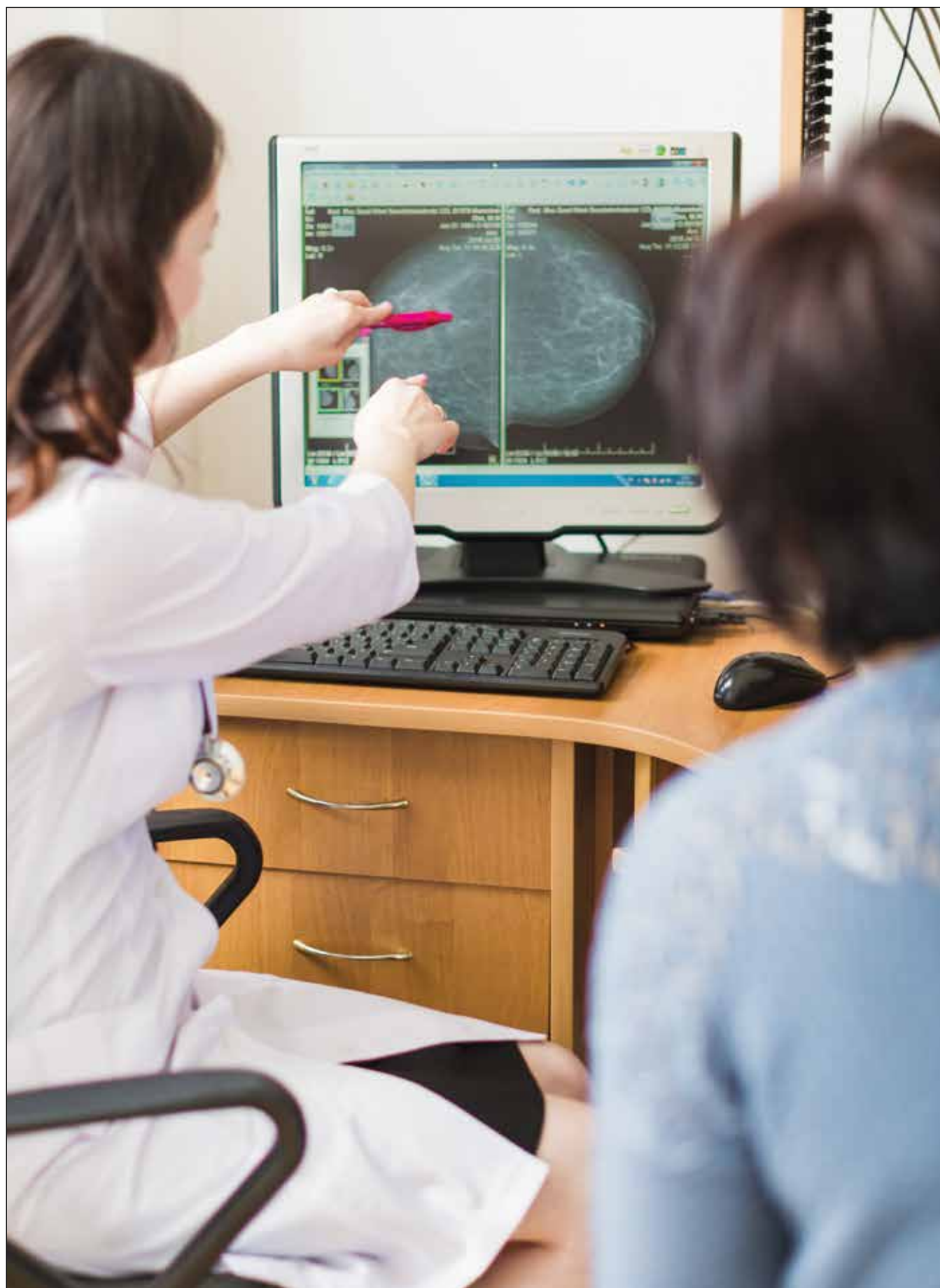
SYMPTOMS TO BE CONCERNED ABOUT

If you feel any change in your breast that you're worried about, even if it's explained by one of the above reasons, call your doctor and have it checked out. Some symptoms that should raise a red flag are:

A lump or firm feeling in your breast or under your arm. It could be a hormonal change, but it could be something more nefarious. Do regular self-exams so that you know what your breasts feel like but remember, they're no substitute for a mammogram.

Nipple changes or discharge. This discharge can be any of several colors or textures. It could be something as simple as an infection of the side effect of medications, but it should always be checked out.

Itchy, red, dimpled or puckered skin. Again, this could just be minor irritation, but it could be something worse. Call the doctor.



How to Do a Self-Exam

You should be checking your breast for changes at least once a month, according to the National Breast Cancer Foundation and Johns Hopkins Medical Center.

About 40% of diagnosed breast cancers are detected by women who feel a lump and get it checked out. Here's how to properly conduct a self-exam.

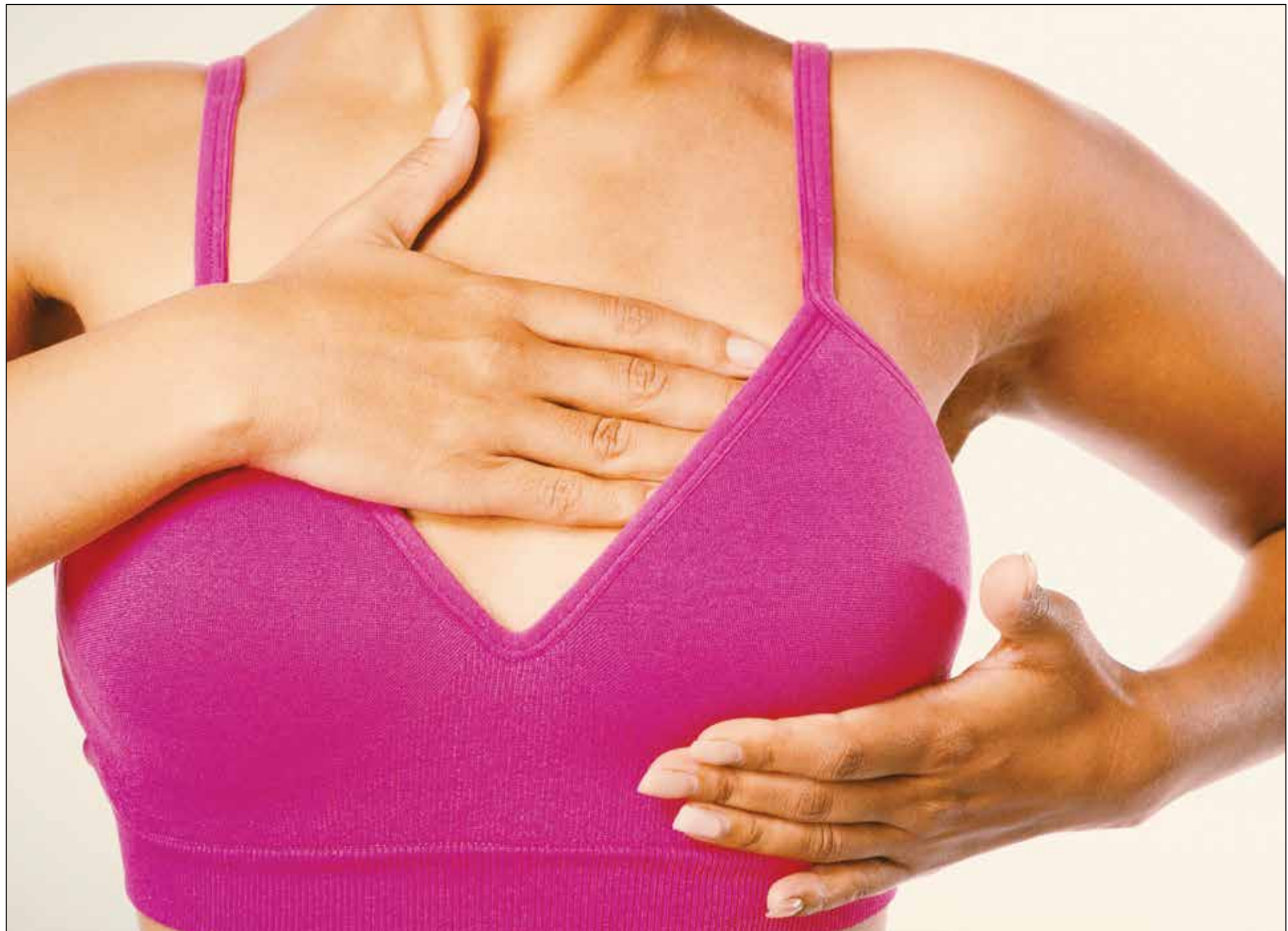
IT'S NOT A MAMMOGRAM

A self-exam is useful, but remember, it's not the same as a mammogram or other imaging that can detect cancer in its very earliest stages. For the most effective medical care, combine self-exams with regular doctor's appointments and age- and health-appropriate cancer screenings.

Some signs to look for during your breast exam are nipple tenderness, lumps, thickening, changes in skin texture or enlargement of pores in the skin of the breast. Also examine your underarm area as the breast tissue spreads around your sides and armpits.

LYING DOWN

When lying down, your breast tissue will spread against the chest wall. Place a pillow under your shoulder



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and raise that arm above your head. Using the opposite hand, move the pads of your fingers around your breast, covering the entire area and armpit. Use light, medium and firm pressure. Check for nipple discharge and lumps, then repeat for the other side.

IN FRONT OF A MIRROR

With your arms at your

sides, look at your breasts as you raise your arms over your head. You're looking for changes in the contour, swelling, dimpling of the skin or changes in the nipples. Rest your palms on your hips and press firmly to flex your chest muscles. Look for dimpling, puckering or changes, particularly on one side. Don't be alarmed if your breasts aren't symmetri-

cal; most women's aren't.

IN THE SHOWER

Hold one arm up and behind your head. Using your fingertips, check the entire breast and armpit area on that side by pressing down with light, medium and firm pressure. Look for lumps, thickening, a knot or any other changes.

If you notice any changes, don't panic. Most lumps, even, aren't cancer. But you do need to check with your doctor for a clinical exam whenever you have concerns. Combined with regular medical care and more in-depth screening, such as mammography, self-exams are a powerful tool in the early detection and successful treatment of breast cancer.

What Is a Mammogram?

Mammograms are X-ray pictures of your breast. They can detect breast cancer early, when it's most treatable.

Regular mammograms are some of the best tests doctors have to detect breast cancer early, the Centers for Disease Control and Prevention says.

WHEN SHOULD I GET A MAMMOGRAM?

The American Cancer Society recommends regular, annual mammograms for women 45-54 years old. Before then, women over 40 can start to have the annual screening with mammograms if they or their health care providers choose to. Women 55 and older can switch to mammograms every two years if they want. Screening should continue as long as a woman is in good health and expected to live 10 or more years. Because of family history, genetics or other factors, some women should also get MRIs along with their mammograms.

HOW IS A MAMMOGRAM DONE?

You'll stand in front of an X-ray machine and a technologist will place your breast on a clear plastic plate. Another plate will firmly press your breast from above. The steps are repeated for a side view. The technologist will not be able to tell you your results;



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that has to wait for a radiologist. It may be uncomfortable, but it will only take a few minutes. Try not to schedule your mammogram near your menstrual cycle as this can make your breasts more tender and the X-ray more uncomfortable.

Don't wear perfume, deodorant or powder as these products can show up as white

spots on the mammogram. Try to wear a top with a skirt or pants instead of a dress as you'll need to undress from the waist up.

WHEN WILL I GET MY RESULTS?

You will usually get your results within a few weeks. If you haven't heard within 30

days, contact your health care provider or the mammography facility. If your mammogram is normal, you should continue to get mammograms at the regular intervals. Mammograms work best when they can be compared with previous ones.

If your mammogram is abnormal, that doesn't neces-

sarily mean you have cancer, but you should have additional mammograms, tests or exams. You may be referred to a breast specialist or a surgeon, but again, that doesn't mean you have cancer or need surgery. These doctors are experts in diagnosing breast problems and they can do follow-up tests.



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Genes and Hereditary Cancer

About 3% of breast cancers are the result of inherited mutations in the BRCA1 and BRCA2 genes. These two genes normally protect you from getting certain cancers, but mutations can prevent them from working properly.

These mutations can cause breast, ovarian and other cancers, but not everyone who inherits the mutation will get cancer.

HOW IT WORKS

Everyone has two copies of the BRCA1 and BRCA2 genes, one from their mother and one from their father. If a person inherits a mutation from one parent, they can still have the normal copy from the other par-

ent. Cancer occurs when a second mutation happens that affects the normal copy of the gene so the person no longer has a properly functioning BRCA1 and BRCA2 gene. Unlike an inherited mutation, the second mutation is only present in the cancer tissue.

OTHER MUTATIONS

Breast cancer can also be caused by inherited mutations in genes other

than BRCA1 and BRCA2. In some families with a history of breast cancer, mutations can be identified through genetic testing using multi-gene panels.

GENETIC TESTING

Genetic testing is usually recommended, the Centers for Disease Control and Prevention says, if you have a strong history of breast cancer, a moderate family history of breast cancer and are of Ashkenazi Jewish or Eastern European ancestry, a personal history of breast cancer and meet certain criteria, a personal history of other cancers or a known history of inherited gene mutation in your family. Your testing should be paired with

genetic counseling to help you get the most from your results.

Having a family history of breast cancer doesn't mean you have an inherited mutation. The CDC says that most women identified as being as having an increased risk for BRCA1 and BRCA2 mutations based on family health history do not have the mutations. In fact, some women who the BRCA1 and BRCA2 mutations have no known history of breast cancer.

Talk to your health care provider to see if you're a candidate for genetic testing and counseling to assess your risk for breast cancer. You should bring with you a family health history, especially if you have a family history of breast and ovarian cancer.



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Lowering your Cancer Risk

There are lots of factors that contribute to your risk of breast cancer, not just genetics or family history. Lower your risk for breast cancer by following these tips from the Centers for Disease Control and Prevention.

KEEP A HEALTHY WEIGHT

Try to keep your body mass index, or BMI, at between 18.5 and 24.9. This is a ratio of your weight to height, but it may not be accurate for all body types. This is particularly true after menopause, the Susan G. Komen Foundation says. Talk to your health care professional about an ideal weight for you.

healthy weight, reduces risk of cardiovascular disease and diabetes, lowers your blood pressure, reduces your risk for stroke, can ease arthritis pain and reduce depression and anxiety. Get at least 150 minutes of moderate activity or 75 minutes of vigorous aerobic activity per week. Talk to your doctor before you begin an exercise regimen.

of cancer proportional to the amount of alcohol consumed, the CDC says. That means that the more you drink, the more at risk you are for breast cancer and other cancers. Limit drinks to one per day.

HORMONE REPLACEMENT THERAPY AND ORAL CONTRACEPTIVES

Women who take these kinds of replacement hormones can affect your risk of breast cancer. Talk to your health care provider about the type of therapy or birth control you take and the associated risks.

dren have a lower risk of breast cancer, ovarian cancer, type 2 diabetes and high blood pressure. The longer a woman breastfeeds, the greater the benefit. Women who breastfed for a lifetime total of more than two years got the most benefit from the practice, the Susan G. Komen says. Breastfeeding may be particularly good at lowering the risk of estrogen receptor-negative cancers, which do not need hormones to grow.

If you have a high risk of breast cancer, there are options, Susan G. Komen says. These include risk lowering drugs such as tamoxifen or raloxifene or a prophylactic mastectomy. Talk to your doctor if you think these options are right for you.

EXERCISE REGULARLY

Physical activity helps you maintain a

LIMIT ALCOHOLIC DRINKS

Alcohol consumption raises the risk

BREASTFEED YOUR CHILDREN

Mothers who breastfeed their chil-

Stages of Breast Cancer

You may have heard someone talk about their cancer in stages.

This is the level of progression to which the cancer has spread.

The stage of the cancer at detection often determines the treatment.

In breast cancer, the stage is based on the size and location of the primary tumor, the spread of the cancer, the tumor grade and whether certain biomarkers are present, the National Cancer Institute says. After you receive your diagnosis of breast cancer, doctors will perform tests such as biopsies, X-rays and various scans to see how far it's spread.

Cancer can spread through tissue by growing into nearby areas, through the lymphatic system by spreading through lymph vessels to other parts of the body or through the blood. When cancer spreads to another part of the body, it's called metastasis. The metastatic tumor is the same kind of cancer as the primary tumor. If breast cancer spreads to the bones, it's metastatic breast cancer, not bone cancer.

There are three types of breast cancer stage groups. The clinical prognostic stage is the first stage for all patients based on health his-



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tory, physical exam, imaging tests and biopsies.

Mammography or ultrasounds can be used to check the lymph nodes for signs of cancer. In the pathological prognostic stage, patients have surgery as their first treatment. It's based on clinical information, biomarker status and lab results. The anatomic stage is based on the size and spread of the

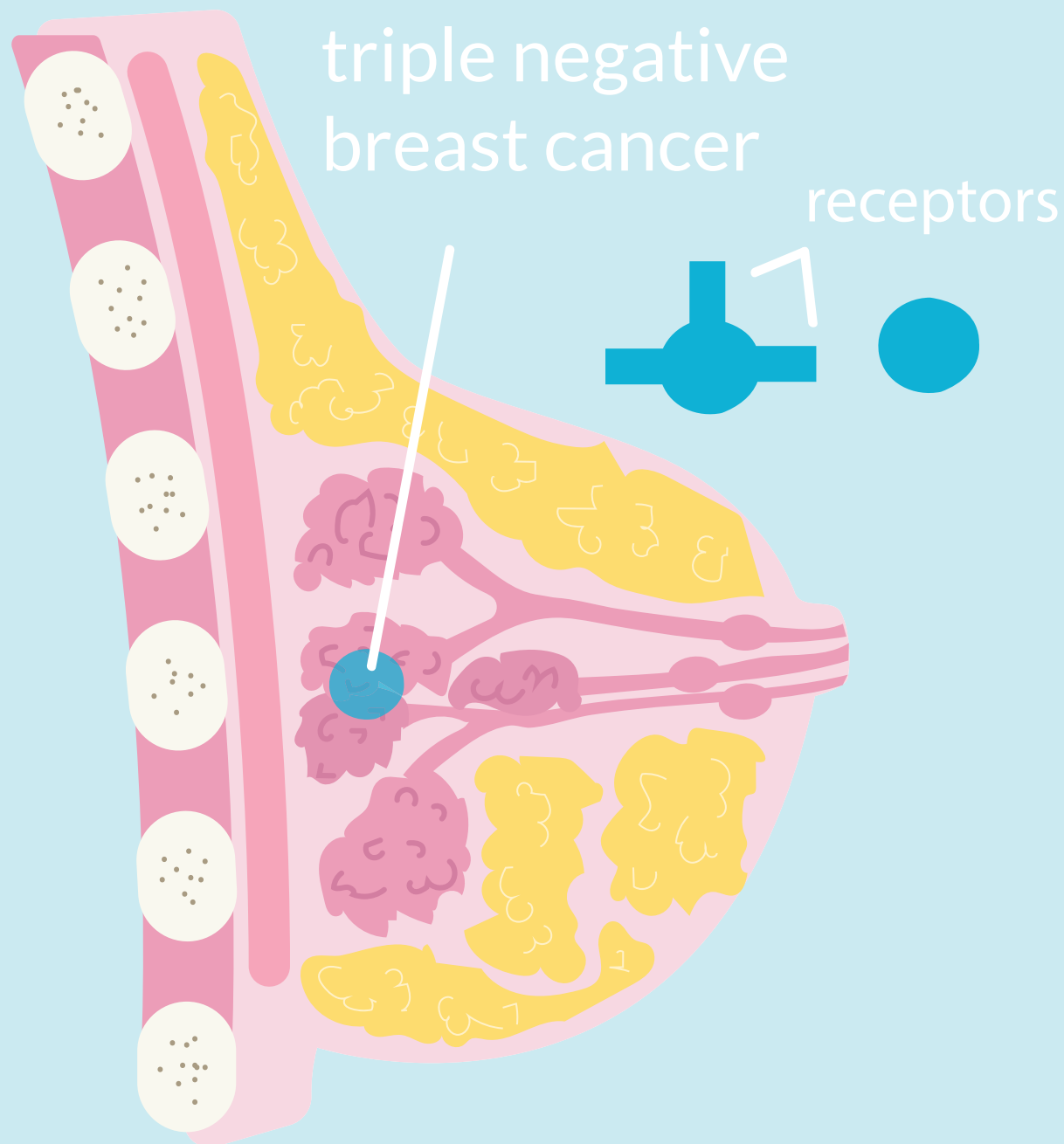
cancer. It's used in parts of the world where biomarker testing is not available, which doesn't include the United States.

The TNM system — tumor, lymph node, metastasis — is used to describe cancers, including breast cancer. T values refer to the size of the tumor and range from TX, meaning the tumor can't be assessed, to T4, meaning the

tumor has grown into the skin or chest wall or is inflammatory. N values refer to the size and location of lymph nodes where the cancer has spread. When the lymph nodes are checked using mammography or ultrasound, it's called clinical staging. M values show if the cancer has spread to other parts of the body. M0 means it hasn't; M1 means it has. Breast cancer most often

spreads to the bones, lungs, liver or brain. This system, along with grading that describes how quickly the tumor is likely to grow and spread, and biomarker testing is used to determine the breast cancer stage and the treatment of the cancer. Your doctor will be able to explain how your cancer was staged and discuss treatment options going forward.

Triple-Negative Cancer



Triple-negative breast cancer is a form of breast cancer that doesn't have receptors commonly found in breast cancer: estrogen, progesterone and human epidermal growth factor, or HER2.

If your cancer has any of these receptors, doctors have an avenue for treatment they can use to help destroy the cancerous cells. But with triple-negative breast cancer, doctors must look to other treatment options, such as chemotherapy.

Triple-negative breast cancer tends to be more aggressive and have a poorer prognosis than other breast cancers and the cancerous cells tend to resemble healthy breast tissue.

WHO CAN GET IT?

Anyone can get triple-negative breast cancer, but it tends to affect more younger people, Black and Hispanic women and people with a BRCA1 mutation. About 10-20% of breast cancers or triple-negative breast cancers.

TYPES OF TREATMENT

Without these receptors to reach the cancer cells, doctors turn to other forms of treatment. The first step is usually to have the tumor removed – a lumpectomy – or the whole affected breast removed – a mastectomy. These surgeries are usually followed by radiation therapy, where high-energy radiation is given to your breast to kill any remaining cancer cells. Chemotherapy

can kill any cancer cells that have spread elsewhere in the body and lowers the chance that cancer will recur.

SIDE EFFECTS

These treatments, though they may be successful, aren't without side effects. The Centers for Disease Control and Prevention says to expect hair loss, nausea, tiredness and skin changes. There are new treatments that may be able to help with hair loss from chemotherapy; talk to your doctor if losing your hair is a concern. Chemotherapy can also cause nausea, but your doctor can give you medication to help. Fatigue is associated with both chemotherapy and radiation. It will subside a few weeks after your therapy ends. There may also be skin changes with radiation, including redness or peeling like with a sunburn.

GENETIC COUNSELING

People of Ashkenazi Jewish heritage have a higher risk of certain types of cancer, including triple-negative breast cancer. Genetic testing followed by genetic counseling can help you determine a course of treatment and risk management both for you and your family.