

**BREAST  
CANCER  
STATISTICS:**

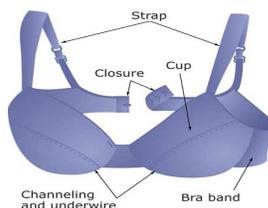
- About 1 in 8 women in the U.S. will develop invasive breast cancer over the course of her lifetime
- Less than 1% of all new breast cancer cases occur in men
- More than 1 in 4 cancers in women are breast cancers
- About 70-80% of breast cancers occur in women who have no family history of breast cancer
- The most significant risk factors for breast cancer are gender and age
- In 2010, there are more than 2.5 million breast cancer survivors in the U.S.
- The older a woman is when she has her first child, the greater her chance of breast cancer.
- Women who never had children are at an increased risk of breast cancer.

## Check Your Bras, says B.R.A.S.

According to the Breast Research Awareness and Support (B.R.A.S.), newer research is starting to look at what may be going wrong inside breast tissues to allow cancer to develop. For example, your bra may play a part in having swollen lymph nodes, infections, cysts, lumps, and eventually cancer after 20-30 years of pressure and blockage. So make sure you are wearing a bra for comfort and movement rather than fashion. The modern version of today's bra was actually invented in the 1930s as a fashion accessory. Is it just a coincidence that cancer rates have increased along with the bras' popularity?

Bras can create droopy, weak breasts. As you rely on the bra for support, it tends to make

your breasts unable to support themselves. Just like people who wear back supports, they eventually weaken the very muscles



they were created to support. Therefore, it is critical to have the proper fit. Let's look at a few ideas to get a great fitting bra:

**Smooth fitting cups.** If you don't fill out the cups, you need a smaller size. If you are "overflowing" the cups, try a larger cup size or a style with a

fuller cup design.

**Center panel lays flat against your breastbone.** If it does not, this could be a sign that your cup size is too small or the panel is not large enough to accommodate the separation between your breasts.

**The bottom of the bra in the front and back is parallel to the floor or slightly lower in the back.**

**Straps stay put and don't dig into your shoulders.**

**Breasts face the front and do not sag or fall to the sides.**

**Cup fabric should be stable.**

**Two fingers can be run under the front band.**

**Feels comfortable when sitting.**

## Breast Cancer Risk Factors

Studies have found the following risk factors for breast cancer:

1. **Age.** Risk increases as you get older.
2. **Personal health history.** Having breast cancer in one breast increases risk of getting it in the other breast.
3. **Family health history.** Risk increases if your mother, father, sister, or daughter had breast cancer.
4. **Certain genome changes.** Changes in certain genes, such as BRCA1 or BRCA2, substantially
5. **Lack of physical activity.** increase the risk of breast cancer.
6. **Drinking alcohol.**
7. **Being overweight or obese after menopause.**

- For more risk factors, go to [www.cancer.gov/cancertopics](http://www.cancer.gov/cancertopics)

# Massage Benefits Women with Breast Cancer

Massage therapy reduced depression, anxiety, and anger in women with breast cancer, and increased their levels of dopamine, serotonin, natural killer cells, and lymphocytes, according to recent research.

“Breast cancer patients have improved immune and neuroendocrine functions following massage therapy” was conducted by the Touch Research Institutes, Department of Pediatrics, Hematology/Oncology Clinics, Sylvester Comprehensive Cancer Center and Department of Medicine at the University of Miami School of Medicine.

Thirty-four women with Stage 1 or 2 breast cancer were randomly assigned to either a massage-therapy group or a standard-treatment control group. Each participant had completed radiation or chemotherapy treatment at least three months before the study started.

Women in the massage-therapy group received three 30-minute massages per week for five weeks. The massage involved stroking, squeezing, and stretching techniques on the head, arms, legs, feet and back. Women in the control group received standard treatment only, with the option to receive massage after the study.

The State Trait Anxiety Inventory, Profile of Mood States and the Symptom Checklist-90-R were used to evaluate participants’ anxiety and mood at the beginning and end of the study period.

Urine samples were taken from the women on the first and last days of the study and their blood was drawn.

Results of the urine tests showed that serotonin and dopamine levels for the massage group increased, and the blood tests showed that there was a significant increase in their natural killer (NK) cell numbers and lymphocytes.

“NK cells spontaneously destroy a wide variety of cancer and virus-infected cells and are involved in eliminating metastases,” state the study’s authors. “Lymphocytes are precursor cells of immunological function as well as regulators and effectors of immunity.”

Results of the questionnaires showed that women in the massage-therapy group had reduced anxiety, depression, anger, and hostility.

“In the current study, massage therapy was found to be a safe treatment, as no adverse effects were reported, and massage was found to positively impact the psychology, immunology, and biochemistry of women with breast cancer,” state the study’s authors.

“In summary, the self-reports of reduced stress, anxiety, anger/hostility, and improved mood, and the corroborating findings of increased dopamine and serotonin levels and increased NK cell number (the primary outcome measure) and lymphocytes suggest that massage therapy has positive applications for breast cancer survivors.”

-Taken from Massage Magazine

## What You Need to Know about Breast Cancer

Cancer begins in cells, the building blocks that make up tissues. Tissues make up the breasts and other parts of the body.

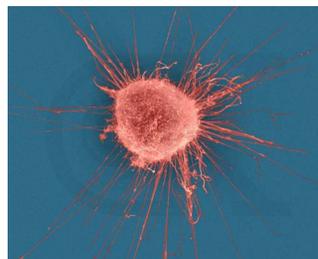
Normal cells grow and divide to form new cells as the body needs them. When normal cells grow old or get damaged, they die, and new cells take their place.

Sometimes, this process goes wrong. New cells form when the body doesn’t need them, and old or damaged cells don’t die as they should. The buildup of extra cells often forms a mass of tissue called a lump, growth, or tumor.

Tumors in the breast can be benign (not cancer) or malignant (cancer). Benign tumors are not as harmful as malignant tumors:

### Benign Tumors:

- Are rarely a threat to life
- Can be removed and usually don’t grow back
- Don’t invade the tissues around them
- Don’t spread to other parts of the body



Typical breast cancer cell as seen through a microscope.

### Malignant Tumors:

- May be a threat to life
- Often can be removed but sometimes grow back
- Can invade and damage nearby organs and tissues
- Can spread to other parts of the body

Breast cancer cells can spread by breaking away from the original tumor. They enter blood vessels or lymph vessels, which branch into all the tissues of the body. The cancer cells may be found in lymph nodes near the breast. The cancer cells may attach to other tissues and grow to form new tumors that may damage those tissues.

- Taken from [www.cancer.gov](http://www.cancer.gov)