Changes and choices YOU can make — little by little, bit by bit, day by day, to create a healthier environment, bolster your immune system and reduce the risk of breast cancer.

Healthy Lifestyles

2022 Calendar

by Breast Cancer Options
A not-for-profit organization dedicated to supplying information, support and advocacy.
The Precautionary Principle

IS IT TOO LATE FOR THE PRECAUTIONARY PRINCIPLE? Global Warming, Toxic Chemicals & Cancer

The precautionary principle is organized around the notion that it is better to be safe than sorry. It aims to prevent harm from the outset rather than manage it after the fact.

How Climate Change & Toxic Chemicals Can Increase Your Breast Cancer Risk – Climate change is increasing cancer risk through increased exposure to carcinogens after extreme weather events like hurricanes and wildfires. It is also impacting cancer survival. Extreme weather events can impede patients’ access to cancer care and the ability of cancer treatment facilities to deliver care. Warmer temperatures increase exposures to toxic chemicals and affect how chemicals behave. Higher temperatures allow certain chemicals to vaporize into toxic byproducts and enter the air we breathe.

Impacts of extreme weather events include concentrated releases of chemicals – Catastrophic weather-related events have become more frequent resulting in the release of toxic chemicals into the air when homes and factories burn. These events expose people and the planet to highly concentrated chemical doses. Climate change increases the health impacts of air pollution. Cancer is predicted to be the leading cause of death in the 21st century.

Toxic chemicals can inhibit the body’s ability to stay healthy – Many toxic chemicals are endocrine disruptors. They alter metabolism and hinder our ability to adapt to changing temperatures. These effects occur particularly in communities without access to heating or air conditioning. Most of us are exposed to a cocktail of environmental toxins on a daily basis at relatively low levels of exposure. Hotter temps make it harder for our bodies to cleanse and get rid of toxic chemicals.

Adopting a safer- or closer-to-nature approach is the only way to slow down contact with known and suspected carcinogens that are present in everything from fire-resistant couches to endocrine disruptors in shampoo and other personal care products. Protect yourself – control what you can control, limit exposures where you can, and then be active when other environmental dangers come to light.

Facts to remember: There are 35,000 chemicals in use today and only 7% of them have been tested for safety. Precaution is overdue. These understudied chemicals are used in everything from preservatives in our personal care products to flame retardants in our household furnishings—from plasticizers in our water bottles to pesticides on our fruit and vegetables—from household cleaning products as well as electromagnetic radiation from cell phones, computers, and other devices. In addition to being carcinogenic and having other toxic effects, xenobiotics, acts like estrogen and help promote breast and other cancers.

The majority of breast cancers cannot be explained by just lifestyle factors. Only about 5-10% of breast cancers are due to hereditary factors. A total of 25-40% are due to any known risk factors. Reasons for the other causes are unclear but are likely due to preventable factors. Safety tests are needed in laboratories, not in our bodies.

Help Stop Global Warming? See how much carbon dioxide you can save doing some simple things.

1. Change a light. Replace one regular light bulb with an LED bulb. Save 1.50 lbs of carbon dioxide a year.
2. Drive less. Walk, bike, or carpool or take mass transit. Save one pound of carbon dioxide for every mile you don’t drive.
3. Recycle more. Save 2,400 lbs of carbon dioxide per year by recycling half of your household waste. Even better, bring your own reusable container.
4. Check your tires. Keep your tires inflated properly and improve your gas mileage by more than 3%. Every gallon of gasoline saved keeps 20 lbs of carbon dioxide out of the atmosphere.
5. Use less hot water. It takes a lot of energy to heat water. Take shorter, cooler showers. Washing your clothes in cold water is just as effective and will save 300 lbs of carbon dioxide per year.
6. Avoid products with a lot of packaging. Reduce your garbage by 10%. Save 1,200 lbs of carbon dioxide.
7. Adjust your thermostat. Move your thermostat down 2 degrees in winter and up 2 degrees in summer. Save 2,000 pounds of carbon dioxide a year.
8. Plant a tree. A single tree will absorb one ton of carbon dioxide over its lifetime.
9. Turn off electronic devices. Turning off your TV, DVD player and computer, when you’re not using them saves thousands of pounds of carbon dioxide a year.

Become an informed consumer. Look around your environment and identify your exposures. Read product labels and don’t purchase a product that can harm you or your family. Select alternatives least harmful to the environment and human health; be vigilant with products for children including toys, food and clothing. Lower your risk of harm by making responsible health choices: Eat a healthy diet; Learn how to deal with stress; Integrate exercise into your life; advocate for what you believe.

We need to do everything we can NOW to eliminate the chance that our daughters and their daughters will ever get breast cancer.
Understanding Your Risk of Getting Cancer and/or Having a Recurrence

Every woman wants to know what she can do to lower her risk of getting breast cancer or if she has been diagnosed, having a breast cancer recurrence. Lifestyle factors help genes remain healthy and help to reduce risk. Cancer is ultimately a disease of malfunctioning genes. Only 10% of all cancers occur in people at high risk of developing cancer because of inherited genetic defects. Most of us are born with good genes, but during the course of our lifetimes, genes become damaged and mutate. Some factors — like being a woman, age, and genetics, for example — can’t be changed. Other factors, which fuel inflammation can be changed by making healthier choices. These changes can lower your cancer risk and the risk of a recurrence. It is thought that up to 70% of all cancers might be prevented if we made healthier choices.

UNDERSTANDING RISK: To understand what the numbers mean about your risk, you must first know your risk of getting cancer in the first place or your risk of having a cancer recurrence. If you have been diagnosed with breast cancer your doctor should be able to tell you both your Relative Risk and your Absolute Risk of recurrence.

Relative risk is used to compare risks between two groups, whereas absolute risk stands on its own.
Relative risk is the number that tells you how much something you do can change your risk. It can be expressed as a percentage decrease or a percentage increase.
Absolute risk is the size of your own risk and tells you the chance you have of developing a disease over a certain time.

Consider the risk for cancer recurrence in a patient over a 5-year period. If the risk is 2 in 1000 (0.2%) in a group of patients treated conventionally, and 1 in 1000 (0.1%) in patients treated with a new drug, the absolute difference is gotten by subtracting the two risks: 0.2% - 0.1% = 0.1%. Expressed as an absolute difference, the new drug reduces the 5-year risk for cancer by 0.1%. Given the data above, the relative difference is: 0.1% / 0.2% = 50%.
Expressed as a relative difference, the new drug reduces the risk for recurrence by half. Each is accurate.

RELATIVE RISK

New drug reduced cancer incidence by 50%

ABSOLUTE RISK

New drug reduced cancer incidence from 2 per 1000 to 1 per 1000

Although the drug illustrated reduced the relative risk of cancer by 50%, the absolute risk reduction of getting cancer that affects each individual is only 0.1%.

HOW TO DECIDE WHETHER OR NOT TO TAKE A SPECIFIC TREATMENT.

You need to balance various things, such as:
- What is the absolute risk of getting the disease to start with?
- What is your risk of recurrence?
- How much is the absolute risk reduced with treatment?
- What are the risks or side-effects in taking the treatment?
- How much does the treatment cost?
## Breast Cancer Risk Factors – What You Can And Cannot Change

Some of the factors associated with breast cancer — being a woman, your age, and your genetics, for example — can’t be changed. Other factors — being overweight, lack of exercise, smoking cigarettes, and eating unhealthy food — can be changed by making choices. Choose the healthiest lifestyle options possible and you can lower your risk.

### ESTABLISHED RISKS: SOME YOU CAN CHANGE AND SOME YOU CAN’T

- **Being a Woman** is the biggest risk factor for developing breast cancer. There are over 266,000 new cases of invasive breast cancer and 64,000 cases of non-invasive breast cancer annually. **Look at women and men all cases**

- **Age**: The risk of breast cancer goes up as you get older. About 2 out of 3 invasive breast cancers are found in women 55 or older.

- **Radiation to Chest or Face Before Age 30**: If you had radiation to the chest to treat another cancer (not breast cancer), like non-Hodgkin’s lymphoma, you have a higher-than-average risk of breast cancer.

- **Family History**: Women with close relatives who’ve been diagnosed with breast cancer have a higher risk of developing the disease. One first-degree female relative (sister, mother, daughter) diagnosed with breast cancer doubles your risk.

- **Genetics**: About 5% to 10% of breast cancers are thought to be hereditary, caused by abnormal genes passed from parent to child

- **Light Exposure at Night**: Several studies suggest that women who work at night — factory workers, doctors, nurses, and police officers, for example — have a higher risk of breast cancer compared to women who work during the day. Other research shows that women who live in areas with high levels of external light at night (i.e., street lights) have a higher risk of breast cancer. Light at night lowers melatonin which modulates immune function.

- **Exposure to Chemicals in Cosmetics**: Many chemicals in cosmetics are hormone disruptors and can affect how estrogen and other hormones act in the body, blocking them, mimicking them and throwing off the body’s hormonal balance. Estrogen can make hormone-receptor-positive breast cancer develop and grow, so limit your exposure to these chemicals.

- **Exposure to Chemicals in Plastic**: We are exposed to these plastic products every day. Food and beverage containers, some disposable plates, and toiletry bottles are all made from chemicals. Plastics may leach chemicals if they’re scratched or heated. Research also suggests that some of the chemicals in these products, such as bisphenol A (BPA), may cause cancer in people.

- **Exposure to Chemicals in Water**: The water you drink — from your home faucet or bottled water from a store — may not always be as safe as it could be. Install a filter on the taps in your house or store drinking water in a pitcher with a filter.

- **Pregnancy History**: Women who haven’t had a full-term pregnancy or have their first child after age 30 have a higher risk of breast cancer compared to women who gave birth before age 30.

- **Using HRT (Hormone Replacement Therapy)**: Current or recent past users of hormonal replacement therapy (HRT) have a higher risk of being diagnosed with breast cancer

### RISK FACTORS YOU CAN CHANGE

| Maintain a healthy weight | Limit alcohol - The more you drink, the greater your risk of developing breast cancer |
| Be physically active | Breastfeed, if possible |
| Don’t Smoke | Avoid Birth Control Pills, Particularly After Age 35 or if You Smoke |
| Eat Your Fruits & Vegetables | Avoid or limit Post-Menopausal Hormones |
| Avoid chemicals in personal care products | Turn out the lights at night, pull down the shades and sleep in darkness |

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**March Calendar**

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Nutrition and Cancer Prevention

Research has shown that plant-based foods can reduce the risk of cancer and strengthen the chance of survival after diagnosis.

1. Limit or avoid dairy products to reduce the risk of breast and prostate cancer.
2. Limit or avoid alcohol to reduce the risk of cancers of the mouth, colon, esophagus, breast.
3. Avoid red and processed meat to reduce the risk of cancers of the colon, breast, prostate, kidney, and pancreas.
4. Consume non-processed soy products during adolescence to reduce breast cancer risk in adulthood.
5. Consume fruits and vegetables to reduce risk of several common cancers.

**Fruits, Vegetables & Whole Grains** contain phytochemicals with antioxidant, antitumor, and chemopreventive properties that help prevent cancer. Organic when possible.

**Recommended:** 5 or more servings of vegetables and fruits daily.

**Crucciferous vegetables:** broccoli, cauliflower, kale, cabbage, brussel sprouts.

**Fruits:** grapes, strawberries, red raspberries, black raspberries.

**Unprocessed whole grains:** High in complex carbohydrates, fiber, vitamins, minerals & phytochemicals. Whole grain intake has a positive benefit, altering the hormonal actions of breast cancer. Daily fiber intake should be 25-30 grams of insoluble and soluble fiber.

**Consume Healthy Fats:** Fats are the building blocks of cell membranes & hormones. They control the balance of inflammatory and anti-inflammatory compounds in the body. Omega 3 fats decrease inflammation and lower the risk of cancer. Heart disease, diabetes, arthritis & neurological diseases. High in Omega 3 fatty acids: Deep sea fish, fish oils, free range/organic poultry, grass fed meats and flax seeds. Avoid hydrogenated oils and trans-fatty acids. Use unrefined, organic oils like olive, flax, coconut & nut oils. Use moderate amounts of organic butter.

**Why you should eat organic:** Pesticides and herbicides sprayed on fruits, vegetables and grains are “hormone mimics”. They stimulate the growth of breast tumors causing hormonal imbalances. Organic food grown without chemicals, hormones or antibiotics is higher in important nutrients than foods grown in commercially fertilized, nutrient-depleted soil. Organic eggs, dairy products and meats are free of the estrogen-like hormones and antibiotics fed to the animals and stored in their fat. The **most highly sprayed Fruits & Veggies:** Strawberries, Spinach, Kale, collard & mustard greens, Nectarines, Apples, Grapes, Cherries, Peaches, Pear, Bell & hot peppers, Celery, Tomatoes.

**Foods to limit or avoid:** Some foods have a direct impact on your cancer risk. Others are linked to weight gain, which can raise your risk of cancer.

**Red Meat:** Several studies support that the type of saturated fat found in red meat may result in the development of breast cancer. Sugar and Sodas: Avoid excess refined sugar and foods sweetened artificially. Use natural sweeteners: honey, maple syrup, stevia, monk fruit. Alcohol: Alcohol is a known carcinogen, and any alcohol intake should be modest or eliminated to keep your risk of cancer low.

**Tips:** Choose organic teas only. **Dietary Guidelines – Eat both raw and cooked forms**

- Eat 2+ servings of fruit daily
- Eat 5+ servings of vegetables daily
- Eat nuts and seeds, like flaxseed which have a phytoestrogenic effect
- Eat from the full spectrum of the rainbow colors every day
- Choose in-season produce, deeply colored, fragrant, local & organic

**Coffee Lowers Risk of Breast Cancer Recurrence:** New studies show that drinking 2-3 cups of coffee a day may reduce the risk of dying from breast cancer. Coffee provides 1,300 mg of antioxidants daily in the form of polyphenols. Survivors with higher post diagnostic coffee consumption had better overall survival.

**How to remove chemicals from your food:** Mix 1 teaspoon of baking soda to 2 cups water, soak for 5-15 minutes (the longer you soak, the more organic & non-organic chemicals you remove) Rinse before eating.

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**Cancer Fighting Foods**

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Reduced risk of dying from breast cancer.
Interactions of Medications, Food and Supplements. What You Need to Know!

Up to 80% of women treated for breast cancer take at least one dietary supplement, but many are not aware that certain supplements may interact with chemotherapy and hormonal medicines used for breast cancer. It is really important to let your doctors know everything you are taking before, during and after treatment.

INTERACTIONS OF MEDICATION AND DIETARY SUPPLEMENTS – Some herbs and supplements disrupt the way your body processes hormonal and chemotherapy drugs, making them either less able to fight cancer cells or more toxic to your body than intended.
- Patients who took antioxidants Vitamins A, C, E, Carotenoids and CoQ10, both before and during chemotherapy were more likely to have a recurrence.
- Patients who took Vitamin B12, iron, and Omega-3 fatty acid supplements were at significantly greater risk for recurrence and death.
- Tamoxifen: Avoid Red Clover, St. John’s Wort, Black Cohosh, DHEA and Licorice because they can affect your hormone levels, lower blood lipids and increase absorption and toxicity. May reduce absorption of anticancer drugs.
- Herbs that have a negative effect on how the body metabolizes chemotherapy drugs: Ginkgo, Echinacea, Ginseng, St. John’s Wort, Kava
- Supplements that disrupt the toxicity/efficacy balance of chemotherapy: Curcumin, Valerian root, and Allium
- Essiac: Affects the liver’s metabolic processes, possibly inhibiting the effectiveness of chemotherapy
- Garlic: May increase bleeding when used with blood thinners. (aspirin, warfarin)
- Iron supplement used to help with improving anemia was significantly associated with recurrence, used both before and during treatment

Multivitamins didn’t appear to affect outcomes after chemotherapy.

INTERACTIONS OF FOOD AND DRINK – CYP enzymes: Enzymes called cytochrome P (CYP) are an important part of the process of how drugs are broken down in the body after they are absorbed into the blood. Certain ones affect how cancer drugs are broken down in the body.

Foods that affect CYP enzymes:
- Grapefruit and Seville oranges. This Includes juice and products made from these, i.e. marmalade. Grapefruit has the potential to interact with many common drugs, from chemotherapy to heart medicines. At least ten chemotherapy drugs can interact with grapefruit. So, avoid it until chemotherapy is completed.
- Don’t drink grapefruit juice if you’re taking: Chemotherapy, Statins, antihistamines, blood pressure drugs, Valium, HIV drugs
- Beer & Wine: Use of alcohol-containing beverages can increase the risk of hepatotoxicity.

ANTIDEPRESSANT INTERACTIONS – Antidepressants have caused a number of troubling interactions for chemotherapy patients. 1 in 8 Americans take an antidepressant, which is also the same percentage of women in the US who will develop invasive breast cancer over the course of her lifetime. Studies have shown that women on Tamoxifen® who also take certain antidepressants have a much higher risk of death—91%, according to one study—than tamoxifen patients not taking high-risk antidepressants. Women stay on tamoxifen 5-10 years. It is possible that, somewhere along the line, another doctor might prescribe an antidepressant.

INTERACTION CHECKER WEBSITES
- WebMD: Enter two or more drugs, OTC’s, or herbal supplements to check for interactions. www.webmd.com/interaction-checker
- Natural Medicines Comprehensive Database - Provides a large number of evidence-based reviews, adverse reactions, interactions, and dosage. (paid website) www.naturalmedicinesdatabase.com,

May

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Mother’s Day

Memorial Day
How Our Lifestyle Affects Our Gene Expression

We cannot change our DNA but while bad things can happen to good genes, we know that good lifestyle changes can also make good things happen to our genes. Lifestyle behaviors and environmental factors account for around 70-90% of cancer cases, according to research in the Journal Nature. Modifiable factors that could prevent 70% of all cancers include regular exercise, maintaining a proper weight, eating a diet rich in fruits and vegetables, sleeping in darkness and learning how to handle stress. Only 10%-15% of cancers occur in people at high risk of developing cancer because of inherited genetic defects, such as mutations in BRCA genes.

DIET: Studies show that women who eat 5 servings of vegetables and fruit per day combined with regular physical activity reduce their risk of recurrence even if they have BRCA mutations. Natural plant foods contain phytochemicals and micronutrients with a variety of anti-cancer effects. They have anti-estrogenic, anti-proliferative, anti-angiogenic, antioxidant and anti-inflammatory effects. Avoid non-organic foods as they contain chemicals that can mutate genes.

CONTROL YOUR WEIGHT: One of the most important practices to improve breast cancer survival is maintaining a healthy body weight. Being overweight or obese increases the risk of several cancers, including breast cancers.

WHAT ARE THE RISKS RELATED TO WEIGHT? Breast cancer risk increases when adults gain more than 20 pounds. Studies show that women who gained 21-30 pounds after age 18 were 40% more likely to develop breast cancer than women who had not gained more than 5 pounds. Women who gained 70 pounds doubled their risk. Obesity leads to high levels of circulating insulin-like growth factor (IGF-1) and it also leads to inflammation. Inflammation is a normal body process designed to heal the body following injury. Chronic inflammation damages injured tissue in growth-promoting cytokines that tell stem cells to multiply and replace the injured cells.

SLEEP: A REQUIRED ACTIVITY, NOT AN OPTION! Lack of sleep increases inflammation in the body. Sleep gives the body time to recover and repair physically. The normal sleep-wake cycle (circadian rhythm), is important for the production of melatonin, a tumor-fighting hormone, and requires a balance of daylight and darkness. Light at night disrupts melatonin production. Sleep disturbances reduce Natural Killer Cell activity – part of the body’s defense against viruses, bacteria, and cancer – and impacts the body’s natural immunity. Melatonin acts like an anti-estrogen, reducing the number of estrogen receptors on breast cancer cells. It inhibits and interferes with the way that estrogen promotes cancer growth and helps women who have failed to respond to Tamoxifen improve their response. Try to get 7-9 hours of sleep nightly for optimal function.

HOW MUCH PHYSICAL ACTIVITY IS NEEDED TO LOWER BREAST CANCER RISK? Physical activity affects breast cancer directly by influencing circulating hormones, and indirectly, by helping to control weight. It is recommended that women be active for 45-60 minutes on 5 or more days per week to lower risk. Moderate activities are those that make you breathe as hard as you would during a brisk walk. Vigorous activities generally engage large muscle groups and cause an increase in heart rate, breathing depth and frequency, and sweating.

DON’T SMOKE: Smokers and non-smokers alike know how unhealthy smoking is. It lowers quality of life and increases the risk of heart disease, stroke, and at least 15 different cancers – including breast cancer.

DON’T DRINK ALCOHOL: Alcohol is classified as a known carcinogen. It interferes with estrogen pathways influencing hormone levels. It affects the estrogen receptors and disrupts absorption of folate acid, a B vitamin needed for production and repair of DNA. It increases estrogen levels in the body and the risk of estrogen sensitive cancers. Having 3 or more drinks daily raises the risk of ER+/PR+ tumors by 51%.

DETOXIFICATION: Toxins are environmental triggers and build-up in the body because of impaired detoxification processes which can alter gene expression. Methylation helps the body detoxify chemicals and heavy metals. A MTHFR gene that has a mutation can impair methylation. This mutation appears to increase the risk of both breast and ovarian cancer. Suggestion: Get tested! The MTHFR gene mutation can be detected with a simple blood or saliva test. If you have the mutation, only use methylated forms of B12 and Folic Acid. (5 methyl folate and methyl cobalamin) To help your body detoxify, eat a healthy diet, control your weight and exercise. Avoid medications that can interfere with methylation: birth control pills, anticonvulsants, antidepressants, aspirin, Meformin, cholesterol-lowering medications. Check food labels, as un-methylated B vitamins are added to many enriched grains, like pasta, cereals, breads, and commercially produced flours.

LOWER STRESS LEVELS: Chronic stress weakens the immune system and contributes to increases in cancer. It lowers Natural Killer Cells and T-lymphocytes – key to immune response and modifies responses to environmental factors. Learn to let go of what you cannot control and find the support you need. Managing stress, adopting healthy eating and exercise habits, getting a good night’s sleep, and finding good emotional and social support is as much a part of cancer treatment as chemotherapy or radiation. Let go of what you cannot control and find the support you need.

June

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Integrative Therapies That May Help with Treatment Side Effects

Side effects are very individual and may not be the same for two people with similar diagnoses that are receiving the same treatment. They may even vary for the same individual from one treatment session to the next. Some side effects may show up immediately and go away when treatment ends and some continue when treatment ends. Some may show up long after treatment has stopped. People use a variety of therapies to reduce treatment side effects, improve their physical and emotional well-being and help with their cancer recovery. Therapies can include: Medication, Supplements, Mind-Body Practices, Acupuncture, Massage, Medical Marijuana, IV infusions, Exercise. There are only limited studies for many of these therapies.

- **Intermittent Fasting:** Consider a simple form of intermittent fasting. Limit the hours of the day when you eat, and for best effect, make it earlier in the day (between 7 am to 3 pm, or even 10 am to 6 pm, but definitely not in the evening before bed). Preliminary evidence shows that short term fasting can decrease toxicity and increase efficacy of a wide variety of chemotherapeutic agents as well as enhance the effects of radiotherapy. May also reduce side effects and DNA damage in healthy cells in response to chemotherapy.

- **Massage Therapy Helps with the Following:** It lessens nausea from chemo; lowers anxiety and depression; reduces fatigue and improves sleep after treatments; improves immune function by increasing natural killer cells and lymphocytes which are crucial to the immune system; relieves pain associated with treatments and surgery; improves mood and allows relaxation and can help relieve lymphedema. Massage is also well established as a stress-relieving therapy.

- **IV Vitamin C Infusions:** Recent studies show that Intravenous Vitamin C administration improves quality of life in breast cancer patients during chemo-radiotherapy and aftercare. High dose IV therapy affects C-reactive protein levels and pro-inflammatory cytokines in cancer patients. There was a significant reduction of complaints induced by chemo and radiation: nausea, loss of appetite, fatigue, depression, sleep disorders and dizziness. No side-effects of the IV vitamin C administration were documented. IV vitamin C was shown to be a well-tolerated therapy and reduced quality of life-related side-effects.

- **Acupuncture:** Studies show that acupuncture is effective for cancer related fatigue management, joint pain caused by aromatase inhibitors and helps to manage insomnia and mood caused by cancer or by cancer treatments. (radiation, chemotherapy, endocrine therapy). Both acupuncture and acupressure are recommended for reducing chemotherapy-induced nausea and vomiting. Women with peripheral neuropathy had significant improvements in symptoms from an 8-week treatment regimen. It is a helpful integrative therapy for breast cancer patients but more trials of adequate sample size, appropriate control group, and longer follow-up are necessary.

- **Medical Marijuana and Cannabinoids:** The term medical marijuana refers to using the whole, unprocessed marijuana plant or its basic extracts to treat symptoms of illness and other conditions. Marijuana plants have chemicals, known as cannabinoids. The two main ones are THC and CBD. Studies show therapeutic advantages for combining CBD and THC—particularly for treating peripheral neuropathy. THC has antispasmodic, analgesic, anti-tumor, anti-inflammatory, appetite stimulating and anti-emetic properties; CBD has anti-inflammatory, anticonvulsant, antipsychotic, antidepressant, neuroprotective and immunomodulatory effects and doesn’t cause the euphoric effects that occur with THC. Our bodies contain an endocannabinoid system. It interacts with THC and CBD and has been recognized as an important system in the function of brain, endocrine, and immune tissues. The endocannabinoid system regulates relaxation, appetite, sleep cycles, inflammation responses and cognitive functions. Small trials showed that oral THC stimulates appetite, slows down weight loss for patients with advanced cancers, reduces inflammation and may inhibit tumor growth. Most Common Aliments Treated with Medical Marijuana: Appetite; Nausea; Wasting syndrome (cachexia); Pain. Several studies show therapeutic advantages for combining CBD and THC—particularly for treating peripheral neuropathy.

- **Ozone Therapy:** Ozone is a powerful antioxidant that helps reduce the oxidative damage caused by chronic inflammation to your body and DNA. It inactivates bacteria, viruses, fungi, yeast and protozoa, stimulates oxygen metabolism, activates the immune system. Preliminary data demonstrate that ozone therapy is a supportive therapy for fatigue in cancer patients, both during cancer therapy and in a palliative setting with no significant side effects.

- **Exercise:** Managing Fatigue from Chemotherapy and Radiation. Studies show that the best remedy for fatigue is exercise. It is important to make sure there are no underlying medical issues adding to the fatigue, like anemia, iron deficiency or low thyroid function. The main difference between cancer-related fatigue and just being tired is that you DO NOT feel better after getting more rest. Exercise at least 3 hours a week, and if you can, 5 to 6 hours a week. Yoga is useful because it incorporates concentration and stretching. Cancer-related fatigue can be reduced by lipid replacement with vitamins A, D, E, antioxidants and cofactors like coenzyme Q10.
Breast Cancer Stages – What You Need to Know

How a breast cancer’s stage is determined: Breast cancer stage is usually expressed as a number on a scale of 0 through IV — with stage 0 describing non-invasive cancers that remain within their original location and stage IV describing invasive cancers that have spread outside the breast to other parts of the body. Doctors use information from physical exams, imaging and biopsies done before any therapy is recommended. Treatment options are determined by the cancer’s characteristics, such as how aggressive and the size of the tumor, and whether or not it has hormone receptors. The stage and grade of the cancer helps you and your doctor figure out your prognosis, the likely outcome of the disease, decide on the best treatment options, and/or determine if certain clinical trials may be a good option for you.

Breast cancer stage is usually expressed as a number on a scale of 0 through IV — with stage 0 describing non-invasive cancers that remain within their original location and stage IV describing invasive cancers that have spread outside the breast to remote parts of the body. The pathologic stage is determined by the findings at the time of surgery and is different from the clinical stage, which is the stage estimated based upon the findings on clinical exam and radiology.

Breast cancer anatomical stage is based on the T/N/M scale:

- \( T \): the size of the cancer tumour and whether or not it has grown into nearby tissue
- \( N \): whether cancer is in the lymph nodes
- \( M \): whether the cancer has spread (metastasized) to other parts of the body beyond the breast and local lymph nodes

The stages:

- **Stage 0:** Describes noninvasive breast cancers or precancers. This includes the most common form of noninvasive cancer, called ductal carcinoma in situ (DCIS). Within stage 0, there is no evidence that cancer cells have invaded neighboring normal tissue.
- **Stage I:** Describes a very early stage of invasive cancer. At this point, tumor cells have spread to normal surrounding breast tissue but are still contained in a small area.
- **Stage II:** Cancer is in a limited region of the breast but has grown larger. It shows how many lymph nodes may contain cancer cells.
- **Stage III:** The cancer has spread further into the breast and lymph nodes or the tumor is a larger size than earlier stages.
- **Stage IV:** Also referred to as metastatic or advanced breast cancer. It is the most advanced stage of breast cancer. It has spread to distant parts of the body beyond the breast and local lymph nodes. It possibly involves your organs — such as the lungs, liver, or brain — or your bones. Breast cancer may be stage IV when it is first diagnosed (de novo), or it can be a recurrence of a previous breast cancer that has spread.

Updated Staging Guidelines:

In 2018, the American Joint Committee on Cancer (AJCC) updated the breast cancer staging guidelines to add other cancer characteristics to the T, N, M system to determine a cancer’s prognostic stage. These include consideration of:

- **Tumor grade** – a measurement of how abnormal the cancer cells look. The grade of a breast cancer is a prognostic factor and is representative of the "aggressive potential" of the tumor. In a broad generalization, "low grade" cancers tend to be less aggressive than "high grade" cancers.
- **Tumor hormonal status** – do the cancer cells have receptors for the hormones estrogen and progesterone?
- **HER2 status** – are the cancer cells making too much of the HER2 protein?
- **OncoType DX score** for assessing early-stage breast cancer recurrence risk.

**THE VALUE OF A SECOND OPINION:**

**Medical Is as much of an art as it is a science.** Recent studies have shown that 43% of patients who asked for a second opinion at an NCI designated Cancer Center had a change in diagnosis. There was a change in pathology interpretation in 20%. Second opinions are beneficial and can have an impact that may impact the diagnosis. New developments in cancer treatment are happening so fast that doctors cannot be aware of all the most up-to-date ways to deal with the disease. The best doctor to see is one who is a specialist in treating your type of cancer.
Non Toxic Living – Helpful Apps and Useful Information

Chemicals are added to foods, cosmetics and household products. Many manufacturers have words on their packaging like “green,” “safe” and “natural” that lead consumers to believe that the product will be safe. Make-up and feminine and personal care products are among the worst offenders, with food and household products running close behind. These apps will tell you what the products actually contain.

Silent Spring Institute (silentspring.org): Detox Me mobile app – https://silentspring.org/project/detox-me-mobile-app
- Track your progress and get reminders with a personalized guide.
- Scan barcodes on products to find relevant tips.
- Get the latest news on toxins with tips on how to protect yourself.
- Share action-oriented tips with friends and family.
- Use the Buying Guides to decode product labels and find non-toxic alternatives.

Clearway: www.clearway.com. Clearway is a free Chrome Extension and Mobile App that notifies you when there are unsafe ingredients in your makeup, personal care, baby care, cleaning and other products, and helps you find safe alternatives, all while shopping online as usual. Use when shopping online at: AMAZON, SEPHORA, WALMART, HERB, LOVE LETTER

Think Dirty app – https://thinkdirtyapp.com. Think Dirty is the easiest way to learn Ingredients in your beauty, personal care and household products. Just scan the product barcode and Think Dirty will give you easy-to-understand info on the product, its ingredients, and shop cleaner options!

Environmental Working Group: Skin Deep* www.ewg.org/skindeep. Extensive database and app. Search by ingredient, brand or product. Loads of info, with toxicity ratings and explanations, on individual ingredients in personal care products

Tips to avoid toxic chemicals in food
1) Avoid non-stick pans. Most non-stick cookware uses PFOA – a toxic chemical linked to cancer and other health issues. Choose stainless steel, cast iron or enameled pots and pans.
2) Make popcorn the old fashioned way. Most microwave popcorn bags are lined with toxic perfluorooctanoic acid (PFOA). It also shows up in French fry cups and pizza boxes. Make popcorn on the stove, or microwave using a brown paper bag.
3) Filter your drinking water. Remove common contaminants like arsenic and lead from your drinking water by filtering with a faucet unit or a water pitcher. Don't buy plastic bottled water; instead, fill up a stainless steel water bottle with filtered water.
4) Avoid food dyes. 90% of food dyes are derived from petroleum. Studies show that modest doses of synthetic colors added to foods can provoke hyperactivity and other disturbed behavior in children. Download this factsheet www.iastp.org/documents/smart-guide-food-dyes-buying-foods-can-help-learning.
5) Buy organic when possible. Avoid the high in pesticides "Dirty Dozen" (www.ewg.org): Strawberries, Spinach, Kale, collard and mustard greens, Nectarines, Apples, Grapes, Cherries, Peaches, Pears, Bell and hot Peppers, Celery, Tomatoes.
6) Limit canned food and plastic containers. Glass, stainless steel and lead-free ceramic are great alternatives to storing food in plastic containers. Canned food is one of our largest exposures to the toxic chemical BPA. Reduce your BPA levels by 60% in just three days by avoiding food packaging with BPA.

September

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Screening and Detection – What’s New?

About 85% of breast cancers occur in women who have no family history of breast cancer. These are due to genetic mutations that happen as a result of aging and life in general, rather than inherited mutations. The most significant risk factors for breast cancer are being a woman and growing older. A woman’s risk of breast cancer nearly doubles if she has a first-degree relative (mother, sister, daughter) who has been diagnosed with breast cancer but less than 15% of women who get breast cancer have a family member diagnosed with it. Only 5-10% of breast cancers can be linked to known gene mutations inherited from one’s mother or father. Also, the signs of breast cancer are not the same for all women. Our bodies are unique and so is what’s normal for our breasts. We need to be aware of how our breasts normally look and feel and notice any unusual breast changes.

When should I start having mammograms? How often should I have a mammogram? What are the benefits and harms of mammograms?

Women at increased risk are advised to consult with their doctors to develop individualized plans for surveillance and appropriate risk reduction strategies. Before beginning to answer these questions, it’s important to understand that there are three basic purposes for the use of mammograms:

- **Screening** – mammograms used routinely to detect cancer and/or other breast abnormalities before they can be discovered at more visible stages
- **Surveillance** – to closely watch women at high risk of developing breast cancer
- **Diagnosis** – mammograms used to analyze abnormalities that have already been detected.

**Mammograms – 2D or 3D mammograms** (Tomosynthesis):

3D mammography is an advanced technology that takes multiple X-rays of breast tissue to recreate a 3-dimensional picture of the breast. It is more accurate than a 2D mammogram. When screening women with dense breasts, a 3D mammogram provides a clearer picture. 3D mammography makes it easier to catch breast cancer early and accurately see the cancer size than on a regular mammogram. It reduces the number of false positives. There are better images and a call-back rate for women who get 3D mammograms is significantly lower than for those who get 2D mammograms. Radiation exposure from mammography is a potential risk of screening and the exposure risk is greater in younger women.

**The Timing of When to Get a Mammogram**

Studies show that mammography may be the most accurate during days 1-9 of the menstrual cycle. This is a low-estrogen, low-progesterone phase and breast tissue tends to be less dense, so mammograms are more apt to spot small, hard-to-see tumors. This is important if you are pre-menopausal.

**Young Women Who Have the BRCA Gene**

Young women age 20-30 who inherit the BRCA genetic mutation have a high risk for developing breast cancer. They need to be seen by a BRCA expert before they start mammograms at a young age. Research suggests that exposing these young women to even small doses of radiation via screening mammograms might do more harm than good. Women with BRCA mutations have an impaired ability to repair damage in the DNA that makes up their genes. Even the small amount of radiation exposure from a mammogram can damage DNA. These women are believed to be more vulnerable to the harmful effects of radiation in comparison with women who do not carry the mutation.

**Magnetic Resonance Imaging (MRI)**

MRI may be used if a breast problem is detected using mammography, other imaging or physical exam. MRI offers better sensitivity than mammography for breast cancer detection in women who carry a BRCA gene and for women with dense breasts. Breast MRI exam is more expensive than a mammogram but insurers generally cover MRI exams for BRCA mutation carriers and others when recommended by your physician.

**Ultrasound**

About 40% of women, usually younger, have dense breast tissue and ultrasound can determine if a suspicious area is a non-cancerous cyst or solid tissue (dense mass).

**Thermography**

A non-invasive imaging test that uses an infrared camera to read heat from increased blood vessel flow and metabolic changes which indicate abnormality before a tumor is formed. Lifestyle changes can then be made that may possibly reverse these changes and prevent a tumor from forming. It is FDA approved as an adjunct to mammography. Thermography does not use radiation.

**Clinical Breast Exam**

Women in their 20s and 30s should have a clinical breast exam as part of a regular health exam every 3 years especially if they are from high risk families. After age 40, women should have a breast exam by a health professional every year. A clinical breast exam may be recommended more frequently if a woman has a strong family history or personal history of breast cancer.

**Breast Self-Exams**

40% of breast cancers are discovered by women or their partners. Regular self-exams help women learn the landscape of their own bodies so they notice the slightest change and that may send women to the doctor for an exam. Self-exams can also help detect breast cancers that mammograms miss.
Stress Reduction

Stress is a part of our lives and how we handle that stress can have an impact on our health. Chronic stress can cause immune disorders and inflammatory responses. In patients who already have cancer, studies have found that stress is linked to tumor growth. It may fuel cancer by triggering a ‘master switch’ gene which allows the disease to spread, so behavioral responses to stress should be considered along with genetic factors in attempting to understand why some individuals develop cancer or have recurrences. Typically, our immune system recognizes abnormal cells and kills them before they produce a tumor. There are 3 important things that can happen to prevent cancer from developing — the immune system can prevent invasion in the first place, DNA can repair the abnormal cells, and killer T-cells can kill off cancer cells.

Learning to cope with stress is not an easy task. Most of us never forget the day we were diagnosed with cancer. As that date approaches each year we may feel increased anxiety. Follow-up appointments and any real or imaginary new symptoms can have the same effect. Just walking into the hospital can be scary. Levels of the stress hormone cortisol rise with increased stress. High levels of cortisol suppress the immune system and reduce natural killer cell activity. This may cause tumors to grow faster. That is why we need to learn how to cope with everyday stress, including the fear of recurrent cancer. We may not have control over cancer recurrence, but we can have control over the worry. None of us know how long we will live and we need to enjoy whatever time we have.

Some helpful stress reduction techniques are:
- **Go out of your comfort zone** — Mediation, prayer or mindfulness training can help separate the processes of our mind (which will often go for the ‘worst case scenario’) from what is really happening in our life.
- **Get the help you need** — Support groups, therapy, telephone hotlines, Zoom groups can help to free up precious emotional energy. Stay involved with people; don’t isolate.
- **Humor** — Laughter really is good medicine.
- **Distraction** — Keep busy. Go to a movie, go for a hike, have lunch with a friend. Do anything that can take your mind off your fear.
- **Have a good cry** — Whether you do it alone or with others, crying can release feelings of fear.
- **Make your life reflect you** — Your life is your own. Make it reflect your beliefs and choices. Do what you love.

Studies show that a variety of interventions reduce negative biological stress affects and can benefit women with breast cancer.

Many complementary therapies enhance healing and reduce stress by focusing on the connections between the mind, body, and spirit. Therapies that can help: Psychological—support groups; Physical, deep relaxation and exercise; Religious and Spiritual, prayer and meditation. These therapies won’t cure cancer but these coping methods have been proven extremely helpful to people with cancer in a number of ways.

Interventions can:
- Reduce the stress and anxiety that accompany a cancer diagnosis.
- Control some symptoms of cancer.
- Ease some side effects caused by conventional cancer treatments.
- Improve overall health.
- Help identify what is important in life and develop a greater sense of well-being.
- Provide help in coping with the struggles people with cancer may face.

Some of the most common techniques people use to reduce stress are:
- Art Therapy
- Meditation Prayer
- Psychotherapy
- Qi Gong/Tai Chi
- Yoga
- Joining a Support Group
- Massage Therapy
- Biofeedback
- Exercise
- Guided Imagery
- Hypnosis

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Breast cancer advocacy can be traced back to the American Society of the Control of Cancer (ASCC), founded in 1913 to bring talk of breast cancer out of the closet and fight the notion that it was always a death sentence. Women and men took to the streets to lobby for money for breast cancer research and have been doing so ever since. The most notable and successful may be the National Breast Cancer Coalition (NBCC) founded in 1991 to lobby congress for more money for breast cancer research and a seat at the research table, resulting in establishment in 1992 of the Department of Defense Breast Cancer Research Program (DODBCRP), which continues today through the annual lobbying effort of NBCC.

**Types of Advocacy:**

**Self-advocacy:** action to represent and advance your own interests; **Peer advocacy:** action to represent the rights and interests of someone other than yourself; **Systems advocacy:** action to influence health, social, political, and economic systems to bring about change.

**SELF ADVOCACY:** Empowers patients and survivors to know as much as possible about their disease, its treatments and the potential effects of the disease and/or the treatment on their body. Informed consumers, survivors, advocates and activists speak up for themselves and others and speak out on issues relevant to the treatment and prevention of breast cancer. Being your own advocate helps to ensure you are receiving the best care possible. Advances in science and technology have increased options for treating breast cancer and advocates have changed the way people deal with this disease. Becoming an advocate helps individuals get through their diagnosis, gain a feeling of control over their lives and make an impact for others. By being a pro-active educated cancer patient/survivor you can share treatment decision making with your medical team, impact the health care you receive and improve the quality of your life.

**PEER ADVOCACY:** Many peer advocates are breast cancer survivors or are living with breast cancer. They come from both science and non-science backgrounds. Peer advocates developed the tools to advocate for critical breast cancer issues. They helped make government policy to influence public policy and participate in legislative, scientific and policy decision making.

**ADVOCACY IN RESEARCH:** Participation in a clinical trial is an obvious way for patients and survivors to be involved in research. Yet only 3-5% of eligible patients and/or survivors participate in clinical trials. Doctors may not tell their patients about relevant clinical trials or perhaps the trials aren’t focused on research patients care about. However, patients can look up trials at: https://clinicaltrials.gov to see if they are interested in participating.

**SYSTEMS ADVOCACY – A TOOL FOR POLICY CHANGE:** Political advocacy has brought breast cancer patients more access to screening, earlier diagnosis and better treatments. Advocates have been instrumental in increasing federal funding for breast cancer research and have helped to pass laws that provide cancer treatment coverage to low-income, uninsured women. Advocates have challenged corporations; the pharmaceutical industry; local, state and federal legislators; healthcare institutions/providers; health agencies and the media. Tell your state and federal legislators about the gaps you see in patient care – share personal stories – to bring about change. Advocacy organizations have been effective in changing business practices and helping pass legislation to protect the public from toxic exposures and inequities in medical care, such as: banning in New York State of endocrine disrupting Bisphenol-A (BPA) in infant and baby toys, bottles and feeding products and the reduction Nationally of recombinant bovine growth hormone (rBGH) in dairy products.

**RESOURCES:** Patients and patient advocates have steadily increased their roles as partners in research, making a unique contribution by giving a “face” to the disease, reminding researchers of the human element and ensuring relevance of research to patient primary concerns. Here are a few resources to learn how you can become engaged in research:

- National Breast Cancer Coalition (NBCC) Project LEAD  
  www.stopbreastcancer.org  
- California Breast Cancer Research Program (CBCRP)  
  www.cabreastcancer.org/about  
- Patient Centered Outcomes Research Institute (PCORI)  
  www.pcori.org  
- Silent Spring Institute  
  https://silentspring.org/  
- National Cancer Institute Office of Advocacy Relations (OCOAR)  
  www.cancer.gov/about-ncc/classes/oaer  
- Research Advocacy Network (RAN)  
  https://researchadvocacy.org  
- Breast Cancer Prevention Partners  
  www.bcpp.org  
- Breast Cancer Options  
  www.breastcanceroptions.org
The Financial Impact of a Breast Cancer Diagnosis – Paying for Medications

Tips to Lower Medicine Costs: Medications are often a major expense for people with cancer. Make sure you take a look at your insurance plan’s prescription coverage to see what’s covered and what’s not—and how much you can expect to pay out of pocket. Ask for help from your insurance plan or a patient financial counselor at your cancer center. These strategies also may help:

- Ask your doctor or pharmacist about generic medicines. These are usually less expensive than brand name medications. There are generic options for certain types of chemotherapy; hormonal therapies such as tamoxifen and aromatase inhibitors; and bone-strengthening medications like bisphosphonates. Ask about generics for medications used to treat side effects such as pain and nausea.
- Ask your doctor for samples of medicines you’re prescribed. Samples may not be available for all medicines. But if you take a sample medication and have difficulty to manage side effects, you won’t have to pay the cost of a full prescription. To keep costs down, ask for just part of a prescription to make sure that the medication works for you before paying for a full supply.
- Ask if the form of the medication affects your cost. Oral chemotherapy medications are more convenient, but they tend to be pricier than intravenously (IV) medications. Also, a medication taken at home or given in a physician’s office might not be reimbursed in the same way that a hospital-based treatment is. Different forms of medication (pill, patch, IV) and different doses may be covered differently. You may need to weigh out-of-pocket cost versus convenience as you make your decisions.
- Shop around. Call the pharmacies in your area to check the prices of the medicines you’ve been prescribed. Larger stores may have lower prices for commonly prescribed pain medicines and antibiotics. Ask if your insurance plan offers a mail-order prescription medication option.
- If a medication isn’t covered, ask your pharmacist about alternatives. They may be able to suggest another medication that does the same thing as the one your doctor recommended—and is covered.

With so many people in need of prescription drugs, it is disturbing to see the cost of medications rising faster than inflation. JAMA studies found list prices increased by 159% and net prices increased by 60% from 2007-2018. Affordability has become such an issue that many people are not taking their medications as prescribed. Polls say that 1 in 4 adults finds it difficult to pay for their medications; 19% do not fill their medication prescription; 18% take an over-the-counter drug instead; 12% cut their pills in half or skip doses.

PATIENT ASSISTANCE PROGRAMS are usually sponsored by pharmaceutical companies and provide free or discounted medicines to low income or uninsured and under-insured people who meet specific guidelines. Copay assistance for insured patients may also be offered. Eligibility requirements vary for each program. Examples: Gilead Advancing Access Program; GSK Patient Assistance Program; Healthwell Foundation; Lilly Cares Foundation Patient Assistance Program; Novartis Patient Assistance Foundation; Novo Patience Assistance Program; Pfizer Patient Assistance Program.

BEST PRESCRIPTION DISCOUNT CARDS: These Savings Cards Vary by Pharmacy and Location - ie. Letrozole 2.5 MG Tablet cost $11.66 at Shoptake and $158.50 at Rite Aid. The free cards tell you where you can buy at the cheapest price. Coupons are sometimes also available.

Best OVER-the-Counter GoodRx - The website & mobile app lets you search by drug name for the lowest prices in your local area. www.goodrx.com

Best for Local Pharmacy Optum Perks – Accepted at 64,000 pharmacies both chains and local pharmacies. https://perks.optum.com/

Best for Future Savings: SingleCare – Register for their Bonus Savings program & money towards future prescriptions. www.singlecare.com

Best On-the-Go: ScriptSave WellRx – Prescription discounts. Save 60-80%. www.wellrx.com/discount-pharmacy-prices

Best Home Delivery: Blink Health – Pick up your medication from 1 of 35,000 pharmacies in network; free home delivery. www.blinkhealth.com

Best for Chronic Illness: RxSaver – Offers the RxAdvocacy Program $50 a month if you have a chronic medical conditions. www.rsavex.com

OTHER RESOURCES:
- Partnership for Prescription Assistance – www.pppx.org
- Discount Drug Network – www.discountdrugnetwork.com, Search of 66,000 US pharmacies. Use their mobile app to search for local pharmacies and discounted prescription prices.
- RxHope – www.rxhope.com
- NeedyMeds – www.needymeds.org
- RxAssist – www.rxassist.org


Breast Cancer Options (BCO) is an organization of breast cancer survivors, advocates and healthcare professionals who understand that when you are diagnosed with breast cancer, you are suddenly faced with some of the most important decisions you will ever make about your own health care. All of our services are free.

When you explore your options, we want you to understand:
- You do not have to face all this, including physician visits, by yourself.
- You are important and deserve answers. We will help you get them.
- What information and sources are credible and reliable, Which lifestyle changes and complementary therapies can be integrated in treatment.

Support Services
- Camp Lightheart – A free sleepover camp for children who have a parent with breast cancer or have lost their parent to the disease. One of the only existing services for children in this situation.
- Retreat for Women with Metastatic Breast Cancer – This retreat is free for women with stage 4 breast cancer. One of the few services for stage 4 women in NYS.
- Massage and Acupuncture Program: Free services for women with breast cancer in our catchment area.
- Companion/Advocate Program – Trained, knowledgeable and sympathetic breast cancer survivors accompany newly diagnosed patients to medical visits.
- Peer-led Support Groups – On Zoom or in person when feasible. See our web site or call for locations and times. Includes young survivor, metastatic and mixed groups
- Peer-to-Peer Mentoring – Talk to someone who has gone through the same experience.
- Telephone and E-mail Consultations – Questions are answered with information from reliable sources.

Education/Information
- Annual Healthy Lifestyles Calendar – Call or email for a copy.
- BCO News E-mail updates: Sent out to Breast Cancer Survivors and Healthcare Professionals all over the world. Sign up on our site www.breastcanceroptions.org
- Breast Cancer Options web site offers a variety of up-to-date information and resources.
- Annual Integrative Medicine Conference: Top professionals in complementary/Integrative therapies speak and present workshops on the most current modalities.
- Healthy Lifestyles Programs: A series of workshops to look at the ways we can make small, easy changes in our daily lives to improve our health both before and after a cancer diagnosis.

Advocacy
- BCO is an advocate for breast cancer patients at the regional, state and national levels.
- We can help with referrals for insurance and legal problems.