

Breast Cancer: Prevention and Treatment

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Although not true for all cancers, early detection, progress in preventions and treatments have allowed overall cancer incidence rates and death rates to decline. Survival rates for many cancers also continue to improve. Excluding skin cancer, breast cancer is the most common. One in eight women will be diagnosed with breast cancer, 97% will be over age 40 and the average age is 61. More women are diagnosed with breast cancer yet more women die from lung cancer.

The Journal of Breast Cancer Research stated that in 2003 the rate of breast cancer fell significantly by 6.7% in women over age 50. This followed the release of information in 2002 from the Women's Health Initiative Study indicating that women taking Premarin® hormone replacement therapy were much more at risk of developing breast cancer and the use of Premarin® fell sharply. Yet the most recent research is showing that hormone replacement therapy (HRT) may not cause breast cancer formation, but stimulates the growth of existing cancer allowing it to show up sooner. Women on HRT have less aggressive cancer growth and less metastasis than the cancer in women not on HRT. Mammograms detect breast cancer better in women on HRT than women not on HRT allowing better outcome.

Major risk factors include a previous personal history of breast cancer; a history of a precancerous biopsy in the last 10 years (classes AH, LCIS, DCIS); significant family history of breast and or ovarian cancer. Intermediate risk factors include proliferative breast disease without atypia; late breast maturation; having no pregnancies or if first birth occurs after age 30; excess lifetime estrogen exposure (early onset of menses with late menopause; xenobiotic exposure from estrogen like compounds in plastic; or consumption of meat from animals treated with estrogen) post-menopausal HRT use greater than 10 years or high dose HRT; and relatives with prostate or colon cancer. The use of oral contraceptive pills has been shown to not increase the risk of cancer development. "Familial" breast cancer involving the genes BRCA1 and BRCA2 account for about 5% of all breast cancers. The lifetime risk of women with these genetic mutations is 60-85% for breast cancer and 15-40% for ovarian cancer.

There are three types of estrogen HRT's: synthetic, estrogens derived from horse urine (Premarin®) and Bio-identical hormones derived from plant sources. There are two forms of the hormone progesterone: synthetic progestins and bio-identical progesterone. A recent French study showed that when bio-identical estrogen was used with synthetic progestins there was a slight increase in breast cancer formation yet when bio-identical estrogen and bio-identical progesterone were used together there was no increase the rate of cancer development. Clearly, the use of bio-identical hormones is much safer.

There are many nutritional influences on cancers. The American Cancer Society indicates that 60% of all cancers can be prevented by maintaining a healthy weight through life, regular exercise and eating a minimum of 5 servings of fruits and vegetables daily. The Lyon study also found a 60% decline of cancer within four years of following the Mediterranean diet. The anti-inflammatory diet is the same as the Mediterranean diet and can be found at naturalmedclinic.com. The DIANA 1&2 research studies showed following an anti-inflammatory diet, emphasizing whole foods, lowered weight, cholesterol and insulin resistance and improved hormones linked to breast cancer risk. Vegetarians have lower cancer risks than meat eaters and those that consume olive and fish oils are at lower risk. High fat diets have been related to many cancers yet a low fat diet itself does not seem to reduce breast cancer risk in many studies but was found to lower breast cancer reoccurrence in the WINS study. Those that are obese have higher incidence of breast and colon cancer. The Nurses Study indicated that obese postmenopausal women are 60-100 times higher risk of breast cancer compared to thin women.

The foods that lower breast cancer risk include green tea, flax seeds, blueberries, cruciferous veggies such as cabbage and broccoli, garlic, vegetable fiber. The foods that are linked to cancer formation are cured meats, partially hydrogenated oils, refined flours and sugars (Int J. Cancer 2005). Soy probably decreases breast cancer risk but should not be used by women on Tamoxifen. The herb Black Cohosh does not increase estrogen levels and in one study was associated with a 60% reduction in breast cancer. Black Cohosh can be used safely by women going through chemotherapy to control hot flashes.

Specific nutrients that have been related to breast cancer include: Lack of Vitamin D has been associated with breast, colon and prostate cancer formation; Coenzyme Q10 has been found to reduce breast cancer tumors in European studies; vitamin c, vitamin E (mixed, natural Tocopherols) fiber, carotenoids and Omega-3 fatty acids have all been linked to reduce cancer incidence.

The lifestyles associated with cancers are those that:

- Are sedentary – increase risk of all female cancers.
- Smoking increases risk of all female cancers, lung colon and bladder cancers.
- Are exposed to pesticides, radiation, chlorinated solvents, PCBs, beauticians, pharmaceutical industry have links to breast cancer.
- Work in garment laundering, cleaning services – maids have increased vulvar cancer.
- Nighttime worker have more breast cancer.
- Drink more than 2 alcoholic drinks daily have higher breast cancer.

To me the most exciting development is in blood testing. Genova Laboratory now tests for estrogen metabolic hormones. We know from research that the women most likely to develop cancer convert one form of estrogen called estrone into 16-OH estrone or quinones or 4-OH estrogen. The women least likely to develop cancer convert estrone into 2-OH estrone. This test called the estrogen metabolism test measures these hormones allowing us to assess a woman's risk. This is important to know because we also know from research that we can promote the body to metabolize the 2-OH form over the 16-OH form through the use of certain nutrients such

as soy, DIM from broccoli and flax seeds. All women and especially those with a family history of breast cancer should have the estrogen metabolism test for assessment to allow correction of potential risk.

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