



Insight Thermal Imaging

Breast Health Information

Reviewed and approved by Dr. Tanya Paynter, N.D.

There are many factors that make up your breast health. Here is a list compiled from several sources you may want to consider in your diet and lifestyle.

Avoid or limit coffee and black tea. These contain methylxanthenes which mimic estrogen and stimulate estrogen receptors in the breast, leading to a growth of “bad” estrogen sensitive tissue.

Avoid underarm antiperspirants/deodorants, which suppress the natural elimination of toxins through the sweat glands. Many deodorants also contain toxic elements such as aluminum or mercury.

Avoid stressing the liver with alcohol, drugs or medications. The liver will bind and eliminate excess estrogens only if it is not burdened with other more aggressive toxins. Numerous studies have found that each daily drink you have increases your risk for breast cancer by 11%.

Eat fresh, organic whole foods. Avoid produce in the “dirty dozen” when not organic. These change every year so check when it comes out in April. Generally speaking, these foods make it on the list. Visit the Environmental Working Group website to view the dirty dozen and clean 15. www.ewg.org High fiber foods can bind toxic hormones in the gut and promote elimination of exogenous (bad) estrogens. Cruciferous vegetables such as kale, Brussels sprouts and broccoli contain compounds that are known to reduce your risk of breast cancer. Avoid canned, processed, boxed and microwave foods.

Consider dietary “superfoods”. Mushrooms of all kinds, but especially Reishi, Maitake, Shitake and button varieties. Garlic, ginger, turmeric, and seaweeds boost immune function.

Consume healthy fats. Fish and krill oils, olive oil, and coconut oils are health promoting. Avoid health destroying fats such as hydrogenated and trans-fats, corn, canola, vegetable oils and margarines.

Avoid exposure to chemicals. Use green household cleaners or make your own. Avoid scented products and perfumes. These are made from chemicals and detrimental to your health and others around you. Avoid products with chemical fragrances/scents. Essential oils are generally considered safe. Use natural beauty products. Don’t minimize the danger of exposure to fumes, such as new carpet and paint off-gassing, nail polish, gasoline and home and garden sprays. Often a molecule that is inhaled can be more “active” and dangerous than one that is swallowed (i.e. chlorine from tap water vs inhaled steam chlorine from shower water).



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Consider specific supplements. Research suggests DIM (diindolylmethane), calcium-D-Glucarate, folate, vitamin D3, selenium, iodine and vitamin B-12 are all powerful weapons in the fight against breast cancer. If you have been diagnosed with Hashimoto's thyroid disorder, use iodine with caution.

Green tea has research suggesting it to be effective at fighting breast cancer, protecting against the side effects of radiation therapy and much more.

Consider the use of melatonin at bedtime. However, consistent use can suppress natural production of melatonin so this might be best for women at high risk. Melatonin is a powerful anti-oxidant and is associated with lowering your risk for breast cancer.

Hormonal testing. Balancing your hormones can significantly reduce your risk of breast cancer. Excess estrogen is directly linked to an increased risk for breast cancer and causes other problems like fibroids, weight gain and moodiness. It can also lower thyroid function. Estrogen dominance is the number one risk factor for breast cancer. Progesterone (bio-identical not synthetic) balances estrogen dominance, slows proliferation of breast cells, alleviates PMS, menopausal symptoms and promotes calm moods.

***Thermal imaging can see the effects of estrogen dominance in the breast tissue.** Because breast tissue can hold up to 50 times the estrogen detected by serum blood levels, thermal imaging is an excellent tool to help monitor hormone levels.

Reduce or eliminate red meat. Eating less red meat reduces your risk for inflammation, breast cancer, heart disease and obesity. Eat 100% grass fed organic beef when possible. It is leaner and contains healthy omega 3 fats.

Reduce your sugar consumption. It elevates your risk for insulin resistance, diabetes, obesity and it feeds cancer if you already have it. Sugar aggravates any menopausal symptoms you may be having, such as hot flashes and night sweats.

Enjoy sunlight daily in small doses. Vitamin D from sunlight is converted in the body to D3, or "Super D". Brief exposure without sunscreen is linked to reduced risk for breast cancer. Avoid the sun during high exposure times between 10 am and 4 pm.

Practice stress management. Cortisol, the stress hormone released by the adrenal glands, wreaks incredible havoc on our immune system. It contributes to inflammatory conditions, insulin resistance, estrogen dominance, chronic fatigue and much more. Touch, laughter, play, exercise, deep breathing, hobbies and meditation are all ways to relax and turn off cortisol production.

Keep your urine Ph between 6.4 and 7.0. An acid body Ph predisposes the body to numerous health problems and diseases. An alkaline Ph is a pre-requisite to good health. You can do this by consuming a diet high in fresh fruits and vegetables.



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Take good care of your teeth. There is a direct correlation between oral health and the health of your body. Don't underestimate this connection.

Maintain a healthy weight. Fat cells produce estrogen. The more you have, the more estrogen your breasts are exposed to.

Adopt an anti-inflammatory lifestyle. Not only will you reduce your risk for cardiovascular disease (the NUMBER ONE KILLER OF WOMEN), you will lower your risk for cancer.

Have an emotional support network. People who feel emotionally supported have stronger immune systems and tend to fare much better psychologically and physically than people who are more isolated.

Eliminate sodas and junk foods. These are filled with chemicals, sugar, fats and sodium, all of which destroy health. They are not just empty calories, but are actually anti-nutrients, which rob us of our health.

Exercise daily. It reduces stress, builds immune function, prevents osteoporosis, releases feel-good endorphins and makes you look and feel great. Specifically for your breast health and lymphatic system, a mini-trampoline (rebounder), or bouncing while sitting on a large exercise ball or horse riding. Adding the arms in the jumping jack motion (up and down above the head), helps the lymphatic system to work properly.

Consider supplemental minerals. Mineral deficiency is a widespread and usually completely unrecognized problem. Minerals are essential to health and wellbeing. Most women would benefit from 500 mg magnesium daily but very few actually get it. We should be getting calcium and magnesium at a 2:1 ratio, so that for every 500 mg of calcium we take, we should have 250 mg of magnesium. Some mineral deficiencies, such as selenium, are directly correlated with increased risk for breast cancer. Brazil nuts are the richest natural source of selenium. A handful a day give you all the cancer fighting selenium you need.

Do not use synthetic vitamins. Synthetics do not behave the same way in the body or carry the same benefits as naturally derived supplements. A supplement from a whole source comes with the essential co-factors and synergists that allow it to work as nature intended. Taking large doses of isolated synthetic nutrients (such as vitamin A) can be dangerous and harmful to your health. All supplements should be derived from whole foods and other once-living sources.

Avoid birth control pills and synthetic HRT. These synthetic hormones carry a high risk for cardiovascular events (deep vein thrombosis, embolisms, heart attacks, strokes) and breast cancer.



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Rest adequately and sleep in the dark. The adrenal glands require at least 5 hours of uninterrupted sleep to rejuvenate. Our immune system requires adequate rest at night, in the dark, to receive the benefits of melatonin, a breast protective natural hormone.

Detoxify on a regular basis. The older we get, the more cumulative exposure to toxins we have suffered and the more imperative it becomes to detoxify our systems. Toxic exposures are directly linked to increased risk for breast cancer.

Limit exposure to EMFs. Electro-Magnetic frequencies disrupt our own natural bio-electrical fields. Cell phones, computers, blow dryers and other commonly used appliances should be used with protective devices to neutralize their impact.

Have a spiritual practice. Meditation, prayer, chanting and belief in a Higher Power can raise our spirits, our outlook and our ability to resist illness.

Consider a Co-Q10 supplement. Fatigue is one of the most common complaints women have. Co-Q10 helps to improve energy at a cellular level, which leads to systemic improvements. It improves circulation and helps to lift “brain-fog” too. It has been shown in research to help shrink breast tumors.

Don’t drink from plastic water bottles. The chemicals in plastic water bottles can become active when the plastic is warmed, such as occurs in a microwave or even in the car on a hot day.

Drink fresh vegetable juice often. Packed with phyto-nutrients and enzymes, fresh veggie juice detoxifies the liver and provides a real energy boost. Try to consume freshly made juices within 20 minutes of juicing to get the most benefits.

Install a shower filter. Chlorine, fluoride and other harmful substances are inhaled as steam in the shower in addition to being absorbed through our pores.

Avoid metal under-wire bras. The constriction they impose on the lymphatic system is not healthy for breast tissue. The more your breasts are able to move freely, the better for your breast health. When at home, ditch the bra. Studies have shown a direct correlation to the more hours per day wearing a bra, the higher the incidence of breast cancer. For more information on the subject of tight clothing read “Dressed to Kill” by Sydney Ross Singer. He addresses the link between breast cancer and bras.

Consider a digestive enzyme to optimize healthy digestion.

Consider anti-oxidants. These are the first line of defense for protecting DNA from damage of free radical molecules. Phyto-nutrients are naturally occurring anti-oxidants that also deliver life giving enzymes, vitamins and minerals. Best choices are fruits and vegetables with rich, deep colors such as all berries yellow squash, carrots, dark green leafy vegetables and cruciferous vegetables such as broccoli, cauliflower and kale.



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Avoid foods with allergic reactions or food intolerances. These foods act like a poison in your body. Allergies and intolerances are not the same. If you don't know, get tested.

Put yourself first...(most of the time). There are times when other's needs must come first but there's a reason the flight attendant tell you to put your oxygen mask on first!

Suggested reading for breast health:

Breast Cancer Boot Camp – Dr. William Hobbins, M.D., and Wendy Sellens, Lac

Better Breast Health For Life – Tirza Derflinger, CTT

The Warrior Goddess – Christine Horner, M.D., F.A.C.S.

What Your Doctor May *Not* Tell You About Breast Cancer – Dr. John R. Lee, M.D.

Women's Bodies – Women's Wisdom – Dr. Christiane Northrup, M.D.

The Detox Book – Dr. Bruce Fife, C.N., N.D.

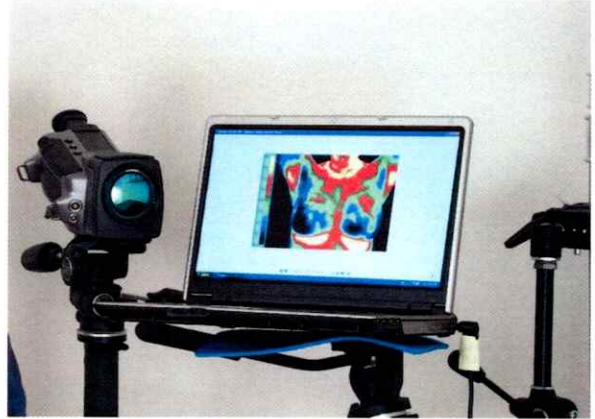
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Breast Thermography: Helping Make Breast Cancer Prevention Possible

One out of every eight women will develop breast cancer during their lifetime impacting the lives of their families, friends and communities(1). While countless dollars continue to be spent on finding a cure, women are led to believe that early detection through mammography is their best option for beating the disease. Is this really all that can be done? Something is missing from this picture and desperately needs to be added if we are really going to create a world without breast cancer.

Mammography has been controversial and has come into question in recent years. In fact, the US guidelines for screening with mammography recently changed from annual examinations at age 40 to every other year beginning at age 50 (2). That means women under 50 currently do not have a viable method of screening for breast cancer and women over 50 will be screened less frequently.



Women who develop cancer under age 50 tend to have more aggressive and more life threatening forms of the disease so it is imperative they have options for screening. For women over 50, the average sensitivity of mammography is 80-90% (3) which sounds great unless you are one in every 5-10 women whose cancer is missed. Whether or not you approve of mammography and believe in its usage is not the point. Even advocates of the technology admit that the status quo is not good enough. While it is obvious that our early detection strategies need to be improved, there is a glaring truth that cannot be ignored.

Early detection is always too late. For cancer to be detected it must be already present and will require treatment that is generally invasive. We need to do better. When I was a child I remember the motto of medicine was "An ounce of prevention is worth a pound of cure". Complementary health care professionals along with progressive medical doctors are returning to these earlier roots by trying to find ways to help the body function better and prevent disease naturally. While early detection and finding a cure remain important, we must shift our focus to prevention if breast cancer is going to be eliminated.

To this end, enter a 40 year old imaging technology called thermography that has recently made a comeback. Thermography is a non invasive radiation free method of visualizing breast physiology by identifying vascular changes and fever at the surface of the breast. By evaluating physiology, we include an important component that has been missed by anatomical imaging such as mammography.

Thermography Basics:

Here is how it works. Heat is produced in the breast by normal tissue metabolism and is carried to its surface by the blood supply. Our bodies naturally release heat to the environment in the form of infrared energy. Thermography uses a camera with a specialized infrared detector that captures this energy and produces an image. The image can then be analyzed allowing an interpreter to accurately measure the temperature of the region of interest to the tenth of a degree.

Normal breast tissue will produce a characteristic temperature pattern when visualized with thermography and the measured temperature differences between breasts are within a normal range (fig 1 and 2).

Cancer produces heat through a combination of elevated metabolism and inflammation. The heat from a tumor travels through the circulatory system to the surface of the skin where it can be detected using a thermographic camera (4, 5).

Helping Make Breast Cancer Prevention Possible (con't)

In addition, cancer will dilate existing blood vessels via nitric oxide production and create its own blood supply via angiogenesis (6). Both of these occurrences can translate into a temperature finding at the surface of the breast and provide a means toward detection (fig 3 and 4).

The thermal findings are less dependent on tumor size and depth and are more directly related with tumor growth rates and metabolic activity (7-9). The more aggressive and metabolically active the tumor, the more likely it will be seen on a thermogram. Thus a very small highly aggressive tumor is more likely to produce findings on a thermogram while it may be missed by mammography because it is too small.

(Normal Grey Scale and Color Breast Images)

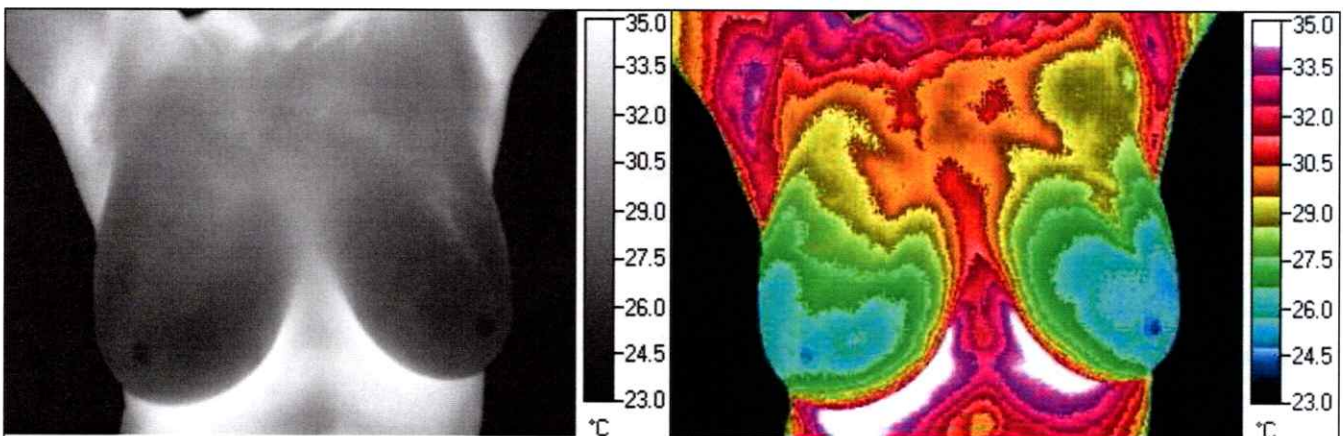


Fig 1: Note the cool darker appearance with only a few visible white vascular markings in the upper service. The temperature is symmetrical between breasts.

Fig 2: Color images make it easier to see temperature differences between sides. Note the relative symmetry in the color distribution between breasts.

(Left Breast Cancer Grey Scale and Color Breast Temperature)

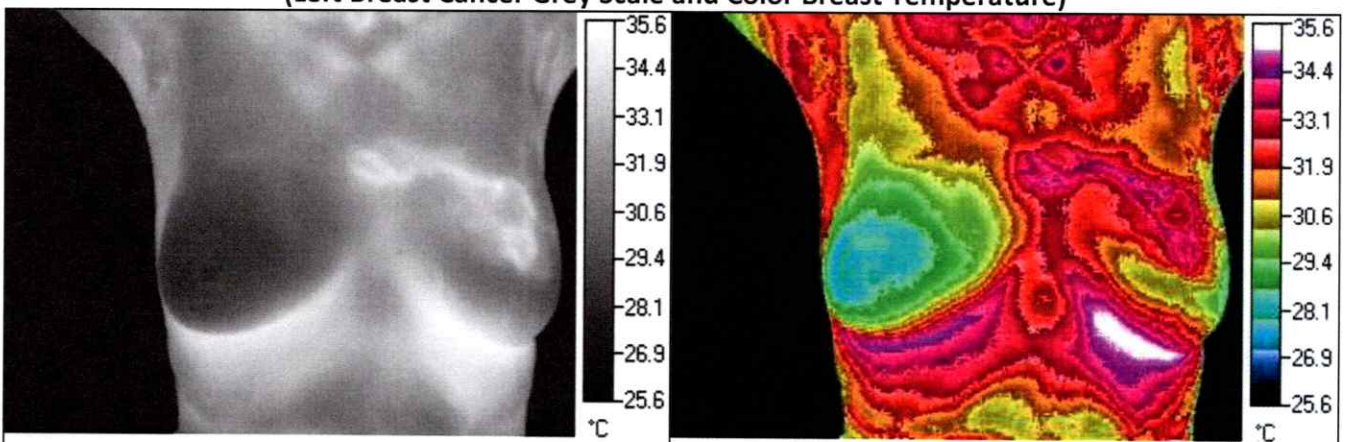


Fig 3: Note the warm (white) vascular markings in the left breast. These markings are not only warm but appear chaotic in their distribution. They are actually circling a tumor and are angiogenic.

Fig 4: The color image demonstrates the degree of warming that has occurred in the left breast. The heat is a function of increased tumor metabolism in combination with cancer induced blood vessel dilation, inflammation and neoangiogenesis.

Thermography and Cancer Prevention:

Perhaps more importantly, thermography provides predictive information allowing us to use it as a method to determine risk. Numerous studies have documented the presence of physiological changes consistent with cancer prior to anatomical detection with mammography. Gautherie observed that 38% of the patients with 'false positive' thermograms developed cancer within four years (10). Stark observed that 23% of the patients with 'false positive' thermograms developed cancer within 10 years (11).

According to Gutherie, a high risk thermogram is considered to be 10x more significant than a first order family history of breast cancer (10, 12). Hobbins further states that a sustained high risk thermogram carries with it a 22x greater likelihood of developing breast cancer than a low risk examination (13).

This is extremely important if we are attempting to prevent breast cancer. If thermography can be used to identify physiological signs that precede cancer and signal future risk, it can also be used to monitor the ability of therapeutic intervention to effectively lower risk.

Although a scientifically proven method to prevent breast cancer does not exist, there is a growing body of research identifying dietary and lifestyle factors that significantly contribute to risk. More importantly, many of these risk factors are modifiable and can be improved or eliminated through lifestyle, diet and natural treatment. This provides us with a starting point for creating breast cancer prevention treatments. Therapeutic interventions are then monitored with thermography to determine if the risk has reduced (Fig 5-6).

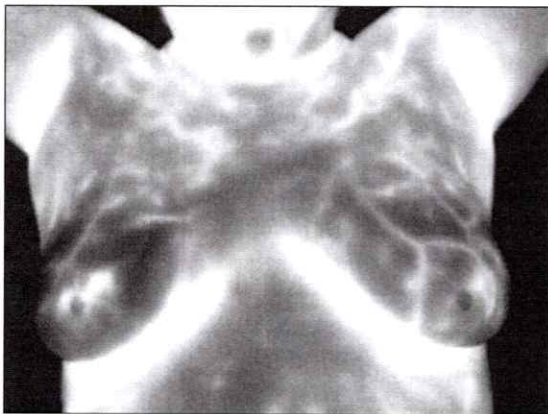


Fig 5: Note the white areas of vascular warming in both breasts. Both breasts are at elevated risk for developing cancer. The left breast is at higher risk than the right.



Fig 6: After therapeutic intervention, the vascular warming and hot spots have diminished significantly. These images suggest a low level of risk for developing cancer.

What are the benefits of thermography over other tests that attempt to assess risk?

BRCA genetic testing identifies a non modifiable risk factor that cannot be used to determine the effectiveness of treatment. Testing estrogen, estrogen metabolite (2:16 hydroxy ratios) and progesterone levels provide systemic information and do not directly evaluate the effects of these hormones on the breast tissue itself. In addition, the serum levels of hormones may not match the tissue levels.

Breast tissue can have up to 50x the estrogen concentration as serum (14). Salivary tests have been used to assess tissue hormone levels but do not take into account that the breasts produce estrogen locally while salivary gland tissue does not. Laboratory tests such as these are still very helpful in determining a therapeutic intervention and monitoring its effects and should not be discounted. Thermography, however is a direct measure of breast physiology and ultimately needs to reflect the desired change.

Thermography and Evaluating the Effects of Estrogen on the Breasts:

In the case of estrogen, thermography offers another unique piece of information. Thermography can help identify Breast Specific Estrogen Dominance. This is different than systemic estrogen dominance in that it occurs specifically in the breasts and may or may not be systemic.

Breast Specific Estrogen Dominance produces vascular changes similar to pregnancy and lactation (15) (Fig 7-9). These changes are distinctly different than those of cancer and can let us know whether or not breast specific estrogen dominance exists and whether or not it is currently elevating the risk for developing breast cancer. If identified, thermography can then be used to monitor the effectiveness of intervention.

Fig 7:

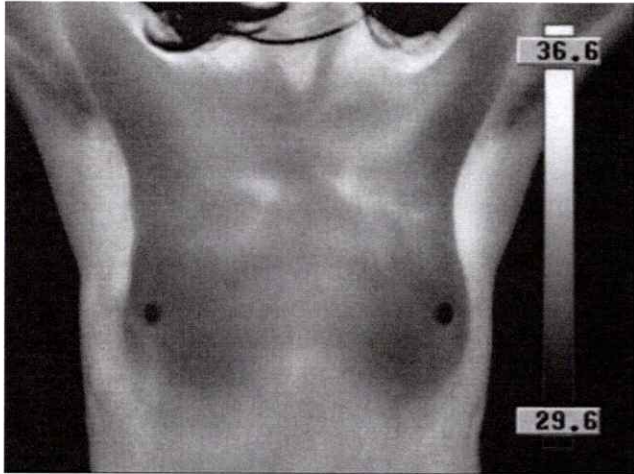


Fig 7: Normal Breast Image With No Signs of Breast Specific Estrogen Dominance: Notice the lack of white vascular markings in the breasts except for a few near the sternal region.

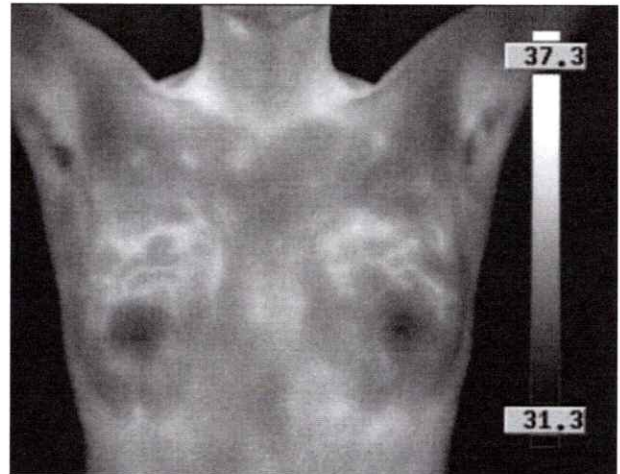


Fig 8: Normal Lactating Breasts: Note the white areas of vascular warming in both breasts. Although the breasts appear highly vascular, the temperature pattern is very symmetrical unlike the vascular signs suggesting risk for cancer.

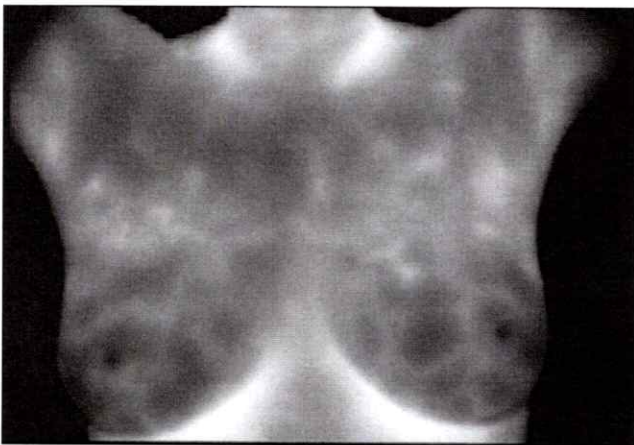


Fig 9: Breast Specific Estrogen Dominance: Note the similar vascular pattern to the lactating breast image with symmetrical vascular warming seen in both breasts. In this case, the patient is on birth control pills but it is possible to have normal or low blood estrogen levels and still have breast specific estrogen dominance.

Helping Make Breast Cancer Prevention Possible (con't)

For breast cancer to be eliminated we must move beyond early detection to the realm of prevention. To create a prevention intervention we must be able to identify the modifiable risk factors and learn to improve or eliminate them. To determine if that intervention is effective, we need thermography to objectively assess the effects of that intervention on the physiology of the breasts.

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References:

- 1) *Breast Cancer Facts and Figures 2009-2010*. American Cancer Society Inc. 2009
- 2) *Screening for Breast Cancer US Preventative Services Task Force*. November 2009
- 3) Ries LAG, Harkins D, Krapcho M, Mariotto A, Miller BA, Feuer EJ, et al. *SEER Cancer Statistics Review, 1975-2003*. Bethesda, MD: National Cancer Institute.
- 4) Yahara T, Koga T, Yoshida S, Nakagawa S, Deguchi H, Shirouzu K. *Relationship Between Microvessel Density and Thermographic Hot Areas in Breast Cancer*. Department of Surgery, Kurume University School of Medicine, 67 Asahi-machi, Kurume, Fukuoka 830-0011, Japan.
- 5) Anbar M. *Quantitative Dynamic Telethermometry in Medical Diagnosis and Management*. CRC Press pp 83-88, 1994.
- 6) Anbar M. *Quantitative Dynamic Telethermometry in Medical Diagnosis and Management*. CRC Press pp 88-93, 1994.
- 7) Head JF, Wang F, Lipari CA., Elliott RL. *The Important Role of Infrared Imaging in Breast Cancer: New Technology Improves Applications in Risk Assessment, Detection, Diagnosis, and Prognosis*. IEEE Engineering in Medicine and Biology: 52-57. May/June 2000.
- 8) Head JF, Wang F, Elliott RL. *Breast Thermography is a Non Invasive Prognostic Procedure That Predicts Tumor Growth Rate in Breast Cancer Patients*. *Ann NY Acad Sci* 698:153-158 1993.
- 9) Gautherie M. *Thermography of Breast Cancer: Measurement and Analysis of the In Vivo Temperature and Blood Flow*. *Ann NY Acad Sci* 335:383-413 1982.
- 10) Gautherie M, Haehnel P, Walter J, Keith L.: *Long-Term Assessment of Breast Cancer Risk by Thermal Imaging*. Biomedical Thermology. Alan R. Liss Inc. pp.279-301, 1982.
- 11) Stark AM: *The Value of Risk Factors in Screening for Breast Cancer*. *Eur J Cancer* 11: 147-150 1985.
- 12) Almaric R, Gautherie M, Hobbins W, et al: *The Future of Women with Isolated Abnormal Infrared Thermogram of the Breast*. *Nouvelle Press Med* 10:3153 1981.
- 13) Hobbins, W.: *Thermography, Highest Risk Marker in Breast Cancer*. Proceedings of the Gynecological Society for the Study of Breast Disease. pp. 267-282, 1977.
- 14) Jefcoate CR, Liehr JG, Santen RJ, et al. Tissue-specific synthesis and oxidative metabolism of estrogens. *J Natl Cancer Inst Monogr* (2000) (27):95-112
- 15) Greenblatt RB, Samaras C, Vasquez J. *Mastopathies: Hormonology and Thermography*. Biomedical Thermology. Alan R. Liss Inc. pp.303-311, 1982.



Am J Surg. 2008 Oct ;196 (4):523-6

Effectiveness of a noninvasive digital infrared thermal imaging system in the detection of breast cancer.

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USA.

BACKGROUND: Digital infrared thermal imaging (DITI) has resurfaced in this era of modernized computer technology. Its role in the detection of breast cancer is evaluated.

METHODS: In this prospective clinical trial, 92 patients for whom a breast biopsy was recommended based on prior mammogram or ultrasound underwent DITI. Three scores were generated: an overall risk score in the screening mode, a clinical score based on patient information and a third assessment by artificial neural network.

RESULTS: Sixty of 94 biopsies were malignant and 34 were benign. DITI identified 58 of 60 malignancies, with 97% sensitivity, 44% specificity, and 82% negative predictive value depending on the mode used. Compared to an overall risk score of 0, a score of 3 or greater was significantly more likely to be associated with malignancy (30% vs 90%, $P < .03$).

CONCLUSION: DITI is a valuable adjunct to mammography and ultrasound, especially in women with dense breast parenchyma



BREASTS

What Every Woman Needs to Know

By Christiane Northrup, MD

Recently, my daughter and I took a friend, Dana, out to celebrate her 40th birthday, which included some well-earned reveling about her wise and gorgeous approach to turning 40. In between the toasts and the birthday intentions, Dana asked me if she needed to care for her health differently, now that she'd reached the Big 4-0. Specifically, her doctor suggested she start yearly mammograms. This didn't feel right to Dana, so she asked me what I thought. Believe me, I have plenty to say!

First, I realized that if Dana—who I know well, and who knows my work and follows a healthy lifestyle—is confused about mammograms, chances are good that just about all women are. If you are one, don't beat yourself up about it! That only makes deciding what is right for you more difficult. This is a complex and controversial subject. So here are some facts and insights that I want you to consider before getting your next mammogram.

Recent Controversy

There's little to no evidence that getting a yearly mammogram starting at age 40 saves lives. This is why, back in 2009, the U.S. Preventive Services Taskforce (USPSTF) published new guidelines, recommending less frequent mammograms for breast cancer screening. (See Note.) Whereas their previous guidelines had called for screening every 1-2 years, starting at age 40, the USPSTF's new guidelines called for screening every other year for women ages 50-74.

The American Cancer Society did not update their recommendations. So despite the USPSTF's findings, most women still follow the American Cancer Society's guidelines and get a mammogram annually, beginning at age 40.

Mammography Is Not Without Risk

Screening mammography is not benign. In a ground breaking study published in the *New England Journal of Medicine* in 2012, Gilbert Welch, MD, a renowned medical authority on the risks of cancer screening, pointed out that routine mammography screening over the last 30 years has resulted in 1.3 million women being diagnosed with "cancer" because their mammograms picked up ductal carcinoma in situ (DCIS).¹

DCIS is not cancer, and in the vast majority of cases will never progress to actual breast cancer. (DCIS is sometimes called stage 0 cancer.) Actually, DCIS is a type of cellular anomaly that women are more likely to die *with* than *from*. In fact, autopsy studies of healthy women in their 40s who died in car accidents have shown that as many as 40% have evidence of DCIS in their breasts.

The newer high-resolution mammography can pick up very early instances of DCIS. And the problem with *that* is once you find it, there is tremendous pressure to do something about it. Hence scores of women are having radiation, surgery, mastectomies, and chemotherapy treatments that are not necessary. Again, these are hardly benign. Plus, a recent study showed that having radiation of the breast increases your risk of heart disease down the road.²

Built-in Fail Safes

The body heals itself! A study published in the November 2008 edition of the *Archives of Internal Medicine* followed more than 200,000 Norwegian women between the ages of 50 and 64 for two consecutive years. Half received regular mammograms and breast exams while the other half had no regular screening. The women who underwent screening had 22% more breast cancer than the unscreened group. The researchers concluded that: *The non-screened women probably had the same number of cancers but their bodies had corrected the abnormalities on their own.*³

Screen With a Thermogram Instead

Thermography and mammography are very different modalities. One is static—an x-ray. The other, thermography, is a functional measure of heat. This modality has been in use since the 1970's to pick up heat in the tissues. Excess heat is associated with cellular inflammation. And cellular inflammation is the root cause of all chronic degenerative disease, including cancer. What that means is that a thermogram (which measures and records heat patterns) is able to tell women and their healthcare providers where the "hot spots" are in tissue. And then address these with lifestyle change. Yes—it's possible to actually *prevent* problems down the line! Good thermographers always refer patients for a mammogram if there is any doubt. You always have the option to do both, until you become comfortable with your thermography results.

My Final Answer

You can't always count on medical science—it's limited and always changing! This is why when there are conflicting recommendations from equally astute scientific bodies—such as the American Cancer Society and the U.S. Preventive Task Force—it can be hard to figure out what's right to do. All you have to go on are the latest facts and recommendations by the reigning "authorities."

What you *can* count on is your inner wisdom—it is always with you. And this inner wisdom includes your body's ability to heal itself. I have spent a lifetime giving women the information and guidance they need to listen to and heed their inner wisdom. This is that "still small voice" that will unerringly let you know whether or how frequently you should get a mammogram. Or anything else. This voice grows stronger the more you trust it.

This information is not intended to treat, diagnose, cure, or prevent any disease. All material in this article is provided for educational purposes only. Always seek the advice of your physician or other qualified health care provider with any questions you have regarding a medical condition, and before undertaking any diet, exercise, or other health program.

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Christiane Northrup, M.D., a board-certified ob/gyn, is a visionary pioneer, beloved authority in women's health and wellness, and the author of the ground breaking *New York Times* bestsellers *Women's Bodies*, *Women's Wisdom* and *The Wisdom of Menopause*. Her third book, *Mother-Daughter Wisdom*, was voted Amazon's #1 book of 2005 (in two categories). In *The Secret Pleasures of Menopause* and *The Secret Pleasures of Menopause Playbook*, Dr. Northrup teaches how to experience joy, pleasure, prosperity, fulfillment, and vibrant health. Her children's book, *Beautiful Girl*, brings her positive message to the youngest of girls. Her books have been translated into 24 languages.

Following a 25-year career in both academic medicine and private practice, Dr. Northrup devotes her time to helping women truly flourish. Follow Dr. Christiane Northrup on [Facebook](#), [Twitter](#), at www.drnorthrup.com, and by listening to her weekly Hay House Internet radio show *Flourish!*

Note: From the USPSTF website: "The USPSTF is an independent panel of non-Federal experts in prevention and evidence-based medicine and is composed of primary care providers (such as internists, pediatricians, family physicians, gynecologists/obstetricians, nurses, and health behavior specialists).

"The USPSTF conducts scientific evidence reviews of a broad range of clinical preventive health care services (such as screening, counseling, and preventive medications) and develops recommendations for primary care clinicians and health systems. These recommendations are published in the form of 'Recommendation Statements.'"

For more information, go to <http://www.uspreventiveservicestaskforce.org> (Endnotes)

- 1 Bleyer, A. and Welch, H.G., Effect of three decades of screening mammography on breast-cancer incidence, *N Engl J Med*, 2012; 367: 1998-2005, November 22, 2012, DOI: 10.1056/NEJMoa1206809.
- 2 Darby, C., et al., Risk of ischemic heart disease in women after radiotherapy for breast cancer, *N Engl J Med* 2013; 368:987-998, March 14, 2013, DOI: 10.1056/NEJMoa1209825.
- 3 Zahl, P, Maehlen, J, and Welch, H.G., The natural history of invasive breast cancers detected by screening mammography; *Arch Internal Med* (2008) 168, 21, pages 2311-2316.

Xenoestrogens and their Role in Estrogen Dominance

Estrogen dominance is a growing problem in the 21st century. It affects both men and women, and sometimes even



children are affected, causing them to experience an early onset of puberty. Estrogen dominance has been firmly linked to breast cancer, prostate cancer, and other hormone sensitive cancers. Researchers have now determined that one of the primary causes of estrogen dominance is xenoestrogens.

What are Xenoestrogens?

Xenoestrogens are man-made substances that mimic the effects of natural estrogen. The name literally means 'foreign estrogen'. These estrogen imitators are found in products all around us - in our drinking water, in our food, and in the products we use every day. The human body cannot tell the difference between natural estrogen and xenoestrogens, so absorption and consumption of them cause estrogen levels in our bodies to spiral upward. Constant exposure to these estrogen-like substances are believed to play a major role in causing estrogen dominance.

Where are Xenoestrogens Found?

Industrial, agricultural, and chemical companies first introduced xenoestrogens into the environment. They are now prevalent in every day life. There are more than 100,000 registered chemicals in use that are known to have hormonal effects on the body and many of those have toxic and carcinogenic effects as well. Just a few of the many ways people are exposed to xenoestrogens include:

- Commercially raised meats (this livestock is often given hormone supplements to make them grow larger and more rapidly)
- Styrofoam cups and food containers
- Plastic bottles, plastic dishes and containers, plastic food wraps
- Pesticides and herbicides
- Cosmetics and personal care products (xenoestrogens absorbed through the skin are 10 times more potent than ones that are consumed)
- Birth control pills and spermicides
- Canned foods (80% of food cans contain a plastic lining to eliminate the taste of metal from the food it contains)
- All artificial scents (perfumes, air fresheners, etc.)
- Commercial dairy products
- Paints, solvents and lacquers
- Detergents and household cleaners
- Industrial wastes

What can you do to Avoid Xenoestrogens?

The fact that xenoestrogens are so commonplace can be a little overwhelming but there are steps you can take to avoid xenoestrogens. You may not be able to escape them altogether, but you can certainly reduce your exposure to estrogen imitators. Here are some simple ways to avoid xenoestrogens:

- **Go Organic Whenever Possible.** Choose meats that are labeled hormone-free or organic. Certified organic produce is free of the herbicides and pesticides found on other commercial produce. Even household cleaners of all types can be found that are all natural and free of xenoestrogens. Whenever possible use cleaners like baking soda, vinegar or other natural substances. Look for detergents that are scent and dye free.
Choose Personal Care Products Carefully. For excellent information about choosing the least harmful cosmetics and other personal care products, visit the [Environmental Working Group's SKIN DEEP cosmetic safety database](http://www.ewg.org/skindeep/). <http://www.ewg.org/skindeep/>
- **Plastics.** Do not microwave or store food or water in plastic containers. Use DEHA free cling wrap. Do not cook with Teflon or other non-stick cookware. Cast iron is an alternative that is safe, affordable, and long lasting.
- **Limit or Eliminate your use of Commercial Dairy Products.** Not only do cows often eat food that has xenoestrogens in it, they are frequently milked when they are pregnant and their estrogen levels are at their highest. This means that commercial dairy products are a prime source of outside estrogen that is getting into our bodies. Substitute rice, coconut, or almond milk whenever possible.
- **Safer Water.** At this time our water treatment plants do not filter out hormonal pollutants and bottled water is an unregulated source for drinking water. Instead, install a reverse osmosis filtration system under your sink or consider a system that filters water throughout the house.

Estrogen dominance is reaching epidemic levels and the finger of blame must point towards xenoestrogens as a clear contributor to the problem. The more you know about these potentially serious health hazards caused by xenoestrogens and how you can limit them in your life the better your odds of avoiding estrogen dominance.