PACM comment: Following is the opinion of Dr. Northrup. Although I agree with much of what she says, there seems to be some over simplification (in my opinion anyway) which makes this article a little misleading. But overall, I agree with the use of thermography for monitoring breast health. Often times changes can be made in thermographic abnormalities seen in the breast with appropriate treatment such as normalizing estrogen dominance, reducing or eliminating inflammation and more. The belief is these changes will improve breast health and likely reduce the incidence of cancer. I am not aware of any studies showing this to be fact, but since a persistently abnormal breast thermogram is associated with a greater risk of breast cancer, then it seems reasonable to believe improvement in thermographic findings through proper treatment, would reduce the incidence of cancer. Our clinic has years of treating the findings associated with an abnormal thermogram and I can say from personal experience, it is possible in many cases to improve breast health. The benefits of thermography, when used prudently, have no down side. No contact, therefore the test is not painful, and there is no ionizing radiation.

Many women with the breast cancer gene are removing their healthy breasts as a way to prevent breast cancer.

Christine Northrup, MD.

Today, many women with a family history of breast cancer are opting for genetic testing to determine whether they carry the abnormal breast cancer genes one (BRCA1) or two (BRC2). When the BRCA1 and BRCA2 genes are healthy, the body is more likely to hinder breast cancer cell growth. When these same women test positive for the (mutated) breast cancer gene, many are opting for a preventative bilateral mastectomy (the removal of two, usually healthy, breasts). This is happening more and more, even though only five to ten percent of all new breast cancers occur in women who carry the gene! Natcancer¹

Women wrongly conclude that if they carry these mutated genes, they are destined to develop cancer. Dr. Colin Begg, Chair of the Department of Epidemiology and Biostatistics at Memorial Sloan-Kettering Cancer Center, and fellow researchers determined after studying 2000 women from different countries that breast cancer risk varies widely among women with mutated BRCA1 and BRCA2 genes. Other factors contribute to a women's risk, including family history, diet, and lifestyle choices. Begg ² This means that testing positive doesn't mean you will get breast cancer *and* testing negative doesn't mean you are protected from developing breast cancer.

When women test positive, many are anxious and wonder what to do. According to the National Cancer Institute, risk increases significantly when a woman has unhealthy BRCA1 and BRCA2 genes and more than one close family member (a mother, sister, or daughter) with unhealthy genes. The risk of developing breast cancer when you have both factors is 60 percent or higher. Prevensvc³

If you fall into this category, your doctor will most likely recommend vigilant breast cancer screening, including mammography and breast exams (and possibly MRIs or sonograms) every six to twelve months. Dr. Northrup says, "Conventional medicine believes in more radical treatments, too."

These treatments include:

- Preventative mastectomy. (An option that isn't 100 percent failproof.)
- Preventative chemotherapy. (Usually in the form of tamoxifen.)
- Taking estrogen-inhibiting drugs for the rest of your life. (This, presumably, thwarts tumor growth).

"I'm saddened by these recommendations. I don't believe that a woman should think of her breasts as lumps of tissue that are destined to kill her," Dr. Northrup continues. "And I wouldn't want any woman to think these are her only three options for staying healthy. These will only create more problems and likely diminish her quality of life. I also don't recommend frequent mammograms because excessive doses of radiation have been shown to increase your risk of cancer." Semelka⁴

Dr. Northrup does recommend getting a regular thermogram at a thermography center, like OsteoMed II in Middleburg Heights, Ohio or the Cometa Wellness Center in Lutherville, Maryland. A thermogram is an infrared image of the breasts that shows cellular activity and inflammation as heat. In a way, it's like a PET scan. For a PET scan, you drink a solution with glucose, which cancer cells quickly absorb. When the X-rays are taken, these glucose-laden cancerous cells are easily identified.

"With thermography, a thermal imaging camera captures the amount of heat on the body's surface. It's then translated to a digital image seen immediately on a computer. Because it uses different colors to represent different amounts of heat—each color is different by half a degree—the resulting image looks a lot like a topographical map. Thermography is a non-invasive test—there's no flattening of the breasts and the thermographer does *not* need to touch your breast to take the images," Dr. Northrup says.

Dr. Northrup adds, "A thermologist, the medical doctor who reads and interprets the thermogram, expects to see symmetrical heat patterns. Even subtle differences from one side to the other are easily identified, and this can indicate cancerous or precancerous tissue or other anomalies. Some are explainable and don't require additional testing. Women who have abnormal thermograms are at a higher risk for developing cancer. Studies have shown it to be an even more reliable indicator than one's family history."Gros⁵

"Women are choosing pre-emptive mastectomies because they believe that they've been warned and now need to act drastically to avoid something even more extreme." Dr. Northrup comments. "With a thermogram, you will likely know sooner if there are breast anomalies, so you can make lifestyle and other changes to improve your health. Similarly, if you get regular thermograms and you do develop breast cancer it will likely be found early. Parisky⁶Therefore, many women will only need a lumpectomy, not radiation and chemotherapy, and certainly not a mastectomy.

"The reason is a thermogram often picks up anomalies better than a mammogram. For example, thermography is very good at finding problems in young dense breasts as well as women with large breasts. This makes thermography, as compared to mammography, appropriate for a woman who is high risk and wants to begin breast cancer screening early. Something particularly good to know is that thermography doesn't pick up questionable masses in women with fibrocystic disease nearly as often as mammography does," Dr. Northrup enthuses. Arora⁷

Conventional doctors also recommend lifestyle changes, like avoiding medications with hormones, such as birth control and hormone replacement; keeping your weight down and eating a low-fat diet; exercising vigorously; and avoiding alcohol. Dr. Northrup recommends a diet low in sugar and other refined carbohydrates along with lots of fruits, vegetables, and flax seed. She also suggests daily supplementation with a high-quality multi-vitamin/mineral, 1,000–4,000 IU of omega-3 fats (like high quality fish oil), 2,000 IU of vitamin D (and maintaining vitamin D blood levels of 40–100 ng/ml), and 10–100 mg of coenzyme Q10.

Complementary medicine practitioners, like Ariane Cometa, M.D., from the Cometa Wellness Center, and Sherri Tenpenny, D.O., from OsteoMed II, often recommend other supplements. For example, because the breasts and lymph play a role in the body's detoxification process, taking a supplement that promotes healthy, efficient detoxification can promote breast health. Likewise, Dr. Northrup recommends a healthy breast and lymph massage. (See *The Wisdom of Menopause*.)

Dr. Cometa recommends diindolylmethane (DIM), which contains a compound found naturally in broccoli, Brussels sprouts, and other cruciferous vegetables. DIM and another compound called calcium D-glucarate can help bring hormonal balance to the body and support healthy breast cells because they support the liver's ability to safely break down and eliminate toxin and hormone metabolites, which may cause normal cells to mutate into cancer cells. Aggaewal⁸ Soy, and other phytoestrogens that contain isoflavones, are also very important.

"I want women to know that a sane approach is not only available, it's also effective—even if you have the breast cancer gene," Dr. Northrup teaches. "It's also entirely possible to improve your thermography results over time by supplementing, exercising, and following a lifestyle that doesn't promote cellular inflammation. I encourage women everywhere to look into thermography and to take a sane approach that promotes breast health proactively."

Learn More — Additional Resources

- Women's Bodies, Women's Wisdom, by Christiane Northrup, M.D.
- *The Wisdom of Menopause*, by Christiane Northrup, M.D.

References

- National Cancer Institute. Genetics of breast and ovarian cancer (PDQ). http://www.nci.nih.gov/cancertopics/pdq/genetics/breast-andovarian/HealthProfessional/page1#Section_66, 2008.
- 2. Begg, C.B., Haile, R.W., Borg, A., et al. 2008 Variation of breast cancer risk among BRCA 1/2 carriers. *JAMA*. 299(2):194-201.
- 3. U.S. Preventive Services Task Force. Genetic risk assessment and BRCA mutation testing for breast and ovarian cancer susceptibility. Retrieved April 20, 2009
- 4. Semelka, R., 2007. Imaging X-rays cause cancer: a call to action for caregivers and patients, *Medscape*, Feb. 13, 2006, reviewed and renewed Feb. 16, 2007.
- 5. Gros, C., Gautherie, M., 1980. Breast thermography and cancer risk prediction, *Cancer* 45:51-56.