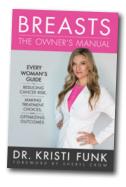




fter spending a morning with Kristi Funk, MD, renowned board-certified breast surgeon, cofounder of the Pink Lotus Breast Center in Los Angeles, and the author of *Breasts: The Owners Manual*, something miraculous happened—I got genuinely excited about breast cancer prevention. Dr. Funk, whose patients have included Angelina Jolie and Sheryl Crow, has helped countless women through their journey with breast cancer. The dietary and lifestyle recommendations she makes in her book are informed by years

of experience and more than a thousand scientific studies. Dr. Funk wants women to know that the dietary and lifestyle choices they make every day can have a huge impact on breast cancer prevention—as well as on treatment outcomes and recurrence. It is exciting news to share as we observe Breast Cancer Awareness Month. Breast cancer, the number one killer of women ages 20 to 59, is *not* something that just happens randomly. Here, Dr. Funk tells you why and gives you practical ways you can reduce your risk.





GOOD HEALTH LIFESTYLES: What drew you to breast health?

KRISTI FUNK: When I finished my general surgery residency, I wanted to specialize in minimally invasive surgery and began the MIS fellowship at Cedars Sinai Medical Center.

Interestingly the same surgeon who ran the fellowship was also the director of their new breast center, and he basically assigned me my future: "You're going to do a breast fellowship and run the breast center." I thought, "No, I'm not! Breasts are easy!" Luckily he gave me a

couple of weeks to think about it. When I really thought about a breast career, I realized that, while no one feels attached to their colon or gallbladder, they do to their breasts. Breasts are life giving symbols of femininity, and women care deeply about them. What an honor to help women navigate breast issues! I changed my path abruptly and did the breast fellowship.

GHL: With breast cancer being the #1 cause of cancer death for women, why is it that many are so reluctant to get to know more about their breasts?

KF: The vast majority of people believe that breast cancer is largely a genetic disease—an inherited predisposition you get from a parent or something that just "runs in the family." That couldn't be further from the truth. In fact, 87 percent of all people with breast cancer do not have a single first-degree relative with the disease. But if you think it's all fate, then what's the point of getting to know your breasts?

Also, half of all breast cancers occur at age 62 and above. Among the other half, the majority occurs between ages 50 and 62. So there are several decades where the odds are very low and perhaps that fosters a feeling of invincibility, or conversely, like it only happens to older women. This whole idea of [a woman's risk being] 1 in 8 is a lifetime tally. In your 20s, the odds are one in 1,567. But in your 40s, it's one in 68. The odds get narrower as you age.

GHL: What would you say is the greatest misconception about breast cancer prevention?

KF: I think the greatest misconception is that there's nothing you can do—family history or not. But women need to be armed with the powerful, life-saving knowledge that there are so many things they can do through nutrition and healthy lifestyle behaviors that can have a dramatic effect not only on the prevention of breast cancer, but on general health. These habits will make it difficult for cells to go awry

inside the body and women will be living their healthiest life.

GHL: You talk a lot about phytonutrients in your book. How do they help keep cells healthy and protect against cancer?

KF: Phyto means plant. So these plantbased nutrients come inextricably bound to all of the fiber inside vegetables and fruit. You just chew and swallowand what you've unleashed inside of your blood stream is an arsenal of phytonutrients that run around and take away everything that cancer and disease love. These nutrients fight against inflammation, free-radical formation, growth hormones, estrogens, and the ability for cancer cells to bring new blood vessels to the cancer—a process that's called angiogenesis. Phytonutrients stop that. Also, cells have what we call a microenvironment.

It's literally the fluids in which your own cells bathe. You want those fluids to be arming cells with anticancer, anti-inflammation, and anti-DNA damage capabilities. On the other hand, practicing an unhealthy lifestyle and eating poorly create a procancer cell microenvironment, whether you intend to or not.

GHL: What are the most phytonutrient-rich foods?

KF: The top players are cruciferous vegetables—broccoli, cauliflower, leafy greens, spinach, kale, and arugula. They contain sulforaphanes, which display ridiculous talent when it comes to seeking out and destroying breast cancer cells. Also, berries—they interfere with cancer cell signals, encourage cancer cell suicide (apoptosis), and inhibit angiogenesis. The deeper the color of your berry, the more powerful the phytonutrients are. Frozen berries more rapidly release these polyphenol heavyweights than fresh berries. And believe it or not, an apple a day can keep cancer away! The anthocyanins in red apples work against every metabolic pathway cancers try to take. Also, curcumin, found in the turmeric root, decreases estrogen,

induces cancer cell apoptosis, suppresses inflammation (COX-2 inhibition), and inhibits free radicals.



GHL: Why are sugar and refined carbohydrates so bad?

KF: They are bad because they have no nutritional value whatsoever and they spike your blood sugar levels, which causes insulin to be released into your blood stream. These sugar and insulin spikes lead to obesity and diabetes—and importantly cancer loves sugar. What's more, excess insulin creates inflammation and cascades into free-radical formation, which creates oxidative stress and causes cellular damage throughout the body.

GHL: What are the best beverages to drink?

KF: Coffee and tea have antioxidants. Three cups of green tea a day will slash breast cancer odds in half because of a powerful phytonutrient it contains called epigallocatechin gallate or EGCG. EGCG potency is bumped up five times by squeezing lemon in your green tea!

GHL: When is surgery the solution for treatment?

KF: Whenever you have a cancer, surgery can be the answer. The dietary and lifestyle interventions that I detail throughout the book are best employed

as a complementary strategy and not as a substitution for the standard of care that we know works in the majority of

breast cancer cases. But having said that, I'm hoping that change is on the horizon and I get to operate less as we start to understand the inherent biology of cancers.

It might be possible then to direct medications or ramp up the body's own immune system

in such a way that it can identify and destroy [just] the cancer cells. Surgery, radiation, and chemo could then become a subset of tools to treat cancer. That would be beautiful. And that's not a pipe dream, it's on the horizon.

GHL: What diagnostic actions can women take?

KF: It's important for women to find out whether or not they have dense breasts. Having dense breasts isn't the same as feeling your own breast [during a self-exam] and deciding it's lumpy. Density is determined by a radiologist reading your mammogram. The denser your breasts, the higher your risk of breast cancer, and the density camouflages cancer on mammograms. So dense-breasted women should add ultrasound to their mammograms every year—and if you're high risk, six months later, do a breast MRI.

GHL: What is the best exercise for reducing your breast cancer risk?

KF: The best kind of exercise to reduce your risk of breast cancer is the one that you will do! A study that followed more than 17,000 women shows that if you briskly walk 11 minutes a day, you can drop your risk of breast cancer by 18

percent. If you work out for three to four hours a week, you drop the risk of breast cancer by 30 to 40 percent. And if you work out over five hours a week, you drop it by 57 percent. These are dramatic numbers because exercise ultimately reduces estrogen levels in your body and it improves metabolism and keeps weight off. Being overweight or obese is one of the biggest risk factors for breast cancer.

GHL: Stress is also a risk factor for cancer. What are the most effective methods for reducing stress?

KF: The most effective method for reducing stress is meditation—at least 20 minutes a day of dedicated quiet. It could also be tai chi or gentle yoga or stretching. The power of "no" is one of our most underutilized stress relievers. It can help you focus on your priorities and limit distractions. There are only so many hours in a day and a busy woman's tendency to overcommit can destroy her health.

GHL: How do you encourage your patients to improve their emotional well-being?

KF: In that frightening moment of a cancer diagnosis, I encourage them to limit the number of friends and relatives they include in the immediate journey. Well-intentioned people will often unwittingly elevate the anxiety associated with the early stages of a diagnosis.

GHL: What role does play, joy, and laughter have in health?

KF: Play, joy, and laughter inherently reframe life into its most meaningful aspect. The unabashed enjoyment of a moment is the most beautiful feeling. It makes you want to live forever.



Kim Henderson is a natural health and green living writer based in Los Angeles, California. She is also the author of the award-winning environmental book, 50 Simple Steps to Save the World's Rainforests (Freedom Press).