

Alternative perspectives on breast cancer



Lifestyle matters! Around one in nine women in the U.S. will develop breast cancer during her lifetime. A recent study found that roughly 30 percent of breast cancers could be prevented with simple lifestyle modifications: Avoiding obesity, alcohol intake, smoking and hormonal therapies.

What was fascinating about that study was that, even in women with strong family histories of breast cancer or with the dreaded BRCA gene, these simple measures could reduce their heightened risk to equivalence with that of average women.

And the paper doesn't even begin to assess the preventive effects of more stringent lifestyle modifications, which may confer considerable additional protection.

Let's look at those 4 risk factors:

Metabolic Syndrome and breast cancer: By some estimates, upwards of 60% of adults are metabolically unfit, if not full-blown diabetic. A waist-to-hip ratio of 0.8 or greater predicts metabolic syndrome in adult females. Excess insulin and insulin-like growth factor (IGF-1) are known to promote cancer. Metabolic syndrome is highly amenable to diet and exercise. A healthy low glycemic index diet targeting diabetes was found to reduce the risk of breast cancer in the Women's Health Initiative (WHI)

study. Even women who were not overweight enjoyed protective benefits.

Alcohol: Many studies show women who drink alcohol have an increased risk of breast cancer. As little as a drink a day hikes risk; 2-3 drinks per day may increase risk by as much as 20 percent. I dread what's going to happen to the increasing number of young women who engage in binge-drinking in high school, college and in their 20s.

Smoking: It was once thought that smoking conferred protection against breast cancer because it made women go through menopause earlier, exposing them to less estrogen. Turns out not. Especially when started young, and in association with alcohol, it's a risk factor.

Hormones: The relationship between menopausal hormone replacement therapy or oral contraceptives to breast cancer risk remains controversial. Most studies suggest that prolonged HRT increases risk; but use of bio-identical estrogen in patches or creams along with micronized progesterone for up to five years did not.

Prolonged birth control pill use, too, was found to slightly increase the risk of breast cancer. While the benefits of hormonal therapy may outweigh the downsides, women who take hormones need careful monitoring.

Merely addressing the above four factors will get you a 30 percent reduction. Shall we go for *extra credit*?

Vitamin D and breast cancer: Women with high levels of vitamin D in their blood when they are diagnosed with breast cancer are almost twice as likely to survive as those with low levels of vitamin D.

Omega 3 and breast cancer: Evidence from several observational studies suggests that higher intakes of omega 3s are associated with a lower risk of breast cancer.

Shift work and breast cancer: Even after accounting for other risk factors, the odds of developing cancer were twice as high in a group of shift workers compared to day workers.

Dairy and breast cancer: Despite the fact that some studies have exonerated dairy, others suggest it might be a risk factor. In my opinion, it's not so much dairy per se, but rather the environmental toxins that bioaccumulate with industrial-scale milk production. To my knowledge, just as with natural meat vs. processed meat, few studies, if any, have compared the impact of organic vs. conventional dairy on cancer.

Soy and breast cancer: A consensus has emerged that early-life soy consumption may protect against breast cancer, while late-life embrace of soy helps very little. Current studies suggest that eating moderate amounts of soy foods is safe for breast cancer survivors; it's unclear whether soy isoflavone supplements are safe or beneficial once you've been diagnosed.

Fruits and vegetables: An analysis of the huge Nurses' Health Study spanning 30 years showed higher intake of fruits and vegetables, and specifically cruciferous and yellow/orange vegetables, may reduce the risk of breast cancer, especially those that are more likely to be aggressive tumors.

Carbohydrates and breast cancer: In contradistinction to studies of the relationship between meat consumption and breast cancer, whose results are equivocal, there's strong consensus that breast cancer risk rises in direct proportion to dietary

carbohydrate consumption.

Exercise: Turns out you *can* run away from breast cancer. There was **consistent evidence from 27 observational studies** that physical activity is associated with reduced all-cause, and breast cancer-specific, mortality. A new study shows how exercise turns down the volume on cancer aggressiveness.

This breezy discussion of modifiable risk factors might feel discouraging to the considerable number of my readers who, despite their healthy lifestyles, have been diagnosed with breast cancer. Let's just stipulate that it's not entirely a merit system: Risk for breast cancer might be acquired in utero, for example. Your mother's health habits might plant the seeds of risk for you, only to emerge decades later.

Plus, few people consistently follow healthy habits for the entirety of their lives; there are many things I wish I hadn't done when I was young and didn't know better.

Finally, there are the pervasive effects of environmental factors beyond our control: the air we breathe, residues of ubiquitous pollutants in our food and water, and the cosmetics and personal care products we apply to our bodies. Many common herbicides, insecticides, plastics, and household products contain hormone-disrupting compounds called **xenoestrogens**.

Even the routine mammograms we use to catch cancer early might come with a tradeoff: added risk due to the cumulative effects of repeated radiation exposure.

Nonetheless, it's considerable consolation that, even if you do get breast cancer, many of the measures discussed above have been demonstrated to increase your odds of survival. Lifestyle matters, for prevention as well as part of a comprehensive treatment and recovery program for breast cancer.