

# Breast Cancer Awareness

“The phthalates leeching out of the plastic containers were such potent estrogen mimics that they turned on the growth of cancer cells.”

We don't just wake up one day and find out we have breast cancer. Cancer growth is a process that develops over years before aberrant, rebellious cells can accumulate to a point when we can feel or detect a lump.

Research has shown that there are many things we can do to empower our immune system. Vitamin D is important in preventing all kinds of cancer, so we can check vitamin D levels. We discussed on an earlier Tuesday Minute that excess iron has been identified as a variable, so keeping an eye on iron is another strategy. Zinc is an antagonist to iron and reduces viruses in 4 ways. But the gorilla in the room, especially when it comes to breast cancer, are xeno-estrogens.

Years ago, it was found that estrogen added to cancer cells caused them to grow like wild fire. Later, researchers accidentally found that cancers proliferated without estrogen at the same rate if the test tube or petri dishes were plastic. The phthalates leeching out of the plastic containers were such potent estrogen



mimics that they turned on the growth of cancer cells. Xeno-estrogens are used in plastic bottles that hold pop, bottled water, and plastic used to wrap supermarket meats and vegetables, etc. Many of the pesticides, and herbicides have estrogen-like activity. Commercial meat by-products are also increasing our levels of estrogen. Animals are fed estrogen to increase their water weight before slaughter.

One study demonstrating the effects of xeno-estrogens in our waterways found male fish with eggs in their testes. These fish were harvested from a river that provides drinking water for millions of

people. Add all these factors together, and you can see why one researcher is quoted as saying, “We are all swimming in a sea of estrogens.”

Just how much plastic are we ingesting? It's difficult to say for sure, but Dr. Thava Palanisami from the University of Newcastle in Australia combined data from 50 studies on the ingestion of microplastic by people. The analysis called “No Plastic in Nature: Assessing Plastic Ingestion from Nature to People” suggests people are consuming about 2000 tiny pieces of plastic every week. That's about the size of a credit card. But it's also approximately 21 grams

a month, which is just over 250 grams a year. That's over a ½ pound a year, and plastics don't move out of our system very easily.

They found the single largest source of plastic ingestion is through water, both bottled and tap, all over the world. Interestingly, twice as much plastic contamination is found in the United States or India than in European or Indonesian water.

In terms of testing, I have provided a link to the DUTCH test, which stands for Dried Urine Testing for Complete Hormones. It's a fascinating test that can give you lots of hormone data. One of the ratios in their panel is 2/16 hydroxyestrone. This simple urine test can predict years in advance whether your patients have the cellular soil that encourages cancer growth. You see, 16 hydroxyestrone metabolite is a potent cancer enhancer, whereas the 2-hydroxyestrone metabolite protects us against cancer. If the ratio favors the 16 hydroxyestrone, chances for cancer are significantly elevated. So, ratios under 2 suggest an increased risk for breast cancer and perhaps prostate cancer. Ratios over 2 suggest healthy detoxification pathways and reduced risk. But, with or without tests, we want to encourage our patients to aggressively reduce our plastic, pesticide, and commercial meat exposure.

But let's come back to food. Encourage family members and patients to eat two ½ cup servings daily from the cruciferous family of vegetables to detoxify the body. Two servings will help the

2/16 ratio. In fact, two servings will increase your body's ability to detoxify harmful liver agents like Tylenol by 20%. Cruciferous vegetables are high in vitamin C and soluble fiber and contain multiple nutrients with potent anti-cancer properties: diindolylmethane, sulforaphane, and selenium.

Researchers at the University of California at Berkeley have recently discovered that 3,3'-Diindolylmethane in cruciferous vegetables is a potent modulator of the innate immune response system with potent anti-viral, anti-bacterial, and anti-cancer activity. 3,3'-Diindolylmethane or DIM is derived from the digestion of indole-3-carbinol, found in cruciferous vegetables. For men, cruciferous vegetable consumption is inversely related to the incidence of prostate cancer and reduced homocysteine levels.

For those crazy times in life where you can't take time to make your veggies, consider Nitro-greens. Nitro-greens contains sprouted cruciferous veggies, which have even greater biologic benefit. Use one scoop in water or almond milk, add berries or ½ banana for more flavor. Nitro-greens will also help balance pH and enhance Nitric Oxide production.

October has been designated as breast cancer awareness month. Let's be specific and use these opportunities to open up conversations about breast cancer and encourage our patients to take preventative steps beyond pharmaceutical rhetoric. Thanks for watching. Look forward to being with you again next Tuesday.