



## Plastics, Pesticides and Periods: Xenoestrogens and Health

By Mahalia Freed ND

Yes, there is a connection between hormonal balance and exposure to pesticides and certain plastics. That connection is xenoestrogens, an ever-expanding group of synthetic chemicals similar enough to our own estrogens that our bodies respond to them, but foreign enough that we cannot adequately get rid of them. They can build up in our bodies, stimulating estrogen-sensitive tissues and throwing off our delicate hormone balance. Xenoestrogens are linked to breast growth in prepubescent girls, gynecological concerns such as PMS, hot flashes, endometriosis and fibroids, and have clearly been shown to enhance the growth of breast cancer tumors. Studies also suggest that xenoestrogens decrease sperm counts in men, contribute to increased rates of testicular cancer and affect developing reproductive systems in utero. Thus, effective treatment & resolution of any of the above concerns must address this class of chemicals.

While scientists have been aware of the endocrine-disrupting effects of pesticides and plastics for more than 40 years, xenoestrogens have only begun to garner government and mainstream press attention recently, mostly thanks to the outcry over Bisphenol A. Banned in Canada in 2008 as an ingredient in baby bottles, it is still found in the linings of cans, in plastic water bottles and in dental enamel, among other places. Other xenoestrogens include a long list of pesticides as well as parabens (preservatives often found in personal care products), phthalates (used to soften plastics including medical tubing), PCBs, and heavy metals. Polyvinyl chloride (PVC) is categorized with the xenoestrogens both on its own account, and due to the chemicals it creates in manufacturing and breakdown. Similar to bleaching in the pulp and paper (and tampon!) industries, the manufacture and incineration of the PVC plastics produces dioxins, which are extremely potent endocrine disruptors. Nonylphenols – found in spermicides and as a breakdown product of conventional detergents – are also in this toxic family. Clearly then, xenoestrogens are pervasive in our environment. For more information on what these toxins are, where they are found, what the evidence is, and what you can do, see [www.environmentaldefence.ca](http://www.environmentaldefence.ca) or [www.ewg.org](http://www.ewg.org). If you are wondering why these toxins are still in widespread use, see epidemiologist Devra Davis' in-depth exploration, "The Secret History of the War on Cancer".

The endocrine, or hormonal, system is a complex web. Operating like a symphony, each part contributes to the resonant whole. The addition of extra players who don't know the score results in discord and disrupts the integrity of the entire work.

This kind of information can feel overwhelming. However there are many things you can do to decrease your personal exposure, in addition to advocating for regulatory change.

- 1) Eat organic as much as possible, especially animal products, as xenoestrogens accumulate in the fat of those who eat them.
- 2) Use all-natural cleaning products, or make your own.
- 3) Read labels on personal care products to avoid parabens.
- 4) Choose to eat a diet rich in phytoestrogens (natural estrogen-like plant compounds), such as those found in legumes and flax seeds.
- 5) When buying toys for kids, choose wood and cloth over plastics.
- 6) When buying sex toys, look for phthalate-free options.
- 7) Avoid vinyl in clothing and building materials.
- 8) Avoid storing food & drinks in plastic, never heat food in plastic, or covered in plastic.
- 9) Use saunas regularly to move fat-soluble toxins out of your body.
- 10) If you are planning to conceive, consider a comprehensive preconception detox to enhance fertility and decrease the toxic load you pass on to your baby.

For a hormone-balancing and detoxification plan geared to your personal health profile, please book an appointment with Mahalia Freed.