



# The effects of toxins and chemicals on hormone health



Words: Dr Marilyn Glenville

Xenoestrogens ('foreign oestrogens') are oestrogen-like chemicals usually from pesticides or plastics that have been linked to disruptions in hormones for both men and women. These endocrine (hormone) disrupting chemicals (EDCs as they are often called) which are chemicals in the environment which mimic our own natural hormones. They are found in everything from plastics to pesticides, and the residues of hormonal medications e.g. the Pill and HRT, that don't break down once they pass into our water supply. Even though the government tells us EDCs are perfectly safe there is a growing body of evidence to suggest that they are not and that they have potentially damaging effects to hormonal health and health in general. In the wild, some of these problems have been dramatic. For example, the Environment Agency has found that a third of the male fish in UK rivers have become feminised and have produced eggs after developing female sex organs.

The increasing levels of xenoestrogens in our environment have coincided with an earlier onset of puberty. At the turn of the century the average age for puberty to begin was 15. Now some girls as young as eight are growing breasts and pubic hair. Women with higher concentrations of certain pesticides in their bodies run a greater risk of developing oestrogen dependent breast cancer than women with lower levels.

Xenoestrogens are stored in body fat and can affect men and women differently. Overweight people tend to have higher concentrations because xenoestrogens are lipophilic – which means that they love fat!

There's no doubt that all of us are affected by xenoestrogens, and they may be at the root of more health problems than we know. It's no coincidence, in my opinion, that the

huge proliferation of xenoestrogens in the last 20 years has coincided with: a decrease in sperm counts of 50%; an increase in testicular cancer; an increased number of boys born with undescended testes and other problems with their reproductive organs; more girls than boys being born and an increase in oestrogen dependent health problems such as breast cancer, endometriosis and fibroids.

Researchers have found a connection between dioxins (a class of xenoestrogens from pesticides) and the development of endometriosis. They found that 79% of female rhesus monkeys spontaneously developed endometriosis after being fed food containing dioxin. Dioxins can be found almost everywhere, not only in the food we eat but also in many products we use on a daily basis, such as the material used for tea bags and sanitary products.

Last year two companies had to remove their cod liver oil capsules from the shelves because of the high levels of dioxins found in them. In the sea, fish accumulate toxins, which pass through their livers (the organ responsible for detoxification). Extracting the oil from the liver of the fish is likely to provide high quantities of these toxins. My advice is to avoid fish liver oil and use fish oil taken from the body of the fish. (In my clinic I use Omega 3 Plus from [www.naturalhealthpractice.com](http://www.naturalhealthpractice.com) 0845 8800 915).

## Other examples of xenoestrogens are:

- Nonylphenols - used in the manufacture of plastics, skin creams, detergents, toiletries, lubricants and spermicides
- Bisphenols - leached from polycarbonate plastics when heated
- Phthalates – found in make-up, nail polish, hair spray, plastic, carpets