Environmental oestrogens

Sometimes it just feels as though Mother Nature is out to get us. She can be a cruel matriarch.

Males are at an increasing risk of lowered sperm counts, affecting their fertility. It has been reported widely in the last few years that this has seriously declined over the last two generations. In some countries, the UK for example, sperm production has dropped by up to a third, with a decline in both sperm quality and the volume of semen. If the decrease in sperm counts were to continue at the current rate then in a no time at all there may be widespread male infertility. Durex and their shareholders must be shitting themselves.

Undescended testes (testicles that fail to descend down into the scrotum during the early years, resulting in reduced fertility) are more common now than it was when I was born 40 years ago. And cancer of the testes has more than doubled in Britain during this same timeframe.

What the hell is going on and what can be done to minimise this alarming trend?

People living in the United States and in Western Europe have been found to have much higher oestrogen levels at much younger ages than people living in less industrialised countries. Many experts link this to environmental exposure.

The blame is being leveled at xeno-oestrogens. These are a type of hormone mimicking chemical that imitates oestrogen. Xeno-oestrogens are found in industrial chemicals, Insecticides, fungicides and pesticides, plastics and other materials. They are fat-soluble, so can store themselves in the body for long periods of time.

These xeno-oestrogens can also be found in a variety of consumer goods like cosmetics and shampoos. The most common sources are BPA (bisphenol A). This is an industrial chemical that has been used to make plastics and resins for over 50 years. It is used in containers that store food and drink such as water bottles. It is becoming more difficult to avoid chemical oestrogens in our environment.

Another common source of these environmental chemical oestrogens is a substance called phthalate. These too are also found in plastics along with personal hygiene products and pesticides.

It appears that the rate of breast cancer is unusually high in men who manufacture perfumes and soaps. They are way more likely to develop breast cancer than the male population at large. Exposure to certain chemicals seems to be an obvious possibility, but this hasn't yet been proven. There is a direct link between oestrogen and breast cancer. That's why some medications used in its treatment are anti-oestrogens. This class of drug is also used by bodybuilders to limit the effects of oestrogen, which excess levels of testosterone from anabolic steroids are converted to.

There appears to also be dietary considerations which affect how much xeno-oestrogens we are exposed to. Soya products are particularly rich in phyto-oestrogens. These are the same as xeno-oestrogens, but produced naturally in plants, rather than man made. They are made as a defence mechanism by the plant. They're not in a position to run away, after all. If an animal eats too many of the plants then their hormone levels are disrupted. Shepherds have known for centuries to keep their sheep out of fields with a specific kind of clover otherwise the sheep can become infertile. No

new baby animals mean less threat of the plant being eaten. The consumption of soy products has increased a lot in the last two or three decades as a substitute for meat protein. Oh dear, poor hippies...

Fighting back

- Limit exposure to BPA by first switching to glass containers for water and food storage rather than plastics. Don't reuse plastic drink bottles from shops. There are sports drinks containers that are certified BPA free available. Check any canned foods for BPA as it remains in use to line food cans. BPA has been banned from use in baby bottles, fortunately.
- Ensure that any fruit and veg products have been washed thoroughly before eating to remove traces of pesticides and other chemicals. You really don't need to go all organic, just wash it.
- Never wash yourself. Actually, this is not strictly necessary or indeed advisable. Just go easy
 on the cosmetics. Trust me; you'll thank me for this. Guy liner, a head full of hair products
 and dousing yourself in overpowering scents will all make you seem like a bit of a twat
 anyway.
- Loose fitting underwear do allow for cooler temperature around the testes. They're on the outside of a man's body for a reason.
- Eat meat. We're graced with teeth called canines (as in the name for dogs) for tearing through meat, after all. Don't just read UK Beef, eat it too.

I should point out that a lot of what is written about xeno-oestrogens and the effect they impart on humans is, at times, highly speculative. Though there is an increasing consensus in the scientific community that there is very likely to be a link between environmental toxins and reduced fertility.

Soon enough there are going to be more mouths to feed on planet earth than there are resources to do so. Reducing fertility could simply be Mother Nature's way of culling the herd. I wouldn't put it past her. Told you she can be cruel.

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