



The Paraben Debate

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I know the debate today is focussed on parabens, but I will broaden the perspective and talk about the cocktail of chemicals to which we are all exposed via consumer products.

I will also try and provide some guidance as to steps you can take not to be a ‘Toxic Consumer.’

I have worked on chemicals policy and how it is woefully inadequate for your health since 1996. I was Director of the WWF Toxics Programme for 10 years and now I am Director of CHEM Trust – Chemicals, Health and Environment Monitoring Trust.

CHEM Trust focuses on man-made, synthetic chemicals – industrial chemicals and pesticides and within those, 2 particular classes of chemicals.

Firstly, those that are hormone or endocrine disruptors, I will explain what they are

Secondly, those that are persistent and bio accumulative, meaning that they build up in our bodies and stay there for a long time.

These 2 classes of chemicals pose the greatest threat to us now and to future generations, as they can be passed from mother to baby via the placenta and breast milk and it is the foetus in utero that is least able to protect itself but is most vulnerable to these exposures.

Currently CHEM Trust is looking at chemicals in consumer products and their links to breast cancer and chemicals in consumer products and links to deterioration of male reproductive health. We work closely with HEAL – Health and Environment Alliance – in Brussels.

So what is an endocrine (hormone) disrupting chemical? The word endocrine and hormone mean the same thing.

Your hormones are amazing things – they work at minute levels in our bodies and they are vital to our existence controlling out reproduction, behaviour, immune systems and neurological development.

They are also very vulnerable to disruption, because they work at such low levels – leading to negative health impacts.

It is now known that certain, nasty, man-made chemicals – mostly industrial chemicals and pesticides – can mimic natural hormones and can undermine our health – many are in consumer products, such as toiletries and cosmetics and food.

Some wildlife examples are i) male alligators exposed to hormone mimicking pesticides such that are no longer capable of reproduction because they have vestigial reproductive organs.

ii) another example is mass die offs of dolphins and seals (as seen in the 1980s with the seals) attributes to industrial chemicals disrupting their immune response so they succumb to what are normally much less harmful viruses.

Clearly, these chemicals do not just affect animals. Humans are animals too with the same physiological processes that are just as easily unbalanced by hormone disruptors.

Some worrying trends in human health where chemicals are believed to be a contributory factor are as I mentioned above – i) increasing rates hormonally driven cancers – e.g. breast and testicle and ii) deterioration in human male reproductive health iii) neurological impairment in children.

I understand that chemicals per se are not interesting to customers, but if I was to say that, from my experience, I would be pretty confident that you all contain a worrying cocktail of many toxic chemicals as a result of your 21st century lifestyle – I think you would find that interesting and possibly worrying.

I am confident in telling you this as I have run a ‘bio monitoring’ campaign for WWF – testing hundreds of people’s blood to see what nasty chemicals they were carrying.

Chemicals that are toxic, chemicals that should not be there, chemicals they had no idea about, chemicals that they were contaminated with – without their consent.

I was the first guinea pig tested, back in 1999, and was confident that my knowledge and lifestyle would make me clean.

I was totally shocked when I had high levels of very worrying chemicals in my blood. Chemicals like PCBs, flame retardants, DDT and other pesticides.

I had not given anyone the right to contaminate me with those chemicals, and what’s more, I knew on the personal side of things that I wanted to start a family and that the chemicals I was carrying were most damaging to the foetus developing in utero.

Over several subsequent years we tested ‘waves’ of people. Initially, a random sample – men and women, old and young, from across the United Kingdom.

Then we tested politicians in the UK and Europe, Health Ministers, journalists and celebrities.

We also tested 3 generations of some families and new born babies.

Everyone we tested was contaminated – even every new born baby – with a varying cocktail of worrying toxic chemicals. Some related to cancer, others known to cause neurological impairment and others linked reproductive problems.

In some cases children as young as nine had higher levels of worrying chemicals in them than their parent or grandparent.

What's more we could highlight foetal exposure as I had had my blood tested prior to having Florence, my first child, and then I had had it tested again after she was born.

The toxicity levels in my fat and blood had gone down enormously during this time.

A major explanation for this is that a woman passes a significant proportion of her lifetime's body burden of toxic chemicals to her child via the placenta during development and via breast milk.

All babies are exquisitely sensitive and vulnerable to chemical insults during utero development. Once, for example, that neurological 'wiring has gone wrong' it cannot be rewired at a later date. This means those children can never reach their full potential.

So what's the solution to this problem that you now have – a problem that you did not create?

The answer is 2-fold:

Firstly the real nasties need to be addressed by regulation – and phased out and replaced by safer alternatives.

Secondly – you can take action to use your consumer power and protect your family's health.

And there is a book that can help you 'The Toxic Consumer'. As part of the WWF campaign we had written a consumer guide on how to avoid toxic chemicals in consumer products.

In the first part of the book we set the scene on how industrial chemicals have now spread to every part of the world and there is probably no one that is not contaminated.

Thus we are living through a gigantic chemical experiment and we cannot stop it.

And it is not just one or two chemicals to which we are all exposed. It is probably many thousands. How is that chemical cocktail affecting us?

No one knows, but many leading scientists believe that the mixtures are much more worrying for our health than individual exposures.

We then look at the top 10 nastiest chemicals (in our opinion) that are currently found in consumer products:

Our list is:

1. BFR's found in electronic goods and soft furnishings, cause neurological impairment in rats and accumulate in women's breast milk meaning new born babies are exposed.
2. PFCs used in non-stick cook-ware & food packaging, which are linked to immune system disruption and are considered carcinogens by US EPA.
3. Phthalates are used to make hard plastics soft – are known hormone disruptors causing feminising effect in males – e.g. decreased sperm counts etc.
4. Bisphenol A, found in baby's bottles and tin can linings, is a known oestrogenic mimic.
5. Formaldehyde used in carpets and flooring, linked to various cancers and asthma.
6. Synthetic musks, used in fragrances in most products from soaps to candles, are persistent and bio accumulative and linked to breast cancer cell proliferation in the lab.
7. Parabens as we have heard tonight are preservatives used in many cosmetic products and may be implicated in breast cancer. This is particularly worrying as women put so many cosmetics on these days.
8. PERC is dry cleaning fluid and occupational exposure is linked to a higher incidence of throat cancer.
9. Organotins are used in toys and sports clothing for antifungal purposes but in the marine environment, where they have been used on boats, they are hormone disruptors causing female snails to grow a penis.
10. Triclosan is used in soaps etc as an antibacterial substance. It has a very similar structure to dioxin which is a very toxic chemical and in certain circumstances it can be transferred into dioxin. Also it is very persistent and is now found in breast milk.

A US version of the book has Product Guides summarising the above advice in different sectors of our lives – for example: Home Furnishings & Appliances, Building Materials, Clothing & Personal Care Products, Baby & Childcare and Food and Drinking Equipment.

Home Furnishings

Soft furnishings -BFR & PFCs – Buy BFR free without stain repellent.

Vinyl shower curtain – Phthalates – Choose alternatives or air well

Air fresheners – Synthetic masks – Use essential oils

Building Materials

PVC flooring – Phthalates – Solid wood or natural

Conventional paints – BPA, Organotins – Choose low VOC alternatives

Clothing and Personal Care Products

Cosmetics – Phth, Parab, musks – natural, organic products

Non-iron clothing – PFCs – untreated fabrics

Dental sealants – BPA – Avoid white fillings

Baby and Childcare

Plastic feeding bottles – BPA – glass or dispose after 3 months

Disposable nappies – Organitons – washable or eco-friendly disposable

Food and Drinking Equipment

Non-stick cook wear – PFCs – Stainless steel, ceramic

Microwave popcorn – PFCs – do not use

So, in many cases, with wise consumer purchasing, you can avoid these chemicals and I would recommend that. It all helps.

In conclusion –

We can hope that i) the chemical industry will become more responsible and ii) we can hope that chemical regulations in the future will do an adequate job...

...But while we wait for that it is most likely, that without exception, every pregnant and breast feeding woman who exists on the earth today, will, often unwittingly and certainly unwillingly be exposing her unborn or new born child to a variety of chemicals.

Many of these will be known to be toxic many others – unknown if they are toxic or not.

However - by taking collection personal action and by getting educated and making choices

you as the non-toxic consumer can have great power to ensure that worrying chemicals are phased out of consumer products – by simply not buying them that way your children can not get exposed.

www.chemtrust.org.uk

