

A monthly update on the latest in the chemical crisis  
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## **New evidence that flame retardant chemicals may disrupt thyroid system in humans**

Artificial 'polycyclic' musks are increasing in concentration in breast milk

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New evidence that flame retardant chemicals may disrupt thyroid system in humans.

Researchers have now shown that brominated **flame** retardants (BFRs), used in fabrics and plastics, can interact with the human thyroid hormone system *in vitro* [1]; this research follows on from earlier work in rats which found that BFRs reduced thyroid hormone (thyroxine) levels [2]. Thyroid hormone is involved in controlling the development of many organs, including the brain. As these **chemicals** contaminate our bodies, they could be affecting our health, with children particularly vulnerable. Another group of industrial **chemicals**, the PCBs, is known to disrupt the thyroid hormone system, and research has shown that low level exposures lead to adverse effects on brain development in children [3]. PCBs are now banned, but continue to contaminate our bodies.

Artificial 'polycyclic' musks are increasing in concentration in breast milk.

Recent German research has found that levels of polycyclic musk perfumes (as used and defended by Boots) are increasing in breast milk [but breast milk is still the best option for a child]. These researchers also point out the lack of safety data on these **chemicals** "So far no data whatever is available on long-term toxicity of polycyclic musks" [4]. Remarkably, polycyclic musks have been on the market since the 1950s, yet still have only minimal safety data, in spite of the fact they are accumulating in our bodies!

Danish Government finds 20,000 new hazardous chemicals.

The Danish Government has been tackling the problem posed by the fact that the chemical industry has no idea how safe - or dangerous - most of its products are. They have used a computer model of toxicity to look at almost 50,000 different substances. As they say in their press release [5] " Over 20,000 of these substances are so dangerous that they now appear in a new advisory list " which has been presented to industry for its comments. Maybe the chemical industry should have known how dangerous its products are without someone else having to find out?

Political fight continues between DG Environment and DG Enterprise in Brussels - when will the new White Paper on chemicals appear?

The new White Paper, which will map out the future of **chemicals** regulation across Europe, was supposed to be published by the end of 2000. However, it hasn't yet appeared. The problem seems to be that the Environment and Enterprise departments of the Commission haven't been able to agree on a number of key points, for example whether

should be a date set by which all **chemicals** must have had their safety assessed. Latest rumours suggest the White Paper might be out in mid-February - we'll just have to wait and see.

***Watch out for the next Toxic Leaks - due in February***

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**References**

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