


Presentation of Ms. Elizabeth Salter-Green

Biomonitoring

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The COOPERATIVE BANK
Customer led, ethically guided



Polar bears don't live in houses, so why are there chemicals from houses in their bodies.

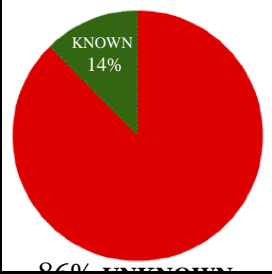


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are we all part of an uncontrolled global chemical experiment?




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KNOWN
14%

86% UNKNOWN
HAZARD DATA



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PCBs and PBDEs-
“compromising our children”



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Phthalates - testicular dysgenesis syndrome



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Findings

- 90% of the 78 chemicals tested for were found
- every person is contaminated by chemicals from each group: OPs, PCBs and PBDEs
- highest number of chemicals found in any one person was 49, median was 27, minimum was 9
- widespread contamination with the **deca-BDE** brominated flame retardant
- older people have higher loading of some chemicals
- mothers have lower loading of some chemicals – **why?**



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Family blood test results 1

- 7 families, 33 people aged from 9 to 88
- 104 chemicals, 6 groups: BFRs, OCPs, PCBs, PFOS/PFOA, phthalates, musks
- Highest number found in one person was 62, highest in a child was 56
- found 80, 75 in children and parents, 56 in grandmothers
- Every child tested had at least one chemical in higher concentrations than their parents AND grandmothers, especially true with certain newer chemicals such as PBDEs (flame retardants) and PFCs (“non-stick” chemicals)
- children were the most contaminated generation with PBDEs (i.e. they had the highest median of any generation) - children had 16 PBDEs and grandmothers had just 5



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Family blood test results 2

- **Deca-BDE**, a flame retardant used in plastic housings for electrical appliances (TVs, VCRs and computers) is found in several people in this study who admit to playing on computer game consoles or watching TV for up to 4 hours a day
- The **phthalate DEHP**, used in numerous plastic products, PVC flooring and food packaging, was found in 79 per cent of the family members tested
- **Organochlorine pesticides** and **PCBs**, which are known to be found in elevated levels in dietary items such as oily fish, are found at higher levels in family members whose lifestyle questionnaires reveal that they eat these kinds of foods more regularly than members of their family who have lower levels
- **Perfluorinated chemicals** are used in the manufacture of and in numerous products such as non-stick pans, stain resistant coatings for carpets and furniture and water repellent treatments for clothing and footwear. 82% of the family members tested had one or more of these chemicals in their blood.



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WHO

“exposure, particularly prenatal exposure, to certain endocrine disrupting chemicals can have adverse effects on neurological development... and behaviour”



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RCEP

“Given our understanding of the way chemicals interact with the environment, you could say we are running a gigantic experiment with humans and all other living things as the subject. We think that's unacceptable. We just do not know enough [about the effects of chemicals] and we've made little attempt to find out. We need a more precautionary approach.”

Sir Tom Blundell, June 2003
Chairman, Royal Commission on Environmental Pollution.



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“99% of chemicals on the market by volume are inadequately regulated.”

DG Environment, European
Commission



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Top Ten Tips

1. Buy organic produce whenever possible.
2. Wash and peel fruit and vegetables before eating.
3. Avoid the use of pesticides in the home or garden by going organic.
4. Avoid canned food: choose fresh, frozen or dried foods instead.
5. Avoid food coming into contact with PVC cling film.
6. Use non-polycarbonate baby feeding bottles or, better still, breast-feed babies.
7. Open your windows instead of using air fresheners.
8. Use environmentally friendly cleaning products.
9. Buy soap, shampoos & cosmetics that don't contain synthetic fragrances.
10. Use paints, varnishes and glues with a low VOC content, or those that are water-based.



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Five safer products

- Teflon-free cast iron frying pans, Manufactum www.manufactum.co.uk
- IKEA furniture, PBDE-free www.ikea.co.uk
- Dr. Brown's B-free Baby Bottle, BPA-free www.babybfree.com
- Swan matches, non artificial musk air freshener!
- Wooden toys, avoids plastics! www.thelittlewoodshop.co.uk



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Chemicals and Health Campaign

- campaigning for everyday man-made chemicals to be made safer
- through a robust EU Chemicals Regulation
- that phases out the worst chemicals and replaces them with safer alternatives



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www.wwf.org.uk/chemicals



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