

World Wildlife Fund September 2006

Chain of Contamination: The Food Link

The report highlights the unintentional but ubiquitous contamination of food by man made chemicals. Sources are diverse but high levels in some foods could be thought to predominate and therefore be the principle source of exposure. Foods with high levels are recorded here.

The WWF report is very brief and makes reference to the need to increase the effectiveness of the new REACH regulations. Included are some analyses of common foods. The regulator already surveys foods and compares findings to permitted levels agreed by expert advisory groups. The WWF report is not aimed at assessing against these levels, but is something of a campaigning report.

For interest:



High levels of X	were found in
Organochlorine pesticides Increases in concentration the higher up the food chain and bio-accumulates.	Pickled herrings and orange juice
PCBs used in electrical equipment may affect neurological development. Bio-accumulates.	Smoked salmon, pickled herring.
Flame retardants may affect neurological development. Bio-accumulates.	Beef, cheese.
Perfluorinated chemicals (used in coatings and packaging and fire fighting products). Bio-accumulative, linked to neurological development problems.	Pickled herring.
Phthalates. Used in plastics. Adverse sexual development and genital disease. Endocrine disruption.	Olive oil, cheese.
Artificial musks, used in toiletries may be endocrine disruptors.	Tuna, Herring.
Alkylphenols used in detergents. Persistent in aquatic environments. Endocrine disruption.	Butter, bacon
Orgaonotins used as biocides e.g. wood preserver. Bioaccumulative and persistent.	Tuna

Comment

The report highlights the many unintentional accumulations of man made chemicals in the wild environment. Establishing a single significant source of exposure would be complex though not impossible when the contamination is highly specific. Health effects remain speculative in many cases and should be prevented by compliance with permitted levels in foods.

The technical report which forms the basis of the WWF paper is available from WWF: TNO report 2006-A-R0095/B version 2 "*Man-Made Chemicals in Food Products*"