

| Guidelines/Criteria | |
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| | <p>Reference: Cleland GB, Leatherland JF, Sonstegard RA. 1987. Toxic effects in C57Bl/6 and DBA/2 mice following consumption of halogenated aromatic hydrocarbon-contaminated Great Lakes coho salmon (<i>Oncorhynchus kisutch</i> Walbaum). <i>Environ Health Perspect</i> 75:153-158.</p> |
| In vivo Study Type Route of Administration Species & age of animals | Feeding study focussed on liver and thyroid Diet Three week old C57Bl/6 and DBA/2 mice. All male. |
| Study Duration | 4 months |
| Type of Mixture Binary >2 components Similar acting or dissimilar What Mode of Action was investigated? | No Coho salmon from Lake Ontario, Lake Erie, Lake Michigan, or ocean coho salmon (used as the control) were included in the diet. (Also a rat chow only diet, which I've ignored.) Both Nothing specific |
| Parameters/End points Measured Target organs/Critical effects Pharmacological changes or adverse effects | EROD in liver, T4 & T3, liver weight and body weight Depends on magnitude of effects |
| Individual Components Characterisation of individual compounds Name, exact chemical name, CAS no. Were dose responses established for individual components? Were no effect levels established? Were doses below the NO(A)ELs investigated? | Certain halogenated aromatic hydrocarbons were analysed in the diets. N/A No No N/A |
| Mixtures Investigated Number of dose levels How does the mixture make-up compare to individual components? (e.g. low dose) equivalents used? No. of technical replicates per exposure condition (<i>in vitro</i>) No. of animals per dose group (<i>in vivo</i>) | One The diet consisted of coho salmon. Different groups were fed salmon from the Pacific (control), Lake Ontario, Lake Michigan or Lake Erie. Fish was 33% of the diet on a dry weight basis. 8 |
| Observations/Findings | Reduction on body weight in DBA/2 mice fed Lake Michigan salmon vs. the ocean control. Increase in % liver weight in both strains fed Lake Ontario salmon. EROD induction in all Great Lakes groups of C57Bl/6 mice, but only for Lake Ontario salmon fed group of DBA/2 mice. Reduction in T3 & T4 for Lake Ontario salmon-fed C57Bl/6 mice. Reduction in T3 (and in some cases T4) for all Great Lakes salmon-fed groups of DBA/2 mice. |
| Overall opinion (e.g. sufficient numbers of groups investigated, group sizes adequate, observations reproducible, low dose levels used investigated) | When so few variables are measured it makes it hard to put the results into context of the overall state of health of the rats. Lake Ontario salmon were the most contaminated and resulted in most effects in both strains. Other Great Lakes only had effects on EROD induction for C57Bl/6 mice and T3/4 for DBA/2 mice. |