



EUROPEAN COMMISSION
Health and Consumers Directorate-General

Directorate E - Safety of the Food chain
E3 - Chemicals, contaminants, pesticides

Brussels, 21 April 2008 D/530286
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INFORMATION NOTE

Subject: Methyl mercury in fish and fishery products

1. To give an EU perspective on the risk from mercury in food, the Commission asked the European Food Safety Authority (EFSA) to consider data collected by the EU Member States on total mercury content in foods (SCOOP task) and to assess this data alongside the new lower PTWI of JECFA (1.6 µg/kg bw/week).
2. On 18 March 2004, EFSA published its scientific opinion and provided general advice to vulnerable groups regarding mercury intake via the consumption of fish. In particular, the advice is aimed at women of child-bearing age and young children as methyl mercury can affect the neurodevelopment of the foetus and young children.
3. This note provides an analysis of the current situation, particularly in view of the impossibility to fully address the issue by setting stricter maximum levels for mercury in fish. It should be used to raise the awareness of all national authorities, institutions, associations, etc which have a responsibility in public health or which provide safety information to consumers.
4. Methyl mercury (organic) is the chemical form of concern and can make up more than 90% of the total mercury in fish and seafood. Fish and seafood contain mercury as a result of its natural presence in the environment and from pollution. Large predatory fish accumulate higher levels of mercury through intake over a long life-time. Large predatory species are often migratory and it is not possible to exclude fish from particular waters where background levels of mercury contamination might be high.

5. Besides fish and seafood, EFSA concluded that other foods found to contain mercury were of lower concern. The forms of mercury present in the other foods are mainly not methyl mercury and they are considered to be of lower risk.
6. EU consumers in general who eat average amounts of fishery products are not likely to be exposed to unsafe levels of methyl mercury. Consumers who eat a lot of fish may be at higher risk, but there is not enough data to specify Member States of particular concern. EFSA highlighted that further information on dietary intake is necessary.
7. The Commission wishes to pursue the need to give more specific advice to vulnerable groups, i.e. women who might become pregnant, are pregnant, are breast-feeding and young children. The Commission considers that it is important to ensure that the advice reaches these target groups of consumers on a continual basis.
8. Several Member States have already issued specific advice to vulnerable groups. This includes limiting the frequency of consumption of particular predatory fish, such as swordfish, marlin, pike and tuna. In some cases the advice is even to avoid eating certain species of predatory fish.
9. There is concern world-wide on the levels of methyl mercury in fish. Specific advice on consumption of fish to reduce intake of methyl mercury has also been issued by some third countries.
 - (a) Australia and New Zealand Food Standards Agency advises pregnant women, women planning pregnancy and young children to limit their intake of shark, broadbill, marlin and swordfish to no more than one serving per fortnight with no other fish consumed during that fortnight. For orange roughy/sea perch and catfish similar advice is given but for one serving per week and no other fish.
 - (b) United States Department of Health and Human Services and the US Environmental Protection Agency have issued advice for women who might become pregnant, who are pregnant, nursing mothers and young children. This includes not eating shark, swordfish, king mackerel or tilefish. Advice is also given to eat up to two average meals (12 oz) per week of species known to be lower in mercury. One example is canned light tuna, although for albacore 'white' tuna only one meal (6oz) is advised.
 - (c) Health Canada advises the general population not to eat more than 150 g per week of fresh/frozen tuna, shark, swordfish, marlin, orange roughy and escolar. For women that are pregnant, may become pregnant or are breastfeeding 150 g of these per month are recommended, for children aged 5-10 years 125 g per month and for children aged 1- 4 years 75 g per month. This advice does not apply for canned tuna, although for canned white (albacore) tuna specific advice is given (higher intakes than for shark, broadbill, marlin and swordfish are recommended).

10. EU legislation setting maximum levels for mercury in fishery products is already in place. In view of the levels of mercury detected in fish, scope to reasonably reduce the levels is limited. Alternative solutions for protecting the vulnerable groups are necessary. Targeted consumer advice is an appropriate approach in this case.
11. The Commission considers that, in view of the above information, the Member States should be provided with all relevant information to be able to issue consumer advice. Consumers are entitled to receive concrete information where possible. Therefore, the Commission has made a rough calculation, based upon levels of methyl mercury in fish compared with the PTWI, to help consumers visualise the implications of the new scientific information:

Women who might become pregnant, women who are pregnant or women who are breastfeeding should not eat more than one small portion (<100g) per week of large predatory fish, such as swordfish, shark, marlin and pike. If they eat this portion, they should not eat any other fish during this period. Also, they should not eat tuna more than twice per week. Parents should be aware that this advice also applies to young children. Consumers should also pay attention to any more specific advice from national authorities in light of local specificities.

12. The EFSA has identified certain gaps in knowledge, in particular with respect to consumption of various fish species by women of child bearing age and young children. Such data would allow refining the risk assessment for these vulnerable groups of the population. In the meantime, the advice in point 11 should apply.