



**Food and Agriculture
Organization
of the United Nations**



**World Health
Organization**

Joint FAO/WHO Expert Consultation on the Risks and Benefits of Fish Consumption

Call for Information and Data

Introduction

The 29th Session of the Joint FAO/WHO Food Standards Programme, Codex Alimentarius Commission held in Geneva, Switzerland, 3-7 July 2006, requested FAO and WHO to consider holding an FAO/WHO Expert Consultation on the health risks associated with methylmercury and dioxins and dioxin-like PCBs in fish and the health benefits of fish consumption, based on a recommendation from the 38th Session of the Codex Committee on Food Additives and Contaminants (CCFAC).

In order to better address the request from Codex, FAO/WHO held a small expert group meeting to get advice on these issues and the most appropriate way forward. The expert meeting noted that a large number of national studies and assessments were available and that these could form the basis for further development of assessment models and for the evaluation. However, a quantitative risk-benefit approach may not be possible at the international level, so other options may need to be explored.

FAO and WHO are now planning an Expert Consultation on the risks and benefits of fish consumption, and are seeking information and data, in particular relevant recent studies and benefit/risk assessments. Both published and unpublished technical information may be submitted.

Timing

The Expert Consultation is tentatively planned for 25th to 29th of January 2010.

A Call for Experts has been published separately.

Confidential and/or unpublished data

FAO and WHO recognize that some of the information and relevant data which is now required may be unpublished or of a confidential nature. With regard to unpublished information and data, this remains the property of the author for subsequent publication by the owner as original material. Unpublished confidential studies that are submitted will be safeguarded in so far as it is possible to do so without compromising the work of FAO and

WHO. Specific issues relating to confidentiality should be discussed directly between the information and data owners and FAO/WHO. For these and other issues please contact FAO and WHO at the contacts provided below.

Scope of the Expert Consultation

Assessment of the health risks associated with consumption of fish, produced from marine and fresh waters by capture fisheries and aquaculture, with respect to risks from (methyl) mercury, dioxins and dioxin-like PCBs, such as neural and cardiovascular development of children as well as other vulnerable groups.

The main goals of the consultation are to consider the risks of dietary exposure to methyl mercury, dioxin and dioxin like PCBs from consumption of fish for vulnerable groups of the population, i.e. women of childbearing age, the foetus, infants and small children and high consumers, versus the nutritional and health benefits of consumption of fish.

The main aspects to be considered are:

Assessment of the health risks associated with fish consumption with respect to methylmercury, dioxins and dioxin-like PCBs, including the neural and cardiovascular development in infants and children as well as other effects in the vulnerable groups of the population.

Assessment of the nutritional and health benefits associated with fish consumption, not only with focus on long chain polyunsaturated fatty acids (DHA and EPA), but also including knowledge regarding benefits of amino acids and micronutrients (vitamins, minerals) of aquatic origin, and knowledge of possible benefits of other nutrients (e.g. taurine).

Comparison of the health risks and health benefits of fish consumption in a systematic way, if possible by using quantitative risk/ benefit assessment models.

Previous work and assessments carried out on national/regional and international level will form the primary basis for the evaluation.

Objectives of the Expert Consultation

The Expert Consultation will assess the health benefits and risks associated with consumption of fish. Based on existing evidence, the main objective will be to give advice, targeted at vulnerable population subgroups, on a neutral basis, in order to assist countries and their institutions, policy makers, health authorities, fisheries bodies, public health advisors, etc., to balance the risks and the benefits of fish consumption.

The elements that should be considered by the Expert Consultation include:

- The human health risk of fish consumption related to neurological development and cardiovascular diseases, with focus on methylmercury but also considering the impact of dioxins and dioxin-like PCBs;
- The nutritional and health benefits of fish consumption, that may be related to the prevention of cardiovascular disease, prostate cancer, immunological disorders, osteoporosis and to the outcome of pregnancy and subsequent neurological and

cardiovascular development of infants and children, focusing on long chain n-3 fatty acids, other nutrients contained in fish and considering the interaction between nutrients from fish and nutrients in the background diet;

- Assessment of risks and benefits;
- Fish consumption patterns related to region, ethnic groups, culture, traditions, habits, economy, social factors, media, education, etc.; and
- Potential effects related to increased or reduced consumption of fish.

Information on the following aspects is requested:

- Occurrence of mercury/methylmercury in fish.
- Occurrence of dioxin and dioxin-like PCBs in fish.
- Recent toxicological knowledge and epidemiological studies on human exposure to mercury, dioxin and dioxin-like PCBs and evaluation of co-exposure to these contaminants.
- Possible benefits of consuming fish, such as long chain polyunsaturated fatty acids (DHA and EPA), but also amino acids and micronutrients (vitamins, minerals) and other beneficial components of marine origin.
- Child development linked to geographical differences and differences related to local traditions and economic power.
- Neurological development of children, in particular up to the age when the brain is fully developed and the possibility that exposure to contaminants during gestation may result in adverse effects only detectable in adulthood.
- Nutritional factors affecting neural development.
- Fish consumption by region/country and by group of fish products (oily fish, lean fish, shellfish, etc.).
- Factors that could affect fish consumption (geography, culture/traditions/habits, social and economic factors, media, potential contaminants, nutritional value, etc.).
- Levels of contamination in food supplements, particularly fish oils, used to avoid potential contamination from fish.
- Qualitative and quantitative approaches in evaluating risks from exposure to contaminants in the diet, in particular methylmercury, dioxin and dioxin-like PCBs, from fish and other sources.
- Qualitative and quantitative approaches in evaluating benefits of intake of nutrients on biochemical and physiological endpoints.

- Chemistry and toxic effects of methylmercury, dioxin and dioxin-like PCBs in the human body, particularly pre- and post-natal brain development and cardiovascular disease.
- Benefit/risk analysis, in particular in relation to population based dietary habits and health.
- Potential effects related to increased or reduced consumption of fish.
- Communication of risk/benefit of fish consumption.

Deadline

Information/data should be sent to the Joint Secretariat by **15 August 2009** to the addresses below, electronic submissions are preferred, either via e-mail (if not too large) or on CD ROM.

Submission of Information

<p>WHO Jørgen Schlundt Director Department of Food Safety, Zoonoses and Foodborne Diseases World Health Organization 20, Avenue Appia CH-1211 Geneva 27 Switzerland Tel (+41) 22 791 34 45 Fax (+41) 22 791 48 07 E-mail: schlundtj@who.int</p>	<p>FAO Grimur Valdimarsson Director Fish Products and Industry Division Fisheries and Aquaculture Department Food and Agriculture Organization of the United Nations Via delle Terme di Caracalla 00153 Rome, Italy Tel: (+39) 06 5705 56510 Fax: (+39) 06 5705 55188 E-mail: Grimur.Valdimarsson@fao.org</p>
--	---