

## **AF 06.04.2004 – 6 SCIENTIFIC COLLOQUIUM on METHODOLOGIES AND PRINCIPLES FOR SETTING TOLERABLE INTAKE LEVELS**



**European Food Safety Authority**

### **EFSA SCIENTIFIC COLLOQUIUM ON METHODOLOGIES AND PRINCIPLES FOR SETTING TOLERABLE INTAKE LEVELS FOR DIOXINS, FURANS AND DIOXIN-LIKE PCB'S: REVISITING THE PROCESS**

#### **Background**

A publication on the 9th January 2004 in “Science” on the global assessment of organic contaminants in farmed salmon triggered a substantial number of comments around the globe. National food safety authorities in a number of European Member States also issued formal advice and the issue was discussed at the 6th Advisory Forum meeting in Dublin. The Advisory Forum concluded that (1) there were no new scientific data and (2) the US EPA standards were different from the other standards used because of differences in methodology and principles.

From the Science article and the subsequent wave of comments it could be concluded that threshold limits could differ substantially depending on the applied risk assessment and evaluation approach. Differences between the US EPA approach referred to in the Science paper and the approach adopted by the Commission, the WHO and JECFA are summarized in the table below. This comparison should not be considered as exhaustive or complete but merely as an illustration of how approaches may differ.

<b>US EPA Risk assessment and evaluation approach</b>	<b>Risk assessment and evaluation approach currently used by the Commission, WHO, JECFA</b>
<ul style="list-style-type: none"><li>• Assumption of linear risk additivity irrespective of the mechanisms of toxicity;</li><li>• Adverse effects other than cancer are added to the equation;</li><li>• Carcinogenic effects treated as a non-threshold effect.</li></ul>	<ul style="list-style-type: none"><li>• Risk additivity only for similar mechanisms of toxicity;</li><li>• Application of toxic equivalency factors (TEQ) to express the total toxicity of dioxins, furans and PCBs into the toxicity of TCDD;</li><li>• Assuming a threshold for carcinogenic effects of TCDD.</li></ul>

#### **Revisiting the process for setting tolerable intake levels: the first EFSA Colloquium**

Following the publication of the Science article a number of Member States, including France and the Netherlands, suggested that a thorough analysis should be carried out of the methodology for the evaluation of the food safety risks of contaminants in oily fish,

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taking into account the respective toxicities and concentration of the various contaminants.

Based on that suggestion, EFSA has decided to arrange for an open scientific meeting of experts on dioxin/furan/PCB toxicity and risk assessment and evaluation methodologies to discuss and analyze the various approaches for setting tolerable intake levels for these contaminants. Experts will be requested to address in particular:

- Principles of and approaches for risk additivity;
- Thresholds for carcinogenic effects; and
- The assessment of contaminants that induce toxicities other than cancer.

Although members of the Scientific Panel on contaminants in the food chain (CONTAM) will be invited, the objective of the meeting will not be to reach consensus and produce a scientific opinion by the CONTAM Panel. Instead, the aims of the meeting will be to provide the state-of-the-science on the process and approaches for setting tolerable exposure limits, to identify and analyze differences in approaches used by authorities and to produce general guidance for the CONTAM Panel and national authorities on setting exposure limits.

In order to achieve these goals, the meeting will be organized as a **colloquium**: an interactive exchange of expert views, comfortably informal to allow for lengthy debates, if needed, yet sufficiently structured and managed to enable the meeting to arrive at conclusions and recommendations.

Invitations to actively participate in the colloquium will be sent to: the Scientific Committee and all Panels; the Advisory Forum; experts from food safety authorities in the US (both EPA and FDA) and Japan (Food Safety Commission); international organizations with an interest in the subject (e.g., FAO, JECFA, JMPR, OECD, WHO); EFSA's stakeholder organizations (e.g., environment, consumer, producer and retailer associations/NGO's); and recognized experts on the subject from European Member States, Iceland, Norway and Switzerland. In addition, the meeting will be announced on EFSA's webpages.

Participation will be limited to approximately 40 experts as a large meeting is considered incompatible with the essence of a colloquium as explained above. All participants need to register in order to be considered. Limited funds will be available to assist experts who lack resources to travel.

Provisional dates and venue of the colloquium are: 28-29<sup>th</sup> June in Brussels.