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Safety evaluation of certain food additives and contaminants

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Expert Committee on Food Additives (JECFA)

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METHYLMERCURY

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1. EXPLANATION

The Committee first evaluated methylmercury at its sixteenth meeting (Annex 1, reference 30), when it established a provisional tolerable weekly intake (PTWI) of 300 µg of total mercury per person, of which no more than 200 µg should be present as methylmercury. At its twenty-second and thirty-third meetings (Annex 1, references 47 and 83), the Committee confirmed the PTWI of 200 µg of methylmercury (3.3 µg/kg bw) for the general population. At its thirty-third meeting, the Committee noted that pregnant women and nursing mothers may be at greater risk than the general population from the adverse effects of methylmercury. The Committee considered the available data insufficient to recommend a specific intake for this population group, and it recommended that more detailed studies be undertaken.

At its present meeting, the Committee reviewed information that had become available since the previous evaluation. The PTWI was not reconsidered and was maintained at its present value. Two other WHO publications have dealt with the effects of mercury and methylmercury on human health (WHO, 1976, 1990). Relevant information from those documents and the studies published since the report of the thirty-third meeting are summarized and discussed in this monograph, and the data were used to estimate the risks associated with exposure to methylmercury. It should be noted that the doses given refer to the mercury constituent of the organic mercury compound.