Opinion On Lindane In Foods Intended For Infants And Young Children

(Opinion expressed on 15th January 1998)

Terms of Reference

To advise the Commission:

- whether the presence of lindane at a level of 0.03 mg/kg in foods intended for infants and young children poses a risk to their health
- on the maximum level of lindane in such products that could be considered to be acceptable from the public health point of view.

Background

The Committee issued an opinion on lindane in baby food on 23rd September 1994. In November 1997 the Commission, in view of the implications of this opinion for the regulation of a question relating to the free movement of commercial baby food in the Community and that fact that the opinion was issued three years ago, requested the Committee to confirm whether that opinion was still valid. The Committee concluded as follows at its Plenary meeting of 10 November 1997.

"The Committee was asked by the Commission a few days before the meeting to advise the Commission whether the scientific basis for its opinion of 23rd September 1994 on lindane in baby foods remained valid and, if so, to confirm that opinion. At that time the Committee concluded that "With a residue level of 0.04 mg/kg in baby food for example a child of 10 kg, would have to consume 2 kg of that food per day, an amount which is physiologically impossible, to reach a dose equalling the ADI. The Committee, therefore, has no reason to believe that a content of 0.04 mg lindane/kg baby food would cause reason for concern". The CommitteeÂ’s opinion of 1994 was based on the ADI of 0.008 mg/kg body weight set by the JMPR (Joint FAO/WHO Meeting on Pesticide Residues) in 1989.

The Committee was informed verbally at the meeting that the JMPR had recently reviewed the ADI and reduced it substantially (JMPR meeting of 22 Sept. - 1 Oct. 97). In the light of this information and without knowing the reasons which led JMPR to reduce the ADI, the Committee must now conclude that, as a matter of prudence, its earlier opinion can no longer be assumed to be valid. The Committee currently lacks the information to allow it to advise on an upper residue level for lindane in baby food.

However, the Committee noted that the above statement is not in contradiction with its opinion on "A maximum residue limit (MRL) of 0.01 mg/kg for pesticides in foods intended for infants and young children", expressed on 19 September 97."

Opinion

The Committee has previously only considered those pesticides which may be used as food additives. Thus lindane has never been evaluated toxicologically by the SCF.

The Committee was aware, however, that the FAO/WHO Joint Meeting on Pesticide Residues had recently (JMPR meeting of 22 September -1 October 1997) reviewed the ADI for lindane and had allocated a temporary ADI of 0 - 0.001 mg/kg b.w.. The toxicological evaluation, which was the basis for the temporary ADI, is in print and will be available in the near future from FAO/WHO.
In the Committee’s opinion on "A maximum residue limit (MRL) of 0.01 mg/kg for pesticides in foods intended for infants and young children" expressed on 19 September 1997, a worst case intake of food for 12 month old infants was estimated to be 48 g/kg b.w./day

The temporary ADI, as set by JMPR, would not be exceeded by infants and young children consuming commercial products at the highest recorded 95 percentile every day i.e. 48 g/kg b.w., if lindane was present in all of these products at a maximum level of 0.02 mg/kg food.

The Committee now concludes therefore that a maximum level of lindane of 0.02 mg/kg in foods intended for infants and young children, could be considered to be acceptable from the public health point of view.