

Residues in breast milk

Recommendation of the National Breastfeeding Committee of 20.11.1995

The Senate Commission for the Testing for Residues in Foods of the German Research Society addressed the issue of residues in breast milk in 1978 and in 1984. It also undertook a health assessment of residues and recommended unrestricted breastfeeding in the first four months irrespective of the level of residues in breast milk. At the same time, however, it proposed that mothers wishing to breastfeed for more than four months should have their milk examined for residues of organochlorine pesticides and polychlorinated biphenyls. "Guidance values" were submitted for the levels of these substances in breast milk: depending on the level of residues mothers continuing to breastfeed their babies should give less breast milk per day as the advantages of breastfeeding would then no longer outweigh the theoretical risk.

All the same, the Commission does not see any health risk for the infant from these residues and thus, no need for any restrictions on breastfeeding. It recommends to mothers that they exclusively breastfeed their infants up to when they switch to spoon-feeding (i.e. for four to six months) and does not see any risk to the infant if its mother continues breastfeeding in parallel to giving it complementary food and follow-on-formula.

Previous recommendations and their impact

The Senate Commission for the Testing for Residues in Foods of the German Research Society addressed the issue of residues in breast milk in 1978 in announcement V and in 1984 in announcement XII. In announcement XII this Commission also undertook a health assessment of residues and recommended unrestricted breastfeeding in the first four months irrespective of the level of residues in breast milk. At the same time, however, it proposed that mothers wishing to breastfeed for more than four months should have their milk examined for residues of organochlorine pesticides and polychlorinated biphenyls. "Guidance values" were submitted for the levels of these substances in breast milk: depending on the level of residues mothers continuing to breastfeed their babies should only give a maximum amount of 850, 600, 400 or even 250 ml breast milk per day as the advantages of breastfeeding would then no longer outweigh the theoretical risk.

The test bodies of most federal states in Germany were instructed to examine at the request of the mothers – irrespective of the length of time since giving birth – their milk free of charge for the above substances and, if necessary, to postpone the monitoring of foods which constitute the main intake path for these substances. By way of example, in 1990 around 6,000 samples of breast milk were analysed in Germany.

In no other country were guidance values of this kind introduced for organochlorine pesticides and polychlorinated biphenyls in breast milk although in some neighbouring countries to Germany similar or in some developing countries even far higher residue levels were measured. The Federal Health Office and the Federal Institute for Health Protection of Consumers and Veterinary Medicine, which is now responsible for this assessment¹, has consistently rejected "guidance values" for breast milk. The World Health Organisation, too, after repeated assessments does not see any grounds, on the basis of these residues, to impose constraints on breastfeeding.

¹ Since 2002 the National Breastfeeding Committee has been attached to the Federal Institute for Risk Assessment (BfR).

This breastfeeding recommendation from 1984 considerably worried numerous mothers; this in turn prompted them to have their breast milk examined at a far earlier stage and, in some cases, to stop nursing their infants at an earlier stage than they would have otherwise.

Current recommendations

The National Breastfeeding Committee in Germany already dealt extensively with the problems of residues in breast milk at its constitutive meeting (1/2. 9. 1994) (K. W. Tietze, B. Trumann, C. Sedemund [Editor.]: "Breastfeeding in Germany", RKI-Heft 8/1995). In this way it was able to establish that, as a consequence of the measures taken, the residues of persistent organochlorine compounds in breast milk had fallen considerably over the last few years:

- organochlorine pesticides by 50-80 %,
- PCB and dioxins by around 50 %.

The Commission was happy to note this development but still requests, for precautionary reasons, that suitable measures be taken in the future to minimize the residues of all foreign matter in breast milk. All the same, the Commission does not see any health risk for the infant from these residues and thus, no need for any restrictions on breastfeeding. It recommends to mothers that they exclusively breastfeed their infants up to when they switch to spoon-feeding (i.e. for four to six months) and does not see any risk to the infant if its mother continues breastfeeding in parallel to giving it complementary food and follow-on-formula.

The National Breastfeeding Committee recommends to the federal states of Germany that they inform mothers through the health agencies and other corresponding institutions about this decision. It suggests stopping the examinations of breast milk samples at the request of interested mothers and to restrict testing to samples where there is good reason to believe that they have a particularly high contaminant level. By contrast, it proposes that the federal states conduct studies of representative breast milk samples within the framework of a coordinated monitoring programme in order to further observe and assess the residue situation.

(Bundesgesundheitsblatt (Federal Health Gazette) 2/96, p. 87)