

Breast milk: Dioxin concentrations decrease continually

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Humans take in dioxins mostly through the consumption of foods of animal origin and then accumulate these in body fat. Due to its large fat content, breast milk is a good bioindicator for human background exposure to dioxins.

Occasioned by the increased dioxin concentrations in eggs and meat which were detected in January, the Federal Institute for Risk Assessment (BfR) has been asked by concerned parents whether the consumption of such foods could lead to increased dioxin concentrations in breast milk. In its Opinion Nr. 002/2011, BfR reached the conclusion that the daily consumption of two highly contaminated eggs over the course of one month would only slightly increase the amount of dioxins stored in body fat. Consequently, the dioxin concentrations in breast milk are not expected to increase significantly.

BfR would like to draw attention to the fact that dioxin concentrations in breast milk have decreased considerably over the past 20 years in Germany. This has been demonstrated by data provided by the test authorities of the German Federal States, which were evaluated by BfR. Thus, samples of breast milk from 2009 contained about 80 percent less dioxins than samples from 1990. The decrease in dioxin concentration in breast milk reflects that the background presence of dioxin in the environment and in foods has continually decreased over the past 20 years.

The dioxin intake of breastfed infants has also decreased accordingly. Nonetheless, the dioxin intake of an infant that is exclusively breastfed remains in excess of the tolerable daily intake set for dioxins.

In light of the health benefits of breastfeeding and the limited period in which an infant is breastfed, the World Health Organization and the National Breastfeeding Committee at BfR recommend that mothers breastfeed their children.

The full version of this BfR Information is available in German on http://www.bfr.bund.de/cm/343/frauenmilch_dioxingehalte_sinken_kontinuierlich.pdf