

Aluminium contents in infant and follow-on formula

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The presence of aluminium in food can have different causes. Thus, for example, it can be due to natural contents in certain food ingredients or aluminium-containing additives. Another source can be the transfer of aluminium from food packaging, cooking utensils, or kitchen equipment etc.

Below, the Federal Institute for Risk Assessment (BfR) assesses aluminium contents in baby food with regard to their potential health effects. The trigger for the BfR opinion was a British study which measured aluminium contents in infant food. In addition to that data, the BfR drew on aluminium contents in baby food which had been made available by the supervisory authorities of the federal states.

The European Food Safety Authority (EFSA) has inferred a tolerable weekly intake (TWI) of 1 mg of aluminium per kg of body weight. The analysis of the available data on aluminium in infant food shows that both the use of baby food in powder form which is then mixed with drinking water and the use of ready-to-eat liquid food can lead to a situation where the TWI value is reached or even exceeded.

However, the toxicological concept used - referring to the TWI - only has limited informative value for the health assessment of infant food, since the TWI value does not apply to babies under the age of 12 weeks. So far, however, there has been no scientific evidence to suggest that aluminium intake levels resulting from the consumption of infant food are harmful to the health of babies.

In view of the fact that infants and premature babies constitute especially vulnerable groups, however, only infant food should be marketed whose aluminium content in the finished product is so low that its consumption at least does not result in an exceeding of the TWI.

The full version of this BfR Opinion is available in German on <http://www.bfr.bund.de/cm/343/aluminiumgehalte-in-saeuglingsanfangs-und-folgenahrung.pdf>