

Flavouring substances in baby food

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The Federal Institute for Risk Assessment (BfR) has conducted an assessment on the use of flavouring substances in infant and follow-on formula and in foods for special medical purposes intended for infants and young children.

In the opinion of the BfR, flavouring substances are neither required to improve acceptance of such products nor to support development of taste sensation. If infant formula or foods for special medical purposes are given to babies starting within the first three months of life, there are usually no acceptance problems. If, however, for example for medical reasons, formula is used only from the 12th week onwards, repeated exposure usually improves the acceptance over time. Since infant formula is a standardised product, even the addition of flavouring substances does not provide the spectrum of flavours that breast milk offers infants. Based on the current state of knowledge, flavoured infant foods cannot, therefore, support the development of a baby's sense of taste and smell in the way that breast milk can.

Babies are especially vulnerable during the first few months of life: the body's detoxification systems, for example liver and kidney functions and other protective mechanisms such as the blood-brain barrier, are not fully developed yet. Therefore, international expert committees emphasise that the ADI values derived for food additives are not to be applied to babies up to the age of 12 weeks. ADI stands for "Acceptable Daily Intake" and is the quantity of a substance which may, in relation to a person's bodyweight, be consumed daily throughout life without appreciable health risk. The BfR is of the opinion that the rationale behind the use of food additives in baby food should also apply to the use of flavouring substances in baby foods. In the view of the BfR, therefore, flavouring substances should be used neither in the production of infant formula nor in balanced diets intended for babies aged less than three months. If, under exceptional circumstances, their use is however deemed necessary, the flavouring substances intended to be used require, like any food additives, special case-by-case assessment.

In addition, there are indications that sensory experience during infancy influence the development of the sense of taste and thus may have implications on subsequent dietary preferences. However, the currently available data are not sufficient to assess the consequences of the use of flavouring substances in infant formula for later dietary behaviour and related health risks.

The full version of this BfR opinion is available in German on <http://www.bfr.bund.de/cm/343/aromastoffe-in-saeuglingsnahrung.pdf>