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Fluoride: European Food Safety Authority presents draft updated risk assessment

The document can be commented on by the public

The European Food Safety Authority (EFSA) has released a draft updated risk assessment of fluoride for public consultation. The draft takes into account both the intake of fluoride from food and drinking water as well as the exposure through the use of dental care products and other relevant sources.

In the assessment, potential adverse effects on the central nervous system, the thyroid gland and the bones as well as on the development of dental fluorosis – discolouration and teeth stain or even loss of tooth enamel – were taken into account.

EFSA explicitly indicated that the draft opinion focuses exclusively on the assessment of possible health risks, while health benefits - in particular the known positive effects of fluoride on dental health (caries prevention) - were not directly addressed.

The comment period ends on 9 February 2025. The German Federal Institute for Risk Assessment (BfR) will also review the draft and provide comments if necessary.

Fluoride is a trace element which, according to current knowledge, is not essential for humans and therefore does not need to be ingested with food. However, studies have shown that small amounts of fluoride are able to reduce loss of tooth enamel and to inhibit the growth of acid-forming bacteria in the mouth. Fluoride therefore reduces the risk of tooth decay and is used in caries prophylaxis. More information on this can be found at the [Healthy Start – Young Family Network](#) (German only).

Based on currently available scientific data, EFSA proposed adjustments of the Tolerable Upper Intake Levels (ULs) for children under 8 years of age and established a Safe Level of Intake for older children and adults, including pregnant women.

For its assessment, EFSA screened around 20,000 scientific studies published from 2005 to 2024; the most relevant 152 human studies and 81 animal studies were assessed in detail. EFSA's final opinion is expected to be available in the course of 2025.

Further information on Fluoride

Proposed maximum levels for the addition of fluoride to foods including food supplements

<https://www.microco.info/cm/349/proposed-maximum-levels-for-the-addition-of-fluoride-to-foods-including-food-supplements.pdf>

Information on micronutrients

<https://www.microco.info/en/vitamine-homepage.html>

About the BfR

The German Federal Institute for Risk Assessment (BfR) is a scientifically independent institution within the portfolio of the Federal Ministry of Food and Agriculture (BMEL) in Germany. The BfR advises the Federal Government and the States ('Laender') on questions of food, chemicals and product safety. The BfR conducts independent research on topics that are closely linked to its assessment tasks.

This text version is a translation of the original German text which is the only legally binding version.

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