

Epoxide resin coatings of cans: substance transfer to oil-containing foods possible

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Oily foods in cans can contain levels of Cyclo-di-BADGE (CdB) that present a health risk for high consumers. This is the result of a health risk assessment of the Federal Institute for Risk Assessment (BfR) in which the institute analysed data on the CdB content of canned fish preserved in oil.

CdB is a molecule consisting of Bisphenol A (BPA) and Bisphenol A diglycidyl ether (BADGE). It is formed as a by-product during the production of epoxide resins which are, for example, used for the internal coating of cans and tubes. CdB can be transferred from the epoxide resin to the food. As early as 2010, the levels contained in food were measured in Switzerland. The situation has not changed meanwhile: there is no toxicologically derived limit value for the transfer of CdB to foods. In its risk assessment, the BfR therefore uses computer-aided simulations on the toxicity of the substance, since toxicological data is not available.

For consumers with average consumption of canned foods preserved in oil no health risk is expected. However, in the opinion of the BfR, it is possible for consumers with above-average consumption of these foods coupled with high product loyalty to experience negative long-term health effects caused by CdB. For this reason, the BfR recommends that experimental data on genotoxicity and sub-chronic toxicity for confirmation of the safety of this substance transfers are developed, provided that the use of can coatings is intended to be continued for such foods in future.

The full version of this BfR Information is available in German on <http://www.bfr.bund.de/cm/343/epoxidharz-beschichtungen-von-konservendosen-stoffuebergaenge-in-oelhaltige-lebensmittel-sind-moeglich.pdf>

About the BfR

The 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. It advises the Federal Government and Federal Laender on questions of food, chemical and product safety. The BfR conducts its own research on topics that are closely linked to its assessment tasks.

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