

## The proposed EU maximum levels for non-dioxin-like polychlorinated biphenyls (ndl-PCBs) in food are too high

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PCBs – polychlorinated biphenyls – rank amongst the most dangerous environmental toxins. Consumers mainly ingest these substances from milk, meat, eggs and fish. For the first time the European Commission has suggested maximum levels in food for non-dioxin-like PCBs (ndl-PCBs) that are intended to reduce consumer exposure to PCBs. BfR was asked to assess the EU proposal for a maximum level for PCBs from the angle of consumer health protection. BfR welcomes the fact that for the majority of PCBs, the ndl-PCBs, maximum levels are to be laid down across Europe. This would also lead to a replacement of the maximum levels for PCBs in the national contaminants ordinance which are deemed to be too high. According to the Institute, the maximum levels proposed still do not afford the population sufficient protection. Furthermore, some foods of animal origin with above-average levels of contamination, like wild game and fish liver are not taken into account in the EU provisions.

PCBs were produced by humans for various applications – as cooling liquids in transformers, plasticisers, additives for varnishes or hydraulic oils. The production of PCBs came to a halt in the 1980s. Because of their persistence, they are still to be found in the environment. There are 209 different PCB compounds (congeners) out of which roughly 130 occur in produced mixtures. 12 PCBs are described as dioxin-like compounds (dl-PCBs) because of their properties which are similar to dioxins. Maximum levels have already been laid down for them in the EU in the maximum level provisions for dioxins and dioxin-like PCBs (WHO-TEQs). One subject of discussion when it comes to laying down maximum levels for ndl-PCBs is reaching agreement on a suitable calculation method.

The EU proposal envisages using the sum of 6 ndl-PCBs ( $\Sigma 6$ PCBs), which account for around half of the PCB contamination in food, for the establishment of a maximum level. BfR has no objections to this procedure but is of the opinion that, with the maximum levels proposed by the EU, it is still the case that scarcely any foods with elevated PCB levels will be objected to. The reason: because of the correlation between dl-PCBs and ndl-PCBs in Germany, the proposed EU maximum levels would only then take effect after the already existing EU maximum levels for dioxin and dioxin-like PCBs (WHO-TEQs) had been exceeded.

In the opinion of BfR, the WHO-TEQs already protect the population in Germany from elevated PCB exposure more effectively than the EU maximum levels proposed for  $\Sigma 6$ PCBs could. As detected levels probably frequently fall slightly below the maximum levels for  $\Sigma 6$ PCBs accompanied by exceedances of the WHO-TEQs in the same samples, the simple and cost-effective method determining  $\Sigma 6$ PCBs could be used as a pre-test for the cost-intensive test for WHO-TEQs. The latter should only be undertaken when a specific trigger value for  $\Sigma 6$ PCBs has been exceeded.

The full version of the BfR Opinion in German is available on [http://www.bfr.bund.de/cm/208/vorgeschlagene\\_eu\\_hoechtsgehalte\\_fuer\\_nicht\\_dioxinaehnliche\\_polychlorierte\\_biphenyle.pdf](http://www.bfr.bund.de/cm/208/vorgeschlagene_eu_hoechtsgehalte_fuer_nicht_dioxinaehnliche_polychlorierte_biphenyle.pdf)