

## **No risk to health from DEET residues in chanterelle mushrooms from Eastern Europe**

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Up to 1 milligram DEET (*N,N*-diethyl-3-methylbenzamide) per kilogram mushrooms was detected in fresh chanterelles from Lithuania, Russia and Belarus. DEET is used in biocide products for instance to offer protection against mosquitoes and ticks. The Federal Institute for Risk Assessment (BfR) examined whether the contaminated mushrooms constitute a health risk for consumers.

The toxicological assessment of DEET is based on the evaluation of this substance by the Member State Sweden in conjunction with the EU active substance tests for biocides. It indicated that the health risk from DEET arising from external use by humans is deemed to be extremely low. However, the substance can be harmful if ingested. In dogs no harm to health was observed up to an amount of 75 milligram per kilogram body weight and day. In order to transfer the findings from the animal experiment to humans, a standard safety factor of 100 is used, i.e. in humans a DEET intake of up to 0.75 mg per kilogram body weight (b.w.) and day is deemed to be safe. In its assessment of acute exposure to DEET from chanterelles, BfR took the highest measured residue of 1 milligram per kilogram mushrooms as the starting value and determined the absorbed DEET amount using German and European consumption data (VELS model and EFSA model). For children this was 0.0018 mg/kg and for adults it was 0.0053 mg/kg b.w./day. The safety margin up to the amount which triggers a harmful effect in the animal experiment is deemed to be sufficient. Hence, there is no threat to health from the chanterelles which were the subject of the query.

The full version of the BfR Opinion in German is available on  
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