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Tetrahydrocannabinol levels are too high in many hemp-containing foods - health impairments are possible

BfR opinion No 034/2018 of 8 November 2018

Various foods containing hemp are available in the marketplace. These include products similar to tea consisting entirely or partially of hemp leaves. The German Federal Institute for Risk Assessment (BfR) has assessed the risk of psychogenic and pharmacological effects through the consumption of hemp-containing foods with the customary levels of tetrahydrocannabinol determined by the monitoring authorities for all population groups, including children. On the basis of the available data, the BfR comes to the following conclusion: the consumption of hemp-containing foods with the total Δ^9 -tetrahydrocannabinol (THC) levels on which the calculation is based can lead to an exceedance of the acute reference dose (ARfD) of 0.001 milligrams (mg) per kilogram body weight proposed by EFSA. This acute reference dose describes the quantity of Δ^9 -THC which can be ingested over short term periods without the expectation of any psychomotoric and psychogenic effects. It is also possible when consuming foods containing hemp that Δ^9 -THC doses could be ingested which lie within the range of the doses of ≥ 2.5 milligrams (mg) per person and day used in pharmaceutical products, in which case pharmacological effects would be expected. As the occurrence of psychomotoric effects such as reduced reaction capability or tiredness has to be expected in this dosage range, restrictions in a person's ability to drive or operate dangerous machines can be connected with the consumption of foods containing hemp. This applies in particular to high consumers of products of this kind. The psychomotoric effects can also be enhanced by the consumption of alcohol and certain other drugs. In the opinion of the BfR, the levels of Δ^9 -THC in hemp-containing foods should therefore be further minimised.

The full version of this BfR Opinion is available in German at:

<https://www.bfr.bund.de/cm/343/tetrahydrocannabinolgehalte-sind-in-vielen-hanfhaltigen-lebensmitteln-zu-hoch-gesundheitliche-beeintrachtigungen-sind-moeglich.pdf>

 BfR Risk Profile: Tetrahydrocannabinol levels are too high in many hemp-containing foods - health impairments are possible (Opinion No. 034/2018)	
A Affected groups	1 Children 2 General population 
B Probability of a health impairment through [describe exposure]	Practically excluded Unlikely Possible Probable Certain
C Severity of the health impairment through [describe exposure]	No impairment Slight impairment [reversible] Moderate impairment [reversible/irreversible] Severe impairment [reversible/irreversible]
D Reliability of available data	High: The most important data are available and are free of contradiction Moderate: Some important data are missing or contradictory Low: Numerous important data are missing
E Controllability by the consumer	Control not necessary Controllable through precautionary measures Controllable through avoidance Not controllable

Squares highlighted in dark blue indicate the properties of the risk assessed in this opinion (more detailed information on this is contained in BfR Opinion No. 034/2018 of 8 November 2018).

Explanations

The risk profile is intended to visualise the risk outlined in the BfR Opinion. It is not intended for the purpose of comparing risks. The risk profile should only be read in conjunction with the corresponding opinion.

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. 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.

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