## **Hazard or Risk?**

# That's the difference

In our everyday language, we pay little attention to the meaning of the two terms and even use them interchangeably. However, there is a difference when it comes to scientific risk assessment. Whether a potential hazard is associated with a risk depends on the level of "exposure": how much, how long, how often.

#### Risk Hazard Describes the potential of something Describes the probability of whether and how to damage health (hazard potential) severely health is damaged by something **Tiger** ) potentially dangerous predator No health damage is to be expected if > tiger in the zoo > toxic and highly No health damage is Prussic acid volatile liquid to be expected when Hvdrogen ) naturally present in > consuming a max. of 15 g flaxseeds at a time cyanide small amounts in > consuming a max. of 2 bitter flaxseed, manioc, apricot kernels per day bitter apricot kernels ) manioc has been watered, and persipan grinded and dried > levels of prussic acid in persipan are legally regulated **Active** ) potentially toxic substance No health damage is to be expected if substances in ) active substance has been tested, plant protection assesed and approved in accordance products with EU regulation > health guidance values are not exceeded ) active substance is used as intended

### Conclusion: The dose makes the poison

Tigers, prussic and plant protection products are potentially dangerous. If you never enter a tiger enclosure and follow the instructions for eating flaxseed and other foods, no damage on health is to be expected. The same applies to pesticide residues in food, because they are scientifically assessed and regulated by law.



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

## **Legal Notice**

Publisher:

German Federal Institute for Risk Assessment | BfR

Max-Dohrn-Straße 8-10 10589 Berlin, Germany T +49 30 18412-0 F +49 30 18412-99099 bfr@bfr.bund.de bfr.bund.de/en

#### Institution under public law

Represented by the president Professor Dr Dr Dr h.c. Andreas Hensel Supervisory Authority: Federal Ministry of Food and Agriculture Responsible according to the German Press Law: Dr Suzan Fiack VAT ID No. DE 165 893 448

Status: October 2024

















