Hazard or risk?

In our everyday language, we pay little attention to the meaning of the two terms and even use them synonymously. However, there is a difference when it comes to scientific risk assessment. What does a potential hazard mean for the safety of substances, chemicals or products?

HAZARD

describes the potential of something to damage health (hazard potential)

RISK

describes the probability of whether and how severely health is damaged by something

BEAR

bear at the zoo: no damage to health expected

PRUSSIC ACID/HYDROGEN CYANIDE

- very toxic and highly volatile liquid
- is naturally present in small amounts in flaxseed, manioc, bitter apricot kernels and persipan

Damage to health is not to be expected from:
- max. 15 g flaxseeds at once
- max. 2 bitter apricot kernels per day
- watered, ground, dried manioc
- legally regulated prussic acid levels in persipan

ACTIVE SUBSTANCE IN PLANT PROTECTION PRODUCT

- Potentially toxic substance

Damage to health is not expected if:
- active substance is tested, assessed and approved according to EU regulation
- health guidance values are not exceeded
- used as intended

Potential hazards can also be in food:

- Pathogens, such as salmonella
- Chemical substances, e.g., residues of plant protection products
- Undesired substances, such as dioxins
- "Natural toxins", such as solanine in potatoes

Whether a potential hazard is associated with a risk depends on exposure:

- How much
- How long
- How often

Bears, prussic acid and plant protection products are potentially dangerous. However, if you never go into a bear enclosure and follow the instructions for eating flaxseed and other foods, no damage to health is to be expected. This also applies to pesticide residues in food because they are scientifically assessed and regulated by law.