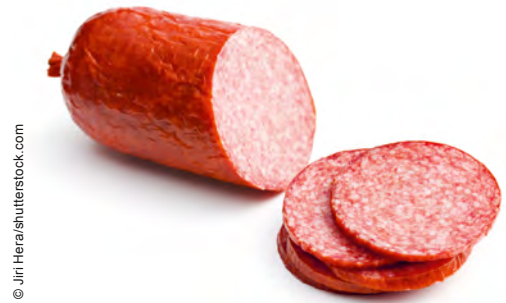


## Hazardous food supplements from natural sources

They are one of nature's sophisticated weapons. Plants produce pyrrolizidine alkaloids (PAs) to keep herbivores at bay. These secondary plant ingredients can enter the food chain via PA-producing wild herbs growing on areas for cultivated plants. The problem: pyrrolizidine alkaloids can damage the human liver and have been shown to cause genotoxic and carcinogenic effects in animal studies. A further problem are food supplements made from plants like borage, coltsfoot or hemp agrimony – all of which produce PAs. Food supplements containing PA-producing plants or parts of plants significantly contribute to the intake of pyrrolizidine alkaloids. The PA level in some food supplements is so high that toxic effects are possible even after short-term intake. The BfR therefore advises against the use of food supplements that contain PA-producing plants or parts of plants. In contrast, no PAs were found in oil-based extracts of PA-producing plants.

**More information:**  
BfR Opinion No. 020/2018 of 14 June 2018



## Health risk from sausage and cold cuts

Anyone who eats raw pork – for example in the form of ground pork or minced meat – may get a gastrointestinal infection due to *Yersinia* for example. It is still not clear whether popular raw sausage products like salami or sausage meat spread are involved in infections due to *Yersinia*. As the bacteria also multiply at refrigerator temperatures, it is important that food products are free of these pathogens. The BfR is therefore carrying out a multi-year project to determine whether the standard production methods reliably eliminate *Yersinia* in raw sausage products. For this purpose, the Food Technology Centre at the BfR produced various types of salami (with and without addition of starter cultures) and smoked sausage spreads (“Teewurst” and “Mettwurst”) and deliberately added *Yersinia* bacteria. The study team then tested whether salting, drying, acidification, maturing or the addition of starter cultures eliminated the bacteria up to the end of the best before date. This was only found to be the case in the salami products with starter cultures, while *Yersinia* were still detected up to the end of the testing period in salami without starter culture and pork sausage spreads (“Teewurst” and “Mettwurst”). These products could pose a health risk for particularly sensitive groups of people such as small children, pregnant women, senior citizens and people with compromised immune systems.

**More information:**  
[www.bfr.bund.de/en](http://www.bfr.bund.de/en) > A-Z Index: *Yersinia*

## Food supplements during the cold time of the year

Winter is the season of colds, and a time when many people turn to food supplements to provide them with vitamins and minerals, in the hope of preventing colds. At the same time, a balanced diet generally supplies a healthy body with all the nutrients it needs. However, supplemental intake of nutrients via highly dosed food supplements and fortified foods may increase the risk of undesirable health effects due to excessive nutrient intake. The BfR regularly assesses the potential health risk of food supplements and issues recommendations to minimise this risk. The BfR recently updated its recommendations for the maximum amounts of vitamins and minerals in food supplement products that can be considered safe. For healthy people above the age of 15, for example, the maximum dosage recommendation for vitamin D in food supplements is 20 µg per day. Vitamin D in particular only needs to be supplemented if the overall quantity of vitamin D formed by the body itself through sunlight and intake via a person's regular diet is insufficient.

**More information:**  
Weißborn et al. 2018: Höchstmengen für Vitamine und Mineralstoffe in Nahrungsergänzungsmitteln. *J Verbrauch Lebensm.* 13 (1): 25–39. (Open Access, German)