



Mycotoxins in food and feed Detecting naturally occurring toxins



Vigilance required to detect naturally occurring toxins

Mycotoxins are naturally occurring substances produced by fungi growing on food and animal feed. Estimates show that up to 20% of food products may contain mycotoxins, which can cause anything from mild to serious illness. Some mycotoxins are of worldwide concern due to their toxicity. For example, aflatoxin B1 has a carcinogenic effect on the liver. Mycotoxins are also one of the leading causes for border rejections of foodstuffs – leading to significant financial loss.



European Union Reference Laboratory for Mycotoxins

The JRC-IRMM has also been nominated as the European Union Reference Laboratory (EU-RL) for mycotoxins. EU-RLs are an integral part of European risk management system. They are tasked to set-up EU-wide standards for testing, organise comparative tests, provide training to national laboratories and provide scientific and technical assistance to the European Commission.

http://irmm.jrc.ec.europa.eu/EURLs/eurl_mycotoxins/



Mycotoxins in infant food

Because of their relatively high intake of certain foodstuffs compared to their body weight, infants and young children are more vulnerable than adults to many toxins. For this reason, European legislation stipulates lower maximum limits for certain foods intended for infants and young children (Reg. (EC) No 1881/2006).

The JRC-IRMM has developed methods to measure the levels of mycotoxins in infant food, and these methods were adopted by the European Committee for Standardization, CEN¹, as international standards. The standards enable laboratories around the world to measure mycotoxin levels in infant food in a harmonised manner, thereby ensuring the access to safe and healthy foodstuffs for one of society's most vulnerable groups.

The two standards are:

- EN 15850 - Determination of zearalenone in maize based baby food, barley flour, maize flour, polenta, wheat flour and cereal based foods for infants and young children
- EN 15851 - Determination of aflatoxin B1 in cereal based foods for infants and young children.

¹ <http://www.cen.eu>