Increased aflatoxin concentrations detected in raw milk

Information No. 08/2013 of 01 Mar. 2013

Increased concentrations of the Mycotoxin Aflatoxin M₁ were detected in a raw milk sample on the occasion of quality controls in food business in Lower Saxony. With 57 nanograms (ng) per kilogram (kg) of raw milk, the concentration is slightly above the maximum level fixed in Europe of 50 ng of Aflatoxin B₁ per kg of raw milk. The cause of the increased concentrations is presumably the feeding of maize with high aflatoxin concentrations that was processed into animal feed.

Milk with concentrations of more than 50 ng per kg of raw milk can not be put on the market. A risk for the consumer is unlikely if the maximum level in milk is only slightly exceeded. Maximum levels determine fundamentally whether goods can be put on the market or not. From the point of view of consumer health protection, the consumption of foods with increased aflatoxin concentrations should be avoided in the long term.

Aflatoxins are mycotoxins which can occur naturally due to mould and which are also to be found in cereals. They can form prior to harvest or during the storage of a feed or food. It should be taken into account with feeds that any Aflatoxin B₁ they may contain can be transferred to livestock and the products of animal origin. Once it has been ingested by the animal, Aflatoxin B₁ can be metabolised in the liver into Aflatoxin M₁ among other metabolites. Aflatoxins have a high carcinogenic potential.

Where feed regulations are concerned, aflatoxins are categorised as undesired substances which can occur in or on feedstuffs. They have the potential to have a negative effect on animal health and the performance of livestock or, as residues, on the quality of the products of animal origin with regard to their harmful effects on human health. The maximum levels of Aflatoxin B₁ in various feedstuffs are subject to the Directive 2002/32/EC of the European Parliament and of the Council.