



Directorate-General for
Health & Consumers

Aflatoxins in food

Frans Verstraete



Outline of this presentation

- Framework legislation for contaminants
- Prevention and Regulation
- Maximum levels: Regulation (EC) 1881/2006
- Enforcement: sampling and analysis
- FVO-Missions
- Assistance
- Conclusions



Council Regulation (EEC) 315/93

■ Regulatory framework :

Council Regulation (EEC) No 315/93 of 8 February 1993 laying down Community procedures for contaminants in food

(this Regulation does not apply to contaminants which are the subject of more specific Community rules, such as pesticide residues, veterinary drug residues, ...)



Regulation (EEC) 315/93

Provisions

■ General provision:

- food containing a contaminant in an amount which is unacceptable from the public health viewpoint and in particular at a toxicological level shall not be placed on the market

■ Good practice:

- contaminant levels shall be kept as low as can reasonably be achieved following good practices at all stages (ALARA)



Regulation (EEC) 315/93

Provisions

- When necessary for protecting public health maximum levels shall be established for specific contaminants --> Procedure for setting maximum levels. This can also include a reference to the sampling and analysis methods to be used.
- Obligatory consultation of the European Food Safety Authority (EFSA) Panel on contaminants in the food chain before provisions having effect upon public health shall be adopted.



General principles « The General Food Law » - Reg (EC) 178/2002

- **“farm to fork” approach**
- **high level of protection of human health**
- **free movement**
- **EU feed/food legislation shall be based on risk analysis**
- Risk assessment shall be based on the **available scientific evidence** and undertaken in an **independent, objective and transparent manner**
- The **risk management shall take into account the results of risk assessment, other factors legitimate** to the matter under consideration and the precautionary principle where appropriate



General principles « The General Food Law » - Reg (EC) 178/2002

- When **international standards** exist or their completion is imminent, they shall be taken into consideration in the development of food law, except where such standards would be an ineffective or inappropriate means for the fulfilment of the legitimate objectives of food law
 - Codex Alimentarius Commission
 - Codex Committee on Contaminants in Foods (CCCF)
 - By EU accepted international standards → EU legislation: aflatoxins in hazelnuts, almonds, hazelnuts and peanuts



Prevention and Regulation

- “prevention is better than cure” to protect the consumer (humans and animals) from the toxic effect of contaminants → need for encouraging preventive actions such as good agricultural practice, good storage conditions, use of improved sorting procedures, good manufacturing practice ...
- Fixing maximum limits is not contrary to prevention. Fixing maximum levels at a reasonably achievable level, stimulates preventive actions at all stages to avoid contamination of the feed/food chain.



Prevention and Regulation

- Regulatory standards (maximum levels) provide a benchmark against the effectiveness of the successful implementation of prevention programmes and provide a tool for control authorities to control the correct application of prevention measures by each actor in the chain
- If maximum limits are fixed, these should be fixed at a level reasonably achievable but stimulating a preventive approach.



Maximum levels: Commission Regulation (EC) No 1881/2006

- **Commission Regulation (EC) No 1881/2006 of 19 December 2006 setting maximum levels for certain contaminants in foodstuffs.**
 - Food containing a contaminant exceeding the ML shall not be placed on the market
 - Maximum level does apply to edible part
 - For dried, diluted, processed or compound foodstuffs: concentration/dilution factors, relative proportion of the ingredients apply insofar no specific EU MLs have been established for these dried, diluted, processed or compound foodstuffs



Maximum levels: Commission Regulation (EC) No 1881/2006

- Specific provisions for the application of the maximum levels of groundnuts, nuts, dried fruit and maize, to be subjected to sorting or other physical treatment to reduce the aflatoxin contamination before human consumption or use as an ingredient.
- Specific provisions for the application of MLs of aflatoxins groundnuts, derived products thereof and cereals: double use (for feed or for food)



Regulatory limits – enforcement Sampling

- Sampling procedure: an accurate estimate of the true level of contaminant in a batch is pursued - exporter's risk/producer's risk against importer's risk/consumer's risk
- Methods of analysis: performance criteria based approach
- Regulation (EC) 401/2006 of 23 February 2006: mycotoxins



Safeguard measures - contaminants – special conditions on import

- Commission Regulation (EC) No 1152/2009 of 27 November 2009 : aflatoxins in certain products from certain third countries
 - Almonds from US / Brazil nuts in shell from Brazil / Groundnuts (peanuts) from China / **Groundnuts (peanuts) from Egypt** / Pistachios and from Iran/ Hazelnuts, dried figs, pistachios from Turkey



Increased frequency of controls at import

- Commission Regulation (EC) 669/2009 of 24 July 2009 implementing Regulation (EC) No 882/2004 of the European Parliament and the Council as regards the increased level of official controls on the imports of certain feed and food of non-animal origin
 - **Aflatoxins / Peanuts** / Argentina, Brazil, **Ghana**, India, **South Africa**
 - Aflatoxins /spices / India, Peru
 - **Aflatoxins / melon seeds / Nigeria**
 - Aflatoxins / Basmati rice / Pakistan



FVO mission to Third countries main conclusions

- GAP (including storage) and traceability problematic
- Great variation in process controls and levels of mechanisation
- HACCP commonly not in place
- Deficiencies in sampling procedure and laboratories analysing aflatoxins
- Homogenisation of samples poor



Assistance from DG Health and Consumers

- Short term assistance (10 days) → prevention aflatoxin, GAP, good storage/handling practices, appropriate laboratory controls
- Better Training for Safer Food (BTSF) → hands-on laboratory training for mycotoxins (including aflatoxins)



Conclusions

- Extensive EU legislation on aflatoxins in feed and food
- EU legislation takes into account international (CODEX) standards
- Several specific (safeguard / increased import control) measures related to the presence of aflatoxins.

AFRICAN UNION UNION AFRICAINE

African Union Common Repository

<http://archives.au.int>

Agriculture and Food Security

Partnership for Aflatoxin Control in Africa (PACA) collection

Aflatoxins in Food

<http://archives.au.int/handle/123456789/52>

Downloaded from African Union Common Repository