



Directorate-General for
Health & Consumers

**Assessment of the approach for
managing mycotoxins in feed as
provided by Recommendation**

2006/576/EC

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REGULATING CONTAMINANTS IN FEED: ISSUES TO BE CONSIDERED

- Contaminant: effect on public health, animal health, environment → determining the nature of the measure
- Sensitivity /tolerance towards a contaminant (animal health): species specific
- Carry over of contaminants of feed into food of animal origin: species specific
- Feed materials: non species specific
- Compound feed: species specific



REGULATING CONTAMINANTS IN FEED: ISSUES TO BE CONSIDERED

- Bio-availability of contaminant in a certain feed material or additive
- Achievability of certain levels under normal good practice production conditions
- Feed materials: can be by-products of food production, other production processes such as bio-energy...
- Proportion of use of a certain product for feed in comparison with the total production
- Feasibility to decontaminate at a reasonable cost
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MYCOTOXINS IN CEREALS

USE OF CEREALS

Use of cereals, excluding rice, in period 2006-2008 - approximate figures for EU-27 (losses (market) not taken up in the table)

| Cereal | % for human consumption | % for animal feed | % for seeds | % for industrial use |
|---------------|-------------------------|-------------------|-------------|----------------------|
| total cereals | 23-24 | 63-64 | 4.1 - 4.3 | 8.9 – 9.1 |
| common wheat | 39-42 | 45-49 | 4.4 – 4.9 | 7.0 – 7.3 |
| durum wheat | 86-87 | 4.1 | 8.3 – 8.5 | 1.0 |
| Rye | 41-42 | 30 - 38 | 9 - 16 | 11 – 20 |
| barley | 0.7 | 75 - 76 | 5.3 – 5.6 | 18-19 |
| Oats | 16 - 17 | 73 -75 | 6-7 | 2.4 – 2.5 |
| maize | 5.9-6.2 | 83 - 84 | 0.6 | 8.5 – 9.0 |
| other cereals | 1.0 -1.3 | 93 - 95 | 4 - 5 | 0.4 – 0.6 |



MYCOTOXINS IN CEREALS

USE OF CEREALS

- Large part of the production of cereals is used for animal feed
- Cereals for food production: by products → intended for animal feed
- Cereals for bio-energy: by products → intended for animal feed
- Alternative uses for “non-compliant” cereals limited → serious economic impact



Recommendation

Prevention *Fusarium*-toxins

- Recommendation 2006/583/EC of 17 August 2006 on the prevention and reduction of *Fusarium* – toxins in cereals and cereal products
 - Risk factors to be considered for inclusion in Good Agricultural Practices (GAP)
 - Contamination by *Fusarium*-toxins of cereals can be imputed to multiple factors
 - integrated approach addressing in a reasoned way all possible risk factors taking into account the local situation



MYCOTOXINS IN CEREALS

FEASIBILITY

- Presence of Fusarium-toxins
 - Large year to year variation
 - Management measures a relative (limited) impact on presence
- Presence of ochratoxin A and aflatoxins
 - Management measures (storage conditions) major impact on presence



REGULATING MYCOTOXINS IN FEED: considerations

- EFSA opinions on deoxynivalenol (2 June 2004), zearalenone (28 July 2004), fumonisins (22 June 2005), ochratoxin A (22 September 2004)
- Scientific risk assessment concludes that the presence of deoxynivalenol, zearalenone fumonisins and ochratoxin A in animal feed can **endanger animal health and livestock performance** but is of **limited** (ochratoxin A) or **no** (deoxynivalenol, zearalenone and fumonisins) **significance for public health**



Mycotoxins – Feed Recommendation 2006/576/EC

- Animal health effects critical effects – impact public health minor as carry-over from feed to food is limited
- **Two-step approach:**
Recommendation on increased monitoring combined with guidance/orientation values as first step – evaluation on achievement of objectives in 2 years time (2009) to consider possible further legal measures in the frame of Directive 2002/32/EC



Mycotoxins – Feed Recommendation 2006/576/EC

- Cereals and cereal products include also cereal forages and roughages
- Guidance values to be applied to judge acceptability of compound feed and cereal and cereal products for animal feeding
- Guidance values to be used by feed business operators as guidance for the determination of critical limits in their HACCP system – attention for cereals and cereal products for the production of feed for sensitive animal species - guidance values for cereals and cereal products have been determined for the most tolerant animal species – “upper guidance values”



Mycotoxins in feed assessment of the approach

- An assessment of the approach provided for by this Recommendation should be undertaken by [2009] in particular to assess its contribution towards protecting animal health. The monitoring data obtained as a result of this Recommendation will also enable a better understanding of the year-to-year variance and the presence of these mycotoxins in the wide range of by-products used for animal feed, which is of primary importance for taking, if necessary, further legislative measures.