

**Presence of antimicrobial substances in by-products from the bioethanol industry destined for animal feeding**

1. In August 2008, the Food Standards Agency received a request from the European Commission (DG SANCO) asking Member States to:
  - (a) undertake checks on the presence of antimicrobials and other substances with antimicrobial properties (in particular ionophore polyether coccidiostats) in by-products from bioethanol production destined for animal feed; and
  - (b) investigate the nature and extent of the use of antimicrobial substances and products in fermentation and distillation processes which generate by-products for use in animal feed.
2. The Commission asked Member States to report the results of this work in anticipation of a full discussion of the issue at a meeting of the Standing Committee on the Food Chain and Animal Health (Animal Nutrition Section) on 18/19 September.

**Background**

3. The background to the Commission's request was the discovery of several findings of residues of monensin sodium in spent yeast derived from sugar cane molasses from Brazil (used in bioethanol production) destined for use in animal feed in Europe. The Commission has said that further investigations have indicated that monensin sodium is authorised in several countries to control bacterial growth in alcoholic fermentation, and that other ionophore coccidiostats might also be used for this purpose.

**Action taken by the Food Standards Agency**

4. The Food Standards Agency carried out a preliminary data gathering exercise that indicated that if low levels of microbials are present in bioethanol co-products, the risk to animal and human health is likely to be low. However, this risk assessment was based on information contained in the Rapid Alert System for Food and Feed (RASFF) notifications forwarded by the Commission, which only concerned imports from non-EU countries. The Agency investigated practices in the UK.
5. In order to address the Commission's request, a meeting with biofuel interests and feed stakeholders was held at the Agency's Aviation House offices on Tuesday 2 September 2008. The Agency asked stakeholders for assistance in:

ACAF/08/18

- identifying suppliers of by-products (co-products) of bioethanol production to the feed industry, so that the Agency could conduct follow up work on their practices concerning the use of antimicrobial agents;
  - providing information on the use of antimicrobial substances used in fermentation and distillation processes, especially where the by-products may be used by the feed industry. This could include co-products from the brewing and distilling industries, sugar beet molasses, etc.; and
  - providing assurances that the feed industry does not use ingredients or materials containing residues of substances such as antibiotics and ionophore polyether coccidiostats used as preservative agents.
6. During the stakeholder meeting the Agency obtained the following information on the production of bioethanol in the UK:
- there is one plant in the UK which produces bioethanol from sugar beet. The co-products from this process may be supplied for feed use. The feed business operator concerned has confirmed that antimicrobial substances mentioned in the Commission's request are not used in the production process. However, the plant does use an extract from hops to control bacterial growth during fermentation; and
  - at least one other plant is under construction in the UK for the production of bioethanol, but is not yet on-stream. The company advised the Agency that it does not intend to use medicinal substances when production starts. The Agency was advised that a fermentation process is not carried out in any other UK biofuel plants; and
  - the brewing and distilling industries do not use medicinal substances in their processes.