

## **Questions and Answers on animal by-products**

### **What is the Commission proposing in relation to animal by-products?**

The Commission presented a proposal to the Council and the European Parliament in October 2000 for a regulation on animal by-products as a follow-up to the White Paper on Food Safety. It aims to integrate the animal by-products sector into the farm to table approach to food safety. In fact the transport, handling and disposal of this material are critical elements of this approach, which must be thoroughly controlled. The Parliament adopted its opinion on the proposal on 12 June and the Agriculture Council will now discuss its position in the light of this opinion at its meeting on 18 June in Luxembourg.

### **What are animal by-products?**

Animal by-products are the part of a slaughter animal not directly consumed by humans. These products are valorised in animal proteins like meat-and-bone-meal, fats, gelatine, collagen, petfood and other technical products, such as glue, leathers, soaps, fertilisers etc. The alternative is their destruction, largely through incineration.

### **Does the proposal permit the feeding of meat and bone meal to farm animals?**

No, a separate proposal for a Commission decision to prolong the existing ban on meat and bone meal will also be discussed by the Agriculture Council on 18 June. However, any future decision to lift the current ban will require a series of conditions to be fulfilled. The Commission considers that these conditions include the risk classification with respect to BSE of Member States, safe systems for the processing of animal by-products and verification that all the relevant controls are respected. The present proposal is, therefore, only one of the pre-conditions for any eventual lifting of the ban. Its primary focus is, however, the safe processing of animal by-products.

### **What quantity are we talking about?**

It has been estimated that only 68% of a chicken, 62% of a pig, 54% of a bovine animal and 52% of a sheep or goat is directly consumed. Therefore, every year, more than 10 million tons of meat not destined for direct human consumption derived from healthy animals, are produced in the EU. This material is then transformed in a variety of products used in human food, animal feed, cosmetic, pharmaceutical and other technical use. For examples:

- bones, skin and connective tissue, such as tendons, are used for the production of gelatine which is then used in human food (desserts, gummed candies, marshmallow and prepared meat products), animal feed (coats of vitamins, binders of feed pellet and dogchews), pharmaceutical (hard and soft capsules) and technical use (in the photographic industry for paper coating and as a component in silver halide emulsion coatings, etc);

- mixture of bones, meat trimmings and offals are rendered into fats and into animal proteins which are then used in human food, animal feed, cosmetic, pharmaceutical and technical products;
- offals and meat trimmings are used as fresh raw material in petfood and pharmaceuticals or, following strict heat treatment (i.e. 133°C for 20 minutes at 3 bars of pressure, in animal feed.

### **Are there any risks from these uses?**

No. The current and proposed controls require that the raw material is derived from healthy animals which passed the compulsory veterinary inspection before and after slaughter and have been found fit for human consumption, i.e. it is material which while safe is not suitable for direct human consumption. Any material identified as unsafe, such as BSE potentially infected material is removed and destroyed eliminating any prospect of it entering the human food or animal feed chain.

### **Is meat and bone meal a modern invention of intensive farming practices?**

Not really. The only difference is that in the past a bigger proportion of meat and offals was directly consumed by humans. In recent decades, with higher incomes and lifestyle and dietary changes, consumers are effectively eating more steaks and less offal. Contrary to common belief, meat-and-bone meal was introduced into animal feed more than one century ago.

### **What went wrong? Why did it go wrong?**

It is clear from epidemiological analysis that the primary cause of BSE was the consumption of contaminated feed. What is not so clear is what was the initial source of the BSE agent in feed, as there are a number of alternatives still discussed by scientists.

Regardless of the initial origin of BSE in cattle, it is clear that the epidemic was sustained and boosted by the recycling of BSE infected cattle material to other cattle from the mid 1980s onwards. Changes to rendering procedures in the 1970s/1980s would have allowed the infectious agent to survive during rendering of BSE infected animal by-products into meat and bone meal (MBM) and so enter cattle feed. The vast majority of cases have therefore been caused by cattle material being fed to other cattle.

To stop the spread of the epidemic and to prevent its re-occurrence, a range of protective measures have been introduced at the Community level following scientific advice, namely:

- a ban on the feeding of mammalian proteins to cattle, sheep and goat, as from July 1994;
- higher processing standards for the treatment of mammalian proteins (133°C, 3 bars of pressure for 20 minutes), as of 1 April 1997;
- active surveillance measures for the detection, control and eradication of BSE, as of 1 May 1998;
- the requirement to remove specified high-risk materials (SRMs) from cattle, sheep and goats from 1 October 2000 from the human and animal food chains the single most important protective measure against BSE.
- Furthermore, a prohibition of intra-species recycling (i.e. cannibalism) for animal species other than ruminants, for which the cannibalism is prohibited since 1994,

is included in the proposal under discussion. As learnt from the BSE epidemic, this practice may increase the risk of recycling potential infectivity due to the absence of a species barrier.

### **What are the guiding principles of the new approach?**

The key principle is that there must be a strict Community-wide system for the safe collection, treatment and disposal of animal by-products. In the absence of such a system there is a clear risk to public health and the environment from inadequate processing of the millions of tonnes of such products produced in the EU each year.

### **How does the new approach deal with processed animal proteins such as meat and bone meal?**

It is proposed that only animal by-products derived from animals fit for human consumption may be used for animal feed. In other words, the same health standards required by EC legislation for human food will be required for animal feed! In order to guarantee that animal by-products derived from animals unfit for human consumption cannot enter the human food or animal feed chain, the following control rules are introduced:

- a complete separation during collection and transport of animal waste not intended for animal feed or human food;
- a complete separation of plants dedicated to feed production from plants processing other animal waste destined to destruction;
- stricter rules for traceability of animal by-products, including the control of movements of BSE specified risk material by a record keeping system and accompanying documents or health certificates, and visual markers for animal proteins and fats intended for destruction;

In practice, food and feed products cannot be derived from BSE suspects, Specified Risk Material, or animals slaughtered over thirty months of age not submitted to a BSE rapid test. All the potentially infected material in these categories is destroyed, eliminating any prospect of it entering the food or feed chain.

### **What are the main changes compared to the past?**

In the past it was allowed to use raw material of a lower health standard than the one used for human food, for animal feed ingredients. For example, animals which died on farm and were unfit for human consumption could enter the animal feed chain. This practice of recycling cadavers and material unfit for human consumption into the feed chain was the main factor in the spreading of the BSE epidemic, but also of other food scandals, such as the dioxin crises.

### **Will these controls work and will be they respected?**

The Regulation introduces a set of controls which are as strict as the control established for the food industry. Furthermore, the use of markers for the identification of material unfit for human or animal consumption and the availability of new tests for the detection of prohibited ingredients in animal feed will provide practical instruments for an effective control.

Unfortunately, the possibility of a criminal act can never be ruled out. This applies to the animal feed sector as well as to any other sector such as the food industry. But, it lies within the competence of Member States to ensure that the penalties for any non-compliance are sufficiently strict to ensure respect of the proposed regulation.

Moreover, there is an equal or even greater risk in the absence of the proposed regulation which would ensure a Community-wide system of strict controls in relation to animal by-products which does not exist at present.

### **Will cattle be permitted to eat meat-and-bone meal again?**

NO, such practices are already strictly prohibited and there is no proposal to relax this prohibition. Animal proteins can only ever be considered for the feeding of non-ruminant animals, namely pigs, poultry and fish which are not 'vegetarians'.

### **Why not ban the feeding of animal proteins, like meat and bone meal, to animals?**

Pigs, poultry and fish are not 'vegetarians' and they need some essential amino acids only available in animal proteins. Even with the present ban, farm species such as pigs and chickens are still fed with fishmeal. In case of a permanent feed ban of all animal proteins to farmed animals, substitutes for those amino acids will have to be found in synthetic amino acids. Animal health and welfare problems have been reported as a consequence of the sudden switch from animal to vegetable proteins, especially in young animals in intensive farming (i.e. day old chicks and piglets).

### **Are there economic considerations in the feed ban?**

The complete ban on use of animal meal would have the following economic impacts:

- Farmers will lose the value of the by-products. Total revenue from the sale of by-products, including the value added by the rendering industry is estimated in the order of 1.5 bn €
- The cost of replacing the by-products by other feed ingredients is estimated in the order of 0.7 bn €

There will be important additional imports of replacement protein crops from third countries.

The cost to dispose of all animal by-products, largely through incineration, is estimated in the order of 3 bn € and there are also important environmental implications from this disposal.

Therefore, the total cost of the complete ban would be close to 6bn €

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# SLAUGHTERHOUSE

Ante mortem inspection

# SLAUGHTER

Post mortem inspection

# CUTTING

Bones

Fats trimmed from carcasses

Meat and offals

Hides and skins

Blood

Fats  
Defatted bones for gelatine

Fats  
Greaves

Meat  
Meat products  
Processed  
Animal Proteins

Leather  
Gelatine  
Collagen  
Hydrol. Proteins

Blood products

Human food  
Animal feed\*  
Petfood  
Pharmaceutical  
Cosmetic  
Technical

Human food  
Animal feed \*  
Petfood  
Pharmaceutical  
Cosmetic  
Technical

Human food  
Animal feed \*  
Petfood  
Pharmaceutical  
Cosmetic  
Technical

Human food  
Animal feed  
Petfood  
Pharmaceutical  
Cosmetic  
Technical

Animals unfit for human consumption

Animals positive to BSE rapid test

Parts unfit for human consumption

BSE Specified Risk Material

**DISTRUCTION**

\*in case of proteins, following treatment of 133°C, 20 min, 3 bars. In case of fats, following ultrafiltration.