

# ANTIBIOTIC RESIDUES IN HONEY – THE FEEDM VIEW

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## INTRODUCTION

280,000 TONNES OF HONEY SHOULD BE ELIMINATED.

22% OF WORLD PRODUCTION!!

About 1.2 million tonnes of honey is produced annually. About 400,000 tonnes is traded internationally. The main exporting countries are China (exports to the EU suspended in 2002 and exports to the US restricted by anti-dumping actions), Argentina and Mexico. The EU has a permitted list of countries allowed to export to the member states. There are presently over 40 countries on the list. The main importing regions are the USA, the EU and Japan. The EU is only 42% self-sufficient in honey. FEEDM is the European Federation of Honey Packers and Distributors. It was established in 1989. It is composed of eleven national honey associations or individual companies from different European countries. FEEDM uses its contacts with the European Commission and international associations to ensure the honey available in the EU complies with all the relevant consumer protection and other legislation.

## THE PRESENT SITUATION

### a) The Beekeepers

As about a third of honey offered for sale to importers and packers contains antibiotic residues and has to be rejected, it is clear that many beekeepers both within the EU and in the major exporting countries are still using antibiotics. Beekeepers must address this issue. They have clear choices that they must pursue.

They can apply for Maximum Residue Limits for certain antibiotics, they can lobby the legislators for a change in the law or they can stop using antibiotics, even producing under an organic regime.

The industry and consumers want honey free of residues because it is perceived as a pure, natural product.

It may be that beekeeping with the use of antibiotics is less labour intensive and therefore more profitable. If this is the case, beekeepers should say so and face up to the consequence that antibiotic use must be made legal. It seems to be assumed that antibiotic residues will disappear from honey over time but some substances are extremely stable in honey.

### b) The Exporters

Many exporters see honey as a commodity which they are prepared to sell into any market which will accept the product they are offering. This does not put them into a situation that obliges them to focus on antibiotic residues to the extent necessary.

### c) The Legislators

The presence of antibiotic residues in animal products is controlled by Regulation 2377/90. This places residues in one of four Annexes. These are:

Annex I, List of pharmacologically active substances for which a maximum residue limit (MRL) has been set.

Annex II, List of substances not subject to an MRL

Annex III, List of pharmacologically active substances used in veterinary medicinal products for which MRLs have been fixed

Annex IV, List of pharmacologically active substances for which no MRL can be fixed. It is very important to understand what is meant by this. It means the substances are regarded as too dangerous for use because they cause fatal illnesses such as aplastic anaemia and cancer. The substances are chloramphenicol, chloroform, chlorpromazine, colchicine, dapsone, dimetridazole, metronidazole, all the nitrofurans including furazolidone and ronidazole.

Although anyone can apply for an MRL, the process is expensive and it is usual for the manufacturer of the drug to prepare a safety dossier and a residues dossier and submit them to the European Medicines Evaluation Agency (EMA). Manufacturers have made these applications only when they have perceived a commercially viable market for the product. As a consequence there is now a crisis caused by the lack of drugs for minor uses and minor species (MUMS). The problem extends beyond beekeeping to deer, ostriches, rabbits and other minor species. The legislators must share the blame for failing to address this important issue.

Nobody has made an MRL application for any antibiotic residue in honey. As a consequence, any antibiotic residue in honey is illegal.

d) The Industry represented by FEEDM

The packers supply supermarkets and other customers who insist on honey free of residues. The importers and packers are therefore spending very large sums of money checking every consignment for streptomycin, tetracyclines, sulphonamides, chloramphenicol and nitrofurans. The list will grow longer unless beekeepers put their house in order.

The industry has managed to grow the market in honey over the last twenty years. The concern now is that negative publicity arising from the residue problem will damage the image of honey as a pure, natural product.

e) The enforcement authorities.

The EU requires every member state to have a monitoring scheme in operation. There has to be an equivalent scheme in countries permitted to export to the EU. The schemes check honey for residues. Any positive results are placed on the Rapid Alert System for Food and Feed. Often, a product recall or at least withdrawal will result, at considerable cost.

In the case of chloramphenicol and nitrofurans, the EU has set Minimum Required Performance Limits (MRPLs) of 0.3ppb and 1.0ppb respectively. It must be made clear this does not mean that concentrations below these limits are permitted. The tolerance for Annex IV substances is zero. The Minimum Required Performance

Limit (MRPL) is an instruction to the analyst that the method of analysis must be able to reach at least that level.

Antibiotics in Annexes I, II and III are permitted in some animal products because they do not constitute a risk to public health at the residue concentrations usually found. However, it must be stressed that even these substances, such as streptomycin and tetracyclines, are still illegal in honey because beekeepers have never applied for authority to use them.

There is a lack of harmonisation in member states so that results below 20 ppb may be ignored in one country while another is ignoring only those results below 10 ppb. Decisions on consignments found to contain residues may also show discrepancies, for example, return to the country of export in some cases and destruction of the consignment in others.

Enforcement authorities in exporting countries need to be more active and effective in ensuring the quality of honey sent for export.

## **The FEEDM View**

Beekeepers who wish to sell their honey in the EU must ensure it contains no residues until such time as the beekeepers have obtained authority for any antibiotics they wish to use. As it is the beekeepers who wish to use these substances, the MRLs must be obtained at their expense. It is not the responsibility of the industry to cover this cost.

Beekeepers should pay for an insurance scheme so that purchasers of their honey are compensated when residues are found. FEEDM is asking the European Commission to make this a requirement for countries on the export list.

Apimondia must play a much more active role in beekeeper training.

Maximum Residue Limits must be agreed for safe antibiotics because as analytical methodology improves it becomes possible to detect ever lower traces of residues. Honey in which these occur has to be withdrawn from the market. This is unreasonable when there is no risk to public health.

New legislation requires full traceability of food back to the primary producer. This will reduce the occurrence of ``triangulation``, exporting to a country that then appears to be the country of origin. For example, honey coming from Vietnam was found to be Chinese. As a result of the traceability legislation, the beekeeper who uses illegal drugs will have no place to hide.

Beekeepers should look to the example of China which has had its exports suspended for two years now, the image of honey has been damaged and a great deal of cost to the industry was incurred. The Chinese beekeepers have lost their livelihoods.

Beekeepers will destroy the market for honey unless they begin to understand the seriousness of the situation. The confidence of the consumer is essential if honey sales are to continue. It is absolutely vital that beekeepers understand they have to stop using antibiotics in such a way that residues reach the honey.

Beekeepers depend on exporters, importers and packers to sell their honey and exporters, importers and packers depend on beekeepers to produce the honey. Thus good cooperation between everyone in the supply chain is essential if consumers are going to continue receiving honey.