

PROPOSED DRAFT CODE OF PRACTICE ON GOOD ANIMAL FEEDING

[At Step 3 of the Procedure]

SECTION 1. INTRODUCTION

This code is to establish a feed safety system for food producing animals which covers the whole food chain, taking into account relevant aspects of animal health and the environment in order to minimize risks to the health of consumers. This code applies in addition to the principles of food hygiene already established by the Codex Alimentarius Commission¹, taking into account the special aspects of animal feeding.

SECTION 2. PURPOSE AND SCOPE

This Code of Practice applies to the production and use of all materials destined for animal feed at all levels whether produced industrially or on farm. It also includes grazing or free-range feeding, forage crop production and aquaculture. The objectives of the Code are to encourage adherence to Good Animal Feeding Practice at the farm level and Good Manufacturing Practice (GMP) during the procurement, handling, storage, processing, and distribution of animal feedingstuffs for food producing animals in order to help ensure the safety of food for human consumption. Those issues of animal welfare other than food safety related animal health are not covered. Environmental contaminants should be considered where the level of such substances in the feed could present a risk to consumer health from the consumption of foods of animal origin.

While recognizing that, in its totality, a feed safety system would address animal health and environmental issues, in addition to consumer health, this Code of Practice, in fulfilling the Codex mandate of consumer protection, only addresses food safety. Notwithstanding this, best efforts have been made to ensure that the recommendations and practices in this Code of Practice will not be detrimental to the more general animal health and environmental aspects of animal feeding.

SECTION 3. DEFINITIONS

For the purpose of this Code ;

Feed (Feedingstuffs): Any single or multiple material whether processed, semi-processed or raw, which is intended to be fed directly to food producing animals.

Feed Ingredient: A component part or constituent of any combination or mixture making up a feed, whether or not it has a nutritional value in the animal's diet, including feed additives. Ingredients are of plant, animal or aquatic origin, and are organic or inorganic substances.

Feed Additives: Any intentionally added ingredient not normally consumed as feed by itself, whether or not it has a nutritive value, which affects the characteristics of feed or animal products [or is intended to improve animal performance].

Medicated feedingstuffs : Any feed which contains veterinary drugs as defined in the Codex Alimentarius Commission Procedural Manual.

Undesirable substances : Contaminants and other substances, which are present in and/or on the product intended for animal feeding and which constitute a risk to the health of consumer, including food safety related animal health issues.

¹ Codex Recommended International Code of Practice - General Principles of Food Hygiene (CAC/RCP 1- 1969, Rev. 3 (1997))

SECTION 4. GENERAL PRINCIPLES AND REQUIREMENTS

Feed and feed ingredients should be obtained and maintained in a stable condition so as to protect feed and feed ingredients from contamination by pests, or by chemical, physical or microbiological contaminants or other objectionable substances during production, handling, storage and transport. Feeds should be in good condition and meet generally accepted quality standards. Where appropriate GMP, and where at all possible Hazard Analysis and Critical Control Point (HACCP) principles,² should be followed. Potential sources of contamination from the environment in certain localised areas should be considered.

Parties that produce feed ingredients or feeds, those that rear animals for use as food and those that produce such animal products need to collaborate to identify potential hazards and their levels of risk to human health. Such collaboration will enable the development and maintenance of appropriate risk management options and safe feeding practices.

4.1. FEED INGREDIENTS

Feed Ingredients should be obtained from safe sources, and should meet defined standards. Manufacturers of feed additives in particular should provide clear information to the user to permit correct and safe use. Monitoring of feed ingredients should include inspection and sampling and analysis for contaminants using risk based protocols. Feed ingredients should meet acceptable, and if applicable, statutory standards for levels of pathogens, mycotoxins, pesticides and contaminants that may give rise to consumer health hazards.

4.2. LABELLING

Labelling should be clear and informative as to how the user should handle, store and use feed and feed ingredients. Labelling should be consistent with any statutory requirements and should describe the feed and provide instructions for use. Labelling, or the accompanying documents, should contain:

- information about the species or category of animals for which the feed is intended,
- the purpose for which the feed is intended,
- a [full] list of feed ingredients, including appropriate reference to additives,
- trade name where appropriate,
- the name and address of the producer or intermediates,
- registration number if available,
- nutrition profile,
- directions and precautions for use,
- lot identification,
- manufacturing date, and
- use before or expiry date.

[Genetically modified organisms and derived products should be labelled.]

4.3. TRACEABILITY AND RECORD KEEPING

Traceability of feed and feed ingredients, including additives, should be enabled by proper labelling and record keeping at all stages of production and distribution. This should facilitate the prompt trace-back or trace-forward of materials and products if any actual or potential health risks are identified, and prompt and complete withdrawal or recall of products where necessary. Records should be maintained and readily available regarding the production, distribution and use of feeds and feed ingredients for as long as appropriate to enable trace-back should a safety problem emerge.

² Hazard Analysis and Critical Control Point, as defined in the Annex to the Recommended International Code of Practice on General Principles of Food Hygiene (CAC/RCP 1-1969, Rev. 3 (1997))

Feed manufacturers should keep records containing full details of the supplier and date of receipt of feed ingredients, of the manufacturing process and the destination of all feed. These records could include:

- inventory records (including labels and invoices on received goods), flow diagrams, master formulae, mixing sheets, daily production logs, files of complaints, files on manufacturing errors and corrective actions taken, analytical results and investigations of out-of-tolerance sample results, records respecting the disposition of returned and recalled feeds, records of the disposition of flushed or recovered material, records of mixer validation and scale/metering device verification, etc.

3.4.1. Special Conditions Applicable to Emergency Situations [to be developed]

Certain additional actions may become necessary in an emergency situation or where high risk ingredients are concerned. In such circumstances and in order to control the spread of specific pathogens or the presence of other undesirable substances or products, it may be necessary to specify, for any feed ingredient, the country of origin and species of animal and any treatment process used prior to purchase. Care should be taken to preserve the identity of such material after procurement to facilitate any checking that might be required.

4.4. INSPECTION AND CONTROL PROCEDURES

Feed and feed ingredient manufacturers and other relevant parts of industry should practice self-regulation/auto-control to secure compliance with required standards for production, storage and transport. It will mostly also be necessary for official regulatory programmes to be established to check that feeds and feed ingredients are produced, distributed and used in such a way that foods of animal origin for human consumption are both safe and wholesome. Inspection and control procedures should be used to encourage that feeds meet requirements in order to protect consumers against food-borne hazards³. Inspection system should be designed and operated on the basis of objective risk assessment appropriate to the circumstances⁴. Preferably the risk assessment methodology employed should be consistent with internationally accepted approaches. Risk assessment should be based on current available scientific evidence.

Monitoring of feeds and feed ingredients, whether by industry or official inspection bodies, should include inspection and sampling and analysis to detect unacceptable levels of contaminants and other undesirable substances.

4.5. HEALTH HAZARDS ASSOCIATED WITH ANIMAL FEED

All feed and feed ingredients should meet minimum safety standards. It is essential that levels of undesirable substances are sufficiently low that their concentration in food for human consumption is consistently below the level of concern. Maximum residue limits, such as those established by the Codex Alimentarius Commission, may be useful in determining minimum safety standards.

5.4.1. Veterinary Medicines and Feed Additives

Veterinary medicines and feed additives should be assessed for safety and used under stated conditions of use as pre-approved by national or international authorities.. Only veterinary medicines legally authorised for administration to food producing animals should be included in feed. Borderlines between feed additives and veterinary medicines must be set to avoid misuse. All veterinary medicines and feed additives should be received, handled and stored to maintain their integrity and to minimise

³ Principles for Food Import and Export Inspection and Certification (CAC/GL 20-1995)

⁴ Guidelines for the Design, Operation, Assessment and Accreditation of Food Import and Export Inspection and Certification Systems (CAC/GL 26-1997)

misuse or unsafe contamination. Feed containing them should be used in strict accordance with clearly defined instructions for use.

Antibiotics in particular should not be used in feedingstuffs in the absence of public health safety assessment⁵.

5.4.2. Feed and Feed Ingredients

Feed and feed ingredients should only be marketed or used if they are safe and wholesome, and do not represent a danger to animal or human health or the environment. In particular, feeds and feed ingredients contaminated with undesirable substances in excess of established national or international maximum levels should not be marketed or used. As indicated under 4.4, monitoring of feeds and feed ingredients should include inspection and sampling and analysis to detect unacceptable levels of undesirable substances.

Feeds and feed ingredients should not be presented or marketed in a manner liable to mislead the user.

5.4.3. Undesirable Substances

The presence in feed and feed ingredients of undesirable substances such as industrial and environmental contaminants, pesticides, radionuclides, persistent organic pollutants, pathogenic microbes and microbial toxins including mycotoxins should be identified, controlled and minimised. The risks of each undesirable substance to human and animal health should be assessed and such assessment may lead to the setting of maximum limits for feeds and feed ingredients or the prohibition of certain materials from animal feeding.

SECTION 5. INDUSTRIAL PRODUCTION OF ANIMAL FEEDINGSTUFFS

Responsibility for the production of safe and wholesome feed lies with the producer or manufacturer who should produce feeds that comply with any applicable statutory requirements. Feed and feed ingredients should not be manufactured in facilities where other incompatible operations are undertaken.

The producer or manufacturer should establish quality assurance systems based on the principles of Good Manufacturing Practice (GMP). The HACCP principles, as annexed to the Codex “Recommended International Code of Practice – General Principles of Food Hygiene” should be followed where appropriate”.

The effective implementation of GMP protocols should ensure that:

1. Buildings and equipment used to process feed and feed ingredients are constructed in a manner that permits ease of operation, maintenance and cleaning and minimises the potential for feed contamination. Process flow within the manufacturing facility should also be designed to minimise such potential;
2. Work and equipment areas are free of fertilizers, pesticides and other such materials not intended for use in feed in order to avoid the potential for cross-contamination.
3. All plant personnel involved in the manufacture of feed and feed ingredients are adequately trained and aware of their role and responsibility in protecting feed and feed ingredients from contamination;
4. Water used in feed manufacture meets hygienic standards and is of potable quality for animals. Conduits for water should be of inert nature;
5. Machinery coming into contact with dry feed is dried following any wet cleaning process;
6. Condensation is minimised;
7. Sewage, waste and rain water is disposed of in a manner that ensures that equipment, feed and feed ingredients are not contaminated;

⁵ WHO Global Principles for the Containment of Antimicrobial Resistance in Animals Intended for Food, June 2000, Geneva, Switzerland

8. Feed processing plants, storage facilities and their immediate surroundings are kept clean and effective pest control programmes are implemented;
9. All scales and metering devices used in the manufacture of feeds are appropriate for the range of weights and volumes to be measures, and are tested regularly for accuracy;
10. All mixers used in the manufacture of feeds are appropriate for the range of weights or volumes being mixed and are capable of manufacturing suitable homogeneous mixtures and homogeneous dilutions;
11. Manufacturing strategies are used to avoid cross-contamination (for example by flushing, sequencing and physical clean-out) between batches of feed containing restricted or otherwise potentially harmful materials (such as certain animal by-product meals, certain additives). These procedures should also be used to minimise cross-contamination between medicated and non-medicated feeds. In cases where the risk linked to cross-contamination is high, completely separate production lines, and storage and transport, should be introduced;
12. Records and other information are maintained as indicated at 4.3 in this Code to include the identity and distribution of feeds so that any feed considered to pose a threat to animal or human health can be rapidly removed from the market and that animals exposed to the relevant feed can be identified;
13. The presence of undesirable substances is monitored and controlled;
14. Feeds are delivered and can be used as soon as possible after manufacture. Any feed ingredients and manufactured feeds should be stored and transported in a manner which prevents deterioration and contamination;
15. Processed feeds are separated from unprocessed feed ingredients, including additives, and appropriate packaging materials are used;
16. Containers and equipment used for transport, storage, conveying, handling and weighing are kept clean. Cleaning programmes should minimise the use, and therefore any remaining residues, of detergents and disinfectants;
17. Pathogen control procedures, such as heat treatment or the addition of authorised chemicals, are used where appropriate and monitored throughout the manufacturing process;
18. Dry feeds and feed ingredients are kept dry in order to limit fungal and bacterial growth. Care should also be taken to prevent, so far as reasonably practicable, deterioration and spoilage at all stages of handling, storage and transport of feeds;
19. Waste feed and other material containing hazardous levels of veterinary drugs, undesirable substances and any other hazards are not used as feed and are disposed of in an appropriate and, where applicable, statutory manner and not used as feed.

SECTION 6. ON-FARM PRODUCTION AND USE OF FEEDINGSTUFFS

[Note from the Codex Secretariat - Section 6 is circulated for comments under a separate Circular Letter CL 2001/37-AF]

SECTION 7. METHODS OF ANALYSIS AND SAMPLING

7.1. SAMPLING

National Feed Control authorities should use defined sampling procedures based on Codex sampling plans for the particular commodity/contaminant combination where available. Otherwise relevant official methods of sampling as elaborated by international organisations, such as the International Standards Organisation (ISO) and AOAC International, should be used. It is important to ensure that the sample taken is representative of the consignment or of the lot.⁶

⁶ Working Group draft has been modified by the Codex Secretariat to delete references to regional organizations.

7.2. ANALYSIS

Where samples are selected for analysis, standard methods of analysis or methods validated through appropriate protocols should be used. Official methods of analysis elaborated by international organisations should be used. These include the ISO and AOAC International. Where no appropriate international analytical standard exists, other scientifically recognised rules can be used. The method selected should also be chosen on the basis of practicability, with preference given to those methods which are applicable for routine use, and of reliability.⁶

Analysis should be conducted in official or officially accredited laboratories, and which employ Good Laboratory Practice.