codex alimentarius commission

FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS

WORLD HEALTH ORGANIZATION

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Agenda Item 6 **CX/FFP 03/7-Add.2**

JOINT FAO/WHO FOOD STANDARDS PROGRAMME
CODEX COMMITTEE ON FISH AND FISHERY PRODUCTS

Twenty-sixth Session
Ålesund, Norway, 13 - 17 October 2003

PROPOSED DRAFT CODE OF PRACTICE FOR FISH AND FISHERY PRODUCTS (SECTIONS 6, 7, 10 TO 15, 17 AND APPENDICES)

GOVERNMENT COMMENTS AT STEP 3 (United States, European Community)

UNITED STATES

SECTION 6 – AQUACULTURE PRODUCTION (Additional comments)

6.1.1 Site selection, 4th and 9th bullets, delete

Reason: These bullets refer to environmental concerns and are therefore not within the scope of Codex.

6.3.1 Feed Supply, 1st paragraph, end sentence at "Feeding" by deleting "and take account of national regulations on fish feeds and not constitute a hazard to humans, fish or the environment." The sentence would thus read: "Feeds used in aquaculture production should comply with the Codex Draft Code of Practice of Good Animal Feeding."

Reason: With the exception of the environment, the reference to national regulations and hazards to humans or fish are points covered in the draft, so they are redundant. Moreover, specific references to matters contained in a document that is still in draft form should be avoided because those matters are subject to revision.

6.3.2 Veterinary Drugs, 7th bullet, delete

Reason: "Medicines" have justifiable uses in aquaculture for prophylaxis. Examples are the need to treat eggs and fish to prevent fungal growth. Such fungi are so universal that they may be assumed to be present even though manifestation of them has not become apparent. Thus, eggs and fish are routinely treated prophylacticly with fungicides to prevent infection of fish and fish eggs by such fungal pathogens as *Saprolegnia parasitica* and *Icthyophthirius multifillis*. Moreover, even when a disease is apparent, it is not possible to treat only the visibly infected fish. All the fish would have to be treated, and for those not yet affected, the treatment would be prophylactic.

Much of the concern about prophylactic drug use has focused on the use of drugs for growth promotion. That issue is already being addressed in paragraph 23 of the Proposed Draft Code of Practice on Good Animal Feeding, which states, "Antibiotics should not be used in feed for growth promoting purposes in the absence of public health safety assessment."

6.3.2 Veterinary Drugs, 8th bullet, delete

Reason: This bullet refers to environmental concerns and is therefore not within the scope of Codex.

6.3.3 Growing, 7th bullet, delete

Reason: This bullet refers to environmental concerns and is therefore not within the scope of Codex.

SECTION 12 - PROCESSING OF SMOKED FISH

Recommended additional language within sentences is highlighted in bold for the convenience of the reader.

General Comments

We suggest further drafting for consideration at the next session. This drafting should include the addition of a reception step and also steps and guidance as necessary to address smoked bivalve molluscs.

Specific Comments

Section 12 - introductory paragraphs, bracketed 5th paragraph:

Comment: This paragraph essentially asks whether liquid smoke should be treated as a process under this code or as a flavoring substance. We take the view that liquid smoke should be treated as a flavoring substance to enhance flavor. As a flavoring substance, it should be considered an ingredient. Ingredients are topics usually covered in standards rather than in codes of practice. Therefore, the use of liquid smoke would be better referenced in the standard. (Note: In our view, liquid smoke should not be permitted as a complete substitute for smoke, but could be permitted in addition to smoke to enhance flavor.)

Section 12 - introductory paragraphs, 8th paragraph, replace "[for at least 24 hours at -20ºC]" with **"in accordance with Annex 1"**

Reason: It is better to refer to Annex 1 because it contains a discussion of parasites in general. The time period of 24 hours at -20ºC refers to nematodes, but not to all parasites.

Figure 12.1 and Section 12.1, change the name "Pre-Salting" to "**Salting and Marinating**"

Reason: Pre-salting should be changed to "salting" because this section discusses the salting step rather than pre-salting. "Marinating" should be included in this section because it occurs at this processing step to add flavor.

12.1 Salting and Marinating, Technical Guidance, 1st paragraph, change pre-salted to "**salted**" and add a sentence to read, "**Any marinating may be done with, or separately from, salting.**"

12.1 Salting and Marinating, Technical Guidance, 2nd paragraph, change to read "…medium strength salt brine **and any marinade** to gain taste. The salted fish is left for about 24 hours under refrigeration **to allow the salt to diffuse equally throughout the fish.**"

Reason: Clarity.

12.1 Salting and Marinating, Technical Guidance, 1st bullet, after "new brine" add "**and marinade**"

12.1 Salting and Marinating, Technical Guidance, 3rd bullet, change to read, "for fish for cold smoking **that will be packaged in reduced oxygen and salt will constitute the primary barrier to the growth of Clostridium botulinum,** the salt content in the fish should be **at least 3% - 3.5%** salt in the water phase **as selected by the country where the product will be consumed**;"

Reason:

(a) A barrier of salt in the water phase for *Clostridium botulinum* is essential only where the product is to be packaged in modified atmosphere.

(b) Countries where the product is to be consumed should be free to require either 3% or 3.5% salt in the water phase based on the level of protection they wish to have for their consumers. There are scientific data that can support a level of protection reflected by 3% and data that could lead a country to conclude that a minimum of 3.5% in the water phase is needed to protect its consumers.

12.1 Salting and Marinating, Technical Guidance, 4th bullet, after "the brine" add "**and marinade**"

12.2 The Smoking (Processing Steps 2 & 3), Technical Guidance, 2nd paragraph, revise the first sentence to read: "In the hot smoking process the temperature in the centre of the product **should** reach **63ºC for at least 30 minutes**."

Reason: Clarity. We think this is what the sentence meant to say. Also, we believe that 63ºC is the correct temperature for the point being made.

12.2 The Smoking (Processing Steps 2 & 3), Technical Guidance, 4th paragraph, delete the second sentence.

Reason: This is addressed in the 3rd bullet

12.2 The Smoking (Processing Steps 2 & 3), Technical Guidance, 5th bullet, add a sentence to read as follows: "**Continuous monitoring devices are recommended to ensure that both time and temperature conditions are met.**"

12.4 Cooling and/or Freezing (Processing Steps 4 & 9), delete 2nd bullet and revise 1st bullet to read as follows: "**Immediately after smoking,** cool **both** hot **and cold** smoked products adequately, i.e. products should be cooled to below 10ºC within 2 hours and to below 3ºC within 6 hours;"

Reason: The temperatures to which hot and cold smoked products are cooled after smoking should be the same and are described in the first bullet, making the second bullet unnecessary.

12.5 Packing Of Hot And Cold Smoked Products (Processing Step 7), add "**Refer to Section 8.2**"

12.5 Packing Of Hot And Cold Smoked Products (Processing Step 7), Technical Guidance, add a 4th bullet to read as follows: "**If modified atmosphere packaged (MAP), barriers such as temperature or salt must be used to prevent growth of *C. botulinum.***"

12.7 Storage, Distribution And Retail (Processing Steps 10, 11, &12), Technical Guidance, add *C. botulinum* to the sentence to read……", in particular growth of ***C. botulinum* and** Listeria monocytogenese in….."

Reason: Both need to be considered when determining temperatures for storage and during transportation.

EUROPEAN COMMUNITY

The European Community supported the adoption by the 26th Session of the Commission of some sections of the Draft Code of Practice and welcome the improvements made on the other sections of the Code. The EC considers that it could support the rest of the Code if two Sections are amended as follows:

The Section 2.2. *Aquaculture definitions*, and Section 6.3.2. *Veterinary Drugs* should be revised in order to clarify and to be consistent with the wording used by the CCRVDF.

The Section 7. *Bivalve Molluscs - Monitoring of growing areas* (point 7.2.2) should contain an additional paragraph explaining how the monitoring should be implemented, in particular with regard to the sampling frequency for toxins.

2.2 Definitions (AQUACULTURE)

The following definitions have been amended as underlined in italic and bold;

Chemicals include any substance either natural or synthetic which can affect the live fish and crustaceans, its pathogens, the water, equipment used for production or the land within the aquaculture establishment; such substances include pesticides, ~~therapeutic chemicals~~ ***veterinary (chemical) drugs***, disinfectants, anaesthetics, hormones, dyes, detergents, anti-foulants, and fertilisers;

Residues means any foreign substances including their metabolites, which remain in fish and crustacean prior to harvesting as a result of either application or accidental exposure.

Examples of such substances are ***veterinary (chemical) drugs*** (e.g antibiotics, anthelminthics), ~~chemotherapeutcs,~~ disinfectants, fish food additives, growth promoters, hormones, hormone-like substances, heavy metals, pesticides, tranquilizers and radioactive materials. Maximum Residue Limits (MRLs) are specified for many **active** substances by the Codex Alimentarius or national regulations;

Veterinary Drug means any **active** substance applied or administered to ***any*** ~~*food producing*~~ ***animal, including food producing animals*** such as ~~*meat or milk producing animals, poultry*~~, fish and crustacean ~~*or bees*~~, whether used for therapeutic, prophylactic or diagnostic ***disease*** purposes or for modification of physiological functions ~~*or behaviour*~~;

Withdrawal Time is the period of time ***necessary*** between the ***last*** administration of a veterinary drug to fish and crustacean, or exposure of fish and crustacean to a ~~*chemical*~~ **veterinary drug**, and harvesting of the fish and crustacean, to ensure in the edible flesh of the fish and crustacean ***intended for human consumption***, that the concentration of the residue of the **veterinary drug** ~~or chemical~~ ***does not exceed the maximum residue limits.***

6.3.2 VETERINARY DRUGS

Potential Hazards: ~~***R***~~***esidues of veterinary drugs***

In the first paragraph it is stated "*Potential Defects: Unlikely*". We find this not correct in relation to aquaculture products. According to our knowledge fish and shrimps are increasingly treated with a variety of pharmacologically active substances. For this reason Codex has for instance adopted a maximum residue limit (MRL) for Oxytetracycline in Fish and Giant Prawn (100 µg/kg).

We would therefore suggest modifying this statement into:

"*Potential Defects*: ***Aquaculture product not fit for human consumption".***

"Technical guidance:

Other Codex guidelines and recommendations already cover most of the content of the text following the bullet points. The bullet points should therefore be replaced by the following text:

"All pharmacologically active substances used fish farming should be authorized as veterinary drugs for this use according to national regulations in accordance with the RECOMMENDED INTERNATIONAL CODE OF PRACTICE FOR CONTROL OF THE USE OF VETERINARY DRUGS (CAC/RCP 38-1993).

The control of use of the substances should be performed in accordance with the CODEX GUIDELINES FOR THE ESTABLISHMENT OF A REGULATORY PROGRAMME FOR CONTROL OF VETERINARY DRUG RESIDUES IN FOODS (CAC/GL 16-1993)."

Moreover special care should be exercised that substances used are not released into the surrounding environment."

7.2.2. Monitoring of growing areas

To implement these points, sampling plans must be drawn up providing for such checks to take place at regular intervals, or on a case-by-case basis if harvesting periods are irregular. The geographical distribution of the sampling points and the sampling frequency must ensure that the results of the analysis are as representative as possible for the area considered.

Sampling plans to check the microbiological quality of live bivalve molluscs must take particular account of:

(a) the likely variation in faecal contamination, and

(b) the parameters referred above

Sampling plans to check for the presence of toxic or potentially toxic plankton in production and relaying waters and for biotoxins in live bivalve molluscs must take particular account of possible variations in the presence of plankton containing marine biotoxins. Sampling must comprise:

(a) periodic sampling to detect changes in the composition of toxic or potentially toxic plankton and their geographical distribution. Results suggesting an accumulation of toxins in mollusc flesh must be followed by intensive sampling;

(b) periodic toxicity tests using those molluscs from the affected area most susceptible to contamination.

The sampling frequency for toxin analysis in the molluscs, as a general rule, should be weekly during the periods at which harvesting is allowed. This frequency may be reduced in specific areas, or for specific types of molluscs, if a risk assessment on toxins or phytoplankton occurrence suggests a very low risk of toxic episodes. It is to be increased where such an assessment suggests that weekly sampling would not be sufficient. The risk assessment is to be periodically reviewed in order to assess the risk of toxins occurring in the live bivalve molluscs from these areas.

When knowledge of toxin accumulation rates is available for a group of species growing in the same area, a species with the highest rate may be used as an indicator species. This will allow the exploitation of all species in the group if toxin levels in the indicator species are below the regulatory limits. When toxin levels in the indicator species are above the regulatory limits, harvesting of the other species is only to be allowed if further analysis on the other species shows toxin levels below the limits.

With regard to the monitoring of plankton, the samples are to be representative of the water column and to provide information on the presence of toxic species as well as on population trends. If any changes

in toxic populations that may lead to toxin accumulation are detected, the sampling frequency of molluscs is to be increased or precautionary closures of the areas are to be established until results of toxin analysis are obtained.

Sampling plans to check for the presence of chemical contaminants must enable the detection of any overshooting of the levels laid down in the standards.