# codex alimentarius commission





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Agenda Item 5 CX/FFP 06/28/5

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

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# PROPOSED DRAFT CODE OF PRACTICE FOR FISH AND FISHERY PRODUCTS GOVERNMENT COMMENTS AT STEP 3

(European Community, New Zealand)

# **EUROPEAN COMMUNITY**

Section 2 - Definitions

#### Salted Fish

The ECMS suggest that, for consistency, with the Codex Standard for salted fish and dried salted fish of the Gadidae family (Codex Stan 167-1989, Rev.1-1995) the definitions of 'Dry-Salting' and 'Wet-Salting' should be revised to read (new text underlined):

**Dry-Salting** – "is the process of mixing fish with suitable <u>food grade</u> salt and stacking the fish in such a manner that the excess of the resulting brine drains away".

**Wet-Salting** – "is the process whereby primary lean fish is mixed with suitable <u>food grade</u> salt and stored in .... etc".

The ECMS suggest that, if the definition of 'Very Lightly Salted Fish' is to be retained, for consistency with the Codex Standard for Salted Atlantic Herring and Salted Sprat (Codex Stan 244-2004), the definition is amended to read:

**Very Lightly Salted Fish** – "the salt content of the fish muscle is <u>above 1g/100g in water phase and below or equal to 4g/100g or less in the water phase".</u>

# • Smoked Fish

**Hot Smoking** – we would reiterate the EC comments (see CRD 16 at 27<sup>th</sup> CCFFP) to revise the current definition to: "means a smoking process where the smoke is generated from burning and/or smouldering wood or other plant material at a temperature which will cause the complete coagulation (denaturation) of the fish flesh".

# Section 7 - Live and [Raw] Bivalve Molluscs

**7.1, third para.** – we suggest that the penultimate sentence be revised and the reference to AZP be moved as follows: "Another hazard .... shellfish poisoning (DSP, including Azaspiracid (AZP)), paralytic shellfish poisoning (PSP) .... amensic shellfish poisoning (ASP)". This is because AZPs are part of the DSP family.

# Section 10 - Processing of Quick-Frozen Coated Fish and Fishery Products

**10.5.1.1** Shrimp – The ECMS suggest that the following new text be added as a second bullet point under the 'technical guidance' section:

- sulphites should be used in accordance with manufacturer's instructions and Good Manufacturing Practice;
- **10.5.2.1 Shrimp** (**Frozen Storage**) include cross reference to shrimp section 14.2.2 as this also covers this subject.
- **10.5.2.2** Other Ingredients and Packaging Material the correct cross-reference is 10.3.2.3.
- 10.5.2.3 Shrimp (Refrigerated Storage) the correct cross-reference is 10.3.2.2.
- 10.5.5.1 Wet Coating we suggest that "defective coating" be added to the 'potential defects' section.

Also, the following <u>new</u> bullet points should be added under the 'technical guidance' section:

- as bullet point 1 "batter ingredient powders should be checked against buying specification and ideally sieved before use to remove any packaging and extraneous materials";
- as bullet point 4 "note that bacterial toxin formation is a possibility in batter mixes so that usage times and temperatures should be set and cleaning schedules of equipment defined and maintained";
- as bullet point 6 tempura style batters may be used in which case additional crumb coatings will probably not be applied. However, frying temperatures and times will be critical to ensure correct texture";
- as bullet point 7 where batter is for adherence of a crumb coating, formulation and viscosity will be different to tempura styles".
- **10.5.5.2 Dry Coating** we suggest that the following <u>new</u> bullet points should be added under the 'technical guidance' section:
- as bullet point 1 "breadcrumb formulation and grist, or particle size will need to be checked against buying specification and stored according to supplier instructions to avoid staling".
- **10.5.6 Pre-Frying** after the cross-reference to section 10.3.8, we suggest adding a sub-section of frying as follows:

"10.5.6.1 Frying

- whilst frying is necessary for tempura batter coatings, it may not always be used for crumb coating operations, although it does ensure adhesion
- fryers should be operated by trained staff. Oil changes on a regular basis to avoid oxidative rancidity
- oil temperatures should be controlled to avoid burning crumb or fire risks".

# Section 12 - Processing of Smoked Fish

The ECMS consider that this section can only be further developed once the corresponding "Proposed Draft Standard for Ready to Eat Smoked Fish" is nearing completion. This is because this section would need to appropriately reflect whatever is agreed in the standard, for example section 12.2 seems to suggest that only wood can be used for the smoking process yet the current draft standard allows for plant material other than wood to generate smoke as suggested by some countries at the last session. Therefore, section 12.2 would need to be revised to reflect this position.

# Section 13 - Processing of Lobsters and Crabs

- 13.3.1.2 & 13.3.3.2 Live Lobster / Crab Holding the text recommends storage in water. However, we are aware that live crab / lobster can be received and stored <u>dry</u> in crates and such practices should be provided for in the Code.
- **13.3.1.11 Freezing** The ECMS suggest that the second bullet is qualified to state: "the freezing and storage of whole uncooked lobsters is not generally recommended". New text is underlined and the qualification is needed as the statement is not strictly reflective of marketplace practices. For example, our industry successfully source high pressure processed, frozen whole raw lobster from countries such as Canada.
- **13.3.1.12** Labelling For consistency with the shrimp and prawn Code, we suggest that the following new text be added as a second bullet point under the 'technical guidance' section:
- sulphites should be used in accordance with manufacturer's instructions and Good Manufacturing Practice.

- **13.3.3.4** Cooking The ECMS have some observations on the following bullet points under the 'technical guidance' section on which we would welcome discussion and further consideration by the CCFFP:
- first bullet what is the definition of 'approaching that of melting ice'? A lot of the industry is unable to chill its crabs to this level before starting to break-up and extract the meat from the crab.
- second bullet we would question the statement, "crab cooking in boiling water is preferred to steaming", especially as we are aware that crab cooks in steam very successfully.
- fifth bullet some may regard a minimum temperature of 82°C to be quite high. However, it is the combination of the time and temperature regime and not just temperature that is important so the related time should also be stated in the example given. It should also be made clear that other processes where cooking is to a lower temperature but with holding for longer time, can also achieve the 'microbiological kill' and be acceptable.
- sixth bullet it is very difficult to specify generally accepted time, temperature and cooking method for different species as these vary considerably within industry. We would, therefore, suggest deleting this bullet.
- **13.3.3.5** Cooling We suggest the following comments in respect of the bullet points under the 'technical guidance' section:
- first bullet we suggest that there is mention of cooling in brine as this is a method that is used.
- **13.3.3.6 Sectioning** / **Meat Extraction** The ECMS suggest the following comments in respect of the bullet points under the 'technical guidance' section:
- fourth bullet the statement, "...all types of meat are picked, packaged and either chilled [(internal temperature of  $4.5^{\circ}$ C/ $40^{\circ}$ F or less) or frozen within two hours]", would in our view be difficult to achieve in two hours. For example, we are aware that some parts of our industry stipulate a HACCP of <5 $^{\circ}$ C within four hours.
- sixth bullet we suggest that the following text be added at the end of this bullet: "Where hand picking is practiced, care should be taken to minimise microbiological contamination through good hygiene practices". -eighth bullet we suggest that this statement should be qualified to take account of different processing systems used in this industry such as batch processing. It would, therefore, read: "meat recovery operations should be carried out continuously or along batch systems as appropriate".

# Appendix IX – Optional Final Requirements: Frozen and IQF Peel and De-Vein Shrimps or Prawn (pp.169-171)

The ECMS question the value of using the 'point deduction system' outlined in determining shrimp and prawn defects and whether, in fact, such a system is being used on a practical level in the marketplace. We recognise that quality criteria may be internationally agreed but the levels of score may not be, especially if one considers that, nowadays, quality provisions are usually set by commercial specifications for the final product.

We suggest that this Appendix is reviewed and amended to identify the defect factors that should be taken into account with respect to quality / grade and customer specifications without a scoring system. This would be consistent with the approach taken for the 'optional final requirements' for minced fish (Appendix III) and canned fish (Appendix XI).

#### **NEW ZEALAND**

### **Section 2 Definitions**

# 2.3 Live [and raw] bivalve molluscs

New Zealand supports removal of the square brackets around the words [and raw] in the header to this section and those around the definition for Post Harvest Treated Bivalve Molluscs.

### 2.8 Smoked Fish

New Zealand suggests that the title of this section of the definitions should be "2.8 Smoked Fish and Liquid-Smoked Fish"

A definition for Liquid Smoking should be inserted as follows:

Liquid Smoking: means application of liquid smoke either directly or by regeneration by heating smoke condensates, and with or without the addition of heat such that the final product has the sensory characteristics of smoked fish.

A definition of Liquid Smoke should also be inserted as follows:

Liquid Smoke: means a liquid solution of aromatic compounds derived from wood smoke

# Section 7: Live [and Raw] Bivalve Molluscs

#### **Title**

New Zealand supports the removal of the square brackets in the title.

#### Section 7.1

New Zealand suggests that the final sentence of this section should be deleted because it contains no specific information. If it is to be retained, specific examples of species both suitable and unsuitable for purification should be given along with the rationale as to why they are suitable or unsuitable.

#### **Section 7.2.2.4**

This section advises that growing areas should be monitored on a "regular" basis for chemical contaminants. Some indication about what "regular" might mean in this context is appropriate. For example, "regular" in the context of heavy metal monitoring where there are no point sources of such contamination known might mean every three years. Where there is a source of a specific industrial pollutant in the rainfall catchment for a growing area, "regular" might mean much more frequently. Accordingly we suggest the following text be inserted into this section:

"Growing areas should be monitored for chemical contaminants on a sufficiently frequent basis to provide confidence that any identified sources of chemical contamination are not contaminating the shellfish. Shellfish growing areas where there are no known point sources of likely chemical contamination should only require occasional checks for heavy metal accumulation every few years. However, where there are known point sources of specific contamination shellfish may need to be checked more frequently on a routine basis. There should also be the capacity to sample shellfish reactively if a defined event occurs – for example a spillage of anti-fouling paint."

# **Section 7.6.1**

This section lists viable parasites as a hazard that should be managed at reception. New Zealand seeks clarification as to what viable parasites of human health significance would be likely to be able to be detected in a visual examination of live shellfish, in their shells, at reception. If this statement is intended to cover the presence of harmless commensal organisms such as pea crabs then these should be specifically listed as a defect, not a hazard.

# **Section 7.6.2 - Second Bullet Point**

It is suggested that the following sentence be added to this bullet point. "Where natural sites are used for conditioning these should be classified by the official agency having jurisdiction."

#### **Section 7.6.5**

This section does not appear to cover frozen storage. Many raw shellfish products are stored and transported in a frozen state and are then thawed for consumption.

We suggest replacement of the second bullet point under this section with the following text: "Storage periods for live and chilled raw shellfish should be kept as short as possible."

A new third bullet point should be inserted as follows:

"Shellfish to be distributed or stored in a frozen state should have their temperature reduced to -18 degrees Celcius or colder as soon as possible after harvest.

The current third bullet point should be retained as bullet point 4, but we suggest deletion of the words "at the distribution centre" at the end of the sentence as live shellfish may often be held in aquaria or under water sprays at the point of retail sale.

#### Section 7.7

New Zealand supports the removal of the square brackets around this section, however there would appear to be some improvements that can be made to the text.

The words ",and individual quick freezing" should be removed from the second paragraph in this section. IQF is not a post harvest treatment recognised to reduce or eliminate pathogens – it just prevents their multiplication.

The potential hazard in this section is "microbiological contamination". "Failure to eliminate or reduce etc" is not a hazard itself – it simply leads to the hazard remaining in the product.

The final sentence of this section is questionable in value and we recommend deletion. Shellfish that are post harvest treated should be handled in a similar manner to live shellfish up to the point of post-harvest treatment because the post-harvest treatment is typically designed only to target specific pathogens.

#### Section 7.7.1

This section appears to suggest that one could take shellfish that have been grown in sewage and can them or otherwise effectively sterilise them. In New Zealand's view this is not a sound practice due to the risks involved in handling such shellfish and potential for cross-contamination. Waters that such shellfish are taken from should be classified to the same requirements as those from which shellfish may be taken for relaying or depuration.

The first bullet point should be replaced with the following:

"The bivalve molluscs must come from areas that are classified as suitable for relaying or purification (depuration) as approved by the official agency having jurisdiction."

# Section 10. Processing of Quick Frozen Coated Fish Products

# **Coated Molluscan Shellfish**

Section 10.4.2.3 Refrigerated Storage

This section states "See Section 10.3.2.2", this then refers to Section 8.1.2.

In Section 8.1.2 bullet point #5 regarding layering ice amongst fish would not be relevant to fresh shellfish. The reference in 10.4.2.3 might more appropriately be made to section 7.6.5 which covers storage of live [and raw] bivalve shellfish.

For consistency the heading titles should be amended (these then match Section 10.3)

10.4.7 Should be "Re-Freezing - Final Freezing" (as fresh product may be used).

10.4.10 Should be "Transport of End Product"

# **Coated Shrimp**

Figure 10.3 and Explanatory Text

Our understanding is that most coating lines freeze the product first before packing. So process steps Packaging and Labelling (10.5.7) and Blast Freezing (10.5.8) appear to be out of order.

We are unclear as to what is meant by "Casing" (10.5.9). If it means packing into outer cartons (in which case packaging material would be an input), if the order of the steps is reversed as suggested above this step is not needed.

10.5.2.3 Refrigerated Storage

The reference to 10.3.2.1 is incorrect: it should be "See Section 10.3.2.2"

10.5.4.2 Peeling, Deveining, Butterflying

The  $4^{th}$ ,  $5^{th}$ , and  $6^{th}$  bullet points relate to quality issues and not food safety / wholesomeness. They should therefore be deleted. However, if one is using machines to cut the shrimp then potentially metal is a physical hazard (due to damage to blades).

10.5.5.1 Wet Coating

This section should simply refer to 10.3.7.1 which covers the topic adequately. The1<sup>st</sup> bullet point is covered in 10.3.7.1, the 2<sup>nd</sup> bullet point is quality related and the 3<sup>rd</sup> bullet point is too specific as not all batter bags have an outer layer.

# 10.5.5.2 Dry Coating

This section should refer to Section 10.3.7.2 which covers the topic adequately. The bullet points listed under it are all quality matters and the final bullet point is too specific as not all batter bags have an outer layer.

For consistency we suggest that the following heading titles be amended to match Section 10.3.

10.5.8 Should be "Re-Freezing - Final Freezing"

10.5.11 Should be "Transport of End Product"

# **Section 12 Processing of Smoked Fish**

Consistent with New Zealand's comments on the need for inclusion of liquid smoked products under the proposed Draft Standard for Ready to Eat Smoked Fish, the following amendments are recommended.

#### Title

The Title of this section should be amended to read "Processing of Smoked and Liquid-Smoked Fish"

#### Introduction

The square bracketed text that states [Whether the use of liquid smoke is a process under this code or it is to be seen as use of flavouring substances is to be discussed] should be removed and be replaced by:

"The increasing use of liquid smoke as a substitute for traditional smoking processes offers the opportunity to impart the characteristics of smoked fish while reducing the risk of unwanted contaminants from the combustion process. Because the finished product is often little different to those produced by traditional means these products have been included under this section."

# Figure 12.1 Flow Diagram

Our understanding of the use of liquid smoke is generally as a flavouring for a heat treated ready to eat product. To represent this option in the flow diagram, an additional arrow could be drawn from the presalting box to am new box which says "Application of liquid smoke" followed by an arrow to another new box which says "Heat Processing" and an arrow back to join the process at the box labelled "Cooling".

# 12.2 The Smoking

Second Paragraph – this should be amended to include the use of liquid smoke by deleting the words "In the hot smoking process..." and replacing these with "In a hot smoking or liquid smoking process..."

An additional paragraph should be inserted as paragraph 6 in this section as follows:

"Liquid smoke should have been generated from wood that has not been treated with any chemicals."

# 12.6 Labelling

A new sentence should be inserted in this section to cover liquid smoked products as follows:

"Liquid smoked products should be labelled as "liquid smoked" so that consumers are aware of the method of production."