CODEX ALIMENTARIUS COMMISSION E

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World Health Organization

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Agenda Item 6 **CX/FFP 14/33/8**

JOINT FAO/WHO FOOD STANDARDS PROGRAMME

CODEX COMMITTEE ON FISH AND FISHERY PRODUCTS

Thirty-third Session

Bergen, Norway

17 – 21 February 2014

PROPOSED DRAFT CODE OF PRACTICE ON THE PROCESING OF SCALLOP MEAT (At Step 3 of the Procedure)

Prepared by the Electronic Working Group led by Canada

Governments and interested international organizations are invited to submit comments on the attached Proposed Draft Code at Step 3 (*see* Appendix II) and should do so in writing in conformity with the Uniform Procedure for the Elaboration of Codex Standards and Related Texts (see *Procedural Manual of the Codex Alimentarius Commission*) to: the Secretariat, Codex Alimentarius Commission, Joint WHO/FAO Food Standards Programme, FAO, Viale delle Terme di Caracalla, 00153 Rome, Italy, by email codex@fao.org with a copy to Codex Contact Point, Norwegian Food Control Authority, P.O. Box 8187 Dep. 0034 Oslo, Norway, Email: ccffp@mattilsynet.no, **by 5 January 2014.**

Format for submitting comments: In order to facilitate the compilation of comments and prepare a more useful comments document, Members and Observers, which are not yet doing so, are requested to provide their comments in the format outlined in the Annex to this document.

BACKGROUND

1. At the 32nd Session of the Committee on Fish and Fishery Products (CCFFP), the Committee agreed to establish an electronic Working Group (eWG) led by Canada, working in English to advance the draft Code of Practice (CoP) on the Processing of Scallop Meat at Step 2/3.

2. The mandate for the working group was to advance the draft Code of Practice for scallops by:

- Developing a clear definition for 'viscera' that excludes roe in order to clarify the issues around biotoxin risk.
- Amending the definitions to take into account the decisions on the associated standard and the proposed development of a definition for viscera as follows: (i) roe on scallops: delete "all other..." before viscera; and (ii) scallop meat: indicating that scallop meat was the scallop adductor muscle remaining after the shell, the viscera and roe have been completely removed.
- Deleting section X.2.2 Defects and the Appendix X as not essential to the Code.
- Align sections up to X.2.2.3 with teh Standard for Raw, Fresh and Quick Frozen Scallop Products.
- Scrutinize the rest of the document to further improve and align where applicable with the draft Standard.

ELECTRONIC WORKING GROUP SUMMARY

3. Thirteen member countries and one organization expressed interest in participating in the eWG (refer to Appendix I). As an initial step, the draft CoP was amended by the eWG lead to address the points raised above and circulated to the eWG members for a first round of comments. Based on input, there were three further rounds of comments/amendments. Seven member countries (United States of America, New Zealand,

Chile, France, Japan, United Kingdom and China) provided input which was considered and incorporated as appropriate.

4. Overall, there was agreement within the eWG on the nature of revisions made to the definitions and other sections of the draft Code. Many revisions were made which were considered necessary clarifications to the processing steps and technical guidance in order to further enhance the Code. At the close of the eWG discussions, consensus was not reached on the following points. These may require further discussion by the CCFFP.

- The basic principles of (i) the risk of biotoxin presence in the scallop meat and roe, and (ii) permitting the addition of water as an ingredient. Note that these matters have already been addressed in CCFFP discussions on the *Standard for Raw, Fresh and Quick Frozen Scallop Products*.
- The appropriateness of permitting the processing of dead scallops and the inclusion of guidance (refer to text in brackets in section X.3.1.3) for the disposal of dead scallops (similar to the guidance found in section 7.6.4.1 of the code – *Processing of Live and Raw Bivalve Molluscs)*.
- The feasibility of accurately declaring 'added water' for fresh scallops with added water. Concerns have been raised regarding the potential for unintentional water absorption and loss throughout the processing steps which may not be adequately addressed through control measures. The current guidance on the control measures for added water can be found in sections X.2.2.3, X.3.2.7 and X.3.2.13.

5. Canada would like to thank the members for their valuable participation and input in revising this draft Code.

RECOMMENDATION

6. The Committee is invited to consider the eWG Report and the Proposed Draft Code of Practice in Appendix II for advancement in the step process.

Appendix I

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Appendix II

PROPOSED DRAFT CODE OF PRACTICE ON THE PROCESSING OF RAW, FRESH AND QUICK FROZEN SCALLOP PRODUCTS

(At Step 3 of the Procedure)

TABLE OF CONTENTS

SECTION 2 DEFINITIONS

For the purpose of this Code:

Refrigerated Sea Water	is sea water in fixed tanks chilled by mechanical refrigeration.
Roe-on scallops	is the raw scallop adductor muscle meat and the attached roe remaining after the shell and viscera have been completely removed.
Scallop Meat	is the raw scallop adductor muscle meat remaining after the shell, viscera and roe have been completely removed.
Scallop Meat or Roe-on Scallops with Added Solution of Water and Phosphate	is the quick frozen Scallop Meat or Roe-on Scallops with the addition of a solution of water and phosphate and optionally salt.
Scallop Meat or Roe-on Scallops with Added Water	is the fresh Scallop Meat or Roe-on Scallops with water added as an ingredient.
Shucking	is the process of removing the Scallop Meat or Roe-on Scallops from the live whole scallops.
Viscera	For the purpose of this code, is comprised of all the internal organs excluding the Roe.
Roe	is the scallop gonad containing the ovary and testis.

SECTION X PROCESSING OF FRESH AND QUICK FROZEN RAW SCALLOP PRODUCTS

This section provides examples of potential hazards and defects and describes technological guidelines, which can be used to develop control measures and corrective actions. At a particular step, only the hazards and defects which are likely to be introduced or controlled at that step are listed. It should be recognised that in preparing a Hazard Analysis and Critical Control Point **(**HACCP**)** and/or Defect Action Point **(**DAP**)** plan it is essential to consult Section 5 which provides guidance for the application of the principles of the HACCP and DAP analysis. However, within the scope of this Code of Practice it is not possible to give details of critical limits, monitoring, record keeping and verification for each of the steps since these are specific to particular hazards and defects and to the control measures used.

As stressed by this Code, the application of appropriate elements of the pre-requisite program (Section 3) and HACCP principles (Section 5) at these steps will provide the processor with reasonable assurance that the essential quality, composition and labelling provisions of the Draft Standard for Raw, Fresh and Quick Frozen Scallop Products (under development) will be maintained and food safety issues controlled.

The commercial harvest practices of scallops can be quite variable. For instance, shucking can occur on board scallop vessels equipped for such operations or in on-shore processing facilities. For long fishing voyages, scallops are shucked and washed on deck in totes with fresh saltwater or a fresh saltwater and ice solution, then drained, bagged and stored below deck with freshwater ice. The exposure time to water during washing and melting ice during storage can affect both the product quality and composition. For the product to meet international and/or regulatory standards aimed to prevent consumer fraud and unfair trade practices, scallopers and processors should have controls in place that prevent addition of freshwater to the product to the extent attainable and practical, using proper equipment and handling practices.

This Code covers the preparation and handling of fresh Scallop Meat and Roe-on Scallops on board long haul harvesting vessels. It also covers the preparation and handling at the processing facility of fresh Scallop Meat or Roe-on Scallops with our without added water and quick frozen Scallop Meat or Roe-on Scallops with or without added solution of water and phosphate. This code also addresses the control of unintentional and intentional addition of freshwater during processing and the addition of phosphate solutions to enhance water retention. The example of the flow diagram (Figure X.1) will illustrate some of the common steps involved in the processing of scallop products

X.1 GENERAL ADDITION TO PRE-REQUISITE PROGRAMME

Section 3 - Pre-requisite programme gives the minimum requirements for good hygienic practices for a harvesting vessel and processing facility prior to the application of hazard and defect analysis. In addition to the guidelines described in Section 3, the following should also be considered:

- Material used to contain shucked scallops on ice should be clean, sanitary and in good repair
- When scallops are shucked they should be thoroughly rinsed with clean sea water or salt water made from potable water to minimize sand, shell, detritus and foreign material in the finished product.
- Sea water used for onboard washing and pre-chilling should be from clean areas and not be contaminated by the water pumping system or improper location of the water intake.

X.2 IDENTIFICATION OF HAZARDS AND DEFECTS

Refer also to Section 5.3.3 Conduct Hazard and Defect Analysis.

X.2.1 Hazards

Refer also to Section 5.3.3.1 Identification of Hazards and Defects. When marketing Scallop Meat and Roe-on Scallops, the products should meet the contaminants and relevant hygienic provisions outlined in the *Standard for Raw, Fresh and Quick Frozen Raw Scallop Products (under development).*Where marketing of roe-on scallops is concerned, this product should meet the contaminants and relevant hygienic provisions outlined in the *Standard for Live and Raw Bivalve Molluscs* (CODEX STAN 292-2008).

This Section describes the main hazards and defects specific to Scallop Meat and Roe-on Scallops.

X.2.1.1 Marine Biotoxins

Marine biotoxins such as paralytic shellfish poisoning (PSP), amnesic shellfish poisoning (ASP) and diarrhetic shellfish poisoning (DSP) are not reasonably likely to present a hazard in properly processed commercial scallop adductor muscle meat. Scientific data has shown that when present, PSP, ASP and DSP toxins are concentrated in the viscera. [During periods of high toxicity, toxins can accumulate at a hazardous level in roe-on scallops and preventive measures should be in place in accordance with the *Standard for Live and Raw Bivalve Molluscs* (CODEX STAN 292-2008).] Biotoxins may also migrate into the adductor muscle (meat) if the viscera and roe are not removed while the scallop is alive. Scientific information is still limited for toxins in some scallop species therefore the hazard analysis will need to consider marine biotoxins in scallop meat as a potential hazard. This hazard will be excluded or included based upon the species, processing methods, and the available country specific scientific evidence data for toxins in that species.

During shucking to produce Scallop Meat, incomplete removal of the viscera and roe could occur and may introduce biotoxin and pathogen health hazards associated with whole bivalves.

X.2.2 Defects

X.2.2.1 Parasites

Parasites are known to affect the respiratory system, organs and the connective tissue of organs (i.e. Perkinsus spp.) in bivalve molluscs. *Sulcascaris sulcata*, a nematode, has been known to parasitize the adductor muscle of scallops; however, this species matures in cold blooded marine turtles and is not considered a hazard to humans. Never the less, the infestation of parasites in scallops or the presence of cysts can be aesthetically offensive to consumers.

X.2.2.2 Objectionable and Foreign Matter

Sand, silt, detritus and foreign matter may accompany harvested scallops from the natural environment to shipboard. If not properly rinsed away, sand and silt may become embedded between the fibers of the adductor muscle, commonly associated with muscle contraction at time of death. Excessive amounts of foreign matter could result in undesirable physical attributes in the final product that would be objectionable to consumers, such as the grinding of teeth on sand and silt while chewing.

X.2.2.3 Added water Undeclared or Exceeding Level Declared

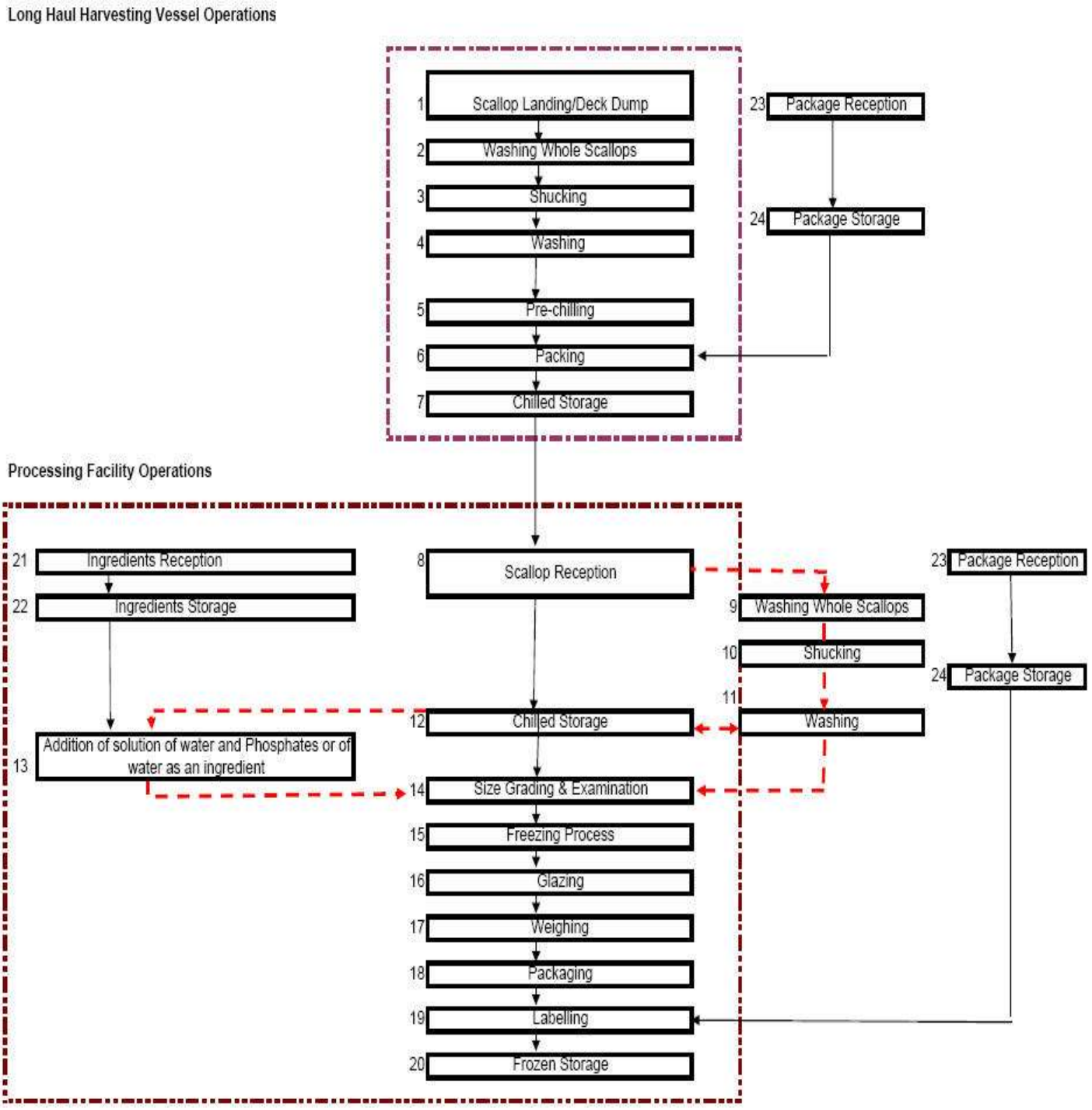
It has been shown that freshwater in contact with scallop adductor muscle meat will increase its moisture content over time. Scallop adductor muscle can uptake and retain added water through several physical and chemical mechanisms exhibiting various degrees of water binding strength. The scallop adductor muscle meat should not be in contact with fresh water, including melting fresh water ice, for an amount of time greater than that required for preparation and processing otherwise the product will absorb excess water, which may be construed as an unfair trade practice or consumer fraud. Proper processing controls should be in place by the processor in order to avoid or limit any water uptake to that which is technologically avoidable.

In the case of scallop products processed with a solution of water and phosphate or added water alone, proper processing controls should be in place to ensure that the amount of water added is consistent with the water declaration on the label (to avoid unfair trade practice or consumer fraud).

The use of a solution of water and phosphate is only permitted in quick frozen scallop products. Phosphates are to be applied in conformity with section 3 of the *General Standard for Food Additives* (CODEX STAN 192-1995).

This flow chart is for illustrative purposes only. For in-factory HACCP implementation a complete and comprehensive flow chart has to be drawn up for each process

[Figure X.1]


Long Haul Harvesting Vessel Operations
1 Scallop Landing/Deck Dump
2 Washing Whole Scallops
3 Shucking
4 Washing
5 Pre-chilling
6 Packing
7 Chilled Storage
23 Package Reception
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21 Ingredients Reception
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13 Addition of solution of water and Phosphates or of water as an ingredient
8 Scallop Reception
12 Chilled Storage
14 Size Grading & Examination
15 Freezing Process
16 Glazing
17 Weighing
18 Packaging
19 Labelling
20 Frozen Storage
9 Washing Whole Scallops
10 Shucking
11 Washing
23 Package Reception
24 Package Storage

X.3 PROCESSING OPERATIONS

X.3.1 Operations

Scallop fishing may be either short haul or long haul and is differentiated by the time at sea and the distance of the fishing ground from the land based processing facility. "Short haul voyages" are typically 1 - 2 days in the case of inshore wild caught fisheries and daily as in the case of aquaculture-controlled harvest. "Long haul offshore voyages" are typically up to 15 days, thus the scallops are shucked, washed, pre-chilled, drained and bagged on deck, then stored in iced or refrigerated storage below deck until the scallop vessel has landed on shore. This section is designed to augment the handling and processing of fresh Scallop Meat and Roe-on Scallops on board long haul harvesting vessels. After landing, additional processing steps are generally done in the processing facilities.

X.3.1.1 Scallop Landing/Deck Dump (Processing Step 1)

Potential Hazards: *Marine biotoxins*

Potential Defects: *Dead scallops,*

Technical Guidance:

- Live scallops should be collected and placed in clean storage containers without undue delay and with care to avoid contamination.
- Rough handling of live scallops should be avoided to minimize stress and injury which could lead to the death of scallops prior to processing.
- [Preventive measures such as on-board biotoxin screening methods should be used when the intent is to produce scallop meat for which marine biotoxins cannot be excluded as a hazard.]

X.3.1.2 Washing Whole Scallops (Processing Step 2)

Potential hazards: *Microbiological contamination, chemical and physical contamination*

Potential defects: *Unlikely*

- The outsides of the shells should be washed free of mud, detritus and sand.
- Scallops having formed clumps should be declumped.
- Washing should be carried out using pressurized clean sea water or salt water made from potable water.

X.3.1.3 Shucking (Processing Step 3)

Potential Hazards: *Marine biotoxins in viscera and roe; Microbiological Contamination*

Potential Defects: *Remaining viscera, remaining roe (in the case of Scallop Meat), dead scallops*

Technical Guidance:

- Live scallops should be shucked as soon as possible.
- [Dead scallops observed during shucking should be discarded because once a scallop dies biotoxins, if present in the viscera and roe, can migrate into the meat. In addition, the quality of the meat and roe in dead whole scallops may be unacceptable because the time of death is unknown.]
- Removal of the viscera and roe in live freshly harvested scallops prevents the migration of biotoxins, if present, into the adductor muscle (meat).
- For Scallop Meat, care should be taken to ensure that the viscera and roe are completely removed.
- For Roe-on Scallops, care should be taken to ensure that the viscera is removed. If biotoxins are present in the viscera control measures should be in place to ensure the roe-on scallops are safe for human consumption (i.e. further sampling of the roe).
- Care should bet aken to insure that shucking tables, containers, and knives are properly cleaned and sanitized.
- The shucked scallops should proceed immediately to the next steps to minimize their exposure to ambient temperatures above 4 °C.

X.3.1.4 Washing (Processing Step 4)

Potential Hazards: *Shell fragments*

Potential Defects: *Objectionable matter, foreign matter, Uptake of water not declared on label*

Technical Guidance:

- Clean sea water or potable salt water should be used to wash scallops after shucking to remove any objectionable matter such as remains of viscera, shell fragments, sand, and foreign matter such as debris.
- Scallops should be gently agitated to allow separation from each other and to ensure the removal of objectionable and foreign matter.
- If salt water other than sea water is used it should be prepared from potable water and 3% of food grade salt to minimize the uptake of moisture. The salinity of the salt water should be monitored.
- If potable fresh water is used, the washing/showering method should be clearly defined and the contact between the water and scallops limited to minimize water uptake to that which is technologically unavoidable.
- The washing schedule (contact time parameters) should be carefully monitored.
- The washed scallops should be adequately drained.
- After washing, the scallops should be immediately processed or refrigerated or iced and kept at the adequate temperature (temperature of melting ice).

X.3.1.5 Pre-chilling (Processing Step 5)

Potential Hazards: *Microbiological contamination*

Potential Defects: *Undeclared added water (applies to pre-chilling using freshwater), decomposition*

Technical Guidance:

- Pre-chilling of the scallop**s** should be employed to reduce the core temperature prior to being placed in chilled storage. This step can minimize the amount of ice melt and consequently freshwater contact with the scallop**s** during chilled storage. Rapid chilling will also minimize subsequent drip loss.
- Pre-chilling should include the immersion of the scallops in refrigerated or iced sea water.
- If freshwater ice is used in conjunction with clean sea water, the contact time for each batch should be kept as short as practical to limit any excessive uptake of water beyond which is technologically unavoidable.
- Water used for pre-chilling should be periodically replaced to minimise the bacterial load and ensure functional water temperature e.g., ≤ 0 °C or ≤ 32 °F) .

X.3.1.6 Packing (Processing Steps 6, 23, 24)

Potential Hazards: *Microbiological contamination*

Potential Defects: *Damaged Scallops*

Also refer to Section 8.5.1 Reception – Packaging, Labels & Ingredients; Section 8.5.2 Storage - Packaging, Labels & Ingredients and Section 8.4.4 Wrapping and Packing~~,~~**.**

Technical Guidance:

- After the scallops are packed in clean containers made of a suitable material appropriate to be in contact with food, a tag or other appropriate identification should be attached to each container to determine the date of harvest and other relevant product information.
- The container should not be too large, should be appropriately filled and not over-stacked in order to facilitate cool air circulation and to prevent scallops from being damaged.
- The scallops should be kept in a clean condition.

X.3.1.7 Chilled Storage (Processing Step 7)

Potential Hazards: Microbiological contamination

Potential Defects: Decomposition, Moisture (added water), physical damage

Also refer to Section 8.1.2 – Chilled Storage

Technical Guidance:

- The containers of scallops should be surrounded by sufficient finely divided ice.
- The chilled storage or storage containers should be adequately drained so that freshwater from the melted ice does not stay in contact with the product near the bottom layer.
- Where ice is used, stored scallops should be examined regularly to ensure sufficient ice cover of the product.
- Temperatures should be monitored to ensure that the stored scallops remain at a temperature of melting ice.
- Containers should be appropriately stacked to facilitate the circulation of cold air and prevent scallop damage.
- The duration of long haul voyages should be limited to the number of days that will assure that at the time of off-loading at shore, the remaining shelf life for all the scallops harvested is adequate.
- Prior to offloading, product and storage information (e.g. dates of harvest in relation to onboard chilled storage locations, etc.) should be considered to facilitate proper utilization of the scallops.
- If the container used to store scallops is not impermeable, it should be necessary to include measures that avoid or limit water uptake to that which is technologically unavoidable (i.e. shorter trips, impervious film between ice and the container).

X.3.2 Processing Facility Operations

This section is designed to augment section 7.6 with additional information on the processing, at the processing facility, of fresh Scallop Meat or Roe-on Scallops with or without added water and frozen Scallop Meat or Roe-on Scallops with or without added solution of water and phosphate.

X.3.2.1 Scallop Reception (Processing Step 8)

Potential Hazards: Marine biotoxins, microbiological, chemical and physical contamination

Potential Defects: Decomposition, undeclared added water, dead or injured scallops. parasites, objectionable matter, foreign matter

Technical Guidance:

- Live scallops should be unloaded without undue delay and with care and adequately chilled to avoid contamination.
- [Whole scallops should be examined to assure they are all still alive, and any dead scallops should be discarded because once a scallop dies biotoxins, if present in the viscera and roe, can migrate into the meat. In addition, the quality of the meat and roe in dead whole scallops may be unacceptable because the time of death is unknown. (See section X.3.1.3).]
- Rough handling of live scallops should be avoided to minimize stress which could lead to the death of scallops prior to processing.
- Product specifications could include the following characteristics:
  - organoleptic characteristics such as appearance, flavour**,** odour, texture, etc;
  - species identification;
  - acceptable upper limit moisture content;
  - workmanship (e.g. presence of viscera/roe (in the case of adductor muscle meat only);
  - chemical contamination such as heavy metals, pesticide residues, etc.;

- presence of visible parasites;
- foreign matter.

- [For the marketing of roe-on scallops, a processor should have a process in place to ensure that the toxicity content meets the regulatory requirements of the official agency having jurisdiction over the harvest area. This could be accomplished by adhering to a toxin monitoring programs or end product testing.]
- Scallop handlers and appropriate personnel should acquire skills in sensory evaluation techniques to ensure incoming lots meet essential quality provisions of the *Standard for Raw, Fresh and Quick Frozen Raw Scallop Products (under development).*.
- Appropriate procedures should be in place for scallop handlers and appropriate personnel to verify that species specifications are met. This could include but not limited to reviewing product information in commercial documentation, etc.
- Scallops should be rejected if known to contain harmful or extraneous substances, which will not be eliminated or reduced to an acceptable level by normal procedures of sorting or preparation. An appropriate assessment should be carried out to determine the reason(s) for loss of control and the HACCP or DAP plan should be modified where necessary.

X.3.2.2 Washing Whole Scallops (Procesing Step 9)

Potential hazards: *microbiological contamination, chemical and physical contamination*

Potential defects: *Unlikely*

Technical Guidance: Refer to section X.3.1.2

X.3.2.3 Shucking (Processing Step 10)

Potential Hazards: *Marine biotoxin; Microbiological Contamination*

Potential Defects: *Remaining viscera, remaining roe (in the case of Scallop Meat), dead scallops,*

Technical Guidance: Refer to section X.3.1.3

X.3.2.4 Washing (Processing Step 11)

Potential Hazards: *Shell fragments*

Potential Defects: *Excessive water, objectionable matter, foreign matter*

Technical Guidance: Refer to section X.3.1.4.

X.3.2.5 Chilled Storage (Processing Step 12)

Potential Hazards: *Microbiological contamination*

Potential Defects: *Decomposition*

Also refer to Section 8.1.2 Chilled Storage

Technical Guidance:

- For scallops packed in containers, their identification tag facilitates the determination of the harvest date. Stock rotation schemes should be used to ensure proper utilisation of the scallops.
- Products should be stored at 4C or below.The temperature should be monitored during chilled storage.
- Product should be stacked in a manner that would facilitate adequate and uniform temperature distribution to all parts of the stored product.
- If freshwater ice is used to chill scallops, care should be taken to provide adequate drainage and minimize water uptake (See section X.3.1.7). Any measurable added water from ice should be properly labelled.

X.3.2.6 Addition of a Solution of Water and Phosphate (Processing Steps 13)

Potential Hazards: Unlikely

Potential Defects: Excess water, off-flavours, textures and decomposition, incorrect application and formulation of phosphate solution

Also refer to Section 8.5.1 Reception – Packaging, Labels & Ingredients and Section 8.5.2 Storage - Packaging, Labels & Ingredients.

Technical Guidance:

- The quantity of phosphate solution added to scallops must be limited to the lowest possible level necessary to accomplish the technological purpose (e.g., moisture retention, preservative). Phosphate solutions should not be used for the purpose of adding water to increase net weight however its use will result in the binding of additional water from the phosphate solution into the Scallop Meat. A processor should develop and follow a process for the application of phosphate solutions in order to consistently achieve the functional goals.
- The net weight of the in-process scallop batch should be recorded prior to and following the phosphate treatment in order to be able to calculate the percent added solution for labeling purposes.
- Phosphate use must comply with the requirements of the *Standard for Raw, Fresh and Quick Frozen Raw Scallop Products (under development).*

X.3.2.7 Addition of Water as an ingredient (Processing Step 13)

Potential Hazards: Unlikely

Potential Defects: Inaccurate measurement of water and scallop quantity

Technical Guidance:

- When water is added as an ingredient to fresh scallop products, the amount of water and scallops to which the water is added should be controlled and accurately measured for labelling purposes.

X.3.2.8 Size Grading and Examination (Processing Step 14)

Potential Hazards: Microbiological Contamination

Potential Defects: Decomposition, improper size variation, parasites.

Technical Guidance:

- Size grading of scallop**s** is typically undertaken through mechanical graders of various degrees of sophistication. There is a possibility of scallop**s** becoming trapped in the bars of the graders so that regular inspection and cleaning is required to prevent "carry-over" of old scallop**s**.
- Gray or black adductor meat, which indicates that the scallop was dead at the time of shucking and is likely decomposed and may present a biotoxin hazard, should be culled from the lot.
- Scallops with an objectionable level of parasites should be culled from the lot.
- Exposure to ambient temperatures above 4˚C should be minimal and monitored. Containers of graded and examined scallops should be kept cool to ensure that the internal temperature is kept at or below 4˚C.

X.3.2.9 Freezing Process (Processing Step 15)

Potential Hazards: Unlikely

Potential Defects: Texture deterioration

Refer to Section 8.3.1 Freezing Process

X.3.2.10 Glazing (Processing Step 16)

Potential Hazards: Unlikely

Potential Defects: Unlikely

Refer to Section 8.3.2 Glazing

Technical Guidance:

- Care should be taken to ensure that the entire surface of the frozen Scallop Meat or Roe-in Scallops are covered with a suitable protective coating of ice and should be free of exposed areas where dehydration (freezer burn) can occur during frozen storage.

X.3.2.11 Weighing (Processing Step 17)

Potential Hazards: Unlikely

Potential Defects: Incorrect net weight

Refer to Section 8.2.1 Weighing and Section 8.3.2 Glazing

- Net weight is often determined by weighing glazed scallops and accounting for the weight of the glaze. For that reason, glaze levels should be routinely measured to ensure that proper net weights are identified.
- Scales should be properly adjusted to account for the estimated glaze percentage and re-adjusted when glaze percentage change.

X.3.2.12 Packaging (Processing Steps 18, 23, 24)

Potential Hazards: Unlikely

Potential Defects: Unlikely

Refer to Section 8.5.1 Reception – Packaging, Labels & Ingredients; Section 8.5.2 Storage - Packaging, Labels & Ingredients and Section 8.4.4 Wrapping and Packing

X.3.2.13 Labelling (Processing Steps 19)

Potential Hazards: Unlikely

Potential Defects: Incorrect labelling, undeclared or inaccurately declared added phosphate solution or added water

Also refer to Section 8.2.3 Labelling

Technical Guidance:

- Information declared on the label should comply with the provisions of the *Standard for Raw, Fresh and Quick Frozen Raw Scallop Products (under development).* Labeling must accurately describe the nature of the product so that consumers are not misled and can make an informed choice.
- When solutions of water and phosphates are used in the process or water is added as an ingredient, a system should be in place to ensure that they are properly and accurately declared on the label. (Also refer to subsection X.3.2.6, Addition of a Solution of Water and Phosphate or subsection X.3.2.7. Addition of Water as an ingredient.

X.3.2.14 Frozen Storage (Processing Step 20)

Potential Hazards: Unlikely

Potential Defects: Dehydration, decomposition, development of rancid odours, loss of nutritional quality

Refer to Section 8.1.3 Frozen Storage

Annex

GENERAL GUIDANCE FOR THE PROVISION OF COMMENTS

In order to facilitate the compilation and prepare a more useful comments' document, Members and Observers, which are not yet doing so, are requested to provide their comments under the following headings:

(i) General Comments

(ii) Specific Comments

Specific comments should include a reference to the relevant section and/or paragraph of the document that the comments refer to.

When changes are proposed to specific paragraphs, Members and Observers are requested to provide their proposal for amendments accompanied by the related rationale. New texts should be presented in underlined/**bold** font and deletion in ~~strikethrough font~~.

In order to facilitate the work of the Secretariats to compile comments, Members and Observers are requested to refrain from using colour font/shading as documents are printed in black and white and from using track change mode, which might be lost when comments are copied/pasted into a consolidated document.

In order to reduce the translation work and save paper, Members and Observers are requested not to reproduce the complete document but only those parts of the texts for which any change and/or amendments is proposed.