



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

Thirty-Second Session

Bali, Indonesia

1 – 5 October 2012

Draft Standard for Quick Frozen Scallop Adductor Muscle Meat

COMMENTS AT STEP 6

(Ghana, USA)

GHANA

SPECIFIC COMMENTS

Comment: 2.2.1 Scallop meat

Ghana proposes that the temperature for storing scallop meat be in range. “The fresh product shall be kept below 4 **within 2–4°C.**”

Rationale: Keeping the product below 4°C does not indicate how low the product can be stored. The standard should provide specific temperature or temperature range at which product can be kept to provide sufficient guidance in its implementation.

Comment: 3. ESSENTIAL COMPOSITION AND QUALITY FACTORS

Ghana proposes that the clause be rephrased to read:

3.4.2.1 “Scallop Meat: **The final product shall not be** ~~It is not an acceptable practice to~~ handled and/or stored ~~this product~~ in such a manner that would result in uptake of water beyond small amounts technologically unavoidable under good manufacturing practices compared to what naturally occurs in scallops at time of harvest.”

Rationale: For clarity and to place emphasis on the quality of the final product.

Comment: Clause 3.4.2.2, paragraph 2,

Ghana proposes that the text be moved and placed as a footnote at an appropriate place within the standard.

~~In order to check the conformity with section 3.4.2.1 and 3.4.2.2, a country may establish a scientifically supported criterion. Where a country has relevant scientific information on the characteristics of the scallop species it exports, it may approach an importing country to discuss the implementation of this criterion on a species-by-species basis.~~

Rationale: This provision is relevant for countries involved in export trade. When placed in the footnote it serves as information worth noting during implementation of the standard.

Comment: 9.4 Parasites

Ghana seeks clarification on the rationale for establishing 20% as the maximum limit for the presence of visible parasites stated below.

“[The presence of visible parasites on the near surface of the scallop adductor muscle. shall not exceed 20% of individuals in the sample.]”

UNITED STATES OF AMERICA

In response to CL 2011/15-FFP, the United States respectfully submits the following comments on the Proposed Draft Standard for Fresh and Quick Frozen Scallop Adductor Muscle Meat (at Step 6 of the Procedure). Recommended additional language within sentences is highlighted in bold for the convenience of the reader.

General Comment:

The United States continues to have difficulty with the in-session proposal to include scallop meat with roe-attached within the scope of the Standard. The consequences of moving a product with considerable biotoxin risk into the standard for a product with virtually no biotoxin risk requires further careful consideration. We do not support moving the Scallop Standard forward with roe-on scallops included. The option to allow phosphates for roe-on scallops within the Bivalve Standard is a better solution that has not been considered.

The scientific literature and the history of scallop regulation show that scallop viscera accumulate biotoxins as in other bivalves. While the gonads accumulate fewer toxins, the amount is unpredictable and often exceeds regulatory limits. Properly processed adductor muscle of commercial scallop species is virtually free of biotoxin risk. There are only two known biotoxin illnesses associated with scallops in the United States, where toxic viscera are routinely removed at harvest. One illness resulted from consuming scallop viscera and the other from consuming only scallop roe. Biotoxins have been rarely reported in the adductor muscle of a few commercial European and Japanese species; however, the toxin levels in the adductor muscle alone were well below regulatory limits. When viscera, including roe, are properly removed from fresh commercial scallops, biotoxins do not migrate from the toxic viscera into the adductor muscle.

To including roe-on scallops in the scallop meat standard with provisions adequate to prevent biotoxin poisoning would impose unnecessary barriers to the traditional trade of scallop meat, and would defeat the purpose of a separate scallop meat standard. This is why the Committee agreed to move roe-on scallops out of the Draft Scallop Standard ten years ago.

1. SCOPE: Remove roe-on scallops from the scope, and replace “and/or additives” with “and phosphates” as follows:

This standard also applies to **frozen** processed scallop meat products that ~~have contain~~ added **solutions of** water and/or ~~food additives~~ **phosphates.** ~~; frozen processed product can also be processed scallop meat with roe attached.~~

Reason:

Roe-on scallops require additional preventive monitoring programs for biotoxins and pathogens and do not fit in this standard. Adductor muscle does not have the biotoxin hazard associated with viscera (including gonads), and the adductor muscle does not retain the bacteria and viruses that accumulate in viscera. There is significant evidence showing that scallop roe accumulates unsafe levels of biotoxins. And, there is inadequate evidence to show that the hazard of bacterial and viral pathogens can be ignored for scallops with roe attached. Whole scallops used to produce roe-on scallops need harvest area controls for biotoxins and pathogens. Whole scallops used to produce scallop meat do not require harvest area controls for biotoxins or pathogens.

All roe-on scallops are included in the Codex Standard for Live and Raw Bivalve Molluscs (CODEX STAN 292-2008) because it states, *The standard does not apply to scallops when the final product is the adductor muscle only.* The bivalve standard does not allow phosphate use for roe-on scallops. If roe-on scallops are included in the Scallop Standard allowing phosphate solutions, then there will be dual conflicting standards.

An earlier draft of the Scallop Standard (CX/FFP 02/20) included all scallops. That draft required roe-on scallops to also meet the requirements of the Bivalve Standard because of their different product hazards. This issue was resolved when the Committee agreed to move roe-on scallops to the Bivalve Standard where they were a better fit.

“Frozen” was added to align with the Food Additives section. “Solutions” was added for accuracy. The term “additives” was replaced with “phosphates” to prevent confusion, as no other additives are allowed or contemplated. (See comment for 2.1.2).

Alternatives:

If phosphate solutions should be allowed in roe-on scallops, then the best approach is to amend the Bivalve Standard. This would keep the scallop products aligned with their appropriate safety provisions.

If roe-on scallops are moved to the Scallop Standard, then separate provisions for biotoxin and pathogens would be needed, or a general referral made to the Bivalve Standard for only roe-on products. The provisions for scallop meat would need to be clearly separate, and indicate that biotoxin and pathogen monitoring are normally unnecessary. If roe-on scallops are moved, then live scallops should also be moved into the Scallop Standard because most of their provisions would then be in place, and all the scallops could be appropriately included in one standard. At minimum, all roe-on scallop products (fresh, frozen, phosphate-treated or not) should be moved into the Scallop Standard in order to prevent certain continued confusion if they were split between standards.

The United States supports amending the Bivalve Standard to allow phosphate solutions in only roe-on scallops, using a non-misleading name. This is the best long-term solution because it aligns the products with the standards based on food safety rather than quality, resulting in better public protection.

Scope, ii): Amend as follows:

This standard does not apply to:

ii) Live scallops and scallop meat in which the shell ~~and all~~, viscera **or roe** are attached. These products shall meet the requirements that apply to live and raw bivalve molluscs in the Standard for Live and Raw Bivalve Molluscs (CODEX STAN 292-2008).

Reason: See reason for amending the Scope above.

2. DESCRIPTION

2.1 Product definition

2.1.1 Scallop Meat: Amend definition as follows:

~~Scallop meat is scallop meat without added water, food additives, or other food ingredients. Raw fresh or quick frozen~~ ‘Scallop meat’ is prepared by completely removing the adductor muscle from the shell and completely detaching the viscera and roe ~~if applicable~~ from the adductor muscle of live scallops. **‘Scallop meat’ contains no added water, food additives, or other ingredients.** The **adductor** muscle is presented whole.

Reason:

Scallop meat is primarily defined by no shell and viscera, not as scallop meat without added water. The fresh or frozen options are covered elsewhere and are not unique to scallop meat.

“Scallop meat with roe attached” is not “scallop meat”. If roe-on scallops were included, they would need a separate definition and separate provisions throughout the standard.

2.1.2 Scallop Meat Processed with Added Water²: Amend heading and content, and delete footnote as follows:

2.1.2 Scallop Meat ~~Processed~~ with Added **Solution of Water and Phosphates**

~~Fresh or quick frozen raw processed scallop meat is prepared by deliberate addition~~ **‘Scallop meat with added solution of water and phosphates’ contains ‘scallop meat’ (as defined in 2.1.1) and a solution of water, phosphates, and may contain food additives and optionally salt.**

Reason: This product is more accurately and fairly described by “added solution of water and phosphates”, rather than “added water”, or “deliberate addition of water”. It is apparent that an added solution is deliberate, rather than incidental. Our comments carry this term forward, and into the product name.

We are not aware of commercial processors that add only water to scallops, beyond what is technically unavoidable during washing and cooling. A water-added only product should not be included in the Standard.

The footnote is no longer applicable.

2.2 Process definition:

2.2.1 Scallop Meat: Revise as follows:

After removal of the shell and viscera under good hygiene practices, the product is rinsed and stored with a ~~view to~~ **method that** minimizes absorption of water to the extent that is technologically ~~necessary~~ **practicable**. The fresh product shall be kept below 4°C. Product, intended to be frozen shall be subjected to a freezing process ~~and shall comply with the conditions laid down hereafter.~~ ~~The freezing process shall be~~ carried out in appropriate equipment in such a way that the range of temperature of maximum crystallization is passed quickly, in accordance with the requirements of the Recommended International Code of Practice for the Processing and Handling of Quick Frozen Foods (CAC/RCP 8-1976).

The recognized practice of repacking quick frozen products under controlled conditions which will maintain the quality of the product, followed by the reapplication of the quick freezing process as defined, is permitted.

These products shall be processed and packaged so as to minimize dehydration and oxidation.

In order to prevent economic fraud and unfair trade practices, harvesting, storage and handling must be conducted in accordance with good manufacturing practices.

Reason:

The term “with a method” is more precise than “with a view”.

The term “technologically practicable” appears to fit the intended meaning better than “technologically necessary”.

To separate inadvertently combined paragraphs and remove unnecessary words.

To move 3.4.2 from the ‘Final product’ section to a more appropriate location under the ‘Process definition’.

2.2.2 Scallop Meat Processed with Added Water: Revise as follows:

After removal of the shell and viscera under good hygiene practices, the product is rinsed and stored with a method that minimizes absorption of water to the extent that is technologically practicable. The fresh product shall be kept below 4°C. The product is subject to the addition of water (e.g. soaked in a bath of potable water), ~~with or without additives.~~ **phosphate solution (e.g., soaked, sprayed).** The amount of added ~~water~~ **solution** shall be controlled **and accurately measured for labeling purposes.** ~~The product, intended to be frozen~~ shall be subjected to a freezing process ~~and shall comply with the conditions laid down hereafter.~~ ~~The freezing process shall be~~ carried out in appropriate equipment in such a way that the range of temperature of maximum crystallization is passed quickly, in accordance with the requirements of the Recommended International Code of Practice for the Processing and Handling of Quick Frozen Foods (CAC/RCP 8-1976).

The recognized practice of repacking quick frozen products under controlled conditions which will maintain the quality of the product, followed by the reapplication of the quick freezing process as defined, is permitted.

These products shall be processed and packaged so as to minimize dehydration and oxidation.

In order to prevent economic fraud and unfair trade practices, harvesting, storage and handling must be conducted in accordance with good manufacturing practices.

Reason:

In parallel with 2.2.1, to indicate that water absorption is minimized during onboard storage for scallop meat even if it is destined for later addition of phosphate solutions.

To exclude products where only water is added.

To emphasize the importance of measuring solution uptake for fair labeling.

To eliminate the option for adding water only (See comment for 2.1.2).

To reflect that phosphate solutions are allowed only in frozen product.

To separate inadvertently combined paragraphs and remove unnecessary words.

To move 3.4.2 from the final product section to a more appropriate location under the process definition.

3. ESSENTIAL COMPOSITION AND QUALITY FACTORS

3.1 Scallop Meat: Include subsection 3.4.2.1 from the “Final Product” subsection, as follows:

The product shall be prepared from sound and wholesome scallops which are of a quality suitable to be sold fresh for direct human consumption.

It is not an acceptable practice to handle and/or store this product in such a manner that would result in uptake of water beyond small amounts technologically unavoidable under good manufacturing practices compared to what naturally occurs in scallops at time of harvest.

Reason: The water content discussion is better located under ‘Scallop meat’ in parallel with the water content discussion for ‘scallop meat with added water’ in subsection 3.2 below (See comment for 3.4.2.1)

3.2 Scallop Meat Processed with Added Water: Amend heading and content as follows:

3.2 Scallop Meat ~~Processed with Added~~ **with Added Solution of Water and Phosphates**

The product shall be prepared from sound and wholesome scallops which are of a quality suitable to be sold fresh for direct human consumption.

~~For scallop meat products processed with added water and/or food additives,~~ **Added solutions of water, and/or food additives, phosphates** and salt are permitted to the extent that **the solution uptake is accurately measured and labeled and** their use is acceptable in accordance with the law or custom of the country in which the product is sold.

~~Any Water added~~ shall be of potable quality, **phosphates shall be food grade, and Added** salt shall comply with the Codex Standard for Food Grade Salt (CODEX STAN 150-1985).

Reason:

To use uniform terminology.

Accurately measuring the amount of the solution uptake is essential to composition and fair trade labeling.

To help prevent use of non-food grade, industrial phosphates.

3.4 Final Product

3.4.2: Move content of 3.4.2 to subsections 2.2.1 and 2.2.2, Process definition.

Reason: Use of good manufacturing practices addresses the process, and is not an essential composition and quality factor.

3.4.2.1: Move content of 3.4.2.1 to subsection 3.1.

Reason:

This provision fits better under subsection 3.1 for ‘scallop meat’, in parallel to the added water provision listed with subsection 3.2.

All essential composition and quality factors apply to the final product; therefore there is no need to place provisions in a ‘final product’ subsection, which leads to additional unnecessary subsections.

We suggest completely removing the ‘final product’ subsection by moving the customary examination provision (3.4.1) to the ‘sampling, examination and analysis’ section.

3.4.2.2: Delete the first paragraph and move the second paragraph to Section 8 (Sampling, Examination and Analysis)

Reason:

The first paragraph is already covered in subsection 3.2.

The second paragraph discusses sampling, examination and analysis, and should be located in that section.

4. FOOD ADDITIVES

4.2 Scallop Meat Products Processed With Added Water: Amend the section title and content as follows:

4.2 Scallop Meat ~~Products Processed~~ with Added **Solution of Water and Phosphates**

Only the specific additives listed below are allowed in quick frozen ~~raw processed~~ scallop meat products **with added solution of water and phosphates**. ~~to the extent that their use is acceptable within the country of production and in any country to which they are exported.~~ Additives must be applied in conformance with Section 3 of the General Standard for Food Additives (CODEX STAN 192-1995) and with good manufacturing practices as provided in section [X] of the Code of Practice for Processing of Quick Frozen Scallop Meat³.

Humectants:

“Phosphates” listed in ~~Table 1 of the GSFA~~ **food category 09.3.4 (Semi-preserved fish and fish products, including mollusks, crustaceans, and echinoderms) of the General Standard for Food Additives (CODEX STAN 192-1995)** are allowed at a maximum level of ~~5000~~ **2,200 mg/kg** expressed ~~in P₂O₅~~ **as phosphorous** (including phosphates naturally present in the shellfish).

Reason:

Uniformity of terminology.

To list the additive functional class and to limit the specific additives allowed in the functional class.

To list a food category used for seafood rather than listing Table 1 of the GSFA that covers all foods.

To align the “maximum level” and the “expressed as” equivalence unit with the GSFA for food category 09.3.4.

That phosphate use must be acceptable in the country of sale is already covered in subsection 3.2, and such statements should be minimized in useful international standards.

5. CONTAMINANTS

5.2: Move the footnote into the body of the subsection and delete footnote reference number, as follows:

The product shall not contain marine biotoxins³ exceeding the levels set out in Section I-5.2 of the Codex Standard for Live and Raw Bivalve Molluscs (CODEX STAN 292-2008) and as sampled and analyzed in accordance with the same Standard.

When scallop meat is prepared in accordance with the Revised Code of Practice for Fish and Fishery Products (CAC/RCP 52-2003) – Section X: Processing of Scallops Meat (under elaboration), marine biotoxins are not reasonably likely to present a hazard in scallop meat. While the hazard analysis will consider marine biotoxins as a potential hazard, this hazard will be excluded or included based upon the species and the available data for toxins in that species.

Reason: Footnotes are often overlooked. This is an important and substantive provision, and one of the principal reasons that scallop meat is not included in the Bivalve Standard. This statement would not apply to whole scallops, or scallops with roe attached, because they normally accumulate biotoxins.

7. LABELLING: Edit subsections 7.1.1 and 7.1.2 and move information from the last paragraph of 7.6 to new subsection 7.1.3 as follows:

7.1 Name of the Food

The name of the product shall be:

7.1.1 Scallop Meat

The name for 'scallop meat' (as defined in 2.2.1) shall be "Scallop Meat", or "Scallops" ~~"X scallops if it conforms with the product description outlined in 2.1.1. or~~

7.1.2 Scallop Meat ~~Processed~~ with Added Solution of Water and Phosphates

~~"X scallops with added water", 'Preparation of X scallops with added water'~~

The name for 'scallop meat with added solution of water and phosphates' (as defined in 2.2.2) shall be "Scallop Meat (or Scallops) with X% Added Solution of Water, Phosphates, (and Salt)", or a like name as allowed in the country of sale, which differentiates the product from "scallop meat" and is not misleading to the consumer. ~~if it conforms with the product description outlined in 2.1.2.~~ "X" is the percentage by weight of the added solution in the final product.

~~"X" in 7.1.1 and 7.1.2 being the common or usual name of the species of scallops according to the law, custom and practice in the country in which the product is to be distributed in a manner not to mislead the consumer.~~

7.1.3 In addition to the name identified in 7.1.1 and 7.1.2, the common and or scientific species names shall be identified as determined by the competent authority in the country where the product is sold.

Reason:

For uniformity and clarity.

To assure that the percent added phosphate solution is part of the product name. In countries that allow phosphate solutions in scallop meat, generally only the percent added phosphate solution is labeled. It is not necessary to label both the percent phosphate solution and the percent scallop meat in these products because these are not ground or formed products. Whole adductor muscles are recognizable, and the percent phosphate solution is self-limiting, both technologically, and by consumer acceptance.

New subsection 7.1.3 moves the provision found in the last paragraph of subsection 7.6 to a proper location. It also replaces the previous "X Scallops" paragraph because, where species names are required, the required labeling format may vary by country and should not be specified.

Subsection 7.3: Remove subsection, and footnote #5.

Reason: The comment for subsection 7.1.2 (above) introduces assurances of adequate labeling of added phosphate solutions within the name of the product.

7.6 Labelling of Non-Retail Containers: Remove the last paragraph.

Reason: Species labeling is covered by the "X" term in the "Name of the food". Or, as we suggest, by new subsection 7.1.3 which covers this provision (see 7.1.3 above). This provision should apply to both non-retail and retail containers.

8. SAMPLING, EXAMINATION AND ANALYSIS

8.1 Sampling: Edit the second line as follows:

The sample unit is the primary container, or for individually quick frozen ~~products~~ or bulk packaged **products**, is at least a 1 kg portion of the ~~sample unit~~ **package**.

Reason: Clarity. The "sample unit" is not a portion of the "sample unit".

8.3 Determination of Pieces and Count: Edit formula as follows:

$$\% \text{ Scallop Pieces} = \frac{\Sigma \text{ Weight of scallop pieces in a sample unit}}{\text{Weight of sample unit}} \times 100$$

Reason: Correction to match previous draft.

8.4 Determination of Net Weight of Products Covered by Glaze: Revert to the methods listed in previous Draft Standard (ALINORM 10/33/18, Appendix VII), or revise as follows:

~~8.4 Determination of Net Weight of Products Covered by Glaze~~

i) Products covered by glaze (individually quick frozen): Official method AOAC 963.18 net contents of frozen seafoods.

ii) Block frozen products: AOAC Official Method 963.13 Drained Weight of Frozen Shrimp or Crab Meat, or AOAC Official Method 963.60 Drained Weight of Frozen Crab Meat. In addition to either AOAC procedure, block frozen scallops shall be thawed inside waterproof bags to prevent contact with, and absorption of, the water used to thaw the product.

Reason: The previous draft included better methods for both individually quick frozen (IQF) and block frozen products. AOAC method 963.18 is applicable to glazed IQF products; however, a method is still needed for block frozen product. Scallops are frequently block frozen, both with and without water added to the package to help protect from dehydration.

New subsection 8.7: Add new subsection 8.7 as follows:

8.7 Determination of the presence of viscera

Scallop meat is examined for the presence of any visible scallop viscera attached to the adductor muscle or loose in the package (such as remains of gills, mantle, hepatopancreas, intestinal tract and roe).

Reason: Examination for viscera should be an independent provision because of the hazard of biotoxins in viscera. Viscera (including roe) must be absent to eliminate the biotoxin hazard.

New subsection 8.8: Move second paragraph of 3.4.2.2 to new subsection 8.8 as follows:

8.8 Determination of added water

In order to check the conformity with subsections 3.1 and 3.2, a country may establish a scientifically supported criterion. Where a country has relevant scientific information on the characteristics of the scallop species it exports, it may approach an importing country to discuss the implementation of this criterion on a species by species basis.

Reason: This provision, currently listed under subsection 3.4.2.2 (Essential Composition and Quality Factors), belongs under Section 8 (Sampling, Examination, and Analysis).

9. DEFINITION OF DEFECTIVES

9.4 Parasites: Include bracketed provision.

Reason: “While wild harvested scallops may harbor parasites, levels above 20% are likely to be rejected by consumers. There are no documented studies supporting this cutoff. But some evidence from consumer complaints and FDA product examination suggests that this is about where people notice and complain about the presence of small but visible parasites.

9.5 Objectionable matter: Remove subsection (i). Remove brackets and edit subsection (ii) as follows:

ii) The presence of sand, shell or other similar particles that is visible in the thawed state or detected by chewing during sensory examination, affecting more than 10% of the sample by weight.

Reason:

Subsection (i) allowed 10% of the meats to be affected with viscera. The presence of any viscera presents a potential biotoxin hazard, and its inclusion as a quality defect is dangerous despite reference to subsection 5.2. See our comment for Section 10 (Lot Acceptance) that covers this concern.

We believe a 5 to 10 % tolerance for sand is reasonable. The provision for shell was moved from subsection (i) to subsection (ii) where it is a better fit.

10. LOT ACCEPTANCE

New subsection (i): Add new subsection before (i) (and renumber other subsections) as follows:

(i) There is no tolerance for the presence of viscera determined according to subsection 8.5 because of the biotoxin hazard that may be associated with even small quantities of viscera.

Reason: Special attention should be accorded the potential biotoxin hazard in scallop viscera (see comment for subsection 9.5).