



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

Thirty-Second Session

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1 – 5 October 2012

Draft Standard for Fresh/Live and Frozen Abalone (*Haliotis* spp)

COMMENTS AT STEP 6

(Australia and Thailand)

AUSTRALIA

Specific Feedback:

Australia recommends that the following text be amended as follows:

a) Section 1 (Scope):

‘Chilling or freezing is done in such a way that essentially the characteristics of live abalone are retained.’
(note: the inclusion of a full stop).

b) Section I-5.2

‘...meets with the marine biotoxins levels in the Standard for...’ (note: removal of ‘s’)

c) Section I-7.4 (Labelling of Non-retail Containers)

‘...is clearly identifiable with the accompanying documents.’ (note: removal of ’’)

d) Section II-4 (Food additives)

‘For raw fresh chilled or frozen abalone any antioxidants that may be used are listed in food category...’
(note inclusion of an ‘s’)

Rationale: To correct typographical errors.

e) Section I-2.2

‘Live abalone ~~are harvested live from a harvesting area or farm~~ **may be wild caught or farmed**. They may be purged in clean sea water and/or drained prior to packaging for direct human consumption or for further processing as in II-2.2.’

Rationale: To be clear on potential origins

Section I-8.4 (Determination of Biotoxins)

Australia recommends the deletion of the following table and the inclusion of the text in square brackets:

Provision	Methodology	Principle	Type
Saxitoxin group	AOAC Official Method 2005.06 (Paralytic Shellfish Poisoning Toxins in Shellfish) four matrices and 12 toxins	LC-FL	II

‘Competent authorities should use the “Performance Criteria and Principles for Marine Biotoxin Methods” when selecting appropriate methodology for determination of biotoxin levels in abalone.’

Rationale: CCFFP have agreed that specific marine biotoxin methods should not be listed in the Raw and Live Bivalve standard. A CCFFP working group has drafted marine biotoxin performance method criterion (for reference and screening tests) for inclusion in the Raw and Live Bivalve Mollusc Standard. It is pertinent to ensure that the approach taken with respect to marine biotoxin analysis is consistent across the abalone standard and bivalve standard. Therefore, Australia recommends that the abalone standard cross refers to the bivalve standard regarding use of appropriate marine biotoxin analytical methods.

f) Section II-2.1 (Product Definition)

Australia recommends inclusion of the text in square brackets.

‘Section II-5 of this standard does not apply to processed abalone meat that has the viscera and epithelium removed.’

Rationale: Abalone which has had the viscera (shucked) and epithelium removed (e.g. canned abalone) should not be required to meet Section I-5.2 (as cross referenced in II-5). Scientific evidence demonstrates that removing the viscera and epithelium during processing significantly reduces the risks associated with abalone and marine biotoxins. Scientific studies on 3 separate species of abalone (*H. laevigata*¹, *H. tuberculata*², and *H. midae*³) demonstrate that ~70% of any toxin present is removed. Due to low propensity for abalone to take up toxins this reduction is an effective risk management step.

g) Section II-8.5.1 (Procedures for Thawing) & Section II-9.4 (Texture)

Australia recommends removal of the following text:

For frozen product, the sample is thawed by enclosing it in a film type bag and ~~immersing in water~~ allowing it to thaw at room temperature or in a refrigerator (at 2-6 °C). The complete thawing of the product is determined by gently squeezing the bag occasionally so as not to damage the texture of the abalone, until no hard core or ice crystals are left.

Rationale: Independent research carried out by Australian abalone processors that have produced frozen abalone meat for further processing has determined that thawing of frozen abalone in any manner other than at room temperature or in a refrigerator will cause the flesh in a significant percentage of the pieces of meat to exhibit the defects described in Section II-9.4 Texture, especially after further processing. In extreme cases the flesh will resemble cream cheese and can be squeezed out of the outer skin of the meat leaving a hollow casing. The research has shown that this effect is not influenced by the speed of freezing or the freshness of the abalone meat. It relates entirely to the thawing technique. Australia is not aware of any academic research into this phenomenon.

It is unknown to Australia if this effect is restricted to wild Australian commercial abalone species (*Haliotis rubra*, *Haliotis laevigata*, *Haliotis conicopora* and *Haliotis roei*). However, it is significant enough that

¹ Dowsett N, Hallegraef G, van Ruth P, van Ginkel R, McNabb P, Kiermeier A, Deveney M, McLeod C (2011) Uptake, distribution and depuration of paralytic shellfish toxins in Australian greenlip abalone, *Haliotis laevigata*. *Toxicon* **58**(1):101-111.

² Bravo, I., J. M. Franco, et al. (2001). "Cytological study and immunohistochemical location of PSP toxins in foot skin of the ormer, *Haliotis tuberculata*, from the Galician coast (NW Spain)." *Marine Biology* **138**(4): 709-715

³ Pitcher, G. C., J. M. Franco, et al. (2001). "Paralytic Shellfish Poisoning in the abalone *Haliotis midae* on the West Coast of South Africa." *Journal of Shellfish Research* **20**(2): 895-904

some processors specify on their sales contracts the method of thawing to avoid unwarranted quality claims from the processors carrying out the further processing.

By removing the words “immersing in water” it allows Australian manufactures to thaw at a slower rate, whilst not prohibiting other countries thawing in water that is at room temperature if they so desire.

THAILAND

Thailand would like to express our appreciation to South Africa for preparing this document. We agree with the document in principle, however, we would like to propose our comment as follows:

Draft title

We are of the view that details of the products have already been stated clearly in Section 1 Scope and in order to be consistent with the Standard for Live and Raw Bivalve Molluscs (CODEX STAN 292-2008) that has already been issued. We deem it preferable for this draft document to be entitled “Proposed Draft Standard for Live and for Raw Abalone ~~Fresh Chilled or Frozen Abalone for direct consumption or for further processing~~”