

**SUBMISSION TO:**  
**Food Standards Australia New Zealand**

**Regarding Proposal P1017**  
**Criteria for *Listeria monocytogenes* – Microbiological Limits for Foods**

**FROM:**  
**The Australian Meat Industry Council**  
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Contact:

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## **ABOUT THE AUSTRALIAN MEAT INDUSTRY COUNCIL**

The Australian Meat Industry Council (AMIC) is the recognised Peak Council in Australia representing the post-farm gate sector including export and domestic meat processors, smallgoods manufacturers, wholesalers, distributors, boning rooms and independent retail butchers.

AMIC is registered as an employer organisation pursuant to the provisions of the Fair Work (Registered Organisations) Act 2009.

AMIC has 2,300 members of which approximately 140 are classified as smallgoods manufacturers and 2,100 are retail butchers, many of whom make smallgoods products.

AMIC provides services to employers in the meat industry and these include advice on industrial relations, occupational health and safety, food safety and market access.

In Victoria, Tasmania and Queensland AMIC has a Food Safety Plan which is operated by most retail butchers and some abattoirs and smallgoods manufacturers.

## **ISSUES**

This submission does not attempt to address each of the terms of reference in the review but provides an overall view of the treatment of *listeria monocytogenes* in the manufacture and distribution of smallgoods.

## **FSANZ EXPOSURE PAPER P1017**

The FSANZ proposal paper provides the background, the current standard and the reason for this review. An AMIC summary of this paper follows.

AMIC supports the proposal to change Standard 1.61 to reflect the Codex Alimentarius Commission (Codex), microbiological criteria being :

- ready-to-eat foods in which growth of *L. monocytogenes* will not occur (<100 cfu/g)
- ready-to-eat foods in which growth of *L. monocytogenes* can occur (not detected in 25g).

In a submission in November 2012 AMIC supported Option 1 as being appropriate:

- Option 1 – to include limits in Standard 1.6.1 for *L. monocytogenes* on the basis of whether the food is ready-to-eat and can or cannot support its growth.

## **REASONS FOR SUPPORTING OPTION 1**

In supporting Option 1 AMIC has previously submitted that:

AMIC members have been operating under the zero tolerance requirements applied generally as a result of the current Standard 1.6.1. As a result the issues raised in the exposure paper have

been an ongoing source of concern and have resulted in costly recall of products even where the level of listeria was low and the product will not support growth.

AMIC has cooperated with Meat and Livestock Australia (MLA) in a project to determine which products support the growth of listeria and which products will not support growth.

The project was based on the work of Mejholm and Dalgaard on the control of *L. monocytogenes* in fish referred to in the exposure paper. Their work, uses a predictive model containing eight factors which affect the lag phase and growth rate of listeria in fish products. The MLA project adapted this work to ready to eat meats and was able to demonstrate a similar outcome to that achieved originally by Mejholm and Dalgaard. The project considered the addition of anti listerial ingredients such as organic acids into current formulations for ready to eat meats. The project concluded that it was possible to correctly anticipate if a formulation in ready to eat meats would support the growth of listeria and whether the lag phase could be extended beyond the use by date of the product.

Because of the zero tolerance currently enforced on products which are found to have listeria *monocytogenes* there has been a lack of incentive with smallgoods manufacturers to ensure that their product does not support growth. The MLA project has provided the same manufacturers with an incentive to use a formulation which will ensure that their ready to eat product does not support growth or that the lag phase can be extended beyond the normal use by date.

AMIC is encouraged by the fact that Option 1 also reflects the approach adopted by the Codex Committee on Food Hygiene (Codex 2007).

AMIC notes that changes to the Code under Option 1 would also be consistent with the approach in establishing limits for *L. monocytogenes* in the FSANZ guidance documents (Recall Guidelines and RTE Guidelines).

## **PRODUCTS IN WHICH LISTERIA WILL NOT GROW**

AMIC supports the proposal that:

In classifying whether a food can support the growth of *L. monocytogenes* or not, a number of product characteristics and processing factors need to be considered. For example growth<sup>1</sup> is considered not to occur in a RTE food if:

- it has a pH < 4.4 regardless of water activity; or
- it has a water activity < 0.92 regardless of pH; or
- it has a pH < 5.0 in combination with a water activity of < 0.94; or
- it has a refrigerated shelf life ≤ 5 days; or
- it is frozen (including foods consumed frozen and those intended to be thawed before consumption); or
- it can be validated that the level of *L. monocytogenes* will not increase by ≥ 0.5 log over the food's stated shelf life; or
- the food has not had a listericidal treatment and it can be validated that the level of *Listeria monocytogenes* will not exceed 100 cfu/g throughout the food's stated shelf life.

AMIC is familiar with the paper by Dr Tom Ross, *Defining Short Shelf Life foods with respect to risk from Listeria monocytogenes* (UTas Ref: ROCU 2666) and would suggest that in the case of Ready to Eat meats the refrigerated shelf life of less than or equal to 5 days could be increased to 7 days. This would provide for an increased range of product which is sold from the premises of manufacture (and therefore under strict temperature control) to be categorised as product which will not support the growth of *L. monocytogenes*.

AMIC also supports the approach, where businesses would also be able to validate that the growth of *L. monocytogenes* will not occur in their product because, for example, they have reformulated it or applied a treatment that prevents growth.

For foods that do not receive a listericidal treatment during processing, occasional low level contamination of *L. monocytogenes* may be unavoidable. This is currently recognised in Standard 1.6.1 for ready-to-eat processed finfish for which a sampling plan for *L. monocytogenes* is specified that allows 1 in 5 samples to have 100 cfu/g (n=5, C=1, m=0, M=100). Such products could be considered a “ready-to-eat food in which the growth of *Listeria monocytogenes* will not occur” if evidence can be provided that growth is limited and would not exceed 100 cfu/g throughout the shelf life.

All other products will be assumed to support the growth of listeria and will be subject to a limit of “not detected in 25g”.

## **DEFINITION OF READY TO EAT MEATS**

AMIC notes that the current Standard 4.2.3 has a definition of ready to eat meats which is somewhat different and a review of the definition which reflects Option 1, and the practical effect on the growth and no growth of listeria monocytogenes in ready to eat meat products, would have to be amended.

AMIC also notes that some state legislation has a definition of ready to eat meats and that this will require amendment to comply with the amended Standard.

## **CONCLUSIONS**

AMIC has provided in this submission an overview of the issues which it considers most important for FSANZ to address rather than to attempt to address all the items in the terms of reference for this review.

AMIC appreciates the opportunity provided by FSANZ to have input to this important issue for the meat industry.