

## **Call for Submissions - Proposal P1017**

### **Criteria for *Listeria monocytogenes* - Microbiological Limits for Foods**

**Prepared by United Fresh Incorporated**

#### **Introduction**

United Fresh is the country's only pan-produce organisation – with 84 members – and has existed for 22 years. Our members include, amongst others, the grower organisation Horticulture New Zealand; produce wholesalers MG Marketing, Turners & Growers, Freshmax and Fresh Direct; several fresh produce ready to eat ('RTE') marketers, as well as the supermarket chains Foodstuffs and Countdown.

United Fresh promotes the 5+ A Day programme in New Zealand and manages the New Zealand government funded Fruit in Schools concept, with our message reaching more than 500,000 primary and intermediate school students.

United Fresh supplies 100,000 pieces of fruit and vegetables to low-decile schools each school day, as part of this programme. That adds up to 20 million pieces of produce each year.

United Fresh is the open forum for the horticultural and produce industries where we come together and work on industry 'good' issues. This creates an umbrella across our industry for external communication with government, the public, media or international organisations.

In order to enable United Fresh to understand produce industry related issues across the board in the areas of food safety related standards United Fresh is the New Zealand member of the International Federation for Produce Standards (IFPS). IFPS is the global association of national produce industry associations and has observer status with CODEX and the ISO Technical Committee 34/SC 17 (*Management systems for food safety*). The New Zealand IFPS Director is a previous chairman of this organisation and currently chairs the IFPS chain information committee.

United Fresh is also representing the New Zealand fresh produce industry on the board of IFAVA, the international fruit and vegetable alliance. The United Fresh General Manager is currently the IFAVA co-chair.

The International Fruit and Vegetable Alliance exists to encourage and foster efforts to increase the consumption of fruit and vegetables globally for better health by supporting national initiatives, promoting efficiencies, facilitating collaboration on shared aims and providing global leadership. All of which is based on sound science.

IFAVA focuses on providing support through the following key elements:

- Global Leadership
- Scientific Clearing House
- Communication and Resource Sharing
- Fundraising Framework and Guidance

The International Fruit and Vegetables Alliance's mandate is to support efforts to increase consumption of vegetables and fruit by providing its members with up-to-date information and support resources, including: research literature; surveillance and science reviews; media relations and other communications tools; forums for transferring success stories and sharing resources; and a "5-a-Day" type program starter toolkit, in collaboration with the World Health Organization (WHO).

A significant part of our role is to communicate with government agencies on matters relating to the fresh produce industry as a whole particularly those issues that have the potential to impact on our membership along the entire fresh produce value chain. With this in mind we submit the following comments for your consideration in relation to proposal P1017.

## **Submission**

United Fresh, in principle, welcomes any move that leads to improved food safety assurances for consumers and standardises regulatory requirements for industry participants.

We view the intent of proposal P1017 therefore in a positive light and our submission is aimed at ensuring that industry reality, intent and eventual promulgation of this standard are aligned.

The thrust of Proposal P1017 specifically proposes to replace existing limits for *L. monocytogenes* in nominated foods in Standard 1.6.1 with two sets of criteria for the *L. monocytogenes* in 'RTE' foods based on whether growth of *L. monocytogenes* will occur or not in the 'RTE' food."

The fresh produce industry is in one of the most dynamic and 'difficult to capture' parts of the food sector. The reasons for that include the products' high perishability and crop physiology, the wide range of products falling into the fruits and vegetables category and the complexities of the fresh produce supply chain both globally and nationally.

One of the challenges our industry therefore has, in any event, is a matter of definitions; for example:

- when do horticultural crops become 'produce'?
- what is the definition of 'fresh'?
- what constitutes 'minimally processed'? and
- what products are defined as 'RTE' foods?

Our submission on proposal P1017 is therefore based on the following considerations:

1. The produce industry needs clarity with regards to what Food Standards Australia New Zealand (FSANZ) considers to be 'RTE' food.
2. Can an 'RTE' consisting of components derived from several produce species be treated in the same way as other non-produce 'RTE' products?
3. The availability of sufficient research to ensure good science based decisions can be made.

## Consideration One

***The produce industry needs clarity with regards to what Food Standards Australia New Zealand (FSANZ) considers to be 'RTE' food.***

FSANZ defines “ready to eat” as per the Schedule p22 included with the call for submission on the proposal, which reads as follows:

***“ready-to-eat” in relation to food means food that is ordinarily consumed in the same state as that in which it is sold, and -***

- a) does not require further processing (such as cooking), but may be defrosted, reheated or portioned before consumption; and*
- b) does not include nuts in the shell and whole, raw fruits and vegetables that are intended for hulling, peeling or washing by the consumer.”*

In August 2013, United Fresh made a submission on the Food Bill to the Primary Production Committee of the New Zealand Parliament. One of the concerns we raised was the definition of the term ‘minimal processing’.

The Supplementary Order Paper our submission was based on, stated on p363, p380 and p393 that ‘minimal processing’ includes (but is not limited to) processes such as rinsing, trimming, shelling and post-harvest treatments (for example, waxing, packing, storing and transport).’

The New Zealand Ministry of Health published a document entitled “Microbiological Reference Criteria for Food” in October 1995. That document is still in circulation and is used as reference material. It defines ready to eat foods as:

“Foods which are generally eaten in the state in which they are sold or given a mild (i.e., non-listeriocidal) heat treatment before consumption.

Foods that may come into this category include but are not limited to:

- Cooked meals, e.g., cook/chill, sous vide type foods
- Cooked meats and their products
- Cooked seafoods and their products
- Seafood products that are likely to be consumed in that state, e.g., cold smoked salmon, smoked mussels
- Prepared desserts and bakery products containing cream or other fillings of high water activity
- Dairy products including soft cheeses

## Our Comments

The definition of ‘RTE’ in the schedule of P1017 suggests that raw fruits and vegetables are excluded from the ‘RTE’ category as long as they are “intended for hulling, peeling or washing by the consumer”.

The New Zealand Supplementary Order Paper referred to above suggests that “rinsing trimming, shelling ...” are practices that lead product to be categorised as ‘minimally processed’. The Schedule makes no reference to trimming, the Supplementary Order Paper makes no reference to hulling.

In practical terms, that would suggest that FSANZ under proposal P1017 does not consider strawberries as 'ready to eat' because consumers typically hull their fruit and the Supplementary Order Paper does not consider hulling to be a 'minimal process'.

Apart from there being a lack of clarity how those two related documents are dealing with produce, there is a genuine concern that industry freely mixes up the terms of 'RTE' and 'minimally processed' which will lead to confusion and is not desirable if we are trying to achieve consistently best practice outcomes in relation to food safety.

As far as the strawberries example is concerned, this is considered by research and industry to be a high risk product in relation to microbiological contamination. It may not be washed by the consumer prior to consumption and hulling alone certainly does not remove all potentially present contamination.

### Our Recommendations

United Fresh would like to see firstly, an alignment of terminology to ensure that FSANZ and the Parliament of New Zealand use the same definitions of 'ready to eat' and 'minimally processed' to avoid any confusion in the way produce in those two categories needs to be treated along the supply chain.

If the 1995 New Zealand Ministry of Health Guideline remains in place the 'RTE' definition in that document needs to reflect the outcome of the proposal to amend FSANZ Standard 1.6.1.

## Consideration Two

***Can those produce products that FSANZ defines as 'RTE' be treated in the same way as other non-produce 'RTE' products?***

### Our Comments

Proposal P1017 proposes to replace existing limits for *L. monocytogenes* with two sets of criteria. These being:

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

Consistent with the proposal's intent, this means that the categorisation of product is science based rather than product category specific in the first instance.

The New Zealand Institute of Environmental Science and Research (ESR) states in "Risk Profile *Listeria Monocytogenes* in Ready to Eat Salads" (2005) that:

*"The information summarised above suggest that L. monocytogenes is present as a contaminant in salads or salad vegetables usually at prevalences less than 10%. This might be expected as the bacterium is a ubiquitous environmental contaminant and the foods are not subjected to listericidal treatment. However, the quantitative data indicates that the bacterium is usually present at less than 100 cfu/g, and thus growth to high numbers before purchase is an unusual event. "*

Supporting document 1 to proposal P1017 suggests that the definition for 'RTE foods' includes: "pre-packed raw vegetable and salad mixes with shelf life greater than 5 days". That begs two questions:

1. How was the 5 day shelf life criterion arrived at?
2. Are 5 days a realistic criterion given *L. monocytogenes* general risk factors, the risk profile of raw vegetable and salad mixes and the technical capabilities of the fresh produce supply chain?

In terms of the risk *L. monocytogenes* represents, the above referred to ESR document suggests the risk may be less than it appears.

Notwithstanding this, it reinforces the need for research to be undertaken before setting standards that are all encompassing.

The supply chain logistics for 'RTE' salads are complex, fit for purpose and the category has enjoyed significant growth over the last 15 years as a result of understanding and managing food safety risk. A 5 day shelf life criterion is not realistic given the sophisticated processing and packaging methodologies utilised by industry and the ordering, fulfilment and stock management processes in place and needed to maintain constant shelf presence.

### Our Recommendation

United Fresh recommends that the shelf life provision should be amended to read "with shelf life greater than 10 days".

## Consideration Three

***The availability of sufficient research to ensure good science based decisions can be made.***

### Our Comments

There is continued growth of the category of fresh produce currently described as either 'RTE' or 'minimally processed', both in mixed vegetable/leaf salads as well as fresh fruit salads and other products, for example, apple slices.

An increasing range of products are being utilised in new and novel ways.

The limitations in relation to the proposed microbiological limits for foods are these:

- The food safety risk profiles of fresh produce sold in commodity form are variable, subject to the production environment, the product itself (product characteristics), and the need for further handling steps, including washing and packaging. An example would be heads of Iceberg lettuce.
- Produce food safety risk profiles differ when a post-harvest treatment process has been developed to manage the crop physiology, such as modified atmosphere packaging, a product coating or other processes applied, to enhance consumer value.
- The integrity of the cool chain after dispatch from the processing plant.

The challenge for the fresh produce processors is that in many areas the food safety validation research and science have not yet caught up with the specific complexities of fresh produce processing into "fresh products" and its risk management.

### Our Recommendation

Further research is needed prior to establishing catch all limits for fresh produce based 'RTE' products.

"Needed" does not necessarily mean that new research needs to be commissioned in New Zealand or Australia although that may well be the case. At the very least though we would like to understand better what existing research initiated in other jurisdictions the fresh produce related aspects in proposal P1017 come from.

The US based United Fresh Food Safety & Technology Council<sup>i</sup> has within the last week released a document entitled "*Guidance on Environmental Monitoring and Control of Listeria for the Fresh Produce Industry*".

This is an excellent industry generated document aimed at providing practical solutions to reduce the health risks associated with Listeria.

The document includes this telling paragraph on the matter of research:

*"There are limited published studies that establish the prevalence of L. monocytogenes in agricultural fields, however it is generally recognized that Listeria is 'ubiquitous' in the environment."*

The document also includes an extensive list of references and we recommend this document to you.

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<sup>i</sup> United Fresh Produce Association in the US is a North American produce industry trade association similar to United Fresh New Zealand Inc. but the two organisations are distinct and in no way affiliated with each other.