

AIFST Fresh Produce Food Safety Summit

Meeting Summary

Tuesday 17th April 2007

Fresh produce are an essential component of a healthy diet and the fresh produce industry is a vital component of Australia's agriculture. As we strive nationally to increase consumption of produce in general we have to ensure also that they are as safe as possible with regard to food safety hazards.

This meeting was conceived by AIFST to take a leadership role and be proactive in bringing stakeholders along the fresh produce supply chain together with regulators and scientists to discuss trends in produce related food safety and what actions are needed to ensure our fresh produce is as safe as possible for our consumers.

This is a summary of the meeting, the presentations and outcomes.

Participating organisations that collaborated in the Symposium, were Food Science Australia (www.foodscience.afisc.csiro.au), NSW Food Authority (www.foodauthority.nsw.gov.au), Australian United Fresh Fruit and Vegetable Association Ltd, AUF Fresh Produce Watch (www.freshproducewatch.com.au), Department of Primary Industries Victoria (www.dpi.vic.gov.au), and Horticulture Australia Limited (www.horticulture.com.au). The meeting was attended by over 80 people, with many from industry, but also from retail, food service, regulatory agencies, State and Council, and Government. Sponsors of the Summit included Perfection Fresh Australia, Coles Group Limited, for the refreshment breaks, and Oxoid, and B2P Australia each had an exhibition table.

The objectives of the Symposium were as follows:

- To build the capacity of key stakeholders in the fresh produce food chain to better manage foodborne disease incidents/ outbreaks.
- To map possible solutions to key problems/ gaps in knowledge/activity and share in making recommendations for their resolution.

Registrants were welcomed by the AIFST President, **Ken Grice**, who emphasised the role of AIFST that includes supporting improvement of the food supply and serving the public need for knowledge in food science and technology especially in relation to public health and nutrition. The large number of industry members among the registrants was particularly pleasing and an indication of their concern and willingness to promote safety in fresh produce.

The meeting was chaired by **Trish Desmarchelier** of Food Science Australia. Trish introduced discussion of the changing picture of fresh produce and food safety risks with an update of trends internationally. Several countries report the consumption of fresh produce and fresh cut products has increased and reports of links of fresh produce, both domestic and imported, with the transmission of foodborne illness has increased also. Foodborne disease outbreaks attributed to fresh produce have the potential to be geographically widespread and involve exposure of large numbers of consumers. The consequent impact can be significant for public health, costs to industry, industry image and market access. International experience should be taken as a warning signal to be proactive in our industry.

In Australia, OzFoodNet has the responsibility for surveillance and investigation of foodborne illness. **Martyn Kirk** is the coordinating epidemiologist and provided an update on recent outbreaks attributed to consumption of produce in Australia that included lettuce, cucumber/tomato salads, sprouted seeds, rockmelon and paw paw. Martyn shared with the audience how they go about identifying and controlling an outbreak using the recent rockmelon incident as an example. He indicated the challenges with fresh produce investigations such as the perishable nature of the product, difficulties in sampling and testing for hazards and the multiple potential sources of contamination and amplification along the food chain.

Robert Premier from the Victorian Department of Primary Industries provided an overview of challenges and emerging knowledge of microbiological hazards and fresh produce. Rob presented data on the microbiological load on vegetables and the pitfalls of misinterpretation when testing for bacterial indicators of hygiene and safety if inappropriate tests are performed and inadequate sampling plans are used. He emphasised, using their research data as illustration, that sanitisers are able to reduce but not eliminate bacterial contaminants. The risk of contamination is increased when leafy vegetables are damaged and the different integuments, matrices and internalisation of bacteria will influence the site of microbial contamination, bacterial growth and/or survival.

A regulatory perspective and update was presented by **Amanda Hill** of Food Standards Australia New Zealand. Amanda explained the contemporary approaches to food safety management taken by FSANZ that is risk based and is focused on identifying and minimizing foodborne hazards at the points in the entire food chain where those hazards are introduced, rather than relying on finding a problem at the end of the process. Currently FSANZ is developing the Primary Production and Processing Standard for Plant and Plant Products that will be a set of outcomes based national standards. A risk profile for plant and plant products has been conducted as a first step in the process. Amanda further described the National Food Incident Response Protocol that is still a work in progress. The Australia New Zealand Food Regulation Ministerial Council initiated this strategy that is being developed to provide clear guidance to agencies for responding to a range of food incidents in a timely, appropriate, consistent and coordinated manner.

Outside of the regulatory system there are various programs for the management of hygiene and food safety in fresh produce. **Scott Ledger** of the Department of Primary Industry and Fisheries in Queensland spoke from his extensive experience working as a quality assurance and horticulture postharvest expert on quality assurance systems and the application of Good Agricultural Practice in the produce industry. Scott recommended GAP as the appropriate level of management on farm and reviewed the key elements of GAP. He emphasised that a strong driving force is needed for the adoption of GAP and barriers to adoption are the knowledge, attitudes, skills and aspirations of farmers and their workers and a need for education to underpin adoption.

An essential element complementary to food safety management is risk communication. **Frances Warnock** of Fresh Produce Watch described the key element in food safety communications with consumers, namely that targeted messages should be factual, clear and consistent, from a trusted source and with knowledge that industry and government are working together. Frances gave some tips on “good messages” and the potential risks of getting the messages wrong. Foodborne illness is relatively new on the government public health agenda and there is some resistance by stakeholders to accept this and an un-preparedness to act. There are some gaps in our knowledge and market research is needed to gain an understanding of consumer perceptions and concerns regarding fresh produce locally. What’s needed is an evidence-based approach to public communications along with a good understanding of issues and problems facing individual stakeholders. Fresh Produce Watch has a major role to play in managing communications for the horticulture industry, especially in a crisis.

Craig Shadbolt, NSW Food Authority and **Tenille Fort**, Environmental Health Unit, Population Health, Queensland Health, shared their experience of the rockmelon associated incident from a regulatory perspective. The complexity of distribution of produce after harvest, timeliness, traceability, understanding the process of an outbreak investigation by industry and communication between the various parties involved were challenges and are lessons that the respective parties are working to improve. Ms Michelle van der Sander of Parilla Fresh gave a view from the industry perspective of her experience of incidents associated with sprouted seeds. Michelle spoke openly of the difficulty experienced in tracking the sources of contamination in a sprout growing facilities. She shared the challenges of finding a management solution for produce that may be contaminated at harvest, where amplification of contaminants occurs during processing yet there is no bactericidal step before consumption for elimination of contamination. This case study illustrates dilemmas in the application of HACCP principles, verification and monitoring, and the limitations of microbiological testing.

Following the presentations and lively discussion registrants broke into two groups to workshop two key issues, risk management and communication. The workshops and the key outcomes distilled from these workshops are as follows:

Workshop 1. On farm food safety management –Can we live with what we’ve got? Chaired by **Richard Bennett**, HAL and facilitated by **Edward Jansson**, NSW Food Authority.

Key outcomes:

1. There is a need to work toward national agreed food safety goals for fresh produce along the food continuum from farm to consumer with alignment of all programs including those of:
 - a. FSANZ Standard Development Committee for Primary Production and Processing Standard for Plant and Plant Products
 - b. HAL (Horticulture Australia Limited), AUF (Australian United Fresh Fruit and Vegetable Association), (HAC) Horticulture Australia Council
2. The science underpinning regulations and requirements for fresh produce safety must be robust e.g. FSANZ initial assessment report.
3. An Incidence Response Protocol (a guidance document for responding to a range of food incidents in a timely, appropriate, consistent and coordinated manner) that will include all stakeholders.
4. Investment is required for research into management tools for food safety and quality of fresh produce e.g. monitoring control points for safety and for quality measures that are rapid and inexpensive.

Workshop 2. What do consumers need to hear to maintain or enhance their confidence in fresh produce? How can we work in partnership to better address this need? Chaired by **Frances Warnock** and facilitated by **Michelle Keygan**, NSW Food Authority.

Key outcomes:

1. Media exposure
 - a. Establish a national partnership for fresh produce food safety utilising existing bodies rather than reinventing the wheel e.g. Fresh Produce Watch with key role as a communication body. Proactive focus aimed at getting positive media attention. Structure should involve all stakeholders at different levels, e.g. state and federal. It needs to be well funded to do an effective job.
 - b. Identify target audiences for messages and utilise champions; focus on electronic communications
2. Consumer research
 - a. Provide the evidence base for developing targeted food safety messages. Good solid data that is current.
 - b. Subtle working in of food safety messages into current health promotion campaigns e.g. Gofor2&5 promotions
 - c. Intellectual property to be addressed e.g. Will data be published?
3. Industry/government stakeholders to play a key role in incident management. Aim to reduce/manage the number of fresh produce food safety outbreaks.
4. Training in food safety for handlers and consumers
5. Quicker testing services when there is a problem, with more availability of testing

The Summit organising committee is considering the appropriate input of AIFST in helping implement these outcomes.