

# The NSW Food Authority Plant Products Food Safety Scheme – An Initial Benchmark Study

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## Introduction

In 2005, new NSW legislation required businesses that produce high-priority plant products to implement HACCP based food safety programs. Five product groups were identified as high priority in terms of food safety risk. They include producers or handlers of fresh cut fruit and vegetables usually consumed raw, vegetables-in-oil, unpasteurised juice and seed sprouts. Previously, these businesses received sporadic food safety inspections from local and State authorities. The NSW Food Authority collected benchmark data before regulatory audits commenced. In order to assess industry preparedness for the HACCP based legislation and to drive future food safety management strategies, this study:

- checked compliance with current food safety legislation;
- collected industry profile information; and
- conducted a snapshot survey of microbiological hygiene and safety of finished product.

## Methods

All plant products businesses that applied for a licence were included in the study:

- fresh cut fruit and vegetable manufacturers (n = 14);
- vegetables-in-oil manufacturers (n = 5);
- producers of seed sprouts (n = 6); and
- unpasteurised juice manufacturers (n = 9).

Between June and December 2005, a Food Authority auditor evaluated how each premise complied with Food Safety Standards (FSC) 3.2.2 and 3.2.3. A questionnaire, comprising 24 questions selected from the 2000/2001 National Food Handling Benchmark Study<sup>1</sup>, was completed for each.

Finished product samples (n=197) were analysed according to Australian Standard methods for indicators of microbiological quality and pH (if appropriate).

## Results

The industry profile revealed that most businesses affected by the NSW Plant Products Food Safety Scheme are small (5 or less food handlers) or medium sized (6 to 50 food handlers), accounting for 43% and 46% respectively. Only 11% are large (more than 50 food handlers) and all of these are manufacturers of fresh cut fruit and vegetables.

Prior to the regulation, industry adoption rates for HACCP varied for each industry type. Approximately one-third of unpasteurised juice manufacturers and sprout producers had implemented an independently audited HACCP based food safety program. Over 85% of fresh cut fruit and vegetable manufacturers operate by means of an independently audited HACCP program as do 45% of businesses producing vegetables-in-oil (see Figure 1).

Figure 1. NSW industry pre-regulation HACCP status

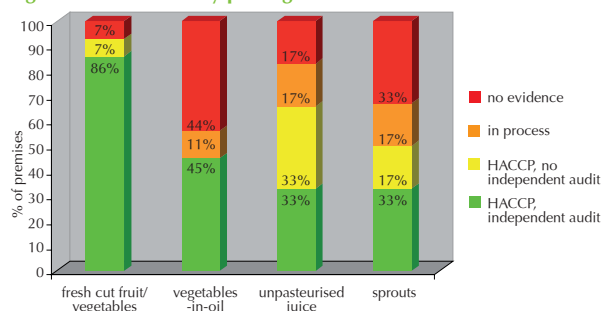
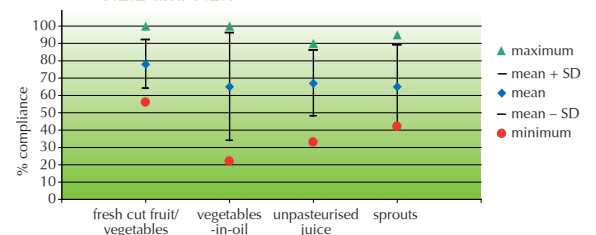


Figure 2 shows the level of compliance with FSC 3.2.2 and 3.2.3 for each industry. Mean compliance scores for each industry type were 78% (fresh cut fruit and vegetables), 65% (vegetables-in-oil), 67% (unpasteurised juice) and 65% (seed sprouts). However, compliance rates of individual businesses varied widely. The greatest variability was among vegetables-in-oil producers. The main areas of non-compliance were cleaning and sanitation, pest control and suitable use of thermometers.

Figure 2. NSW industry compliance with Food Safety Standards 3.2.2 and 3.2.3



No bacterial pathogens were identified in any of the 197 samples analysed. Only 7% of sprout samples (n = 30) and 5% of fresh cut fruit-vegetable samples (n = 107), were rated marginal for indicators of poor hygienic conditions (*E.coli*)<sup>2</sup>. All other samples, including unpasteurised juice and vegetables-in-oil samples, were classified as satisfactory<sup>2</sup>.

## Conclusions

While some individual premises are HACCP ready, most are not (evidenced by poor compliance scores with basic food safety requirements of FSC 3.2.2/3.2.3). Although follow up regulatory attention is ongoing, these findings will be used to:

- enable the Food Authority to develop programs to assist industry to improve their performance; and
- form a baseline against which to assess the impact of the new requirements on food safety risk management.

As food businesses implement HACCP based food safety programs, the Food Authority expects to see much greater compliance with basic food safety requirements.

## References

- 1 Campbell Research and Consulting (2001), *National Food Handling Benchmark*, ANZFA.
- 2 FSANZ (2001) *Guidelines for the Microbiological Examination of Ready-to-eat Food*, Food Standards Australia, Canberra.

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