Education and Training in the food sector
Survey Report
Domestic Food Review
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1.0 Executive summary

This report is a snapshot survey of training in the food industry with just over 400 responses nationwide. The report shows that nearly 80% of individuals surveyed reported receiving some food safety training and less than 10% of organisations reported offering no training.

There are approximately 35 specific food safety related unit standards registered with the New Zealand Qualification Authority Framework over many Industry Training Organisations.

The highest uptake of specific unit standard training is in the food service and retail sectors where Units 167 and 168 are by far the most common units used.

Non-unit standards based training also makes up a significant proportion of training provided across New Zealand and the uptake of both types of training (unit based and non-unit based) is highest in the food service sector.

The report indicates that training uptake is equally driven by both personal motivation and organisational requirements.

All sectors indicate that training is delivered reasonably equally by in-house training providers and external providers although the majority of training delivered was not developed for a specific sector, instead existing or generic training was used.

The highest uptake of customised training is delivered in the food service sector, which is probably due to food safety training being delivered with other position based food service training.

All of the Polytechnics and Universities surveyed are NZQA registered with 71% of Private Training Establishments and 50% of contract trainers delivering NZQA unit standard based courses. The majority of these courses do not have a refresher or renewal component.

This survey and report was commissioned by NZFSA from Treehouse Group, Wellington.
2.0 Introduction

The objective of this survey and subsequent report was to describe the current arrangements in New Zealand relating to food safety education and training in the food sector. The results are then intended to inform the government review and assessment of future needs in this area for the food sector.

The survey is part of the Domestic Food Review (DFR) being undertaken by the New Zealand Food Safety Authority. The DFR is a significant long-term project that is likely to run over at least five years which aims to put in place a food regulatory programme across all sectors of New Zealand’s domestic food industry that promotes and delivers safe and suitable food in New Zealand.

The survey was well supported across the sectors approached, including:

- Retail
- Food service industry
- Food processing industry
- Food manufacturing industry
- Education providers.

When the survey was conducted, data was collected from an organisational and individual perspective. Where one person was approached to complete the survey on behalf of an organisation, another employee within the organisation was approached to provide their own individual perspective.

Concerns were expressed by some organisations/operators as to exactly how the data would be used by NZFSA. Despite reassurances from the surveying party, some of these concerns may be reflected in the data, especially in areas where it relates to legislative compliance.

The private training providers were very supportive of the survey, which highlights their already proactive approach to training and education in the food safety area. 30 providers were originally approached to participate in the survey, and after extensive word of mouth and requests from additional providers the final number surveyed totalled 34.

The survey and subsequent report does not assess food safety qualifications obtained by individuals not currently employed or in pre-employment training.

The report outlines the findings of the survey and, where appropriate, provides rationale for the industry responses. Whilst these responses are based on the industry knowledge and experience of the writer, they are an interpretation of the results and may differ from the interpretation of others.
3.0 Specifications relating to education and training in the food sector

Summary of outcomes required
NZFSA had the survey conducted of the food (and other related) industries to:

- Identify and summarise the types of qualifications and training offered to personnel working in the food sector in New Zealand
- Identify and summarise the education, experience and qualifications over all food sector workplaces throughout New Zealand.

4.0 Methodology
The survey was conducted using the following methodology:

- The survey questions were developed, and a list of education providers and organisations selected to include all listed market segments from the workplace range
- Letters were delivered to management to request individuals be approached that meet the workforce information range, and follow up phone calls were made to confirm acceptance by these individuals
- Letters were sent inviting individuals to complete the questionnaire – including Privacy Act disclaimer information and questionnaires
- Reminders and replacement questionnaires were sent out six weeks later as required
- Statistical validity – this is a snapshot survey and was not designed to be statistically representative.

5.0 Regional statistics
The survey was conducted to allow a minimum of returns that resulted in at least five (5) cities and three (3) towns and two (2) country locations. This cross section was over achieved with respondents from nineteen (19) locations across New Zealand.

The qualifications of respondents varied between each region.

Total responses
A total of 400 responses were received. Responses from individuals and organisations appear identical, as highlighted in the Executive Summary.

Providers were enthusiastic responders to the survey, with requests received from additional providers keen to be involved. As a result, 30 surveys were initially issued to Providers, and 34 responses were received.
Response breakdown

Of the total 400 responses received, 58% (or 232) were from the North Island, with the remaining 42%, (or 168) from the South Island.

62% (248) of responses were received from cities, 22% (88) were received from towns, and 16% (64) from country areas.
6.0 Workplace and education provider range and definitions

The survey was conducted across a wide range of food related industries. Definitions and descriptors of these industries are listed below.

- Retail – Food sales environment (supermarket, convenience store)
- Food Service Industry – Restaurant, café, take away (owner/op and franchise)
- Food Processing Industry – A series of operations performed in the making or treatment of a product – fish, meat, vegetable, coffee
- Food Manufacturing Industry – To make goods, especially in large quantities and by means of industrial machines - bakery (large/small), deli produce, wine
- Education Providers – Polytechnic, University, Private training provider, Contract trainers
- Other relevant definitions
  - Food safety training – The provision of training in the safe handling, processing, manufacturing and preparation of food in the food sector
  - NZQA Unit Standards – a nationally registered, coherent set of learning outcomes and associated performance criteria, together with technical and management information that supports delivery and assessment
  - NZQA Qualifications – requirements for certification established by a recognised standards-setting body or an education provider.

Abbreviations of the industry titles have been used throughout this report, as detailed below:

- Retail – Retail
- Food Service Industry – Service
- Food Processing Industry – Processing
- Food Manufacturing Industry – Manufact.
- Education Providers – Providers.

Abbreviations of the provider titles have been used throughout this report, as detailed below:

- Polytechnic – Polytech
- Private Training Establishment – PTE
- Contract Trainer – Contract.
7.0 Specific outcome statistics

7.1 Individual respondents

Survey outcome

Comments:

• Overall a high level of response was received from individual respondents, particularly the food processing industry.

• The actual responses received indicate the level of importance respondents within the food sectors take in relation to food safety in some areas. There is also some anecdotal evidence from the results that a written approach to data collection may not always be efficient within the service sector as document completion is not always a skill or requirement of the respondents employed in front line positions.

• This comment is primarily based on the quality of the written responses, including use of English, spelling and miscommunication that needed further clarification verbally due to incomplete statements or misleading use of the English language in the responses.

Individual responses

Questions 1 and 2:
1. You have been in the industry for less than 2 years
2. You have been in the industry for over 2 years

Comments:

• The responses to these two questions are indicative of the nature of the food industry, with high turnover and low levels of staff retention. Standard food industry turnover is approximately 35% per annum, as stated in the 'Tourism Skills Report 2005. This high staff turnover has been attributable to better career opportunities in other industries.

• The food manufacturing industry had the lowest turnover, with 27% of respondents in the industry for over two years.

• There is a possibility that respondents who completed the surveys had a short tenure, when the actual figures may be much higher. Without a broader survey cross section, this data is difficult to confirm, although the Tourism Skills Report statistics regarding churn rate and general staff turnover in the food sector supports the above statistics (and does not support the supposed reverse information collated from employers in the next section (7.2))

• High industry staff turnover will be a key factor in training requirements for the industry and how much employers/organisations are prepared to invest for what would seem a short term gain.

1 The Tourism Skills Report is a joint survey completed in 2005 regarding the skills situation and shortage within New Zealand’s tourism industry.
Question 3:
3. You have completed no food safety training

Comments:
• The response to question three indicates the significance of food safety training within the wider food sector. Of the total individual respondents to the survey, only 21% have no food safety qualifications.
• Data indicates that the food service industry is proactive in training its personnel, with only 16% of respondents having no food safety training, compared with a slightly poorer result in the food processing industry where the result was 26% of respondents having received no training at all.
• Personnel in the food service industry are responsible for the processing and serving of individual customers and their requirement for a working knowledge of safe food and safe food practices in both the processing and service of food may explain the high level of food safety trained staff (84%).

Questions 4 and 5:
4. You have NZQA food safety qualifications
5. You have completed non NZQA food safety training

Comments:
• Across all sectors surveyed, a total of 79% of respondents had some form of food safety training, either training and/or qualifications offered on the NZQA framework, or other types of training.
• Within the retail sector, of the total 76% personnel who have food safety qualifications, 60% were NZQA food safety qualifications.
• A total of 74% of respondents from the food processing industry had received some form of food safety training. Of those, 55% received NZQA training, and 45% other.
• 81% of respondents from the food manufacturing industry had received food safety training, of which 67% had undertaken training from the NZQA framework, and 33% other. This is the highest uptake of training that is linked to the NZQA framework across all sectors, perhaps attributable to other training available in this area, retention initiatives and stronger training provider partnerships.
Questions 6 and 7:
6. Your training was completed in-house by your employer
7. Your training was completed with an education provider

Comments:
- Data/responses to questions 6 and 7 indicate some confusion among respondents. Whilst questions 4 and 5 indicate approximately 36% of respondents attended NZQA framework training which is offered by external providers, in question 7 approximately 88% of respondents indicated they attended external training.
- Only 11% of respondents indicated they received their training in-house, delivered by their employer. This response indicates that contractors and small training providers are used in-house but are considered ‘external people’ not as people contracted to provide in-house training.

Questions 8 and 9:
8. You completed this training for personal development
9. You completed this training due to organisational requirements

Comments:
- An even balance exists behind the reasons for individual respondents completing their food safety training. Approximately 32% of respondents completed the training for their own personal development, whilst 35% completed it for organisational requirements.

Summary:
- The high percentage of personnel undertaking non-NZQA training potentially indicates that it is less prescriptive, requires less documentation, can be quicker and less costly, and possibly more specific to organisational requirements and processes.
- In many situations, smaller training providers and individual training contractors/consultants are able to offer the training on a needs basis for organisations, and provide training that meets the legislative requirements without the cost of using the larger providers that support the NZQA framework qualification. This approach also allows for training to occur on site with the employer, rather than requiring participants to attend outside training establishments.
Qualifications completed

Comments:

• Results indicate that up to 30% of personnel in the industry receive training in Unit Standards 167 and 168. These Units can either be undertaken as stand alone units, or as part of a wider qualification. They are quick and efficient for both the individual and employer, and are run by small providers and larger training institutions. The redeveloped unit 20666 has not registered within the industry as yet, which means industry trainers have not picked it up, although it has been introduced by pre-employment trainers (training providers educating people not yet in employment with the industry) and qualifications New Zealand wide.

• Non-accredited training is often that delivered by training contractors who are not affiliated with a Private Training Establishment (PTE) or larger polytechnic or similar. This is often an efficient, cost effective way for employers to train their staff to meet current local legislative requirements.

• Whilst the figure for in-house training is low, results reflected in the organisation results of this survey would indicate that many organisations ‘bring in’ contractors and other training providers to deliver their training in-house. This highlights some definition issues between individuals and employers as to what ‘in-house’ training actually is.

Training duration

Comments:

• The most common form of training is that which takes place over a one day period or less than one week period.

• Interestingly, the processing industry has the least number of individuals with training in the food safety area, although they appear to support the longer training programmes of up to one week or one year.

• Many of the shorter programmes available on the market have a limited off-job requirement and are designed specifically to meet the legislative and base requirements only.

• Funding available specific to food safety for employees and employers was difficult to find, although some Ministry of Education funding was available in certain regions for food safety training. This may suggest that industry training in food safety is primarily self funded by the individual, or by their employer.
7.2 Organisations

Survey outcome

Comments:
- Overall a high proportion of response was received from organisations, particularly the food processing industry.
- The responses received indicate the level of importance organisations within the food sectors place on food safety.
- Response rates from individuals and organisations are identical due to the way in which data was collected. Organisations that participated in the survey were also asked to name one individual who could respond to the individual survey questions. All responses from organisations included a response from their nominated individual.

![Organisation Survey Responses](image)

General questions

Question 1: 1. You offer no food safety training

Comments:
- Responses from employers/organisations indicate a much higher level of training is available than the individual responses indicate.
- There is a strong possibility that employers offer the training, but staff don’t take advantage of the offer/availability of the training.

![Employers surveyed offering no food safety training](image)
Questions 2-4:
2. Training is completed in-house by you, the employer
3. Training is completed with a provider on your behalf
4. Training is completed jointly with a provider

Comments:
• The organisation survey results show a disparity between the amount of training offered in-house and by providers compared with the results shown by individuals.
• External providers are also used extensively across the sectors.
• The processing area indicates a strong use of providers, including working jointly together.

Questions 5-8:
5. Are training programmes designed for you by a provider?
6. Are training programmes designed in-house only?
7. Are training programmes specifically created?
8. Are training programmes designed jointly with a provider?

Comments:
• Data indicates that up to 48% of food service training is not specifically created for that purpose. It would indicate that all areas train food safety as an inherent part of a role, and as a basic organisational operational requirement, rather than specifying it as actual food safety training.
• The service industry has a high level of in-house design, once again possibly indicative of larger organisations with the resources to develop and train, and in many situations, standardised training packages prepared and delivered via head offices. Also the potential for small operators doing what they consider to be suitable, relevant food safety training, without wanting to find or allow for external resources as they may see it as costly and unsuitable within the daily function of the business.
• The response to these questions from those in the processing sector reiterates a strong relationship between training providers and employers, especially in the provider design area.
Questions 9 and 10:
9. What percentage of the food safety training you offer is NZQA accredited?
10. If an in-house programme, do you offer a completion certificate?

Comments:
- The data in this area further confirms the difference of perceptions between individuals and employers/organisations.
- Organisations in the service sector stated they offered a high level of NZQA certificated training, whilst individuals believed it was non-NZQA food safety training. In retail the results were also reversed, with employers stating they offered more in-house training than NZQA training.
- Some explanation can be found through the promotion and marketing of some in-house programmes as ‘NZQA accredited’, but resulting in the theory component only being achieved and no unit completion through practical assessment or moderation. Inconsistency between local authority food safety training by-laws results in many cases of training being completed – but unit standards not being completed. This may explain the disparity between employers believing they are offering NZQA units and the participants getting training only, without assessment or completion.
- As highlighted in the introduction, some employers/organisations did show a reticence to provide information due to uncertainty of its use. This concern could be reflected in the results of these questions. There was much uncertainty by employers as to what their actual requirements were regarding food safety training, especially with the smaller employers.
Questions 11 and 12:
11. Employees have been with the organisation for less than 2 years
12. Employees have been with the organisation for over 2 years

Comments:
- The data relating to tenure of employees varies greatly between the organisation/employer and the individual, especially in the retail and service industries.
- This variation could be related to the individuals surveyed. These people may themselves have been with their employer for a short period of time; whilst the reality may be that other employees have been employed by the one organisation for a much longer period.
- The variation is not supported by other industry data including the Tourism Skills Report that supports the individual response statistics in 7.1 of this report.
- Processing and manufacturing both have been clear about high churn, which could indicate why they (processing in particular) are forming close relationships with providers and are offering NZQA accredited training. These areas are both offering higher levels of longer term (up to one week and one year) training, perhaps in the attempt to retain staff, through professional development.

Training Requirements

Question 13:
13. What percentage of staff require food safety training?

Comments:
- Organisational training requirements relates to the requirements organisations have placed on the importance of training for different roles. These requirements relate to the general operation of these organisations, not necessarily legislative compliance.
- Processing and manufacturing both indicate a higher level of requirement for supervisors and managers to have food safety training. People in these roles would be expected to take overall responsibility for their shift, and also for the training of others.
7.3 Education providers

Survey outcome

Comments:

- Private Training Establishments (PTEs) and Contract Trainers showed a strong response to the survey, with additional participants being involved as a result of word of mouth.
- Polytechnic and University responses were considerably lower; however still a reasonable return rate to allow for comparison of data.

### General Questions

#### Question 1:

1. Registered with NZQA

Comments:

- Polytechnics and universities surveyed were registered with NZQA and able to offer NZQA accredited programmes. Training by polytechnics and universities is usually offered on-campus, and only offered on-the-job where numbers permit.
- PTEs were registered, though to a lesser extent, as were the contract trainers. Of those providers not registered, they are still able to offer non-NZQA certified training, often at a much lower cost and with more on-job flexibility than the larger providers.
- With the cost of unit standard assessment, credit reporting and the need to have qualified assessors complete all on job assessment, there is a disparity between the incurred costs associated with NZQA registered units and qualifications to the user versus the potentially lower costs associated with a training provider that is not registered, not reporting credits, but using a non-NZQA training programme to complete food safety training.
- There is however a consistency issue where non-NZQA units and qualifications are used, as each non-accredited programme is different from the next, adding to the challenge of consistent training standards with each programme. This is not the case with NZQA units and qualifications as they are a consistent product throughout the country.
Questions 2 and 3:
2. Provision of NZQA recognised food safety training
3. Provision of non-NZQA recognised food safety training

Comments:
• Data indicates that Polytechs and PTEs use more NZQA unit standards based training than non-NZQA. Where accredited, many organisations will encourage participants to complete NZQA training with the view that it could lead to a qualification later on, as all units can be used in the completion of a larger or more advanced qualification either at the time or at some future time (unit standards are commonly called qualification building blocks).
• There is no relating data to show how many of these programmes have participants that are employed within industry and how many are pre-employment.
• Some PTEs and Universities also offer alternative training to NZQA, such as London City and Guilds, and have their own certificate programmes. Where this training is used, certification is usually given on successful completion and assessment of the programme.

Question 4:
4. Training that have renewal periods

Comments:
• Training that requires renewal or refresher is usually NZQA based training, however the renewals are set by the providers and are not NZQA requirements.
**Question 5:**
5. Does your training include a practical component?

**Comments:**
- The majority of food safety training programmes offered by the larger providers is based on-campus which makes any practical application a costly exercise for the provider, whether they have suitable practical facilities or not. This is due largely to the size of the classes run (refer below, questions 6 and 7) and the limited importance given to shorter food safety programmes within providers that primarily run long term qualifications. Theory only programmes are far more cost effective for a provider.
- Contract trainers are smaller, often individual training providers who are able to tailor their training to meet the needs of the client. This training is usually done on-site, with a strong emphasis on ‘using’ safe food practices within the employer’s actual facilities and systems. Where the trainer is registered with NZQA, training is usually linked to NZQA Unit Standards and the framework.

**Questions 6 and 7:**
6. Class size of 5-12
7. Class size of 13-30

**Comments:**
- Class sizes for polytechnics, universities and PTEs are indicative of the cost of running training programmes. For a course to be cost effective (and often just to break even), providers are required to have larger groups. This also reduces the opportunity to have a practical application of food safety practices during training.
- Contract trainers will usually work with individual employers, hence smaller groups.
8.0 Food safety related units available on NZQA framework

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