

# **Consumer Attitudes Survey 2007**

***A benchmark survey of consumers' attitudes to  
food issues***

**Food Standards Australia New Zealand**

January 2008

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## **Consumer Attitudes Survey 2007**

A benchmark survey of consumers' attitudes to food issues

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## Executive Summary

Food Standards Australia New Zealand (FSANZ) is an independent, trans-Tasman, government-funded organisation that has the role, in collaboration with other organisations, to protect the health and safety of the people in Australia and New Zealand through the maintenance of a safe food supply. In 2006, FSANZ commissioned TNS Social Research (TNSSR) to conduct a baseline survey to establish the current views of Australian and New Zealand consumers with regard to overall confidence in the food supply. This overall confidence was assessed in terms of behaviour, attitudes and confidence in eating at home, eating out, labelling of food products and the organisations playing a role in the regulation and monitoring of the food supply. This research is the first in a planned ongoing tracking program of consumer attitudes, behaviours and confidence. Future studies will allow for the tracking of change in these aspects, identifying areas of potential change and focus for FSANZ.

TNSSR developed a questionnaire to reflect these objectives, as well as to allow some comparison to similar international studies. The development process consisted of a review of international research, qualitative discussion groups with consumers in both Australia and New Zealand, and an extensive questionnaire development phase. The research was then conducted via an online survey of n=1200 Australians and n=800 New Zealanders aged 14 years and older. The final data were weighted to best reflect the demographic profile of each population.

The research found that most respondents played a role in grocery purchasing and cooking in the home, and that most respondents had in mind particular dietary or food concerns when shopping, with weight concerns, specific health concerns and allergies the most common concerns. Around half of respondents (49% of Australians and 52% of New Zealanders) reported they paid a medium level of attention to a healthy diet, and a further large proportion paid a high level of attention (34% of Australians, 30% of New Zealanders), with only a very small number (4% Australia and New Zealand) reporting they paid a low level of attention to a healthy diet.

However, when assessed against wider issues, healthy eating is of less concern for consumers than issues such as drought/water shortages (in Australia), household finances/cost of living, crime levels (New Zealand) and pollution/environmental issues. Twenty three percent of Australians and 25% of New Zealanders identified healthy eating as a major concern, compared with 9% and 7% of Australians and New Zealanders, respectively, identifying food safety as a major concern.

Overall confidence in the food supply as a whole was at a positive level, with consumers in New Zealand significantly more confident in the safety of the food supply as a whole than Australian consumers. Around two in five Australian consumers (43%) thought food safety had stayed the same in the past year. New Zealand consumers were significantly more likely to believe food safety had stayed about the same (49%). Australian consumers were significantly more likely to say food safety was a 'little worse' (22%) compared to New Zealand consumers (11%).

The research found that almost a third of respondents (32% of Australians and 30% of New Zealanders) thought they had suffered from food poisoning in the past year, with the majority of these respondents thinking this was from food purchased outside the home. Very few respondents reported their condition to anyone, with a doctor or other health professional being the most common person the condition was reported to among those who did report it.

Around half of Australian respondents (51%) and around two in five New Zealand respondents (39%) reported having concerns about the safety of particular types of foods. Foods most commonly nominated (unprompted) by those who had concerns were fresh fruit/vegetables, meat and raw chicken/poultry. The latter was particularly of concern for New Zealand respondents.

The most commonly identified concerns with food generally in Australia were, food poisoning (such as Salmonella and E.Coli), and the storage times of food sold as fresh, with 48% of Australians nominating these issues as being of concern. Australians had the highest level of concern regarding the use of cloned animals in the food supply, the use of antibiotics/hormones/steroids in meat and food safety/hygiene. In New Zealand consumers were most commonly concerned about food poisoning (such as Salmonella and E. Coli) (43%) and obesity levels in the population (38%) whereas the highest level of concern was in relation to the use of cloned animals in the food supply, genetically modified foods and food safety/hygiene. However, when identifying foods or food issues that may be of concern, it should be noted that consumers are likely to be influenced by issues reported in the media before or at the time the survey took place.

Unprompted awareness of FSANZ was low (8% of Australians and 4% of New Zealanders). When prompted, FSANZ was the most commonly nominated organisation consumers thought had a role in food regulation and monitoring in Australia (60%). FSANZ was the third most commonly nominated organisation for New Zealand consumers (52%) after the Ministry of Health (82%) and the New Zealand Food Safety Authority (NZFSA) (60%), as would be expected given the different role FSANZ plays in New Zealand.

Overall confidence in the organisations providing regulation and monitoring of the food supply was positive with New Zealand consumers significantly more likely (mean score of 4.74 out of seven) than Australian consumers (mean 4.5) to report confidence in organisations in general. Australian consumers were significantly more confident in FSANZ (mean 4.66) compared with their confidence in all organisations regulating and monitoring the food supply. New Zealand consumers had similar levels of confidence in FSANZ (mean 4.64) to Australian consumers, although it was less than their confidence in all organisations regulating and monitoring food. There was support for a high level of regulation for both public health issues and food safety issues in both countries. Australian consumers were significantly more likely to report a desire for a greater level of regulation for both public health and food safety issues than New Zealand consumers. Across both countries there was higher support for greater regulation to manage food safety issues compared with public health issues.

Consumers reported referring to food labels frequently with 33% of Australians and 25% of New Zealanders reporting they always referred to the labelling information when purchasing a product for the first time. There was a clear positive relationship between consumers' health consciousness and dietary concerns and their frequency of referring to labelling information. The most commonly referred-to information was the best before/use by date, the amount of fat, country of origin and the amount of sugar. Eighty four percent of Australians and 81% of New Zealanders cited food labels as the main source of information about the nutritional content of food, with fact sheets/brochures, the internet and magazines/cook books also being frequently cited as sources of information. Respondents agreed strongly with the statement 'I find some information on food labels really useful or important'. Confidence in ability to make informed decisions from food labels was positive for Australian and New Zealand consumers, with New Zealand main grocery buyers significantly more confident in their ability to make informed decisions than non-main grocery buyers. This difference was not evident among Australian consumers. Trust in food labelling was at a lower level than confidence, with Australian consumers significantly less likely to trust the information provided on food labels than New Zealanders.

In both Australia and New Zealand most consumers said they think about food safety and food hygiene when preparing food at home, with 51% of Australians and 47% of New Zealanders involved in food preparation 'always' consciously thinking about food safety and hygiene. Most respondents felt they knew about food safety and hygiene in the home. Australian consumers had only a mild level of concern about getting food poisoning from something prepared at home, and felt a high level of control over food safety in the home. New Zealand respondents were significantly more concerned than Australian respondents about getting food poisoning from something they or someone else prepared at home but rated their control over food safety/hygiene for food prepared at home at a similarly high level to Australia. These results are driving a very high level of overall confidence in food safety in the home in both countries (mean scores of 5.98 and 6.03 out of 7 for Australia and New Zealand respectively).

In the last 12 months, Australian and New Zealand consumers were most frequently concerned about food safety when eating outside the home in takeaway shops, temporary food stalls, supermarkets, sausage sizzles and restaurants. Australians were significantly more likely than New Zealanders to be concerned about food safety in takeaway shops, temporary food stalls, supermarkets, local meat/seafood retailers and deli/specialty/other food retailers. In spite of these concerns, consumers overwhelmingly had not reported their concerns to anyone. Concerns that were reported were most commonly reported to staff at the food outlet. Somewhat inconsistently, confidence in the food safety precautions in the preparation of food was highest for local bakeries, restaurants and supermarket/grocery stores for both Australia and New Zealand. Overall confidence in food safety outside the home was relatively low with a mean score of 4.67 out of 7 for Australians and a significantly higher (but still quite low) mean score of 4.88 for New Zealand consumers.

A standard two tiered multiple regression model was developed to determine the impact of key dependent and independent variables on consumers' overall confidence in the safety of the food supply.

The first (or top) level of the model measured the impact of the four main dependent variables considered in this survey on the overall dependent variable of 'overall confidence in the safety of the food supply'. The four main dependent variables were: consumers overall confidence in food safety when eating out; consumers overall confidence in food safety when eating at home; consumers overall confidence in their ability to make informed decisions from food labelling; and consumers overall confidence in organisations providing regulation and monitoring of the food supply. Together these explained almost 40% of overall confidence in the food supply (39% for Australia and 36% for New Zealand), indicating that there are other factors which are also having a strong impact on overall confidence that have not been captured in this model or are outside the scope of FSANZ work. Consumers' overall confidence in food safety when eating out (47.4% in Australia and 42.5% in New Zealand) and overall confidence in organisations providing regulation and monitoring of the food supply (38.9% in Australia and 44.6% in New Zealand) were the most important dependent variables driving the overall confidence in the safety of the food supply.

The second (or underlying) level of the regression model assessed the impact of a range of independent variables on the four main dependent variables considered above: consumers overall confidence in food safety when eating out; when eating at home; in ability to make decisions from food labels; and in organisations regulating and monitoring the food supply. Independent variables were drawn from key questions within the survey. Key findings of the analysis were:

- the independent variable with the greatest impact on consumers' overall confidence in their ability to make an informed decision from food labelling was trust in the information in food labels (29.6% for Australia and 32.3% for New Zealand). Ease of understanding and use of food labels also had a strong impact on overall confidence but was of greater importance among New Zealand consumers (30.8%) than Australian consumers (19.2%);
- the strongest impacts on Australian consumers' overall confidence in food safety when eating at home were their level of perceived control over food safety (40.2%) and their level of knowledge about food safety (26.2%). This was reversed for New Zealand consumers with a 42.2% impact on overall confidence in food safety when eating at home derived from knowledge about food safety, and a 30.3% impact derived from the level of perceived control over food safety;
- consumers' overall confidence in food safety when eating out was impacted by consumers' confidence in food safety precautions at different types of food outlets. Restaurants had the strongest impact accounting for 33% (Australia) and 35.5% (New Zealand) of overall confidence; and
- as the organisations responsible for food regulation and monitoring were relatively unknown, it was not possible to determine the key drivers of overall confidence in organisations providing regulation and monitoring of the food supply.

# 1. Background and objectives

Food Standards Australia New Zealand (FSANZ) is an independent, trans-Tasman, government-funded organisation that has the role, in collaboration with other organisations, to protect the health and safety of the people in Australia and New Zealand through the maintenance of a safe food supply.

In order to fulfil this role, FSANZ desired to conduct research to monitor consumers' awareness and confidence in the food regulatory system and food-related issues. FSANZ anticipated that research would be conducted as an ongoing tracking study, providing benchmark data against which to monitor any changes in consumers' awareness, knowledge and understanding of the food regulatory system and FSANZ. Similar research has been previously conducted by FSANZ into specific issues, such as nutrition information and food safety, but it was anticipated that the findings from the current study would provide a broader interpretation of consumers' attitudes to support FSANZ activities. Information from this survey will allow FSANZ to better understand, prioritise and target consumer concerns overall, and the differences there may be in these concerns between Australia and New Zealand. This, in turn, will assist FSANZ in meeting its broader objectives of maintaining and developing confidence in the food supply. In addition, outcomes of the research may feed into specific standards development projects where appropriate, and the development of targeted consumer information in both Australia and New Zealand. However, it should be kept in mind that FSANZ has a different role in the New Zealand food regulatory environment compared to its role in Australia. In New Zealand FSANZ is responsible for developing and setting food standards and the New Zealand Food Safety Authority is responsible for interpretation and development of information for use by industry and consumers in New Zealand.

Similar consumer attitude surveys are also regularly conducted in other Australian agencies and internationally. Organisations such as Biotechnology Australia, and state jurisdictions, such as the Victorian Government have conducted research into similar topics<sup>1</sup>. Internationally, the United Kingdom Food Standards Agency, the United States Food and Drug Administration's Centre for Food Safety and Applied Nutrition, and the New Zealand Food Safety Authority have all conducted similar studies into consumers' attitudes into food standards and safety.

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<sup>1</sup> Information from RFT (Request for Tender, FSANZ 2006)

## 1.1. Research objectives

FSANZ commissioned TNSSR to conduct the 2007 Consumer Attitudes Survey to gauge and monitor changes in Australian and New Zealand consumers' attitudes, knowledge and confidence in the food regulatory system, food standards and FSANZ in order to inform future consumer related communications and activities.

The objectives of the benchmark, or baseline, study were to collect data on:

### Knowledge and Awareness

- of food regulatory system;
- of FSANZ role and in context of wider environment;
- of food safety, including attitudes and assigned importance;
- of food related issues – specifically which issues are most salient, interesting and of importance to consumers; and
- of major issues being considered by FSANZ, such as iodine and folate fortification and cheese manufacturing (as “add on modules”).

### Confidence

- in the food regulatory system and FSANZ; and
- in the information and assistance provided by FSANZ.

### Information sources

- where consumers find out information about food issues, the different sources for different issues or potential outcomes, and their confidence in different sources.



## 2. Methodology

### 2.1. Overview

The survey design for the Consumer Attitudes Survey underwent considerable development and iteration throughout the course of the research program. The project teams from TNSSR and FSANZ worked in liaison with a broad range of stakeholders and experts to ensure the research was suitably designed to meet the stakeholder needs and objectives. An overview of the methodology employed is illustrated in the following diagram:

Figure 1: Methodology overview



Project scoping and a review of available literature was undertaken prior to conducting qualitative research. This research consisted of eight focus groups, each with approximately 6-8 participants, undertaken in July 2006. Four groups were held in Sydney and four in Auckland. Whilst the scale of the research was relatively small, scope was provided to include a range of consumer types, including age and level of health consciousness (the extent to which consumers pay attention to keeping a healthy diet).

The subsequent questionnaire development drew on the exploratory research and, in addition, consideration was given to incorporating questions from previous FSANZ, national and international research where relevant to allow comparisons to be made.

A pilot survey was conducted online with n=103 members of the TNSSR Online Panel between 13 and 18 April 2007. Following the pilot survey, no further modifications to the survey questionnaire were considered necessary.

Online fieldwork was conducted using the TNSSR Online Panel between 23 and 30 April 2007. A total sample size of n=2000 consumers was targeted, with n=1200 Australian and n=800 New Zealand respondents aged fourteen years or older. Random sampling was undertaken, with a sample drawn separately for Australia and New Zealand. Screening questions were included in the questionnaire to ensure the desired quotas of Australian and New Zealand respondents took part in the survey. Further information on the TNSSR Online Panel and validation tests undertaken are provided in Appendix A.

The overall sample profile for Australia and New Zealand was broadly in line with population data, however, the sample for each country was weighted by age within gender using 2006 population estimates from Australian Bureau of Statistics and Statistics New Zealand data.

*SurveyCraft* was used to produce data tables with full significance testing across subgroups. All tests use the 95% confidence level (z score = 1.96). In addition, in order to explore the relationship between attitudes and behaviour and determine which issues have the most significant and unique impact on overall confidence, a multiple regression analysis was undertaken.

Further detail on each of the phases of the methodology can be found in Appendix B of this report.

# Research Results

## 3. Reading this report

### Reading charts and tables

Under each chart and table the following information can be found:

- the full question, including question number, written in italics. To see the scale used in the question, see the full questionnaire in Appendix E;
- the weighted base size for the question – that is, the number of respondents in the weighted sample who answered the question; and
- an indication of whether respondents were able to choose one or multiple responses to the question, or if the question allowed open ended responses.

### Reading the results

In the text relating to each section, reference is made to subgroup differences which are significant. If no reference is made to a particular subgroup, the reader can assume that there are no significant differences in the results for that subgroup. Where practical, this lack of difference is stated in the report to aid understanding.

**Percentages** in text and tables are reported to one decimal place, unless otherwise appropriate.

**Percentages** in figures are reported to the nearest whole number, for clarity of presentation.

**Means** are reported in text, tables and figures to two decimal places, due to the greater implications of a small change in the figure reported.

### Statistical Mean

Unless otherwise specified, reported means are based on a scale of one to seven, with one being a low or negative response, and seven being a high or positive response.

### Sampling error

The aim of selecting a sample is to be able to limit the cost of interviewing to the most useful number which can be achieved within the available resources. However **the objective is to make inferences about the population from which the sample is drawn.**

In any sample survey a degree of sampling error will occur. The sampling error is the extent to which the survey responses can be generalised to the population from which the sample was drawn (i.e. general consumers). As sample size increases, sampling error decreases.

The results for this survey have been tested for significance at the 95% confidence level. Significance testing and other statistical techniques used are discussed in more detail in Appendix F of this report.

## 4. About the respondents

A total of n=2000 people completed the survey, n=1200 in Australia and n=800 in New Zealand. Once the weighting matrix was applied (discussed in the methodology section, Appendix B), the weighted sample sizes were n=1202 in Australia and n=800 in New Zealand. The following section provides a profile of the respondents from each country based on the weighted data.

### 4.1. Demographic characteristics

#### **Gender and Age**

As outlined in the methodology section, correctional weighting was applied to the respondent sample in terms of age within gender separately for Australia and New Zealand. This ensured the weighted profile of respondents matched Australian Bureau of Statistics and Statistics New Zealand data. The weighted profile in terms of gender and age is shown in Table 1.

**Table 1: Weighted gender and age of respondents**

%	Australia	New Zealand
<i>Base: All respondents</i>	(n=1202)	(n=800)
Male	49.5	48.2
Female	50.5	51.8
14-24 years old	18.3	19.9
25-34 years old	17.1	16.0
35-44 years old	18.0	18.9
45-54 years old	16.9	17.0
55-64 years old	13.6	12.9
65 years or older	16.2	15.4

S1. Age

S2. Gender

Base: All respondents (Australia: n=1202; New Zealand n=800)

### Location

In order to determine location, Australian respondents were asked to record their postcode from which metropolitan (defined as capital cities of Australia) and regional/rural status could be determined. New Zealanders were asked to record the region in which they lived, in line with Statistics New Zealand regions, from which metro/regional status could be derived.

In line with the total population, the majority of respondents lived in metropolitan areas of Australia (69.1%) and New Zealand (61%) as illustrated in Table 2.

**Table 2: Location**

%	Australia	New Zealand
<b>Base: All respondents</b>	<b>(n=1202)</b>	<b>(n=800)</b>
Metro	69.1	61.0
Regional/rural	29.5	39.0
Not answered	1.4	0

S3a. What is your postcode [AUSTRALIA ONLY] (please select one)

S3b. Which of the following regions do you live in [NEW ZEALAND ONLY] (please select one)

Base: All respondents (Australia: n=1202; New Zealand n=800)

### Household status

Respondents were asked a) the number of adults, b) the number of children aged between 15-17 years, and c) the number of children aged 14 or younger in the household. Overall, 39.4% of Australian respondents were in households which included children aged 17 or less; in New Zealand this stood at 45.9%. Around a third of households included children aged 14 or younger.

**Table 3: Children in household**

%	Australia	New Zealand
<b>Base: All respondents</b>	<b>(n=1202)</b>	<b>(n=800)</b>
No children in household	60.6	54.1
Children in household	39.4	45.9
- Children aged 15 – 17 years in household	17.4	20.4
- Children aged 14 or under in household	32.2	35.5

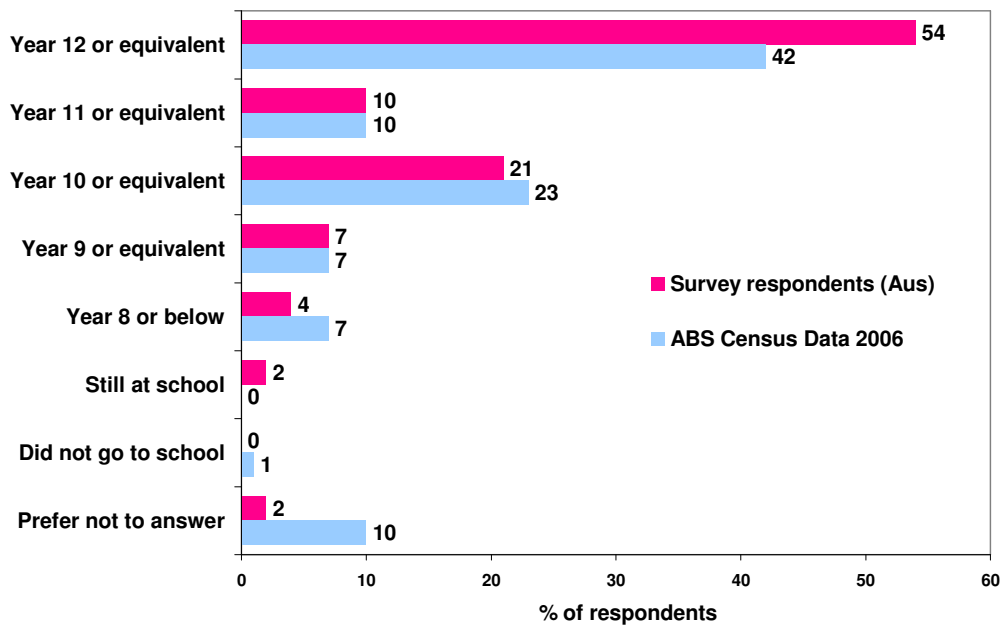
F11. How many people live in your household in each of the following age groups? (please select one)

Base: All respondents (Australia: n=1202; New Zealand n=800) (please select one)

**Educational attainment**

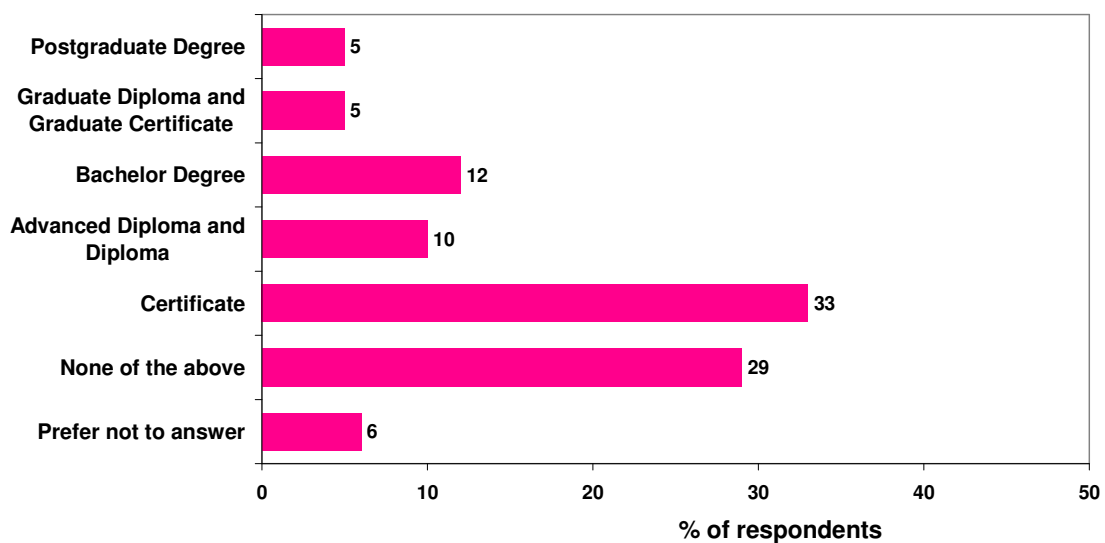
Respondents were asked about their highest level of educational attainment, with response codes tailored to specific Australian and New Zealand qualification levels as per ABS and Statistics New Zealand categorisations. The breakdown of educational attainment compared with census data amongst Australian respondents is depicted in Figure 2 and Figure 3 and for New Zealand respondents in Figure 4.

**Figure 2: Education – highest level of primary or secondary school completed (Australia)**



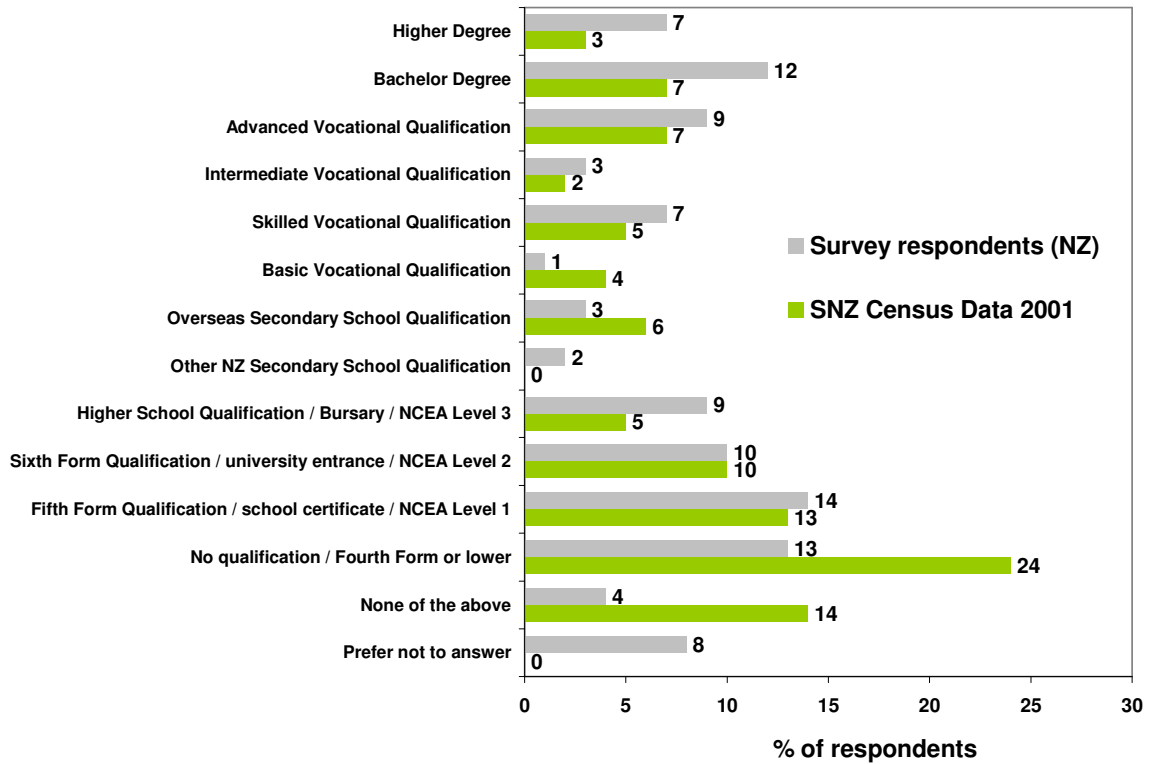
F8a. What is the highest level of primary or secondary school you have completed? (please choose the one that best applies)  
 Base: All respondents (Australia: n=1202)  
 Census data from 2006 Census of Australia  
 Total may not equal 100% due to rounding

**Figure 3: Education – highest qualification completed (Australia)**



F8b. What is the highest qualification you have completed? (please choose the one that best applies)  
 Base: All respondents (Australia: n=1202)  
 Total may not equal 100% due to rounding

Figure 4: Education – highest qualification completed (New Zealand)



F8c. What is the highest qualification you have completed? (please choose the one that best applies)  
 Base: All respondents (New Zealand n=800)  
 Census data from 2001 Census of New Zealand  
 Total may not equal 100% due to rounding

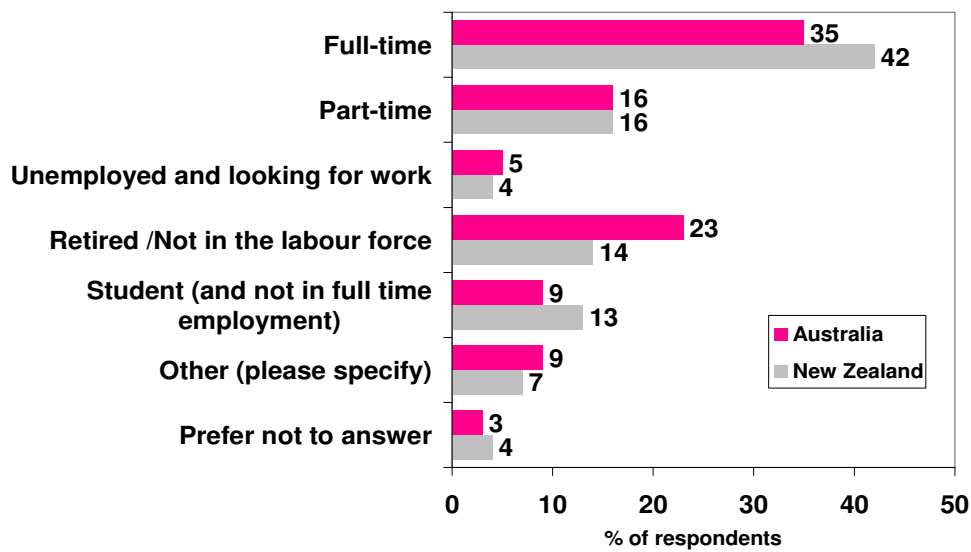
There was a clear diversity in the educational attainment of respondents, ranging from consumers with no qualifications to those of degree level or equivalent standard.



**Employment status**

The diversity of respondents was also evident through their employment status, with all employment types represented, as illustrated in Figure 5. Just over one half of respondents were working, with 35% of Australian and 42% of New Zealand respondents doing so full-time and 16% of both Australian and New Zealand respondents working part-time. Respondents from Australia were more likely to be retired or out of the labour force (23%) than those in New Zealand (14%). There were relatively few respondents who were unemployed – 5% in Australia and 4% in New Zealand.

Figure 5: Employment status

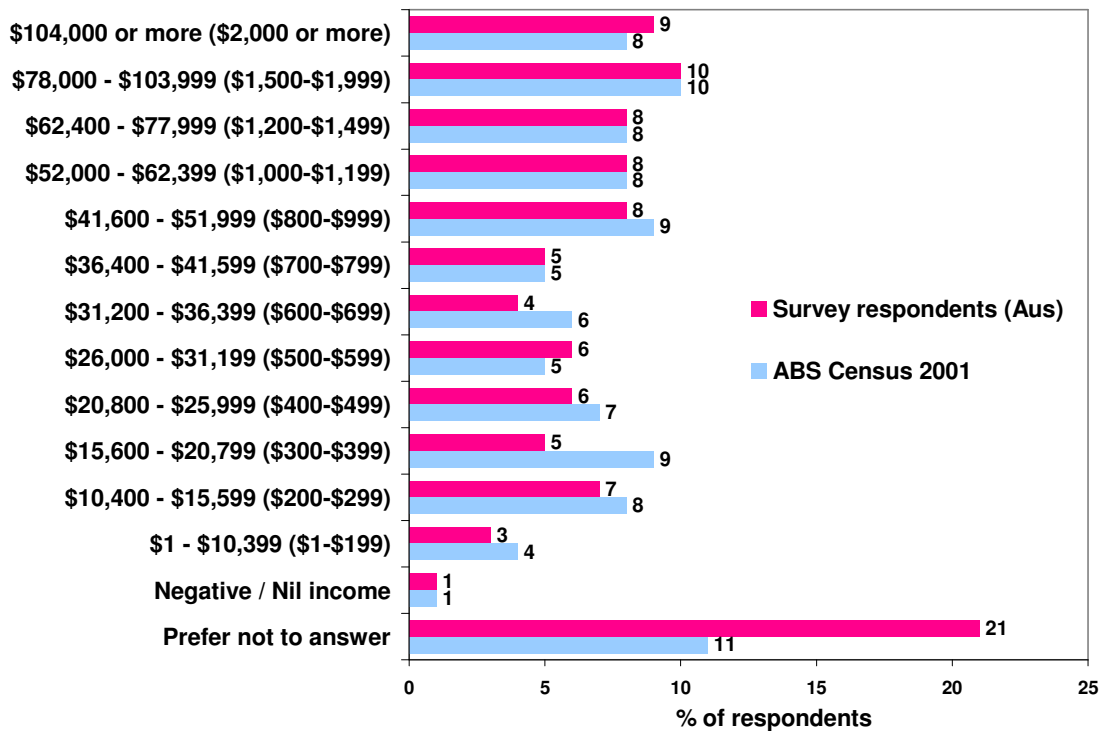


F12. What is your employment status? (Please select one)  
 Base: All respondents (Australia: n=1202; New Zealand n=800)  
 Total may not equal 100% due to rounding

**Income**

The household income of respondents was again diverse, and respondents with a varied range of income levels were represented in the survey. Figure 6 and Figure 7 illustrate the household income ranges of respondents in Australia and New Zealand (note, responses are in the local currency for each country).

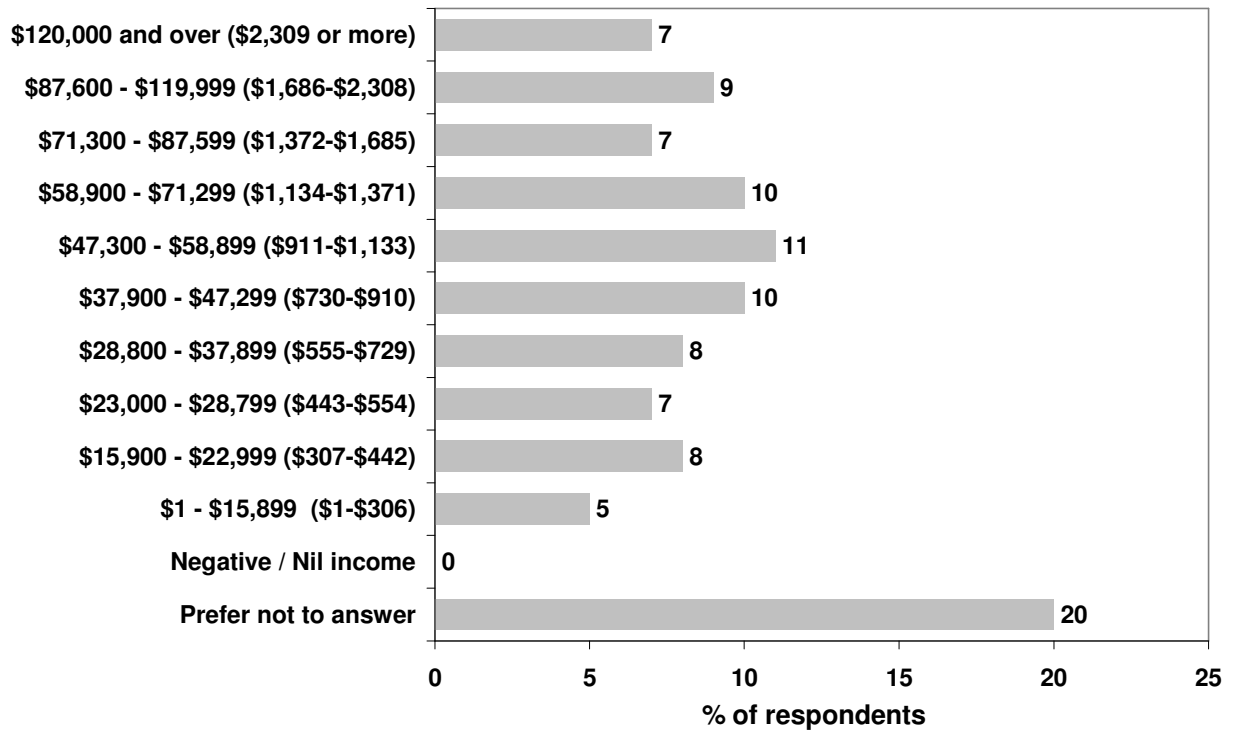
**Figure 6: Household income – pre-tax (Australia)**



F10a. What is your household's **total** annual income (before tax)? Numbers in brackets are the weekly equivalents? **(Please select one)**

Base: All respondents (Australia: n=1202)  
 Census data from 2001 Census of Australia  
 Total may not equal 100% due to rounding.

Figure 7: Household income – pre-tax (New Zealand)



F10a. What is your household's **total** annual income (before tax)? Numbers in brackets are the weekly equivalents? **(Please select one)**

Base: All respondents (New Zealand n=800)  
 Total may not equal 100% due to rounding.

## 4.2. Behavioural measures

A number of questions and attributes were asked in order to obtain behavioural measures and attitudes of respondents, particularly in reference to health, activity and diet.

### **Household shopping status**

The majority of respondents in Australia and New Zealand were responsible for at least half of the food/grocery shopping (82% in Australia and 78.4% in New Zealand). These are considered primary grocery buyers for reporting purposes. The food/grocery purchasing behaviour of respondents is indicated in Table 4.

**Table 4: Household shopping status**

%	Australia	New Zealand
<i>Base: All respondents</i>	(n=1202)	(n=800)
Responsible for all or most of the food/grocery shopping	57.3	54.9
Responsible for about half of the food/grocery shopping	24.7	23.5
Responsible for less than half of the food/grocery shopping	12.0	13.1
Not responsible for any of the food/grocery shopping	6.1	8.5

*S4. Thinking about food/grocery shopping, which of these best describes the level of responsibility you have for the shopping in your household? (please select one)*

*Base: All respondents (Australia: n=1202; New Zealand n=800)*

*Total may not equal 100% due to rounding.*

### **Dietary/food concerns**

In order to establish whether respondents had any food or dietary concerns, a question was included which listed a number of common health or food concerns or activities which applied to respondents. This listing and the percentage of respondents indicating that these applied to their situation is outlined in Table 5. Overall, the majority of respondents indicated that at least one of these aspects applied to their situation – 88% of Australians and 87% of New Zealanders reporting this (calculated as the total population minus the number of people who reported none of the situations applied to them and the number of people who preferred not to respond).

Table 5: Dietary/food concerns

%	Australia (n=1202)	New Zealand (n=800)
<b>Base: All respondents</b>		
Watching my weight/others' weight generally	55.8	52.6
Watching my health/others' health generally	46.9	45.2
Other health concerns such as high blood pressure or cholesterol	35.3	29.5
Asthma	29.7	30.8
Migraine	20.4	18.2
Digestive concerns such as coeliac disease, irritable bowel syndrome	18.8	13.3
Food allergy to seafood, fish, milk, gluten, eggs, or soybeans	17.7	12.5
Diabetes	17.2	14.3
Heart disease	11.9	10.5
On a specific diet	8.9	6.2
Food allergy to nuts	6.3	6.1
Training for sports	5.3	6.7
Pregnancy or breast feeding	4.7	3.7
Vegetarian/vegan	4.7	5.8
Other (please specify)	3.2	4.4
Religious/ethical beliefs that influence dietary choices	2.3	4.0
None of these	9.5	10.1
Prefer not to answer	2.1	2.8

F1. Do any of the following apply to you or any members of your household? (please indicate as many as apply)  
Base: All respondents (Australia: n=1202; New Zealand n=800)

### Health consciousness

Respondents were asked the extent to which they pay attention to keeping a healthy diet (Table 6). The majority of respondents across Australia and New Zealand reported paying at least a medium level of attention to keeping a healthy diet.

Table 6: How much attention paid to keeping a healthy diet

%	Australia (n=1202)	New Zealand (n=800)
<b>Base: All respondents</b>		
Very low amount of attention	3.5	3.7
Low amount of attention	5.5	8.0
Medium amount of attention	49.2	51.8
High amount of attention	34.0	29.5
Very high amount of attention	7.8	6.9

F2. How much attention do you pay to keeping a healthy diet? (please select one)  
Base: All respondents (Australia: n=1202; New Zealand n=800)  
Total may not equal 100% due to rounding

For reporting purposes, respondents were grouped into those paying:

- very low or low amount of attention to a healthy diet (9% Australia, 11.7% New Zealand);
- medium amount of attention to a healthy diet (49.2% Australia, 51.8% New Zealand); and
- high or very high amount of attention to a healthy diet (41.8% Australia, 36.4% New Zealand).

**Physical activity**

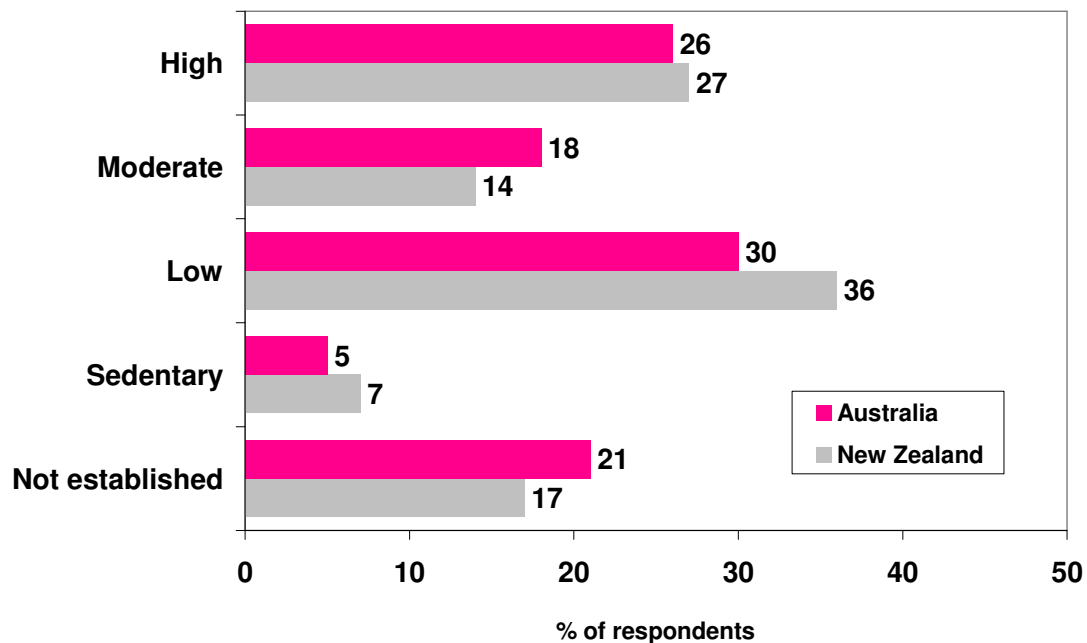
Respondents were asked a series of questions about level and duration of physical activity that mirror questions used in the National Health Survey 2005 (ABS) and the New Zealand Sport and Physical Activity Survey 2002-2003. Responses were calculated to give a score of physical activity such that a score is assigned to each level of activity (3.5 for walking, 5.0 for moderate exercise and 7.5 for vigorous exercise) which is then multiplied by the amount of time spent exercising in this manner.

Using these measures, the level of physical activity is defined as follows:

- **sedentary** – scores less than 100, including no exercise
- **low** – scores of 100 to less than 1600
- **moderate** – scores of 1600 to 3200 or more than 3200 but less than 2 hours vigorous exercise
- **high** – scores greater than 3200 and 2 hours or more of vigorous exercise

The breakdown of respondents falling into these categories is illustrated in Figure 8.

**Figure 8: Respondents’ Level of physical activity in the previous week**



F5. *In the last week how many times have you walked for recreation or fitness?*

F6. *In the last week how many times have you participated in moderate exercise (apart from walking) such as household work, gardening, sport, recreation or fitness activities? This is exercise that causes a moderate increase in your heart rate or breathing.*

F7. *In the last week how many times have you participated in vigorous exercise (apart from walking) such as heavy work around the yard, vigorous housework, or sport, recreation or fitness activities? This is exercise that causes a large increase in your heart rate or breathing.*

Base: All respondents (Australia: n=1202; New Zealand n=800)

Totals may not equal 100 due to rounding

## 5. Overall confidence in food supply

As seen in the following figures and tables, healthy eating is of less concern for consumers, than issues such as drought/water shortages (in Australia), household finances/cost of living, and pollution/environmental issues. In New Zealand, the health system, house prices, crime levels, standards in education and traffic congestion are of significantly more concern than they are for Australian consumers. In Australia, terrorism is of higher concern than it is for New Zealand consumers. These results can be seen in the following table.

**Table 7: Major concerns of respondents (general)**

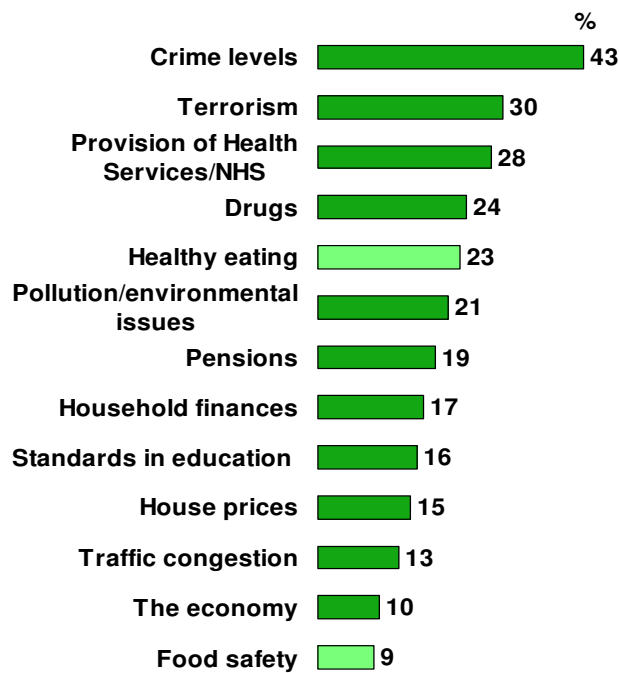
%	Australia (n=1202)	New Zealand (n=800)	Significant difference (p<0.05)
<b>Base: All respondents</b>			
Drought/water shortages	60.6	4.4	*
Household finances/Cost of living (food prices/fuel prices etc)	33.1	33.8	
Pollution/environmental issues	23.5	20.0	
Healthy eating	23.4	24.9	
The health system	22.3	33.3	*
House prices	19.8	28.9	*
Terrorism	18.2	5.6	*
Crime Levels	16.8	40.8	*
Standards in education	15.6	20.4	*
Drugs	15.3	17.5	
The economy	10.6	12.0	
Food safety	8.6	6.5	
Immigration	6.8	6.8	
Traffic congestion	6.7	14.9	*
Government/Politics	0.4	0.6	
Global warming	0.1	0.7	
Other	2.5	6.3	*
Don't know	0.9	2.5	*

*B1. Looking at the screen which of the following are the major concerns facing you today? (Please select your top three concerns)*

*Base: All respondents (n=1202 Australia, n=800 New Zealand), significant differences between Australia and New Zealand indicated by \*. Multiple responses allowed*

Australian results, more so than New Zealand results, were consistent with results for European consumers, who were more likely to think that the environment and healthy eating could damage their health, than terrorism or crime.<sup>2</sup> For Irish consumers, food safety was less of a concern than drugs and drug abuse, the health service and the environment.<sup>3</sup> Results from the UK (Figure 9) show that there were similar levels of concern towards healthy eating and food safety as Australian and New Zealand consumers. Crime and terrorism featured more strongly as a concern in the UK.

**Figure 9: UK Consumer Attitudes Survey – Major concerns facing you today<sup>4</sup>**



*Source: Consumer Attitudes to Food Standards, Food Standards Agency UK, 2007: Q6 Looking at the screen which of the following are the major concerns facing you today? Please select your top three concerns  
Base: All respondents (n=3513)  
Multiple responses allowed*

In Australia, consumers with a high level of health consciousness were significantly more likely than other consumers to be concerned about healthy eating (29.1% of those with a high level of health consciousness compared with 19.3% of those with a medium level and 19.9% of those with a low level of health consciousness). Australian female consumers were significantly more likely than Australian male consumers to be concerned about healthy eating (27.3% of female consumers compared with 19.5% of male consumers). This difference was not evident among New Zealand consumers.

<sup>2</sup> Special Eurobarometer 2005 – Risk Issues, European Food Safety Authority, 2005 (See Appendix G, Table 29)

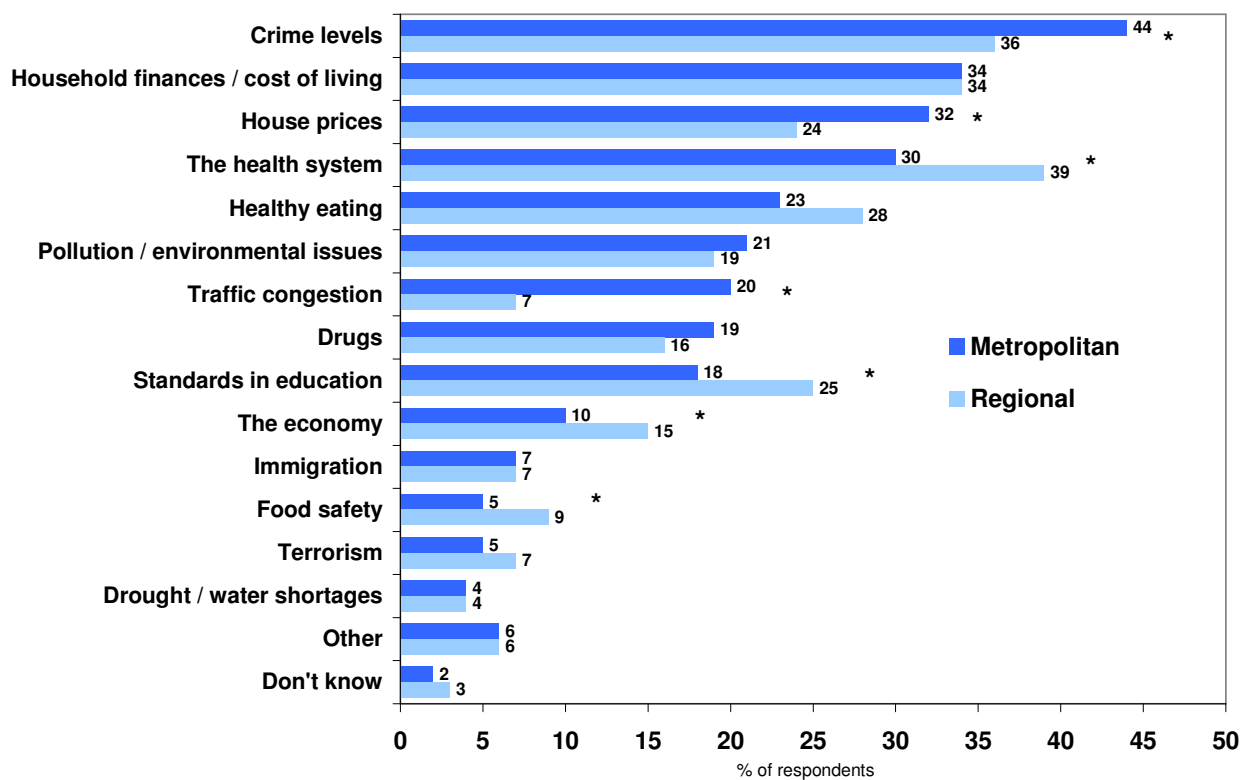
<sup>3</sup> Consumer Attitudes to Food Safety in Ireland, Food Safety Authority of Ireland, 2003 (See Appendix G, Table 30)

<sup>4</sup> Consumer Attitudes to Food Standards, Food Standards Agency UK, 2007



New Zealand consumers living in regional and metropolitan areas reported significantly different levels of concern in food safety, with regional consumers significantly more likely to be concerned about food safety compared with metropolitan consumers (8.7% of regional consumers compared with 5.1% of metropolitan consumers). There were also significant differences between New Zealand consumers living in regional and metropolitan locations in concern about crime levels, house prices, the health system, traffic congestion, standards in education and the economy, as can be seen in the following figure. These differences were not evident among Australian consumers.

Figure 10: Major concerns for New Zealand consumers, by location



B1. Looking at the screen which of the following are the major concerns facing you today? (Please select your top three concerns)

Base: All NZ respondents (n=800), n=486 metropolitan locations, n=314 regional locations,

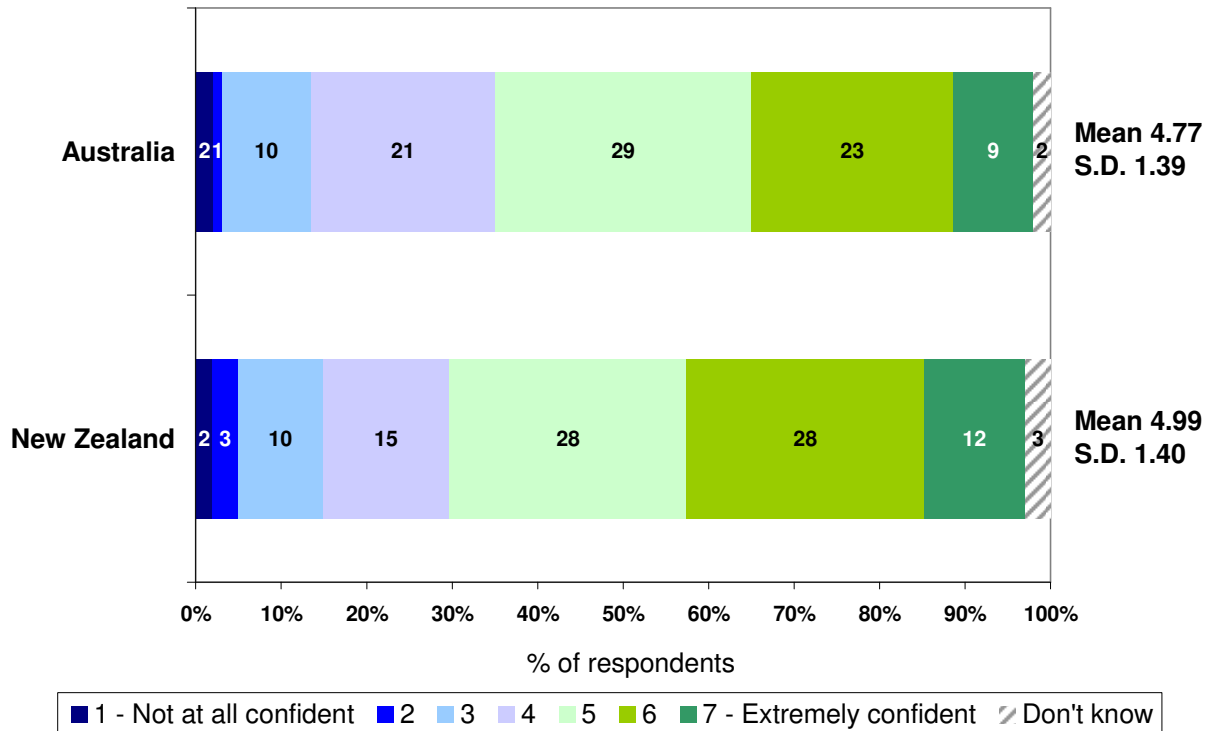
\* denotes significant differences between regional and metropolitan locations.

Multiple responses allowed

In New Zealand, non-main grocery buyers were significantly more likely than main grocery buyers to be concerned about healthy eating (36.2% of non-main grocery buyers compared with 21.8% of main grocery buyers). New Zealand consumers with a higher level of health consciousness were significantly more likely than other consumers to be concerned about healthy eating (29.2% of consumers with a high level of health consciousness compared with 23.4% of those with a medium level and 18.6% of those with a low level of health consciousness) and significantly more likely to be concerned about food safety (23% of consumers with a high level of health consciousness compared with 18.5% of those with a medium level and 17.1% of those with a low level of health consciousness).

On average, consumers in both Australia and New Zealand reported positive levels of confidence in safety of the food supply as a whole, as can be seen in Figure 11. Consumers in New Zealand were significantly more confident in the safety of the food supply as a whole (a mean of 4.99 for New Zealand consumers (S.D. 1.4) compared with a mean of 4.77 for Australian consumers (S.D. 1.39).

**Figure 11: Confidence that the food supply is producing safe food for consumption**



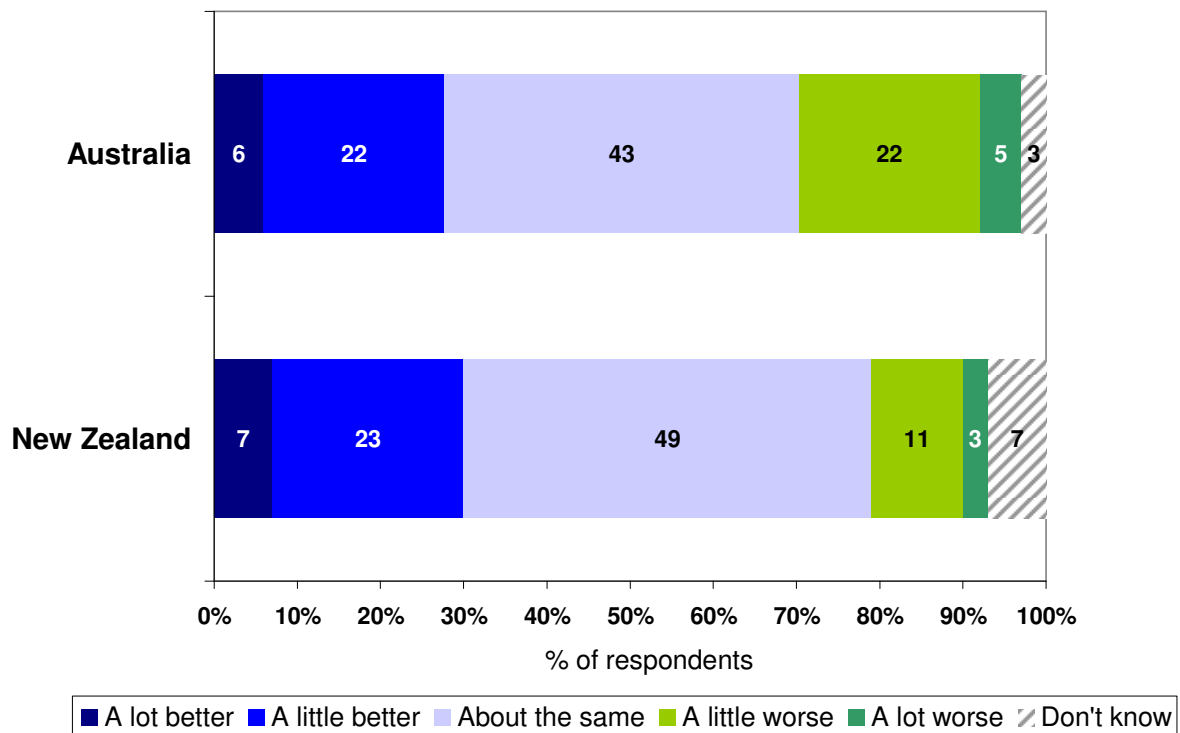
*B2. On a scale of 1 to 7, where 1 is "not at all confident", and 7 is "extremely confident", how confident are you that the food supply as a whole, from the farm to your plate, is producing safe food for consumption? (please choose the one number that best applies)*

*Base: All respondents (n=1202 Australia, n=800 New Zealand) Total may not equal 100% due to rounding*

Consumers with dietary concerns were less confident in the safety of the food supply compared with consumers without dietary concerns with a mean score of 4.74 (S.D. 1.33) for those with concerns compared with 5.02 (S.D. 1.4) for those without concerns in Australia; and a mean score of 4.93 (S.D. 1.39) for New Zealand consumers with concerns compared with 5.37 (S.D. 1.37) for those without concerns. In New Zealand, consumers with a high level of health consciousness were significantly less confident than those with a medium level of health consciousness with a mean score of 4.75 (S.D. 1.53) for those with a high level compared with 5.15 (S.D. 1.29) for those with a medium level of health consciousness. This difference was not evident among Australian consumers.

The largest proportion of Australian consumers reported that they felt food safety generally had remained 'about the same' over the past year (43%) with a further 21.8% saying it was 'a little worse' and 21.5% saying it was 'a little better'. New Zealand consumers were significantly more likely to say food safety generally had remained 'about the same' (48.9%) and significantly less likely than Australian consumers to say it was 'a little worse' (11.4%). These results can be seen in the Figure 12.

**Figure 12: Whether food safety has improved or worsened over the last year**



*B3. Taking everything into account, do you feel that food safety generally has got better or worse over the last year? (please select one) Total may not equal 100% due to rounding*  
 Base: All respondents (n=1202 Australia, n=800 New Zealand)

Results for Australian respondents were not as positive as those for European consumers, where for 38% of consumers food safety had improved, for 29% it had stayed about the same and for an almost equivalent proportion of 28% of consumers food safety had become worse. New Zealand consumers were more likely than European consumers to say food safety had stayed about the same.<sup>5</sup> Irish consumers were asked about changes in food safety in the past ten years, and more than half (53%) of consumers surveyed considered that food was safer then (2003) than it had been 10 years prior, while 30% considered it to be less safe.<sup>6</sup>

<sup>5</sup> Special Eurobarometer 2005 – Risk Issues, European Food Safety Authority, 2005 (See Appendix G, Table 31)

<sup>6</sup> Consumer Attitudes to Food Safety in Ireland, Food Safety Authority of Ireland, 2003 (See Appendix G, Table 32)

Reasons given by Australian and New Zealand respondents saying that food safety generally was a lot or a little **better** included:

- people being more aware of issues, through advertising and the media (6.7% Australia, 7.9% New Zealand);
- improved standards and regulation and stricter controls (5%, 4.5%);
- better health standards of the population (4.4%, 3.5%);
- labels contain more information (4.1%, 5%);
- more checks and inspections (3.8%, 5.5%);
- food safety has improved (3.3%, 2.9%); and
- supermarkets/restaurants/food producers are more accountable/have to be responsible for food safety/take care/aware/offer healthier products/use less pesticides (3.0%, 5.3%).

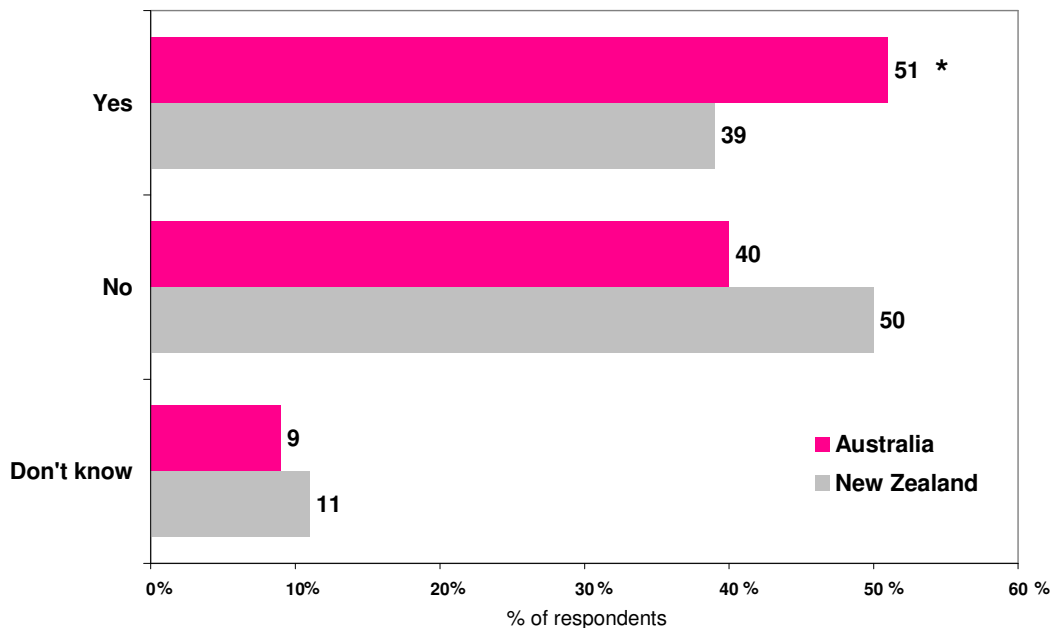
Reasons given by those saying that food safety generally was a lot or a little **worse** included:

- use of chemicals/preservatives/pesticides (7.1% Australia, 4.9% New Zealand);
- bad press/negative media attention (7%, 3.9%);
- worried about imported/overseas foods/safety standards of imported products not as strict as Australia/NZ (6.6%, 1.0%);
- quality of food is poor/not fresh/no taste (5.8%, 3.0%);
- drought/climate change/water shortage has caused concerns/affected food/caused food shortages (4.4%, 0.1%);
- prices have changed the most/have increased/have risen/not value for money (4.2%, 1.6%); and
- genetically modified foods/GM foods/concerns about GM foods/labelling of GM foods (1.2%, 3.1%).

## 5.1. Specific food concerns

As can be seen in the figure below, Australian respondents were significantly more likely than New Zealand respondents to have concerns about the safety of particular types of foods.

Figure 13: Concerns about the safety of particular foods



C1a. Do you have any concerns about the safety of any particular types of food? (please select one)

Base: All respondents (n=1202 Australia, n=800 New Zealand) Total may not equal 100% due to rounding  
\* denotes significant difference

When asked what types of foods were of most concern (unprompted response), Australian respondents who had expressed concern were most concerned with the food safety of fresh fruit or vegetables, unspecified types of meat, raw chicken or poultry, fish, imported foods/fresh or frozen imported food/exported food and seafood. New Zealand respondents who had expressed concern were most concerned with the food safety of raw chicken or poultry, fresh fruit or vegetables, unspecified types of meat, take away/fast food/coffee shops/cafes and foods with genetically modified ingredients or GE (genetically engineered) foods or genetically modified foods.

As can be seen in the following table, Australian respondents were significantly more likely than New Zealand respondents to be concerned about fresh fruit or vegetables, fish, imported foods or fresh or frozen imported food, seafood and dairy products while New Zealand respondents were significantly more likely than Australian respondents to be concerned about raw chicken or poultry. It should be noted that issues under discussion in the media at the time the survey was conducted may have had an impact on those issues identified by consumers as being of concern. For example, media coverage of the safety of raw chicken in New Zealand leading up to the time the survey was conducted may have influenced this high level of concern.

Table 8: Concern for particular types of foods

%	Australia (n=618)	New Zealand (n=315)	Significant difference (p<0.05)
<b>Base: Respondents expressing concern</b>			
Fresh fruit/vegetables	24.7	16.5	*
Meat (unspecified)	18.8	14.7	
Raw chicken/poultry	17.9	37.4	*
Fish	12.7	7.9	*
Imported foods/fresh or frozen imported food/exported foods	11.9	3.7	*
Seafood	10.6	5	*
Other	8.6	6.2	
Take away/fast food/coffee shops/cafes (all mentions)	7.8	11.1	
Dairy products (unspecified)	6.7	3.4	*
Other raw meat	5.8	6.6	
Fresh food/fresh products/raw ingredients	3.8	1.6	
Other packaged foods/pre-packaged	3.8	2.5	
Foods with Genetically Modified ingredients/GE (genetically engineered) foods/GM foods/GMO	2.9	8.7	*
Deli foods/cold meats/deli salads/smallgoods	2.8	6.9	*
Foods imported from Asian countries e.g. fresh food/produce/canned/seafood	2.8	1.2	*
Any foods containing additives/preservatives/colourings/MSG	2.7	1.7	
Eggs	2.6	2	
Bread/bread products/from bakeries	2.5	4.1	
Processed meat/poultry (e.g. sausages, burgers)	2.5	1.5	
Cooked meat/poultry (BBQ/roast chicken)	2.4	4.5	*
Tinned/bottled foods/canned	2.3	0.8	
Processed foods/products	2.2	4.9	*
Cheese	2.1	0.8	
Frozen foods (all mentions i.e. veg/meats)	1.8	1.7	
Milk	1.7	4.2	
Pre-heated foods/bain marie/pre-heated foods in take away shops	1.7	0.4	*
Packaged meat	1.5	0.5	
All/any food types	1.3	0.5	
Raw pork	1.2	3.9	*
Restaurants/foods from restaurants/buffet/smorgasbord	1.1	2.8	*
Use of pesticides/sprays/chemicals/growth hormones in food	1	2.2	
Asian/Chinese foods/take aways/restaurants	0.9	2.2	
Foods out of date/expired/supermarkets still sell/foods with short shelf life	0.8	0.4	
Salads/packed salads/ready made salads	0.8	2.1	
Organic foods (unspecified)	0.6	0	
Food handling concerns/products that can be tampered with/self serve foods	0.5	0.6	
Other dairy product	0.5	0.7	

C1b. And which particular types of foods do you have concerns about?

Base: Respondents who expressed a concern about the safety of a particular type of food (n=315 New Zealand, n=618 Australia)  
Multiple responses allowed, open ended response.

Following on from identifying types of foods that may be of general concern, all respondents were asked to indicate if they were concerned about specific food issues from a list of current issues provided. Respondents who said they had a concern about a particular food issue were asked to rate their level of concern in relation to that food issue, on a scale of one to seven, where one is 'not at all concerned', and seven is 'extremely concerned'. Tables 9 and 10 demonstrate the level of concern with individual food issues, listed in order according to the percentage of respondents who nominated this as a food issue of concern, indicating the level of overall concern with this food issue.

The food issues with the largest proportion of nominations for Australian respondents were food poisoning, storage times of food sold as fresh, the safety of imported foods, food safety/hygiene and the use of additives. The issues with the largest proportion of nominations for New Zealand respondents had some similarities: food poisoning, obesity levels in the population, the amount of sugar in food, storage times of foods sold as 'fresh' and food safety/hygiene. This is consistent with results for European consumers who cited food poisoning as their main perceived risk associated with food (unprompted). Australian and New Zealand respondents were less likely overall than European consumers to be concerned about food contaminated by toxic substances such as pesticides and chemicals, viruses, bacteria and to a lesser extent by the transmission of Bovine Spongiform Encephalopathy.<sup>7</sup> Irish consumers were more concerned about pesticide and herbicide residues, and Bovine Spongiform Encephalopathy than they were about food poisoning.<sup>8</sup>

Australian respondents were significantly more likely than New Zealand respondents to be concerned about a large number of issues: the use of pesticides to grow food (32.9% compared with 28.6%), the use of additives (37.2%, 28%), the sustainability of agriculture (19%, 8.8%), the safety of imported foods (38.2%, 24.9%), the amount of trans fats in food (26.7%, 21.6%), the amount of saturated fat in food (33%, 28.8%), the amount of salt in food (25%, 21.1%), the storage times of foods sold as fresh (47.6%, 35.3%), food poisoning (48.4%, 42.8%) and food labelling (35.1%, 23.6%). New Zealand respondents were significantly more concerned than Australian respondents about Bovine Spongiform Encephalopathy (26.8%, 18.5%).

On a scale of one to seven, where one is 'not at all concerned', and seven is 'extremely concerned', the level of concern for Australian respondents was highest for the use of cloned animals in the food supply, the use of antibiotics/hormones/steroids in meat, food safety/hygiene and the safety of imported foods. For New Zealand respondents, concern was highest for the use of cloned animals in the food supply, genetically modified foods, food safety/hygiene and the use of antibiotics/hormones/steroids in meat.

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<sup>7</sup> Special Eurobarometer 2005 – Risk Issues, European Food Safety Authority, 2005 (See Appendix G, Table 33)

<sup>8</sup> Consumer Attitudes to Food Safety in Ireland, Food Safety Authority of Ireland, 2003 (See Appendix G, Table 34)

Table 9: Level of concern with food issues (mean scores) (Australia)

	Mean	Standard deviation	Percentage of total respondents nominating this as food issue
<b>Base: Respondents who expressed concern</b>			
Food poisoning such as Salmonella and E. Coli	6.08	1.09	48.4%
Storage times of foods sold as 'fresh'	6.01	1.11	47.6%
The safety of imported foods	6.21	0.99	38.2%
Food safety/hygiene	6.22	0.93	37.6%
The use of additives (such as preservatives and colouring) in food products	5.99	1.07	37.2%
The use of antibiotics/hormones/steroids in meat	6.28	0.98	36.9%
Obesity levels in the population	6.10	0.94	35.4%
The amount of sugar in food	5.71	1.17	35.4%
Food labelling	5.74	1.15	35.1%
The amount of fat in food	5.99	1.01	33.7%
The amount of saturated fat in food	6.03	0.96	33.0%
The use of pesticides to grow food	6.05	1.12	32.9%
Foods aimed at children	6.18	0.96	29.7%
Bird/Avian flu	5.89	1.26	26.8%
The amount of trans fats in food	6.09	1.03	26.7%
Genetically Modified foods	5.97	1.29	25.3%
The amount of salt in food	5.60	1.18	25.0%
Conditions in which food animals are raised and slaughtered	5.85	1.18	22.9%
The use of cloned animals in the food supply	6.30	1.09	21.2%
The feed given to livestock	5.96	1.13	19.7%
The sustainability of agriculture	6.18	1.15	19.0%
BSE (Bovine Spongiform Encephalopathy, Mad Cow Disease)	5.86	1.22	18.5%
Food allergies and intolerance	5.91	1.14	18.1%
Irradiation of food or food ingredients	5.89	1.04	13.4%
The addition of nutrients and other substances not usually found in that food, e.g. calcium in orange juice	5.66	1.16	12.1%
The use of iodised salt in foods	5.29	1.42	9.2%
Whether foods are organic	5.30	1.28	8.2%
The addition of folic acid to the food supply	5.63	1.26	6.3%

C2b. [FOR ALL SELECTED AT C2a, Maximum of 10 randomly selected if more than 10 answered at C2a] On a scale of 1 to 7, where 1 is "not at all concerned", and 7 is "extremely concerned", how concerned are you about (INSERT EACH FOOD CONCERN FROM C2a)? (please choose the one number that best applies)

Base: Respondents who expressed a concern about the food issue (varies)



Table 10: Level of concern with food issues (mean scores) (New Zealand)

	Mean	Standard deviation	Percentage of total respondents nominating this as food issue
<b>Base: Respondents who expressed concern</b>			
Food poisoning such as a Salmonella and E. Coli	5.88	1.21	42.8%
Obesity levels in the population	5.90	1.04	38.0%
The amount of sugar in food	5.67	1.18	36.8%
Storage times of foods sold as 'fresh'	5.83	1.09	35.3%
Food safety/hygiene	6.09	1.08	35.3%
The use of antibiotics/hormones/steroids in meat	6.07	1.1	33.5%
The amount of fat in food	5.85	0.99	32.6%
The amount of saturated fat in food	5.79	1.2	28.8%
Genetically Modified foods	6.13	1.13	28.8%
The use of pesticides to grow food	5.80	1.12	28.6%
The use of additives (such as preservatives and colouring) in food products	5.58	1.16	28.0%
Bird/Avian flu	5.78	1.34	27.3%
BSE (Bovine Spongiform Encephalopathy, Mad Cow Disease)	5.74	1.48	26.8%
Foods aimed at children	6.05	1.05	26.6%
Conditions in which food animals are raised and slaughtered	5.93	1	26.4%
The safety of imported foods	5.86	1.09	24.9%
Food labelling	5.68	1.15	23.6%
The use of cloned animals in the food supply	6.44	0.94	22.9%
The amount of trans fats in food	5.97	0.99	21.6%
The amount of salt in food	5.45	1.14	21.1%
The feed given to livestock	5.73	1.16	16.9%
Food allergies and intolerance	5.63	1.12	15.4%
The addition of nutrients and other substances not usually found in that food, e.g. calcium in orange juice	5.34	1.4	13.3%
Irradiation of food or food ingredients	5.72	1.26	10.6%
Whether foods are organic	5.47	1.06	10.5%
The sustainability of agriculture	6.02	1.09	8.8%
The addition of folic acid to the food supply	5.70	1.59	8.5%
The use of iodised salt in foods	5.34	1.39	7.8%

C2b. [FOR ALL SELECTED AT C2a, Maximum of 10 randomly selected if more than 10 answered at C2a] On a scale of 1 to 7, where 1 is "not at all concerned", and 7 is "extremely concerned", how concerned are you about (INSERT EACH FOOD CONCERN FROM C2a)? (please choose the one number that best applies)  
Base: Respondents who expressed a concern about the food issue (varies)

In the UK, just under half of respondents (46%) spontaneously mentioned a concern about food issues. Additives/preservatives followed by poor, unhealthy diet/children’s diet and use of pesticides/chemicals were the most commonly (unprompted) nominated food concerns as shown in the figure below.

**Figure 14: UK Consumer Attitudes to Food Standards, 2007 – Spontaneous concerns about issues related to food<sup>9</sup>**



*Consumer Attitudes to Food Standards, Food Standards Agency UK, 2007: Q7 Are there any issues related to food that you have concerns about?  
 Base: All respondents (n=3513)  
 Multiple responses allowed*

<sup>9</sup> Consumer Attitudes to Food Standards, Food Standards Agency UK, 2007

### **Food Poisoning**

Almost one third of respondents (31.6% of Australian respondents and 30.3% of New Zealand respondents) reported having food poisoning in the last year. A further 14% of Australian respondents and 12.1% of New Zealand respondents were unsure whether or not they had had food poisoning. Main grocery buyers were significantly more likely to say they had had food poisoning than non-main grocery buyers (32.6% of Australian and 32.5% of New Zealand main grocery buyers compared with 27.1% of Australian and 22.5% of New Zealand non-main grocery buyers). Most respondents who reported food poisoning (75.5% of Australian and 75.4% of New Zealand respondents who said they had food poisoning) thought this poisoning was from food purchased outside the home. A further 9.4% of Australian and 12.1% of New Zealand respondents thought this poisoning was from food prepared at home, and 11.9% of Australian and 4.8% of New Zealand respondents thought this poisoning was from both food prepared at home and food prepared outside the home (in the case of more than one instance of poisoning).

The majority of respondents who have had food poisoning said they did not report their illness to anyone (59.7% of the 31.6% of Australian and 62.4% of the 30.3% of New Zealand respondents who said they had food poisoning in the past year). The most commonly cited places where this illness was reported among those who have had food poisoning were:

- my doctor (25.6% of Australian respondents and 25.8% of New Zealand respondents who have had food poisoning);
- staff at the food outlet (11.6%, 7.5%);
- person/household responsible for food preparation (7.5%, 4.2%);
- family member/wife/mother/partner (3.1%, 2.2%); and
- other (2.5%, 6.2%).

In the 2005 New Zealand Food Safety Authority quantitative study, 22% of respondents declared they had experienced food poisoning at some stage over the previous two years. Of that 22%, 83% thought their food poisoning was from food purchased outside the home. Sixty six percent of those consumers who thought they had contracted food poisoning from food purchased outside the home had not reported the food poisoning to anyone<sup>10</sup>.

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<sup>10</sup> New Zealand Food Safety Authority, A Quantitative Study, May 2005 (See Appendix G, Table 35 & Table 36)

## 6. Confidence in regulation and monitoring

The following section examines awareness of and confidence in organisations that play a role in food regulation and monitoring, including unprompted and prompted awareness of FSANZ, and desire for greater food regulation.

### 6.1. Awareness of organisations

Consumers in Australia and New Zealand were asked about their awareness, both unprompted and prompted, of any organisations they could think of which have a role in food regulation and monitoring. A diverse range of organisations and sources were mentioned spontaneously by consumers. The most commonly mentioned organisations across Australia and New Zealand were government health departments/authorities and health related non-government organisations (NGOs).

The most prevalent unprompted responses amongst Australian consumers were:

- State or Territory health departments/authorities (30%) (including organisations such as Safe Food Queensland, New South Wales Food Authority);
- health related NGOs (18%);
- Australian Federal/State governments (10%);
- FSANZ (8%);
- local councils (7%); and
- food manufacturers / retailers (7%).

New Zealand consumers recalled similar types of organisations, with the most commonly mentioned being:

- national/regional health departments/authorities (20%);
- health related NGOs (16%);
- local councils (14%);
- Ministry of Health (9%);
- New Zealand Food Safety Authority (8%); and
- consumer associations (7%).

FSANZ featured in relatively few consumers' top-of-mind awareness when thinking about organisations that play a role in food regulation and monitoring – 8% of Australian and 4% of New Zealand consumers mentioned FSANZ without prompting. A significant proportion of consumers could not think of any organisations involved in food regulation and monitoring, with 38% of Australian and 34% of New Zealand consumers unable to mention any specific organisations spontaneously. Irish consumers were similar to Australian and New Zealand consumers, with only 8% spontaneously able to name the Food Safety Authority of Ireland.<sup>11</sup>

When prompted, awareness increased substantially for all organisations playing a role in food regulation including FSANZ. Amongst Australian consumers, FSANZ became the most common option selected by respondents as an organisation involved in food regulation and monitoring, with 60.2% reporting awareness of FSANZ. This was followed by a number of government bodies including State or Territory Health Departments (45.9%), Department of Health and Ageing (40.6%), Australian Quarantine Inspection Service (40.3%), Department of Agriculture, Fisheries and Forestry (36.3%) and local government organisations (30.8%). Prompted awareness of all organisations is shown in Table 11.

**Table 11: Organisations with a role in food regulation and monitoring – prompted (Australia)**

%	Australia
<i>Base: All respondents</i>	(n=1202)
Food Standards Australia New Zealand (FSANZ, ANZFA)	60.2
State or Territory Health Department/authority	45.9
The Australian Government Department of Health and Ageing	40.6
Australian Quarantine Inspection Service (AQIS)	40.3
Department of Agriculture, Fisheries and Forestry (DAFF)	36.3
Local Council/Local Government organisations or Public Health Units	30.8
Local council organisations	24
State or Territory Department of Agriculture or Primary Industry	21.1
Australian Pesticide and Veterinary Medicines Authority (APVMA)	6.9
Biotechnology Australia	4.7
Office of the Gene Technology Regulator (OGTR)	3.9
Other (please specify)	1.2
None of the above	14.3

*D12a. Which, if any, of the following organisations are you aware have a role in food regulation and monitoring? Choose all that apply.*

*Base: All respondents (n=1202). Multiple responses allowed.*

<sup>11</sup> Consumer Attitudes to Food Safety in Ireland, Food Safety Authority of Ireland, 2003 (See Appendix G, Table 37)

Amongst New Zealand consumers, awareness of FSANZ also increased when consumers were prompted with a list of organisations (51.8% aware). However, FSANZ did not receive highest prompted awareness, with 81.7% referring to the Ministry of Health and 60.4% the New Zealand Food Safety Authority. This is reflective of the different role FSANZ plays in New Zealand in comparison to in Australia. Other organisations which featured prominently in the consciousness of New Zealand consumers included Ministry of Agriculture and Forestry (MAF) Quarantine Service (41.4%), MAF (35.8%) and Regional councils or public health units (32.2%). Prompted awareness of New Zealand consumers for all organisations is listed in Table 12.

**Table 12: Organisations with a role in food regulation and monitoring – prompted (New Zealand)**

%	New Zealand
<b>Base: All respondents</b>	<b>(n=800)</b>
Ministry of Health	81.7
New Zealand Food Safety Authority (NZFSA)	60.4
Food Standards Australia New Zealand (FSANZ, ANZFA)	51.8
Ministry of Agriculture and Forestry Quarantine Service	41.4
Ministry of Agriculture and Forestry (MAF)	35.8
Regional councils or Public Health Units	32.2
Environmental Risk Management Authority (ERMA)	22.7
Ministry of Research, Science and Technology	19.6
Agricultural Compounds and Veterinary Medicines Unit	15.1
Others (specify)	1
None of the above	8.3

*D12b. Which, if any, of the following organisations are you aware have a role in food regulation and monitoring? Choose all that apply.*

*Base: All respondents (n=800) Multiple responses allowed*

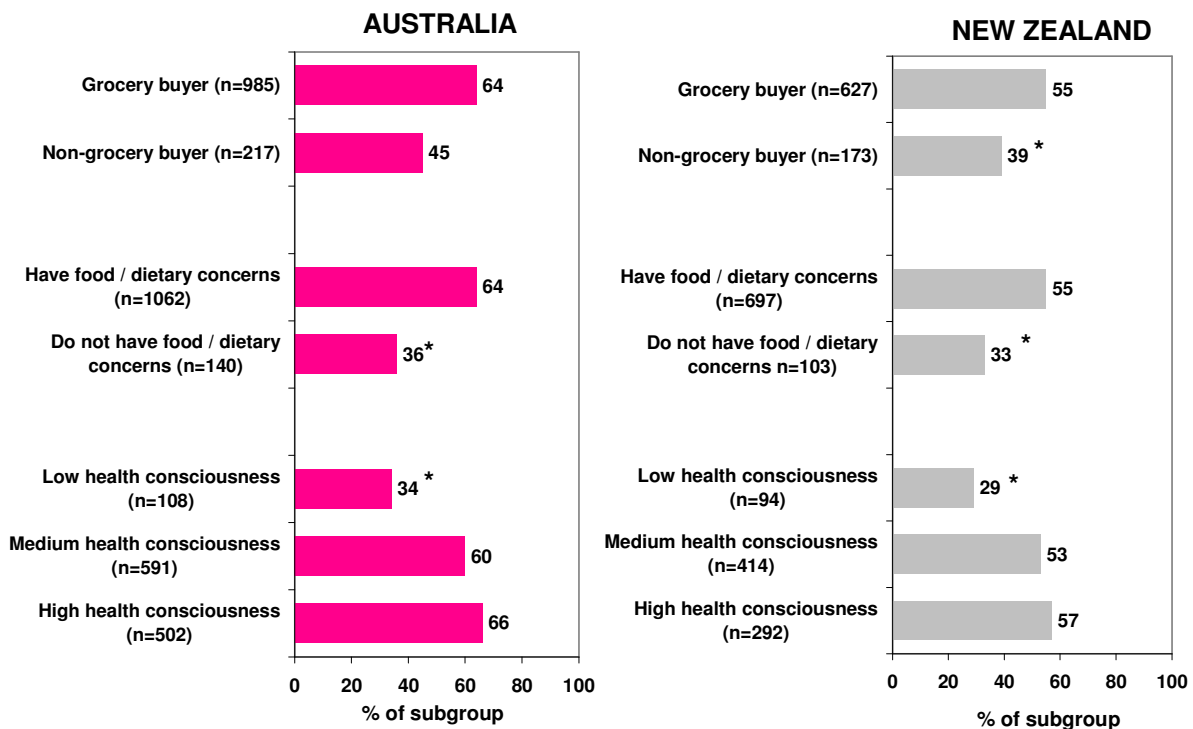
As would be expected given the different role played by FSANZ in each country, prompted awareness of FSANZ was significantly higher amongst Australian consumers when compared with New Zealand consumers. Awareness was lower for FSANZ when compared with the equivalent agency – the Food Standards Agency – in the United Kingdom (UK). When prompted, 82% of UK consumers were aware of this agency in 2006<sup>12</sup>. In Ireland, 60% of consumers said they were aware of the Food Standards Authority of Ireland.<sup>13</sup>

<sup>12</sup> Consumer Attitudes to Food Standards, Food Standards Agency UK, 2007 (See Appendix G, Table 38)

<sup>13</sup> Consumer Attitudes to Food Safety in Ireland, Food Safety Authority of Ireland, 2003 (See Appendix G, Table 39)

Across both Australia and New Zealand, awareness of FSANZ was higher amongst those consumers who were the main grocery buyers, have food/dietary concerns and those who had higher levels of health consciousness (Figure 15). These consumers are likely to be more engaged in food issues given the activity and attitudes they have. Those consumers who were less likely to be aware of FSANZ are not as actively engaged in food issues, such as having no dietary concerns. This group however may, somewhat paradoxically, depend on the work of FSANZ and other organisations regulating and monitoring food to ensure they are protected given they take less self involvement in or concern in food issues.

Figure 15: Prompted awareness of FSANZ



D12b. Which, if any, of the following organisations are you aware have a role in food regulation and monitoring? **Choose all that apply.**

F2. How much attention do you pay to keeping a healthy diet?

F1. Dietary concerns construct

S4. Thinking about food/grocery shopping, which of these best describes the level of responsibility you have for the shopping in your household? **(please select one)**

Base: All respondents (base size varies)

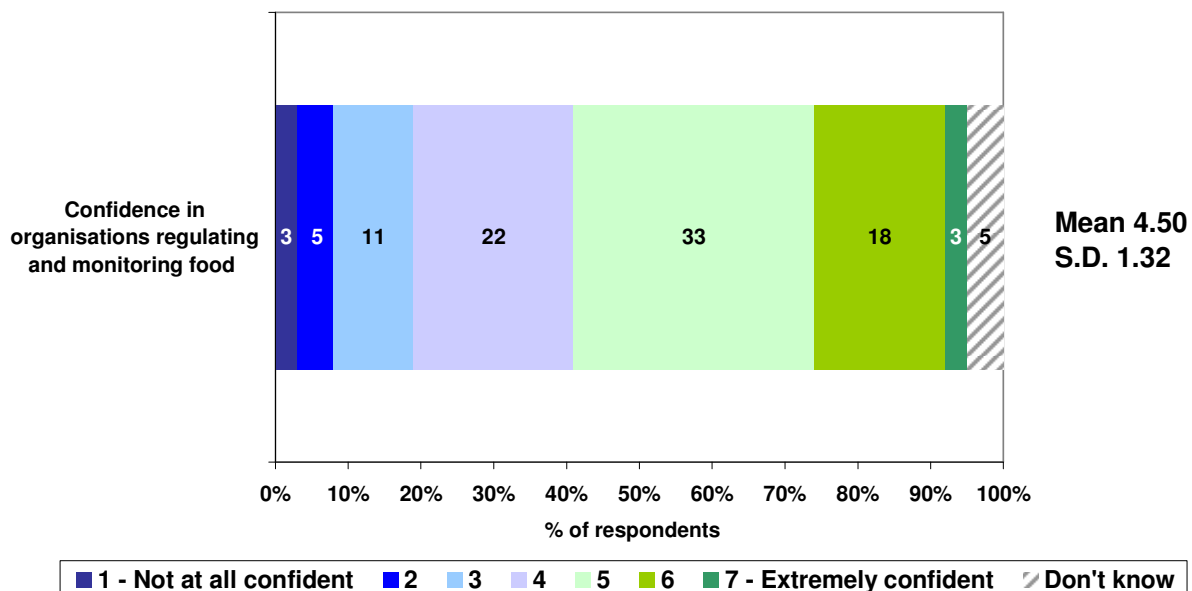
\* denotes significant difference within subgroup

## 6.2. Confidence in organisations regulating and monitoring food

Overall confidence in organisations regulating and monitoring food was slightly positive on a seven point scale, on which one was 'not at all confident' and seven was 'extremely confident'. Australian consumers gave a mean confidence score of 4.50 (S.D.1.32) and New Zealand consumers a significantly higher mean of 4.74 (S.D.1.30).

The dispersion of this confidence for Australian consumers is illustrated in Figure 16. On the positive side of the scale, 54% of consumers rated their confidence as a 5, 6, or 7.

Figure 16: Confidence about current measures taken by the organisations regulating and monitoring food (Australia)



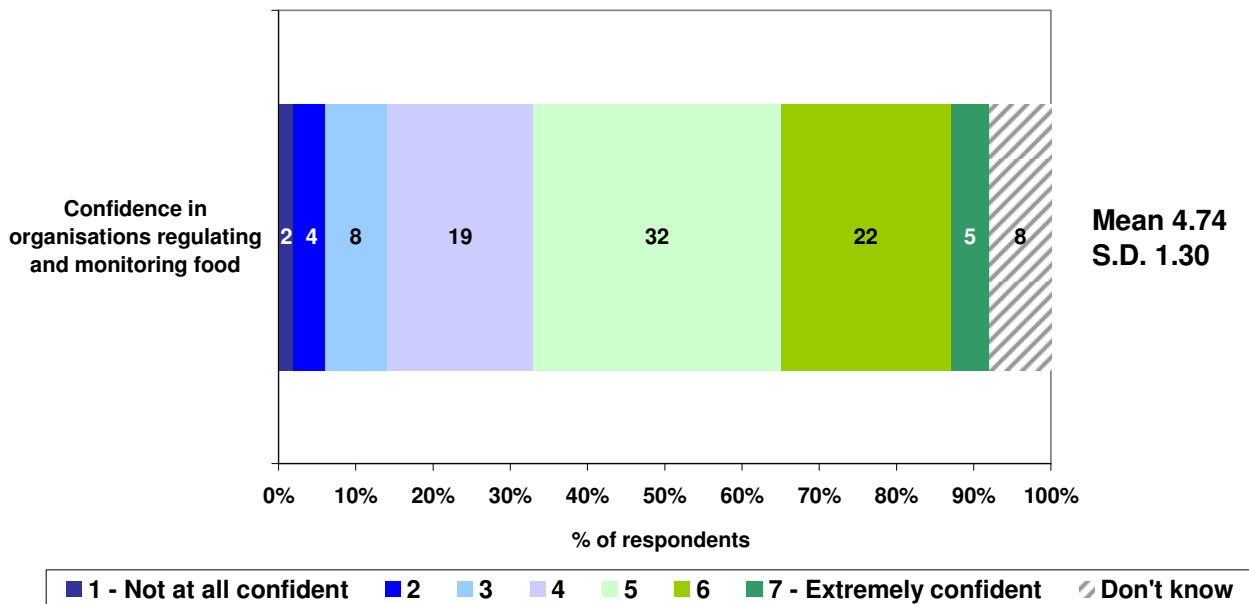
D13. On a scale of 1 to 7, where 1 is "not at all confident" and 7 is "extremely confident", how confident are you about the current measures taken by the organisations regulating and monitoring food? **(please choose the one number that best applies)**  
Base: Respondents (n=1202) Total may not equal 100% due to rounding

There were few significant variations in confidence in organisations regulating and monitoring food amongst subgroups of the Australian population, particularly in terms of attitude and behaviour in relation to health and diet. That is, confidence was similar between grocery buyers and non-buyers, those consumers with and without food/dietary concerns, those with different levels of health consciousness, physical activity, and healthy eating. Male consumers were more likely to express confidence (mean of 4.66, S.D. 1.27) in organisations than females (mean of 4.33, S.D. 1.35) and younger consumers aged 14-24 were more likely than most other age groups to report confidence in such organisations (mean of 4.80, S.D. 1.15).



The dispersion of confidence in organisations regulating and monitoring food amongst New Zealand consumers is shown in Figure 17. New Zealand consumers reported greater confidence in such organisations than Australians, and the majority (59%) reported a score of 5, 6 or 7 out of 7.

**Figure 17: Confidence about current measures taken by the organisations regulating and monitoring food (New Zealand)**



*D13. On a scale of 1 to 7, where 1 is "not at all confident" and 7 is "extremely confident", how confident are you about the current measures taken by the organisations regulating and monitoring food? (please choose the one number that best applies)*  
Base: All respondents (n=800) Total may not equal 100% due to rounding

Amongst New Zealand consumers, levels of confidence in organisations that play a part in food regulation and monitoring were consistent amongst most sections of the population, both in terms of demographic traits and behavioural and attitudinal characteristics. As with Australian consumers, New Zealand males were more likely to express confidence in organisations (mean of 4.85, S.D. 1.32) than females (mean of 4.63, S.D. 1.28).

New Zealand and Australian consumers tended to be less confident than those in the United Kingdom, where 62% of consumers reported confidence in the current measures taken by all organisations involved in protecting health with regards to food safety<sup>14</sup>. Just over half of European consumers (55%) agreed that public authorities are quick to act when a danger to citizens' health is identified.<sup>15</sup> In Ireland, 61% of respondents cited that they were confident in the food safety measures currently in place.<sup>16</sup>

<sup>14</sup> Consumer Attitudes to Food Standards, Food Standards Agency UK, 2007 (See Appendix G, Table 40)

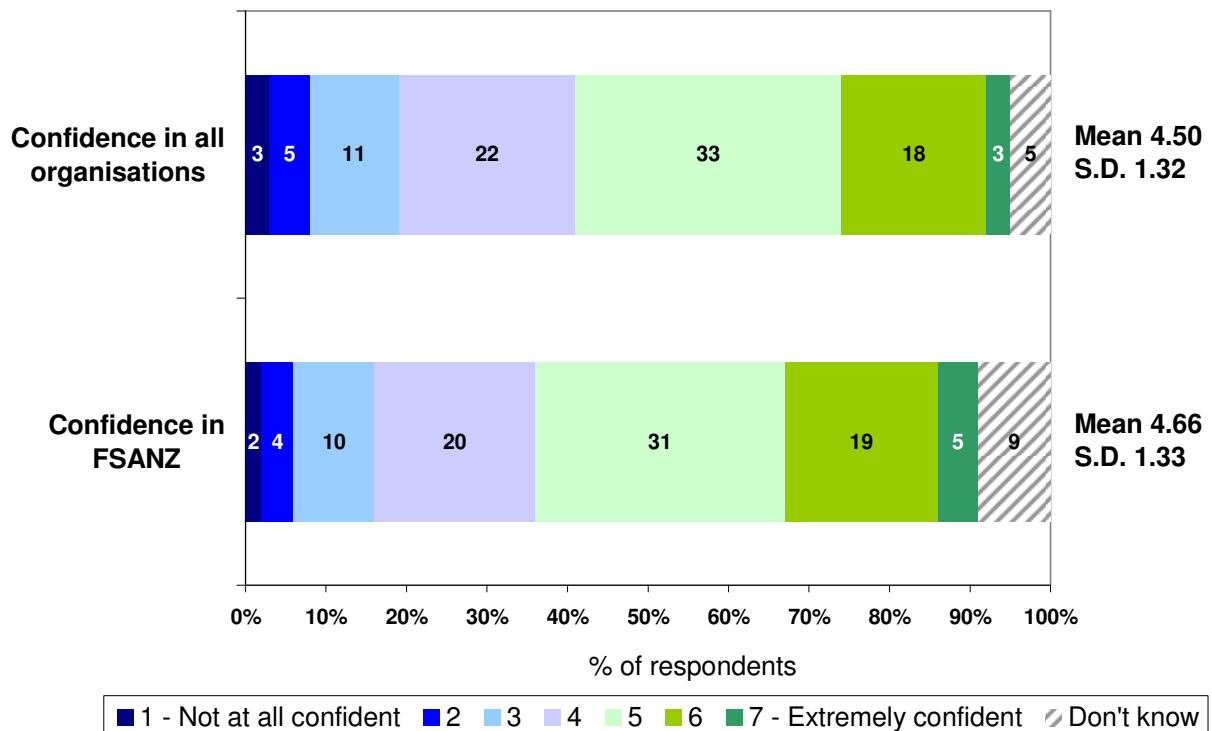
<sup>15</sup> Special Eurobarometer 2005 – Risk Issues, European Food Safety Authority, 2005 (See Appendix G, Table 41)

<sup>16</sup> Consumer Attitudes to Food Safety in Ireland, Food Safety Authority of Ireland, 2003 (See Appendix G, Table 42)

### 6.3. Confidence in FSANZ

Confidence levels in FSANZ as an agency were significantly higher than confidence in all organisations regulating and monitoring food amongst Australian consumers (Figure 18). In New Zealand however, there were no significant differences in the confidence of consumers towards FSANZ compared with all organisations in general (Figure 19).

Figure 18: Confidence in the work of all organisations and FSANZ (Australia)

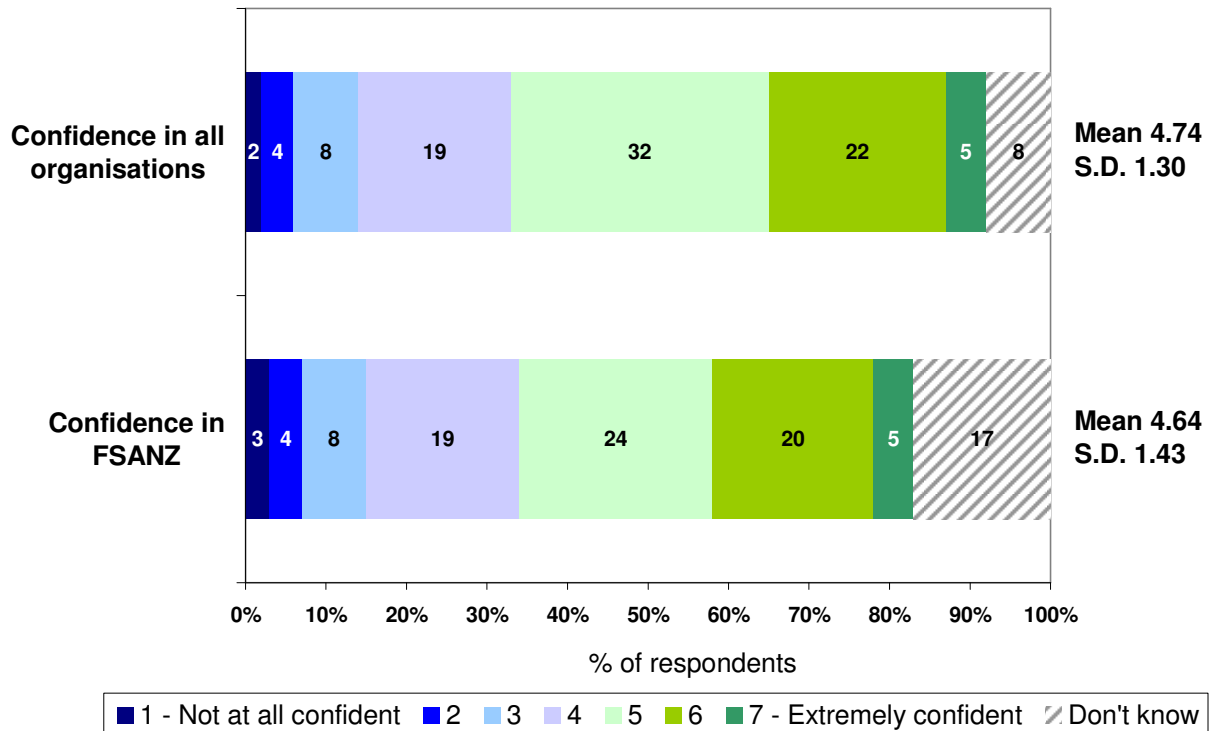


D13. On a scale of 1 to 7, where 1 is "not at all confident" and 7 is "extremely confident", how confident are you about the current measures taken by the organisations regulating and monitoring food? **(please choose the one number that best applies)**

D14. On a scale of 1 to 7, where 1 is "not at all confident" and 7 is "extremely confident", how confident are you in the work of Food Standards Australia New Zealand? **(please choose the one number that best applies)**

Base: Respondents (n=1202)

Figure 19: Confidence in the work of all organisations and FSANZ (New Zealand)



D13. On a scale of 1 to 7, where 1 is “not at all confident” and 7 is “extremely confident”, how confident are you about the current measures taken by the organisations regulating and monitoring food? (please choose the one number that best applies)

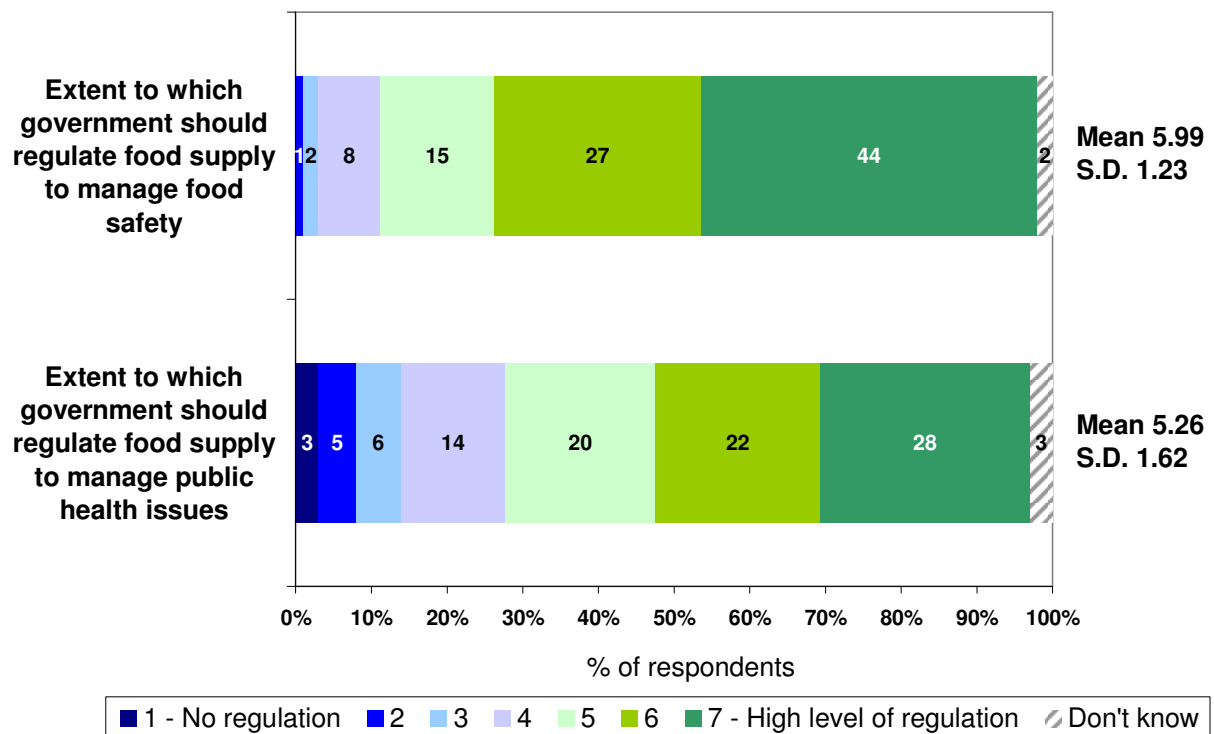
D14. On a scale of 1 to 7, where 1 is “not at all confident” and 7 is “extremely confident”, how confident are you in the work of Food Standards Authority New Zealand New Zealand? (please choose the one number that best applies)  
Base: All respondents (n=800)

Whilst New Zealand consumers were more likely than Australians to report confidence in organisations in general who monitor and regulate food, when it came to FSANZ specifically there was no difference between consumers in the two countries in their confidence towards the organisation (a mean of 4.66 (S.D. 1.33) in Australia and 4.64 (S.D. 1.43) in New Zealand). There were no significant differences amongst consumers within each country, with the exception of Australian males, who were more likely to express confidence in FSANZ (mean of 4.78, S.D. 1.34) than females (mean of 4.54, S.D. 1.31). There were also no significant differences in the level of confidence between those who were aware of FSANZ having a role, and those who did not (both unprompted and prompted questions).

### 6.4. Support for levels of regulation

Consumers were asked on a seven point scale where one was ‘no regulation’ and seven was ‘high level of regulation’ the extent to which they felt there should be government regulation of the food supply a) to manage for public health issues like obesity and b) to manage for food safety. The mean scores derived from these questions for Australian and New Zealand consumers are shown in Figure 20 and Figure 21.

Figure 20: Extent to which government should regulate the food supply to *manage for public health issues like obesity and manage for food safety* (Australia)

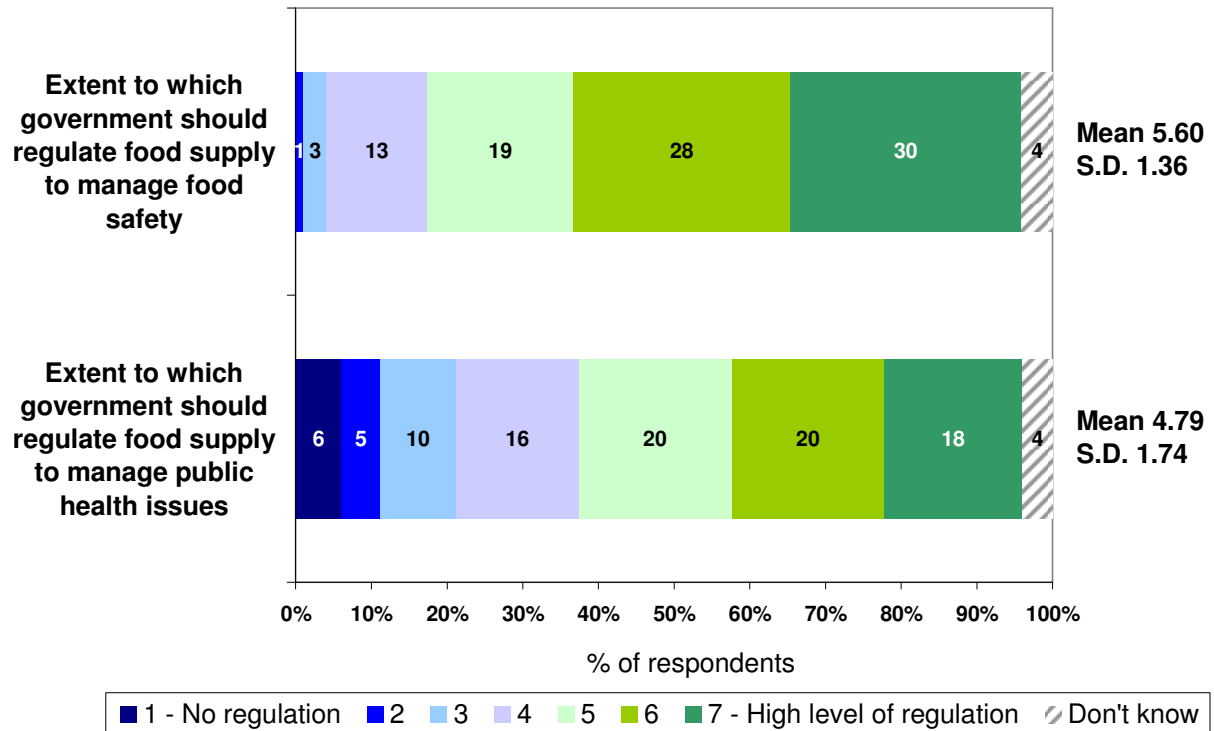


D15. Thinking about purchasing foods in general, on a scale of 1 to 7, where 1 is “no regulation at all” and 7 is “high level of regulation”, to what level do you believe the government should regulate the food supply to **manage for public health issues like obesity**? (please choose the one number that best applies)

D16. Thinking about purchasing foods in general, on a scale of 1 to 7, where 1 is “no regulation at all” and 7 is “high level of regulation”, to what level do you believe the government should regulate the food supply to **manage for food safety**? (please choose the one number that best applies)

Base: All respondents (n=1202)

Figure 21: Extent to which government should regulate the food supply to *manage for public health issues like obesity and manage for food safety* (New Zealand)



D15. Thinking about purchasing foods in general, on a scale of 1 to 7, where 1 is “no regulation at all” and 7 is “high level of regulation”, to what level do you believe the government should regulate the food supply to **manage for public health issues like obesity?** (please choose the one number that best applies)

D16. Thinking about purchasing foods in general, on a scale of 1 to 7, where 1 is “no regulation at all” and 7 is “high level of regulation”, to what level do you believe the government should regulate the food supply to **manage for food safety?** (please choose the one number that best applies)

Base: All respondents (n=800)

Across both countries there was higher support for regulation of the food supply to manage food safety than for public health issues. Australian consumers were significantly more likely to report a higher desire for regulation for both public health issues and food safety than New Zealanders.

**Public Health Issues**

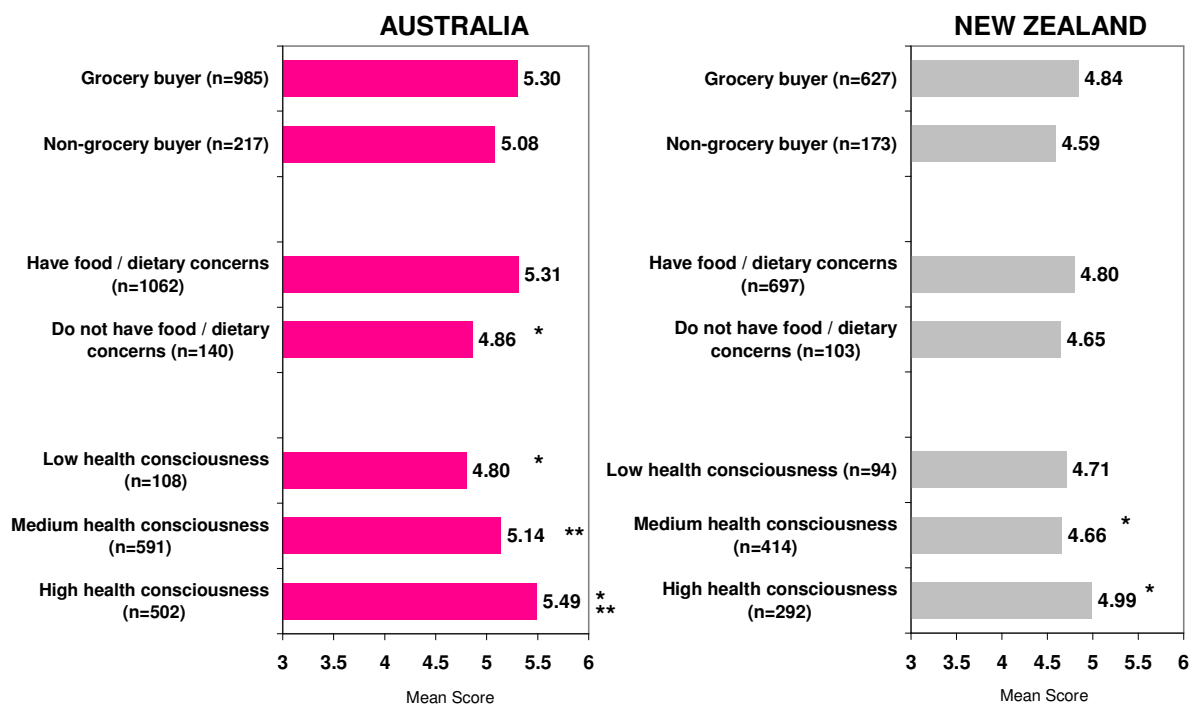
Australian consumers reported a mean score of 5.26 (S.D. 1.62) and New Zealanders reported a significantly lower 4.79 (S.D. 1.74) out of 7 with regards to regulation of the food supply to manage public health issues. Given obesity was mentioned in the question as an example of a public health issue, it is important to consider whether prevalence of obesity is different in each country and may impact desire for greater regulation of public health issues. That is, is support for regulation of the food supply for public health issues higher in Australia because of higher obesity levels? The answer is no, given that recorded obesity levels are no higher in Australia than New Zealand. In fact, obesity is recorded as lower in Australia (16%)<sup>17</sup> than New Zealand (21%)<sup>18</sup> in recent surveys.

<sup>17</sup> National Health Survey 2004-05, Australian Bureau of Statistics

<sup>18</sup> A Portrait of Health: Key results of the 2002/03 New Zealand Health Survey, Ministry of Health

There were some variations amongst Australian consumers in the level of support for regulation of the food supply to manage public health issues: Those consumers with dietary or food concerns were significantly more likely (mean of 5.31, S.D. 1.6) than those without such concerns (mean of 4.86, S.D. 1.78) to support a higher level of regulation. There was also increasing levels of support for regulation as health consciousness and physical activity increased amongst consumers. Such variations were not as evident amongst New Zealand consumers, with the exception of those with high levels of health consciousness, who were more likely to support regulation than those with medium health consciousness levels (Figure 22).

Figure 22: Preferred level of regulation to manage for public health issues (mean scores)



D15. Thinking about purchasing foods in general, on a scale of 1 to 7, where 1 is "no regulation" and 7 is "high level of regulation", to what level do you believe the government should regulate the food supply to manage for public health issues like obesity? (please choose the one number that best applies)

Base sizes vary

\* / \*\* denote significant differences within subgroups

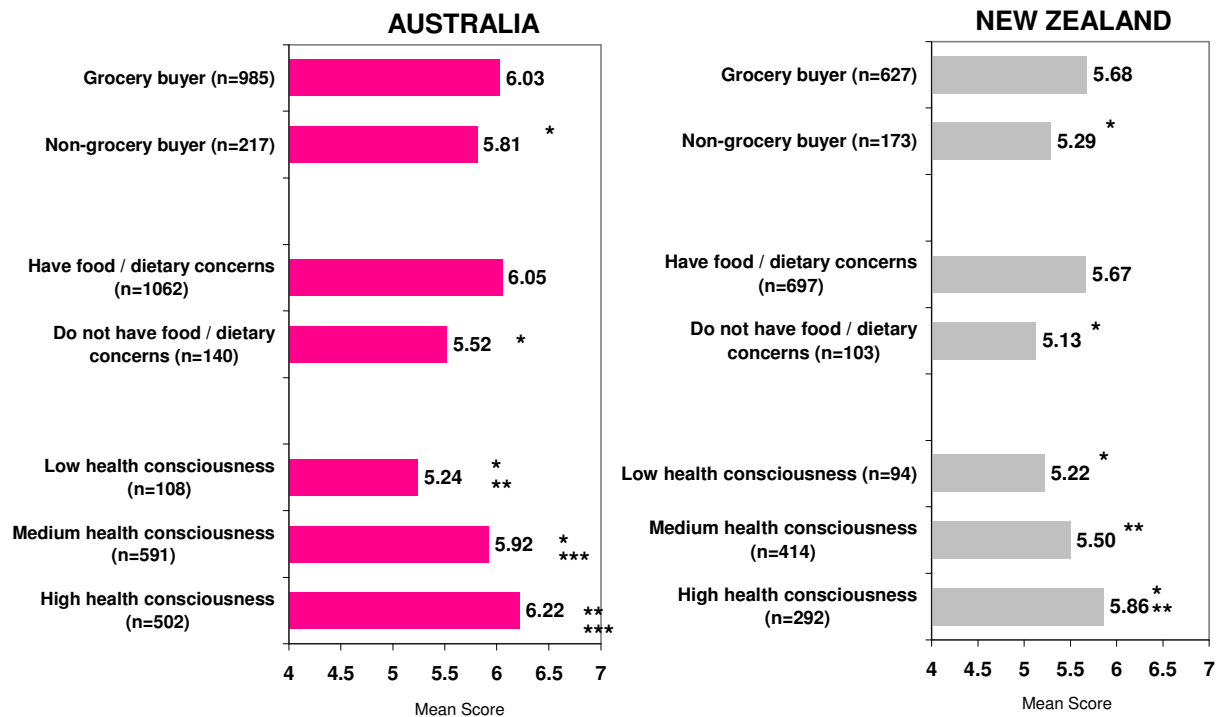
**Food Safety**

Australian consumers reported a significantly higher mean score of 5.99 (S.D. =1.23) compared to New Zealanders (mean of 5.60, S.D. 1.36) in relation to regulation of the food supply to manage food safety. In Australia, 86% of consumers rated their preferred level of regulation at five or more, compared to 76.3% of New Zealand consumers. This desire for regulation was higher than that of European citizens, 43% of whom agreed that there were too many rules and regulations and 45% of whom disagreed.<sup>19</sup>

As can be seen in Figure 23, there were significant differences in the level of regulation of the food supply to manage food safety desired among subgroups of both Australian and New Zealand consumers.

There was no clear agreement about the number of rules and regulations for food among sub-populations of European citizens.

**Figure 23: Preferred level of regulation to manage for food safety (mean scores)**



D16. Thinking about purchasing foods in general, on a scale of 1 to 7, where 1 is “no regulation at all” and 7 is “high level of regulation”, to what level do you believe the government should regulate the food supply to **manage for food safety**? (please choose the one number that best applies)

Base sizes vary

\* / \*\* / \*\*\* denote significant differences within subgroups

<sup>19</sup> Special Eurobarometer 2005 – Risk Issues, European Food Safety Authority, 2005 (See Appendix G, Table 43)

## 7. Confidence in ability to use labelling

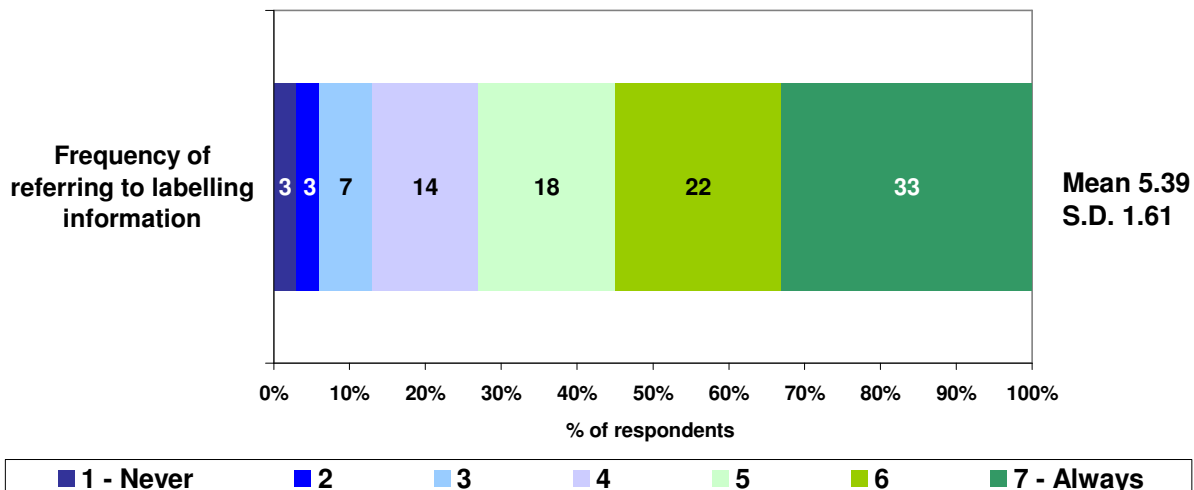
Respondents were asked a series of questions relating to food labelling, specifically examining:

- extent and frequency of referring to food labelling information;
- aspects of labels consumers refer to on food products and the reasons why;
- other sources from which consumers obtain nutritional information;
- behaviour and attitudes related to food labelling; and
- trust and confidence in food labelling.

### 7.1. Frequency of referring to labelling information

On a scale from one to seven, where one represents ‘never’ and seven ‘always’, respondents who had a role in grocery shopping were asked the extent to which they referred to labelling information when they purchased products for the first time. Australian consumers reported a mean score of 5.39 (S.D. 1.61) and New Zealand consumers a significantly lower mean of 5.10 (S.D.1.67). The distribution of scores for both Australia and New Zealand consumers is shown in Figure 24 and Figure 25.

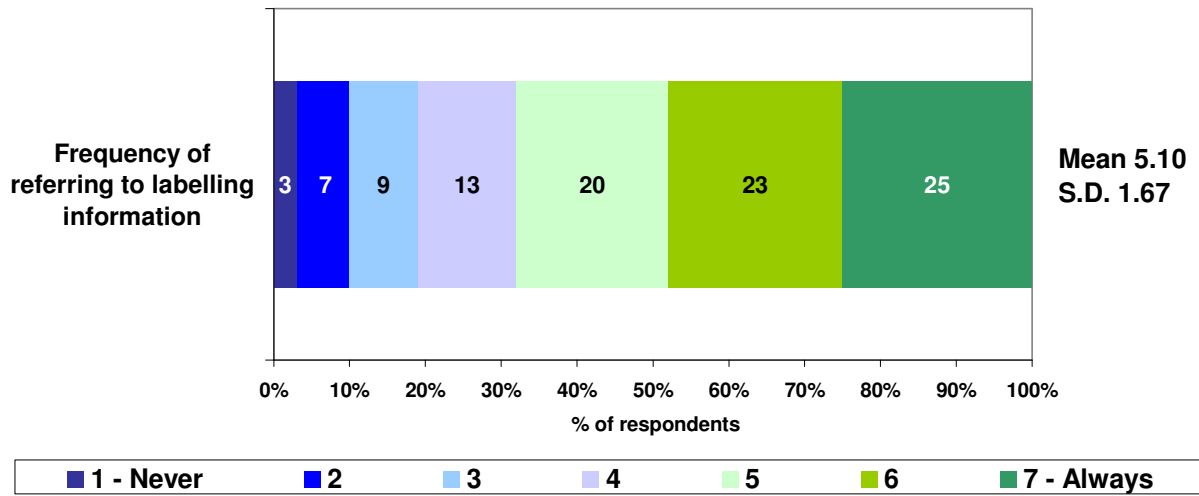
Figure 24: Reference to food labelling when purchasing products *for the first time* (Australia)



E1. On a scale of 1 to 7, where 1 is “never” and 7 is “always”, and thinking just about products that you purchase *for the first time*, how frequently, if at all, do you refer to the labelling information? (**please choose the one number that best applies**)  
 Base: Respondents who purchase food (n=1129) Total may not equal 100% due to rounding



Figure 25: Reference to food labelling when purchasing products *for the first time* (New Zealand)



E1. On a scale of 1 to 7, where 1 is “never” and 7 is “always”, and thinking just about products that you purchase *for the first time*, how frequently, if at all, do you refer to the labelling information? (**please choose the one number that best applies**)  
 Base: Respondents who purchase food (n=732) Total may not equal 100% due to rounding

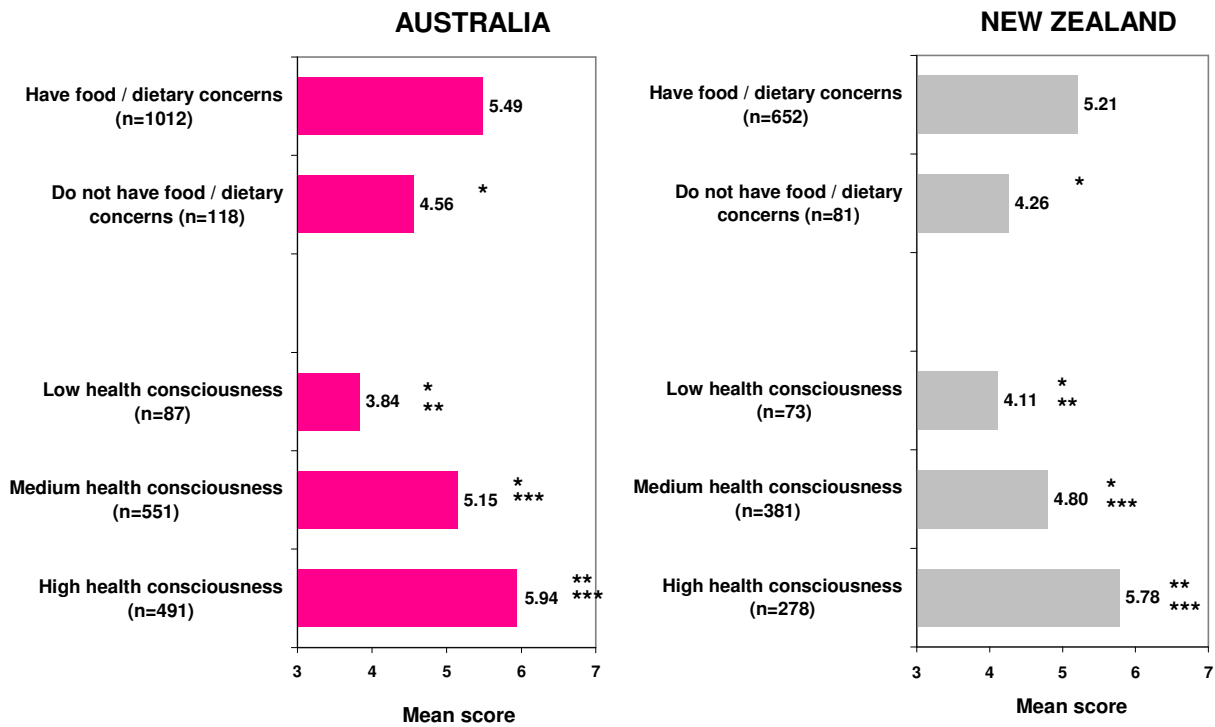
The spread of consumers’ frequency of referring to labelling information was similar to that of consumers in the UK, where (on a five point scale) 70% reported always (32%), usually (20%), or occasionally (18%) referring to labelling information the first time they purchase products<sup>20</sup>. A higher proportion of Irish consumers (83%) reported that they pay attention to the labels on the food that they buy in shops or supermarkets.<sup>21</sup>

<sup>20</sup> Consumer Attitudes to Food Standards, Food Standards Agency UK, 2007 (See Appendix G, Table 44)

<sup>21</sup> Consumer Attitudes to Food Safety in Ireland, Food Safety Authority of Ireland, 2003 (See Appendix G, Table 45)

As illustrated in Figure 26, there was a clear relationship between health consciousness and dietary concerns and the frequency of consumers referring to labelling information. In both Australia and New Zealand, those consumers with higher health consciousness and dietary/food concerns were significantly more likely to refer to label information.

Figure 26: Frequency of referring to labelling information (mean scores)



E1. On a scale of 1 to 7, where 1 is "never" and 7 is "always", and thinking just about products that you purchase **for the first time**, how frequently, if at all, do you refer to the labelling information? (**please choose the one number that best applies**)

Base: all respondents who purchase food (base size varies)

\* / \*\* / \*\*\* denote significant differences within subgroups

## 7.2. Information consumers look for and why

Consumers who had a role in grocery shopping were asked what information in particular they looked for when purchasing a product for the first time. A diverse range of information was sought by respondents when referring to products. The full set of responses for this question is provided in Table 13.

The most common responses reported by Australian consumers (mentioned by more than half of those consumers who refer to label information) when looking for information on labels were:

- the best before / use by date (73.1%);
- the amount of fat (61.8%);
- country of origin (59.1%);
- the amount of sugar (56.5%);
- the ingredient list generally (52.7%); and
- the amount of saturated fat (50.4%).

New Zealand consumers reported looking at similar aspects of labelling information, with the majority (one half or more) referring to:

- the best before / use by date (70.9%);
- the amount of fat (55.9%); and
- the amount of sugar (52.6%).

Generally New Zealand consumers reported lower levels of reference to different aspects of the label information when buying a product for the first time than Australians, as indicated in Table 13.

The indication is that there are regional and cultural variations in the types of information consumers refer to on labels and this may depend on a number of factors, such as marketing activity, media stories, and the characteristics and attitudes of the population. For instance, country of origin information may be more important amongst Australian consumers given that imported products are less prevalent and the 'Australian-made' label can be a key selling point, whereas New Zealand does not require country of origin labelling, so New Zealand consumers may have less awareness of it.

Table 13: What information is looked for when purchasing a product *for the first time* (Australia)

%		Australia	New Zealand	Significant difference
<i>Base: Respondents who purchase food</i>		<i>(n=1129)</i>	<i>(n=732)</i>	<i>(p&lt;0.05)</i>
<b>Nutrition Information Panel</b>	The amount of fat	61.8	55.9	*
	The amount of sugar	56.5	52.6	
	The amount of saturated fat	50.4	46.2	
	The amount of salt (sodium)	42.8	29.8	*
	Calories/kilojoules/energy	38.0	29.9	*
	The Nutrition Information Panel generally	36.7	28.8	*
	The amount of trans fats	34.8	28.7	*
	The amount of carbohydrates	25.8	23.2	
	Serving size per 100g figure	24.2	18.9	*
	Serving size per serve figure	20.8	13.3	*
	The amount of fibre	19.5	16.5	
	Vitamins and/or minerals	18.5	20.0	
	The amount of protein	16.2	16.0	
	%RDI (% recommended dietary intake)	14.8	11.3	*
	%DI (% daily intake)	10.6	9.2	*
<b>Ingredient List</b>	The ingredient list generally	52.7	48.3	
	Additives (e.g. colours and preservatives)	47.5	40.9	*
	Quantity of the main ingredients (% Labelling)	36.1	33.3	
<b>Other Elements</b>	The best before/se by date	73.1	70.9	
	Country of origin	59.1	43.4	*
	Cooking/Storage instructions	49.4	49.7	
	Name of manufacturer	35.6	34.8	
	The name of the food	34.2	34.1	
	Claims about the nutrient content of a food, such as 'low fat' or 'high in fibre'	33.6	28.6	*
	Whether the product is of Genetically Modified/non-Genetically Modified origin	27.1	28.8	
	Free range/Animal welfare	24.4	23.9	
	Information about allergens, such as in ingredient list or statement on package	23.3	16.7	*
	Claims about the health benefit of a food, such as 'calcium is good for healthy bones'	18.2	21.3	
	Glycemic Index values / symbol	17.3	12.2	*
	Whether the products are organic	13.4	16.6	
	None	4.7	5.6	
Other	1.1	2.3		

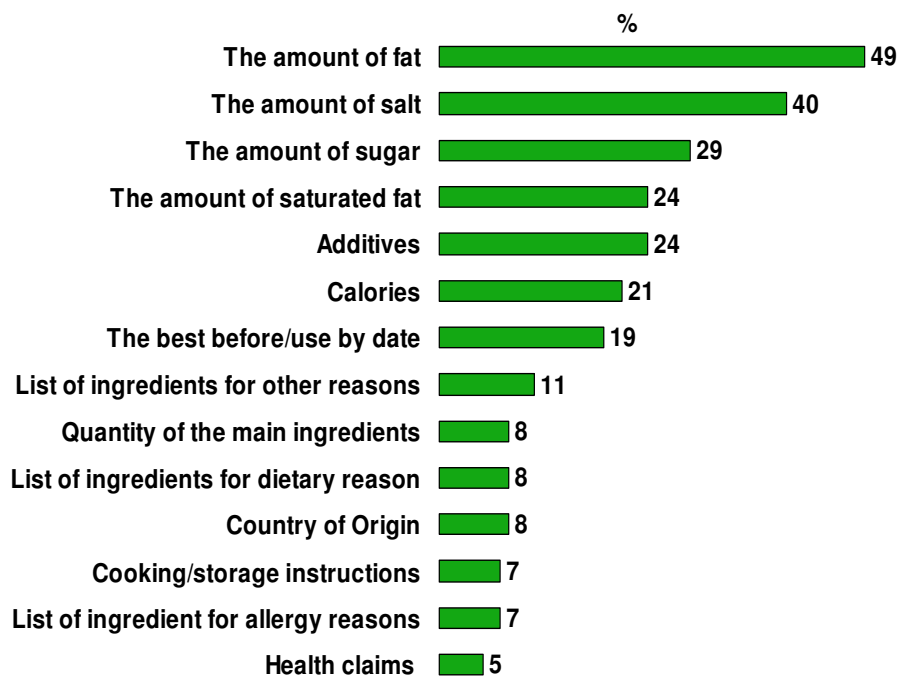
E2a. Still thinking about the products you buy for the first time, what information do you usually look for? (**select all that apply**)

Base: Respondents who purchase food

Multiple responses allowed

Looking at results in the UK (Figure 27), whilst amount of fat, salt, and sugar featured highly (49% referring to fat, 40% to salt and 29% to sugar) for consumers referring to labelling information when purchasing a product for the first time these were generally at lower levels than for Australia and New Zealand. Furthermore, the best before date was referred to by only 19% of UK consumers compared with the high proportion of consumers in Australia and New Zealand doing so<sup>22</sup>. The same trend is apparent with Irish consumers, with 36% looking at the best before date, 31% looking for additives, 25% looking at the fat content and 21% looking at country of origin.<sup>23</sup>

**Figure 27: UK Consumer Attitudes Survey: Information looked for on labels**



Source: *Consumer Attitudes to Food Standards*, Food Standards Agency UK, 2007: Q31 Thinking about the products you buy for the first time what information do you usually look for?

Base: All respondents who refer to the labelling information on food products bought for the first time (2767)  
Multiple responses allowed

<sup>22</sup> Consumer Attitudes to Food Standards, Food Standards Agency UK, 2007

<sup>23</sup> Consumer Attitudes to Food Safety in Ireland, Food Safety Authority of Ireland, 2003 (See Appendix G, Table 46)

The main reasons consumers referred to label information when buying products for the first time related to health and dietary factors. This was mostly consistent between both Australian and New Zealand consumers, as indicated in Table 14.

**Table 14: Why information is sought on food labels (Australia)**

%	Australia	New Zealand	Significant difference
<i>Base: Respondents who look at food labels when purchasing food</i>	<i>(n=1076)</i>	<i>(n=691)</i>	<i>(p&lt;0.05)</i>
Watching my health/others' health generally	63.5	62.6	
Watching my weight/others' weight generally	50.1	47.9	
Specific health concerns, such as migraine, asthma, diabetes, heart disease, high blood pressure, cholesterol	42.4	38.1	
Food allergies	22.9	21.4	
Digestive concerns such as coeliac disease, irritable bowel syndrome	17.8	16.0	
On a specific diet	12.5	9.4	*
Vegetarian/vegan	4.8	6.4	
Training for sports	4.7	4.2	
Pregnancy or breast feeding	3.4	3.6	
Religious/ethical beliefs that influence dietary choices	2.5	4.7	*
Prefer not to answer	2.0	2.0	
None of the above	9.5	13.0	*

*E2b. Why do you specifically look for this type of information when buying products for the first time? Because of... (select all that apply)*

*Base: Respondents who look at food labels when purchasing food  
Multiple response allowed*

Those respondents in both Australia and New Zealand who had no dietary concerns, lower levels of health consciousness, or low levels of physical activity were less likely to mention any of the prompted reasons for looking at food label information, with a greater proportion answering 'none'. This corresponds to their lower engagement in food-related matters and reiterates the relationship between concern in personal health and diet and attention paid to food labelling and information generally.

### 7.3. Sources of nutrition information about foods

The importance of accurate and correctly interpreted information on food labelling is highlighted by the predominance of labels as a source of nutrition information – 83.5% of Australian and 80.7% of New Zealand consumers reported labels on food packaging as the main source they use to gather such information. However, consumers also referred to a number of other sources, with some variation between Australian and New Zealand consumers, as listed in Table 15.

Table 15: Main sources of information on nutritional content of food (Australia)

%	Australia	New Zealand	Significant difference
	(n=1129)	(n=732)	(p<0.05)
<b>Base: Respondents who purchase food</b>			
Labels on food packaging	83.5	80.7	
Fact sheets/brochures	36.1	29.5	*
Internet	33.2	33.0	
Magazines/cook books	29.1	22.1	*
Family member or friend	22.4	19.4	
Television	20.0	16.0	*
Supermarket/retail store	19.6	17.7	
Doctor/other health professional	16.0	13.2	
Food Standards Australia New Zealand	12.8	12.1	
Education institution e.g. school, TAFE, University	6.8	4.0	*
Other Government Department/Non-Government Organisation	4.2	5.5	
Other	2.4	3.0	
None - I don't look for information	5.3	10.5	*

E3a. What are the main sources you use to gain information on the nutritional content of foods? (**select all that apply**)

Base: Respondents who purchase food

Multiple response allowed

Consumers in Australia and New Zealand who had food/dietary concerns were more likely to refer to labels for nutritional information (86.5% Australia and 84.6% New Zealand compared with 57.5% Australia and 48.8% New Zealand who did not have dietary concerns). Consumers with low health consciousness were also less likely to refer to labels than those with a higher level of health consciousness.

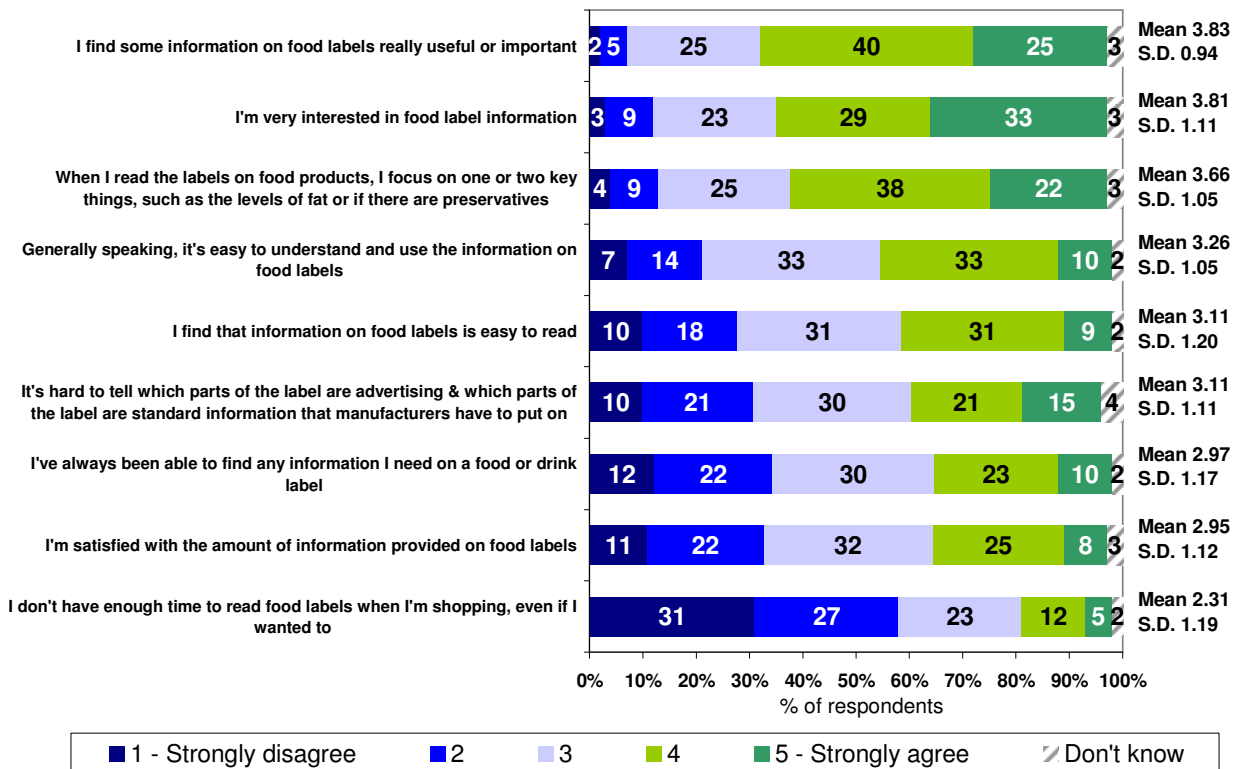
With the exception of labels, consumers were more likely to refer to more informal, potentially unregulated sources, such as printed materials, articles on the Internet, family and friends.

There was lower reference towards more formal and structured sources of nutrition information, such as health professionals and educational sources. Thirteen per cent of Australians and twelve per cent of New Zealanders reported using FSANZ as a source when gathering information on the nutritional content of foods. A small number of consumers mentioned a number of other Government or Non-Government organisations. These included health departments, dieticians and specific health organisations, such as Heart Foundation and diabetes councils. New Zealand consumers specifically mentioned national or local health departments (including the Ministry of Health), Consumer Affairs and New Zealand Heart Foundation. A small number (n=2) mentioned the New Zealand Food Safety Authority.

### 7.4. Behaviour and attitudes towards food labelling

Consumers were asked their extent of agreement towards a number of statements relating to food labelling, on a scale of one to five, where one was 'strongly disagree' and five was 'strongly agree'. The mean scores and percentage of respondents rating the statements from one to five for these statements are shown in Figure 28 and Figure 29.

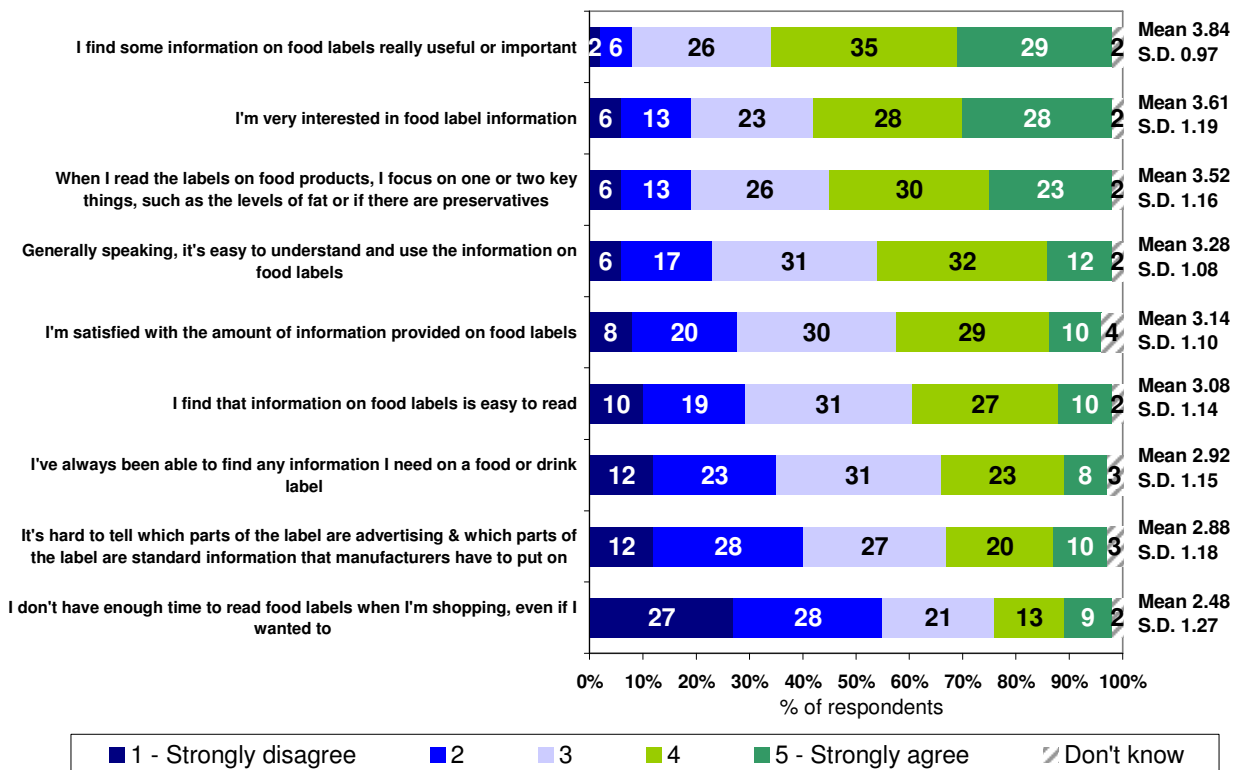
Figure 28: Agreement with food labelling statements (Australia)



E4. Here are a number of things other people have said about selecting food products. On a scale of 1 to 5, where 1 is "strongly disagree" and 5 is "strongly agree", please tell me how strongly you agree or disagree with each statement. Base: Respondents who purchase food (n=1129)



Figure 29: Agreement with food labelling statements (New Zealand)



E4. Here are a number of things other people have said about selecting food products. On a scale of 1 to 5, where 1 is "strongly disagree" and 5 is "strongly agree", please tell me how strongly you agree or disagree with each statement.  
 Base: Respondents who purchase food (n=732)

Highest agreement was towards information on food labels being really useful or important (mean of 3.83 (S.D. 0.94) in Australia and 3.84 (S.D. 0.97) in New Zealand). As one would expect given their higher frequency of referring to label information, consumers in both Australia and New Zealand who reported dietary/food concerns and higher levels of health consciousness were significantly more likely to agree that they find information on food labels really useful or important than those without dietary/food concerns or with a low level of health consciousness.

New Zealand consumers were more likely than Australians to agree that they were satisfied with the amount of information provided on food labels (mean of 3.14 (S.D. 1.1) compared with 2.95 (S.D. 1.12) in Australia) and were less likely to agree that it is hard to tell which parts of labels are advertising and which parts are standard information (mean of 2.88 (S.D. 1.18) compared with 3.11 (S.D. 1.2) in Australia). New Zealand consumers were also significantly less likely to agree that they are very interested in food label information, they focus on one or two key things on labels, and they don't have enough time to read food labels when shopping.

Agreement with all statements regarding food labelling was lower than when this was measured in a FSANZ study in 2003<sup>24</sup> (Table 16). However, the pattern was similar, with greatest agreement towards food labels being really useful or important (77% strongly/tend to agree), respondents being interested in food labelling (69%) and focusing on one or two key things when reading labels (64%).

**Table 16: FSANZ Food labelling study 2003 – specific consumer attitudes towards labelling**

	Strongly agree	Tend to agree	Neither agree nor disagree	Tend to disagree	Strongly disagree
<b>Base:All respondents (n=1940)</b>	%	%	%	%	%
I've always been able to find any information I need on a food or drink label	7	37	15	32	9
When I read the labels on food products, I just focus on one or two key things	15	49	15	6	5
Generally speaking, it's easy to understand and use the information on food labels	10	43	17	23	7
I find some information on food labels really useful or important	23	54	15	6	1
It's hard to tell which parts of the label are advertising and which are standard information manufacturers have to put on	12	35	21	26	5
I don't have enough time to read food labels when I'm shopping, even if I wanted to	7	24	18	36	15
I'm very interested in food label information	32	37	17	10	4

<sup>24</sup> Food Standards Australia New Zealand, Evaluation Report Series No 4: Food Labelling Issues: Quantitative Research with Consumers, 2003

For a similar question in the 2005 NZFSA food safety study, a slim majority (52%) of consumers considered food labels to be easy to understand (Table 17).

**Table 17: New Zealand Food Safety Authority – ease of understanding information provided on food labels<sup>25</sup>**

	Total
<b>Base: All respondents (n=750)</b>	%
1 – easy to understand	29
2	23
3	25
4	14
5 – difficult to understand	8
Unsure	1

*Source: New Zealand Food Safety Authority, A Quantitative Study, 2005  
Using a scale of 1 to 5 where 1 means easy to understand and 5 means difficult to understand, how easy or difficult do you find it is to understand information provided on food labels?*

Irish consumers showed consistent results, with 50% saying they thought there was about the right amount of information on food labels, and 51% saying they thought the information on food labels is clear<sup>26</sup>. Similarly, the majority (58%) of UK consumers considered that the amount of information provided on food labels was about right, 24% considered there was not enough information and 9% considered there was too much information on food labels<sup>27</sup>.

<sup>25</sup> New Zealand Food Safety Authority, A Quantitative Study, 2005

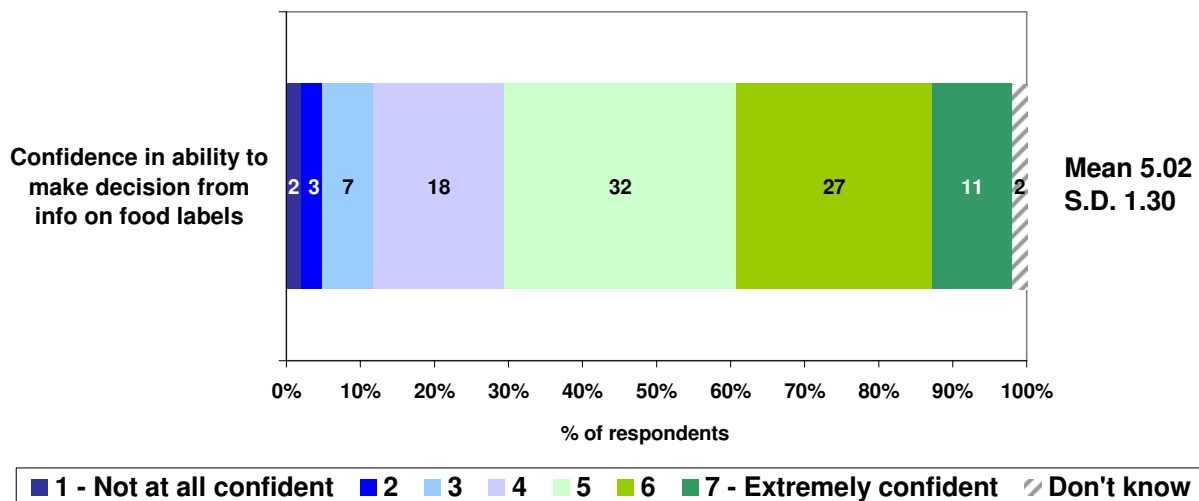
<sup>26</sup> Consumer Attitudes to Food Safety in Ireland, Food Safety Authority of Ireland, 2003 (See Appendix G, Table 47 & Table 48)

<sup>27</sup> Consumer Attitudes to Food Standards, Food Standards Agency UK, 2007 (See Appendix G, Table 49)

## 7.5. Confidence and trust in food labelling

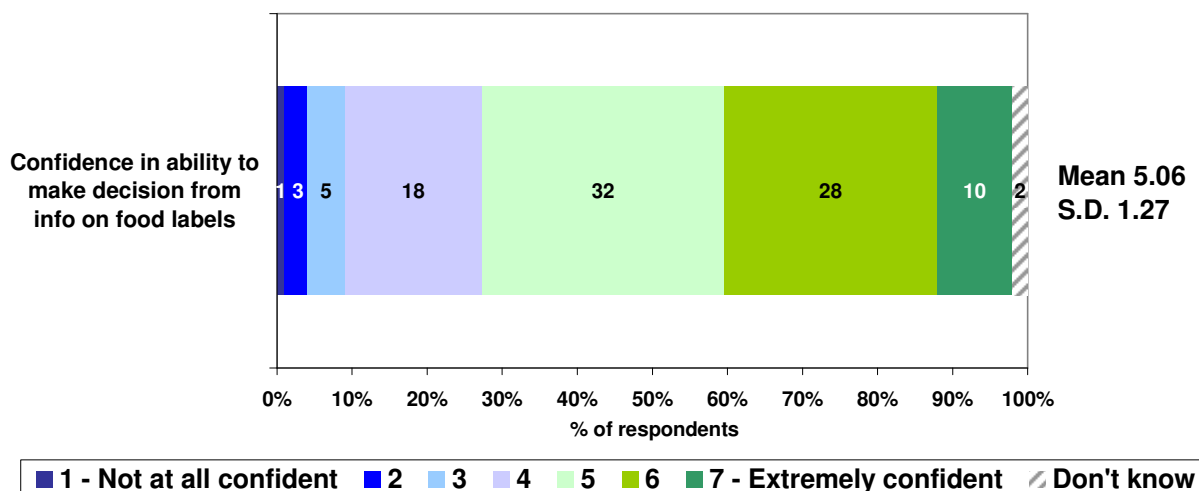
The majority of Australian and New Zealand consumers were confident in their ability to make an informed decision from the information provided on food labels. On a scale of one to seven, where one represented 'not at all confident' and seven 'extremely confident', 70% of Australians and New Zealanders reported a score of 5, 6 or 7 in their confidence (see Figure 30 and Figure 31).

Figure 30: Overall confidence in ability to make an informed decision from food labels (Australia)



E5. On a scale of 1 to 7, where 1 is "not at all confident" and 7 is "extremely confident", how confident are you in your ability to make an informed decision from the information provided on food labels? (please choose the one number that best applies)  
Base: Respondents (n=1202) Total may not add up to 100% due to rounding

Figure 31: Overall confidence in ability to make an informed decision from food labels (New Zealand)



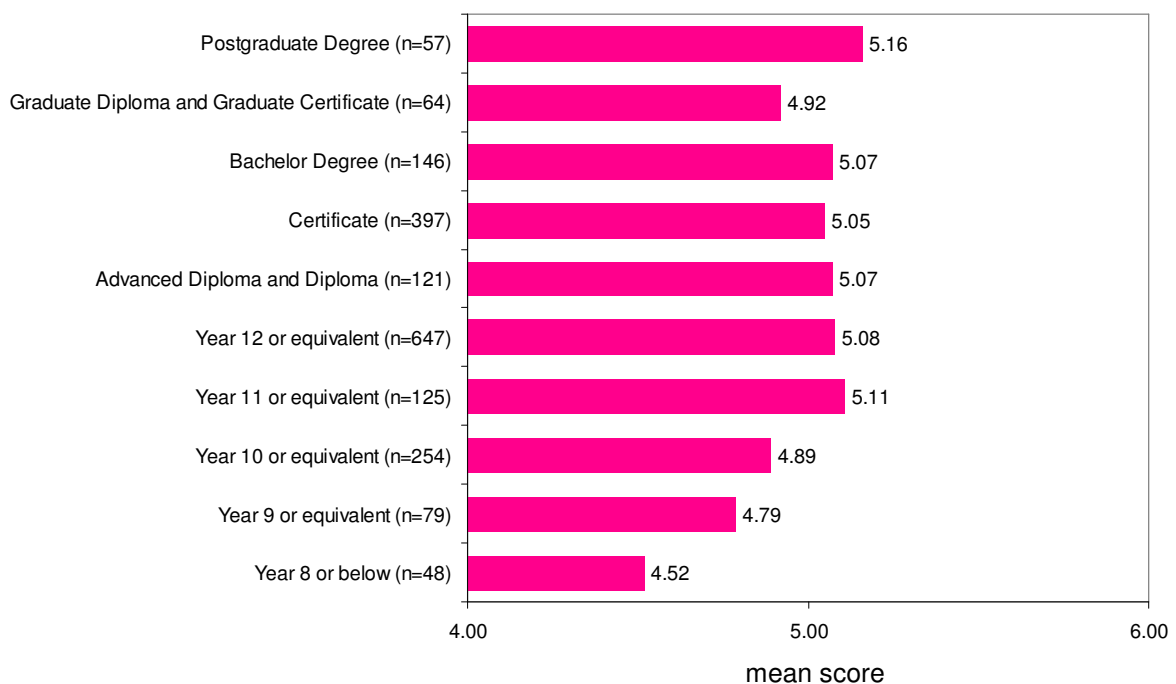
E5. On a scale of 1 to 7, where 1 is "not at all confident" and 7 is "extremely confident", how confident are you in your ability to make an informed decision from the information provided on food labels? (please choose the one number that best applies)  
Base: Respondents (n=800) Total may not add up to 100% due to rounding

There was no variation in confidence between consumers in Australia (mean of 5.02, S.D. 1.3) and New Zealand (mean of 5.06, S.D. 1.27). Confidence increased with health consciousness across both countries – in Australia from a mean of 4.53 (S.D.1.35) amongst those with low health consciousness to 5.30 (S.D. 1.28) amongst those with high health consciousness and from 4.86 (S.D. 1.28) to 5.27 (S.D. 1.34) in New Zealand.

In New Zealand, main grocery buyers had a higher level of confidence than non-main grocery buyers (mean of 5.12, S.D. 1.26 for main grocery buyers compared with mean of 4.80, S.D. 1.28 for non-main grocery buyers). This difference was not apparent among Australian respondents. There were no differences in either country between those with particular dietary concerns and those without.

There was some evidence to suggest education had an impact on confidence in information provided on food labelling, with consumers of lower educational attainment generally expressing lower levels of confidence. As can be seen in Figure 32 in relation to Australian consumers, confidence was lowest amongst those who were educated to Year 8 level or below and gradually increased with educational attainment.

**Figure 32: Overall confidence (mean scores) in ability to make an informed decision from food labels by educational attainment (Australia)**

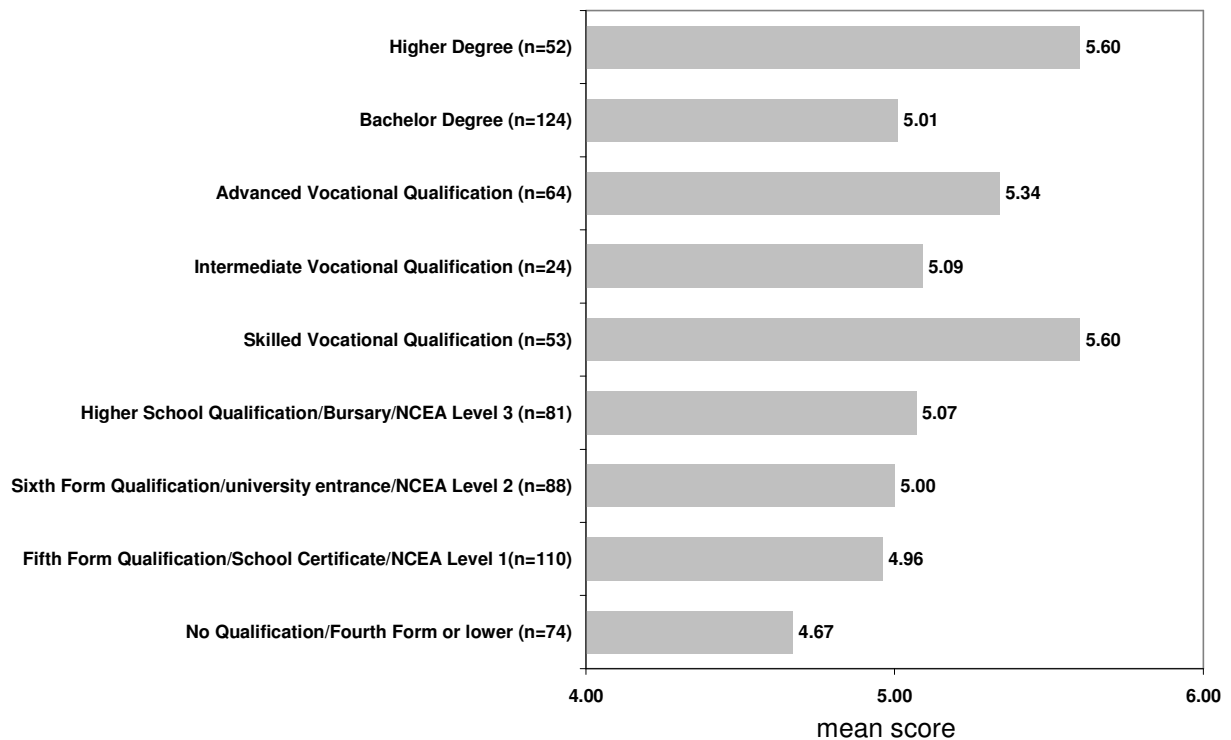


*E5. On a scale of 1 to 7, where 1 is "not at all confident" and 7 is "extremely confident", how confident are you in your ability to make an informed decision from the information provided on food labels? (please choose the one number that best applies)*  
 Base: All respondents (base size varies)

The picture in New Zealand (Figure 33) also indicates a relationship between educational attainment and confidence in food labelling. Those with no or low level educational attainment were the least

confident in their ability to make informed decisions from labels, whereas those with skilled vocational qualifications and higher degrees were the most confident in their ability.

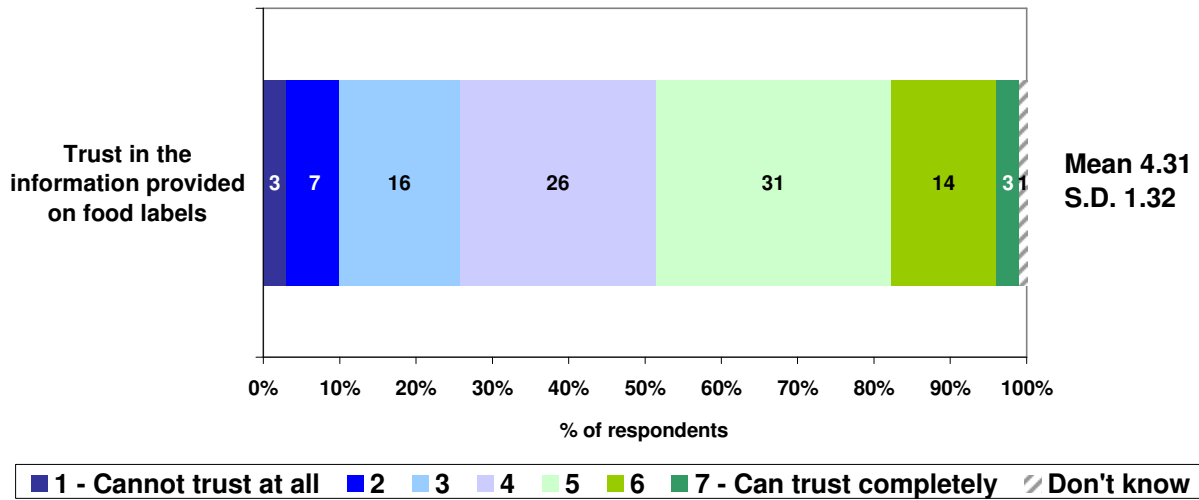
**Figure 33: Overall confidence (mean scores) in ability to make an informed decision from food labels by educational attainment (New Zealand)**



*E5. On a scale of 1 to 7, where 1 is "not at all confident" and 7 is "extremely confident", how confident are you in your ability to make an informed decision from the information provided on food labels? (please choose the one number that best applies)*  
 Base: All respondents (base size varies)

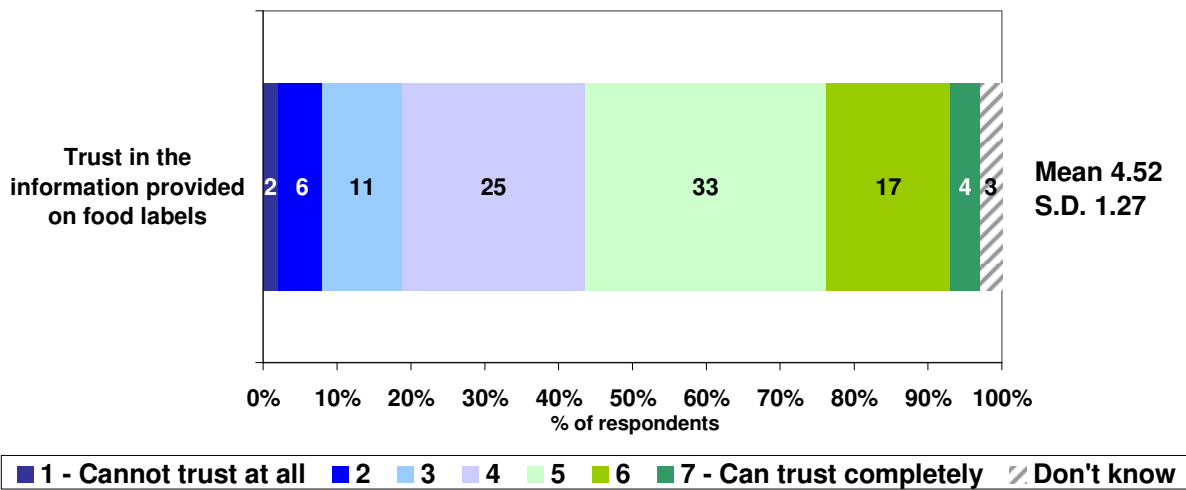
Trust in food labelling was at a lower level than confidence, with Australian consumers significantly less likely to trust the information provided on food labels than New Zealanders. On a scale of one to seven, where one represents 'cannot trust at all' and seven represents 'can trust completely', Australian consumers reported a mean score of 4.31 (S.D. 1.32) compared with 4.52 (S.D. 1.27) for New Zealand consumers. (See Figures 34 and 35). There were few variations in the levels of trust reported by different segments of the community in each country.

Figure 34: Trust in information provided on food labels (Australia)



E6. On a scale of 1 to 7, where 1 is "cannot trust at all" and 7 is "can trust completely", how much do you feel you can trust the information provided on food labels?  
Base: Respondents (n=1202) Total may not add up to 100% due to rounding

Figure 35: Trust in information provided on food labels (New Zealand)



E6. On a scale of 1 to 7, where 1 is "cannot trust at all" and 7 is "can trust completely", how much do you feel you can trust the information provided on food labels?  
Base: Respondents (n=800) Total may not add up to 100% due to rounding

## 8. Confidence in food safety when eating at home

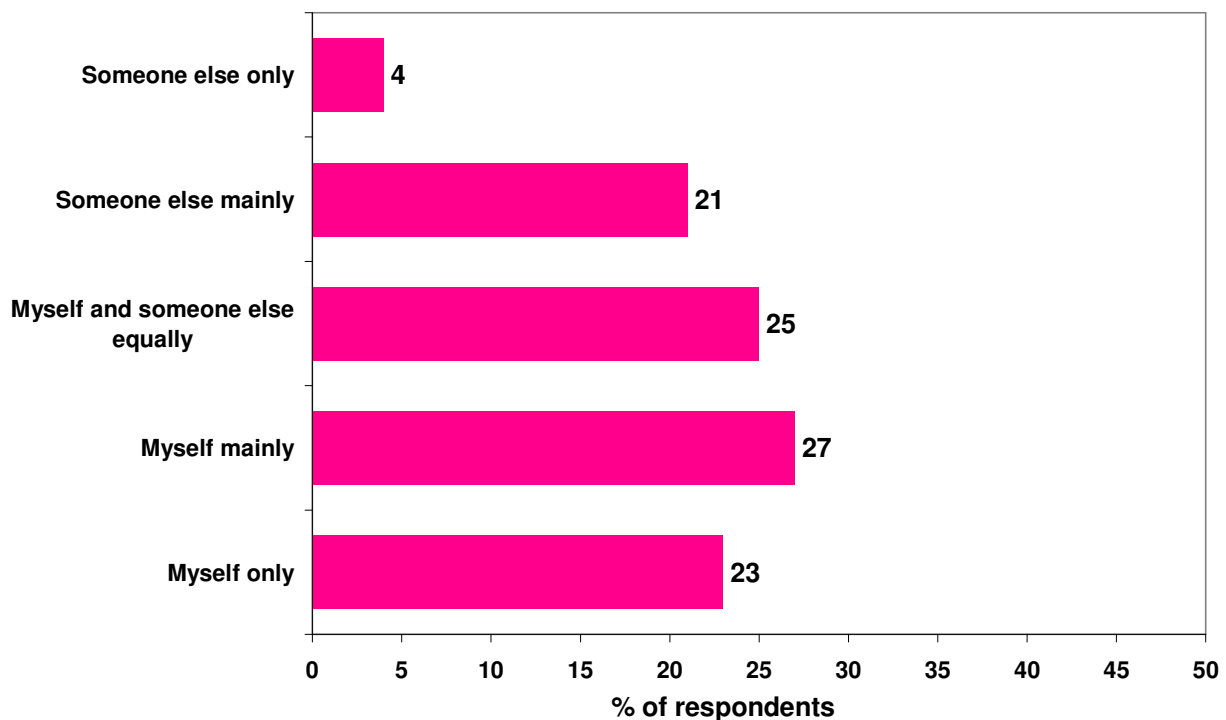
### 8.1. Note about results

Some of the questions in this section asked respondents about their knowledge and practice of food safety and food hygiene practices. Please note that it is likely some respondents were affected by social desirability in this section – that is, they are aware of what their behaviour *should* be, and answered the questions in this fashion. This is common in surveys, and highlights the need to keep questions the same across waves of the survey, to have these affects negated over time.

### 8.2. Role in preparing meals in the home

Most respondents (75% in Australia and 73% in New Zealand) had a role in preparing meals in their home, as can be seen in the following figures. As expected, this was more likely among primary grocery buyers, those with higher levels of health consciousness and women.

Figure 36: Main person responsible for preparing and cooking meals (Australia)

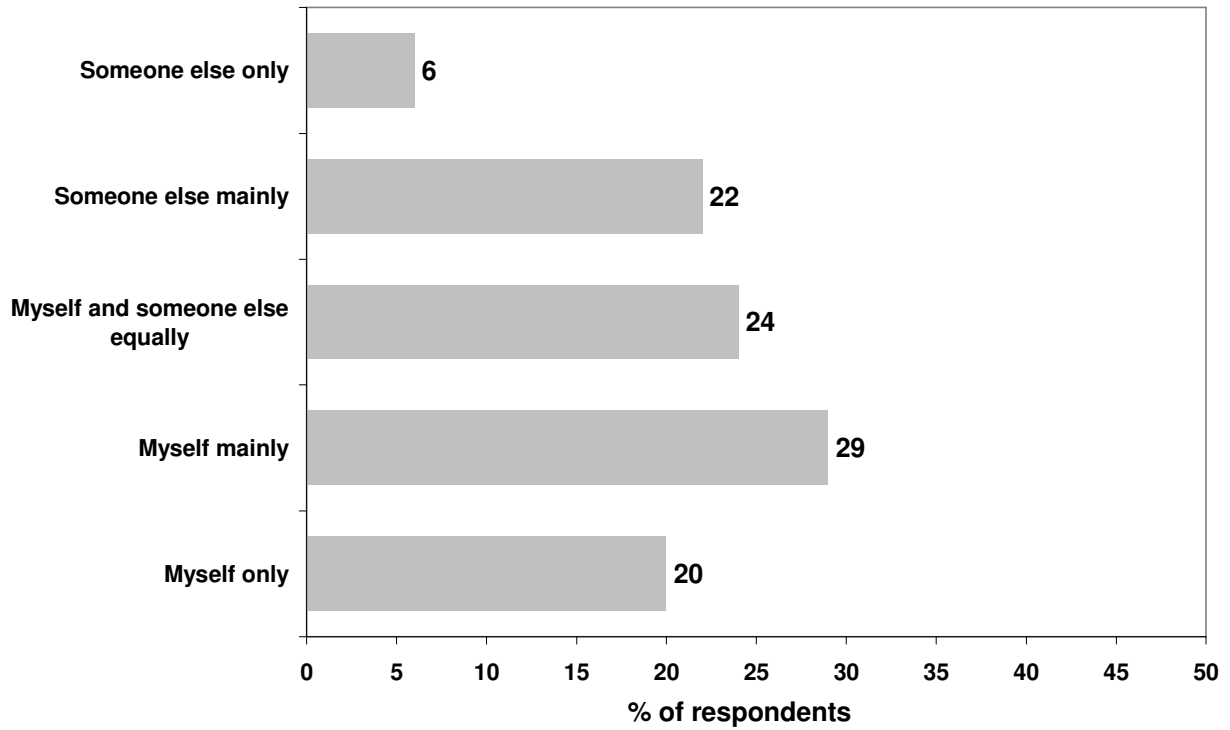


D1. Which of these statements best describes who is responsible for preparing and cooking meals in your household? (**please select one**)

Base: All respondents (n=1202) Total may not add to 100% due to rounding



Figure 37: Main person responsible for preparing and cooking meals (New Zealand)

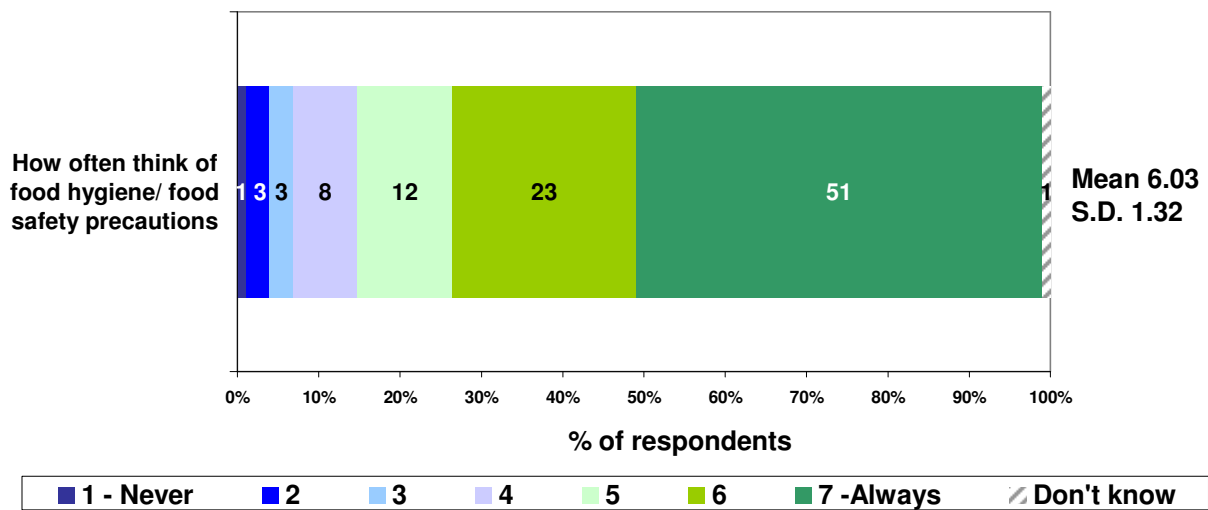


D1. Which of these statements best describes who is responsible for preparing and cooking meals in your household? (**please select one**) Base: All respondents (n=800) Total may not add to 100% due to rounding

### 8.3. Awareness of food hygiene precautions

Over half (51%) of Australian respondents said they ‘always’ consciously think about food hygiene/food safety precautions when preparing food at home, strongly driving the very positive mean score of 6.03 for Australian respondents (S.D. 1.32). These results can be seen in the following figure.

**Figure 38: How often do you consciously think about food hygiene/food safety precautions when preparing food at home (Australia)**

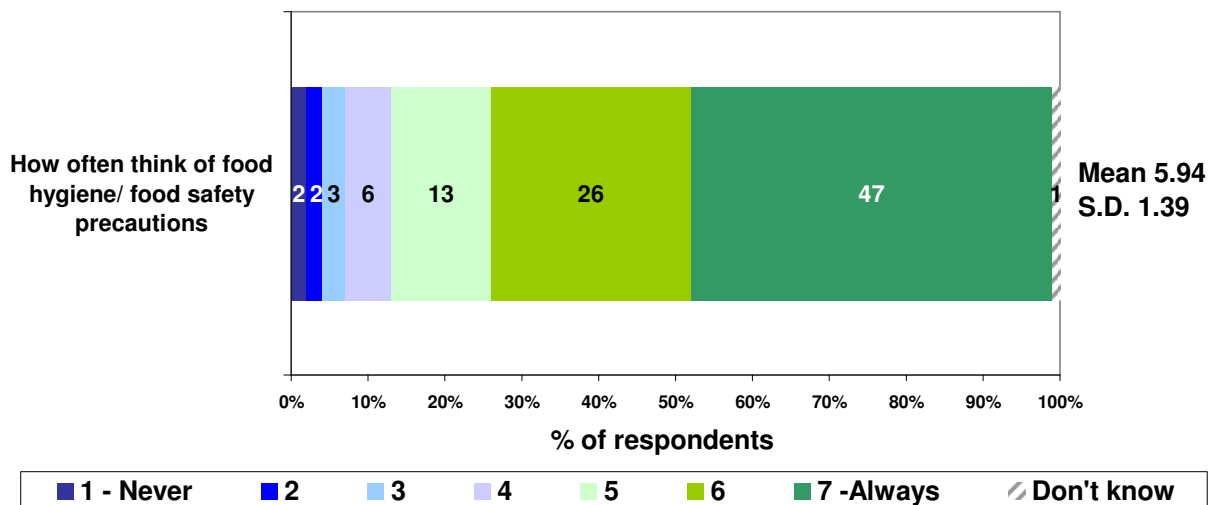


*D2. On a scale of 1 to 7, where 1 is “never” and 7 is “always”, how often do you consciously think about food hygiene/ safety precautions when preparing food at home? (please choose the one number that best applies)*  
 Base: Respondents partially or wholly involved in food preparation (n=1156) Total may not add to 100% due to rounding

Australian respondents living in regional areas (mean 5.95, S.D. 1.38) reported they consciously thought about food hygiene significantly less frequently than those living in metropolitan areas (mean 6.22, S.D. 1.14). Main grocery buyers (mean 6.13, S.D. 1.24) reported they consciously thought about food hygiene significantly more frequently than non-main grocery buyers (mean 5.51, S.D. 1.57). Respondents with a high level of health consciousness (mean 6.42, S.D. 1) reported they consciously thought about food hygiene significantly more frequently than those with lower levels of health consciousness (mean 5.93, S.D. 1.24 for medium health consciousness and mean 4.6, S.D. 2.02 for low health consciousness).

The mean score for New Zealand respondents was not significantly different to that for Australian respondents, at 5.94 (S.D. 1.39), with 47% of New Zealand respondents saying they ‘always’ consciously thought about food hygiene practices when preparing food at home. These results can be seen in the following figure.

**Figure 39: How often do you consciously think about food hygiene/food safety precautions when preparing food at home (New Zealand)**



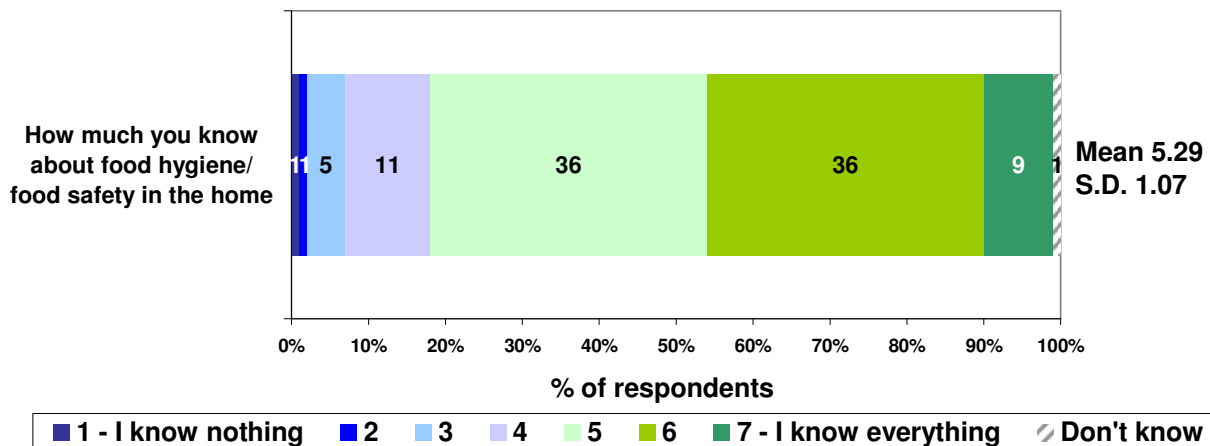
*D2. On a scale of 1 to 7, where 1 is “never” and 7 is “always”, how often do you consciously think about food hygiene/ safety precautions when preparing food at home? (please choose the one number that best applies)*  
 Base: Respondents partially or wholly involved in food preparation (n=756) Total may not add to 100% due to rounding

Similarly to Australian respondents, New Zealand respondents with high levels of health consciousness (mean 6.26, S.D. 1.22) reported they consciously thought about food hygiene significantly more frequently than those with lower levels of health consciousness (mean 5.89, S.D. 1.39 for medium and mean 5.05, S.D. 1.57 for low). Those with food concerns (mean 6.04, S.D. 1.28) reported they consciously thought about food hygiene significantly more frequently than those without food concerns (mean 5.11, S.D. 1.88).

### 8.4. Knowledge about food safety in the home

On a scale of one to seven, where one is ‘I know nothing at all about food hygiene/ food safety’ and seven is ‘I know everything there is to know about food hygiene/food safety’, Australian respondents reported a high level of knowledge, with a mean score of 5.29 (S.D. 1.07), and 81% giving a rating of five or more. These results can be seen in the figures below.

Figure 40: Knowledge about food hygiene/food safety in the home (Australia)



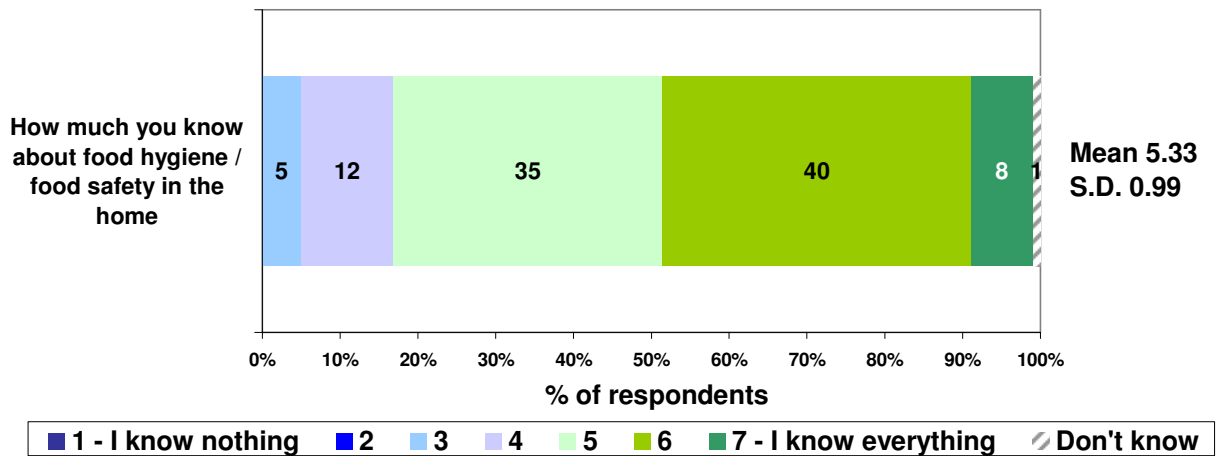
D3. On a scale of 1 to 7, where 1 is “I know nothing at all about food hygiene/food safety” and 7 is “I know everything there is to know about food hygiene/food safety”, how much do you believe you know about food hygiene/food safety in the home? (please choose the one number that best applies)

Base: All respondents (n=1202) Total may not add to 100% due to rounding

Respondents living in metropolitan areas (mean 5.24, S.D. 1.11) reported a significantly lower level of knowledge than respondents living in regional areas (mean 5.39, S.D. 1). Main grocery buyers (mean 5.35, S.D. 1.03) reported a higher level of knowledge than non-main grocery buyers (mean 4.99, S.D. 1.21). Similarly, those who have particular food concerns (mean 5.33, S.D. 1) reported a higher level of knowledge than those without particular food concerns (mean 4.95, S.D. 1.47).

New Zealand respondents reported their level of knowledge at a mean score of 5.33 (S.D. 0.99), not significantly different to the results for Australian respondents. The majority (83%) of New Zealand respondents reported their level of knowledge at five or more.

**Figure 41: Knowledge about food hygiene/food safety in the home (New Zealand)**



*D3. On a scale of 1 to 7, where 1 is "I know nothing at all about food hygiene/food safety" and 7 is "I know everything there is to know about food hygiene/food safety", how much do you believe you know about food hygiene/food safety in the home? (please choose the one number that best applies)*

*Base: All respondents (n=800) Total may not add to 100% due to rounding*

New Zealand main grocery buyers (mean 5.42, S.D. 0.94) reported a significantly higher level of knowledge than non-main grocery buyers (mean 4.99, S.D. 1.07), and those with particular food concerns (mean 5.38, S.D. 0.95) reported a significantly higher level of knowledge than those without particular food concerns (mean 4.97, S.D. 1.19). Similarly, those who have a high level of health consciousness (mean 5.61, S.D. 0.89) reported a significantly higher level of knowledge than those with a medium level (mean 5.24, S.D. 0.97) or low level (mean 4.83, S.D. 1.09) of health consciousness.

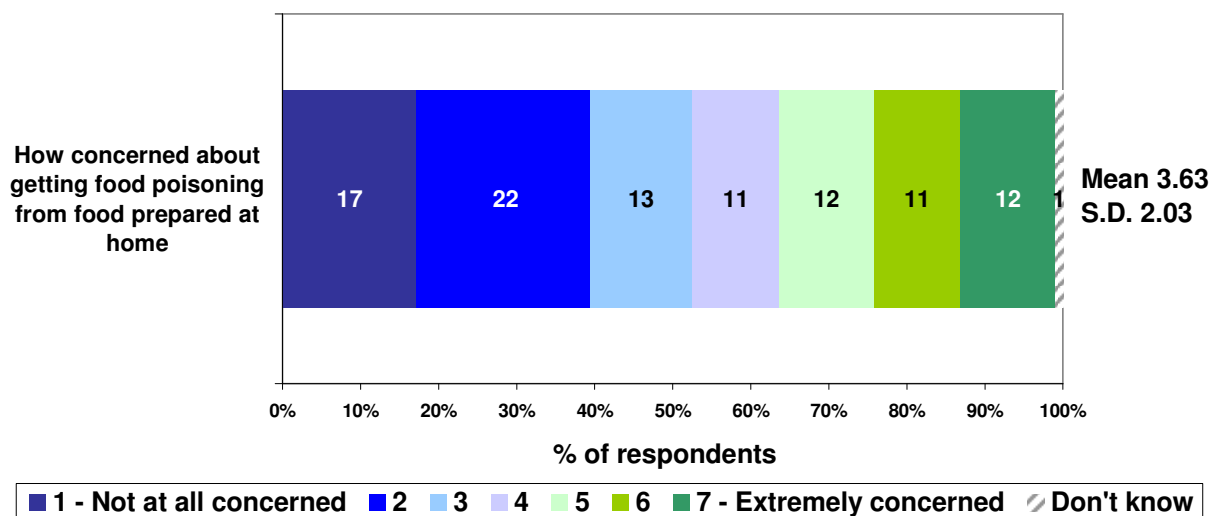
US consumers reported similar levels of knowledge, with nearly 40% of consumers saying that they know a great deal about food safety, and another 44% reporting that they have some knowledge of food safety.<sup>28</sup>

<sup>28</sup> Penn State Food Safety Survey, 1998, as reported in PR/HACCP rule evaluation report: Changes in Consumer Knowledge, Behaviour and Confidence Since the 1996 PR/HACCP Final Rule; U.S. Department of Agriculture, Food Safety And Inspection Service, 2001

### 8.5. Concern about food poisoning

On a scale of one to seven, where one is 'not at all concerned' and seven is 'extremely concerned', Australian respondents reported their concern at getting food poisoning from something prepared at home at a mean score of 3.63 (S.D. 2.03), indicating only a mild level of concern. More than one third of respondents (35.8%) rated their concern at five or more. These results can be seen in Figure 42.

Figure 42: Concern about getting food poisoning from something prepared at home (Australia)



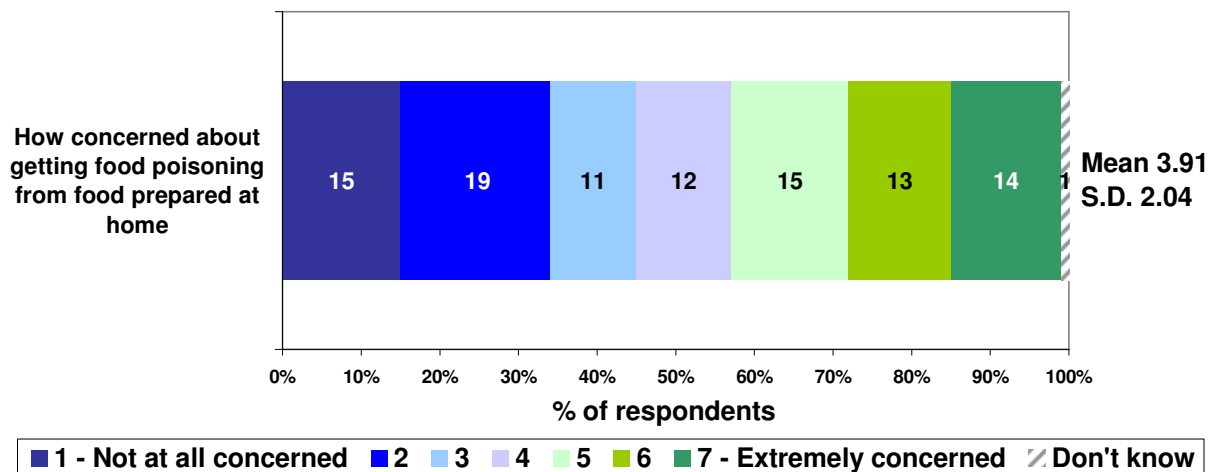
D4. On a scale of 1 to 7, where 1 is "not at all concerned" and 7 is "extremely concerned", how concerned are you about getting food poisoning from something you or anyone else has prepared and eaten at home? (please choose the one number that best applies)

Base: All respondents (n=1202) Total may not add to 100% due to rounding

Main grocery buyers reported a significantly higher level of concern (mean 3.74, S.D. 2.05) than non-main grocery buyers (mean 3.10, S.D. 1.85), and those with a high level of health consciousness reported a significantly higher level of concern (mean 3.72, S.D. 2.16) than those with a medium level (mean 3.66, S.D. 1.94) or low level (mean 3.05, S.D. 1.81) of health consciousness.

New Zealand respondents were significantly more concerned than Australian respondents (mean 3.91, S.D. 2.04 compared with mean 3.63, S.D. 2.03 for Australian respondents) about getting food poisoning from something they or someone else prepared at home, making this a moderate level of concern, with 42% rating their concern at 5 or more. These results can be seen in Figure 43.

**Figure 43: Concern about getting food poisoning from something prepared at home (New Zealand)**



D4. On a scale of 1 to 7, where 1 is “not at all concerned” and 7 is “extremely concerned”, how concerned are you about getting food poisoning from something you or anyone else has prepared and eaten at home? **(please choose the one number that best applies)**

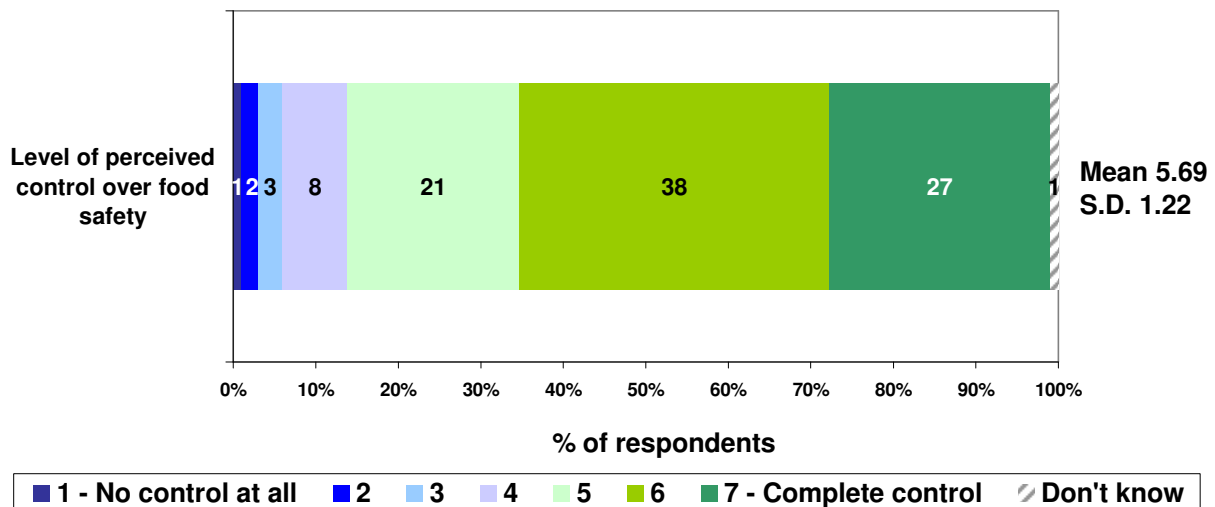
Base: All respondents (n=800) Total may not add to 100% due to rounding

Main grocery buyers were significantly more concerned about getting food poisoning at home (mean 4.05, S.D. 2.05) than non-main grocery buyers (mean 3.41, S.D. 1.95). Those with a sedentary level of physical activity were significantly more concerned (mean 4.46, S.D. 2.04) than those with higher levels of activity (mean 3.80, S.D. 2.09 for low level, mean 3.82, S.D. 1.92 for moderate level and mean 4.01, S.D. 2.16 for high level of activity).

## 8.6. Perceived control over food hygiene/food safety

On a scale of one to seven, where one is 'no control at all' and seven is 'complete control', Australian respondents rated their control over food hygiene/food safety for food prepared at home very highly at a mean level of 5.69 (S.D. 1.22), with 86% rating it at 5 or more. These results can be seen in Figure 44.

**Figure 44: Perceived level of control over food hygiene/food safety for food prepared at home (Australia)**



*D5. On a scale of 1 to 7, where 1 is "no control at all" and 7 is "complete control", how much control do you think that you have over the food hygiene/food safety in your household in the preparation of food when eating at home? (please choose the one number that best applies)*

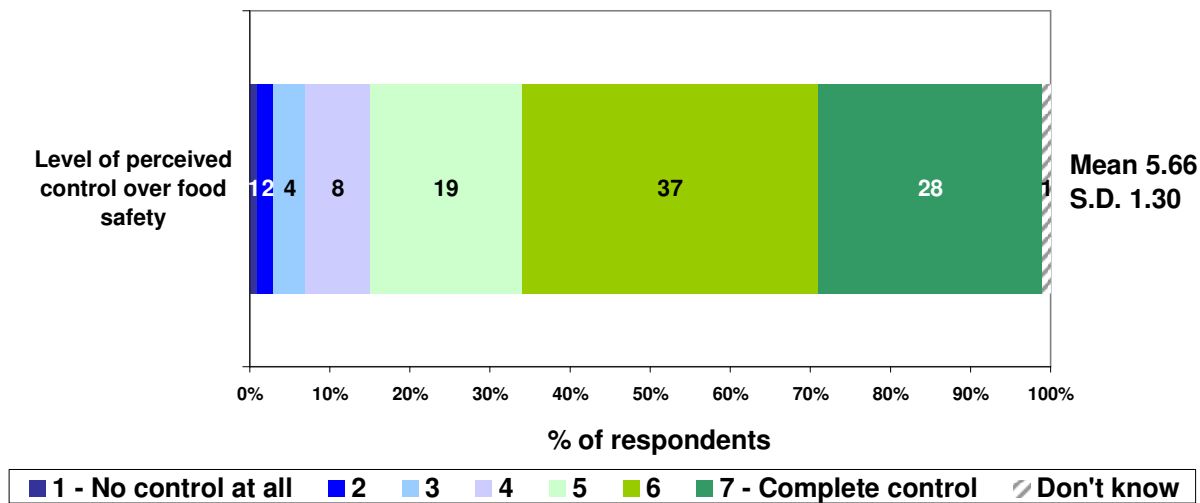
*Base: All respondents (n=1202) Total may not add to 100% due to rounding*

Main grocery buyers rated their perceived level of control over food hygiene/food safety for food prepared at home significantly more highly (mean 5.85, S.D. 1.09) than non-main grocery buyers (mean 4.94, S.D. 1.49), and those with particular food concerns rated their control significantly more highly (mean 5.74, S.D. 1.18) than those without food concerns (mean 5.32, S.D. 1.44). Those with a high level of health consciousness rated their control significantly more highly (mean 5.98, S.D. 1.10) than those with a medium level (mean 5.60, S.D. 1.15) or low level (mean 4.90, S.D. 1.63) of health consciousness. Those with a sedentary level of physical activity rated their perceived level of control significantly lower (mean 4.83, S.D. 1.66) than respondents with low levels (mean 5.65, S.D. 1.22), moderate levels (mean 5.64, S.D. 1.22) or high levels of physical activity (mean 5.89, S.D. 1.10).



New Zealand respondents' perceived level of control over food hygiene/food safety for food prepared at home was not significantly different to that of Australian respondents, with a mean score of 5.66 (S.D. 1.30) and 84% rating their level of control at five or more. These results can be seen in the following figure.

**Figure 45: Perceived level of control over food hygiene/food safety for food prepared at home (New Zealand)**



*D5. On a scale of 1 to 7, where 1 is "no control at all" and 7 is "complete control", how much control do you think that you have over the food hygiene/food safety in your household in the preparation of food when eating at home? (please choose the one number that best applies)*

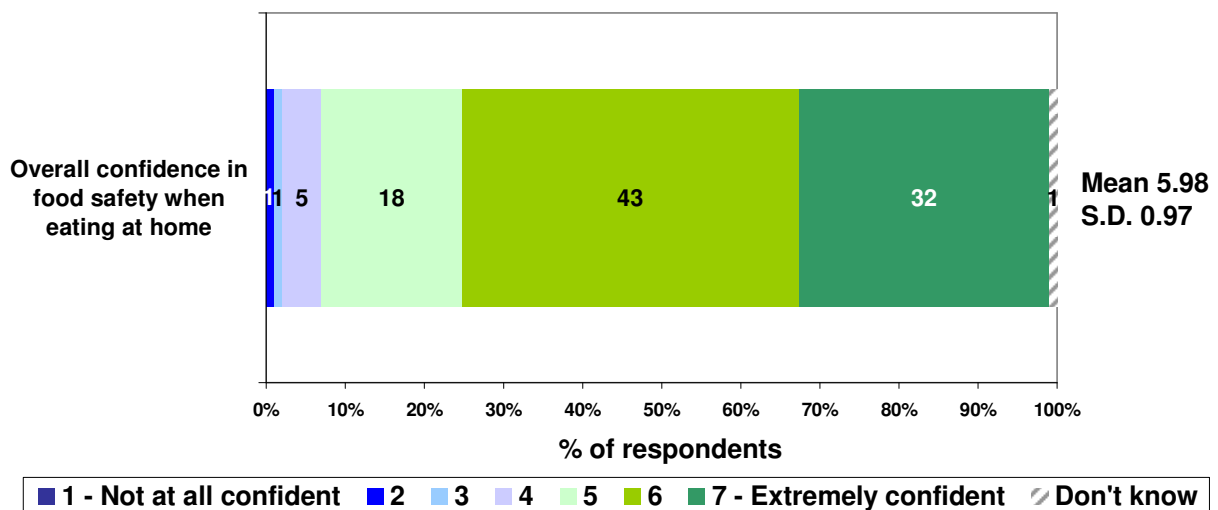
*Base: All respondents (n=800) Total may not add to 100% due to rounding*

Main grocery buyers in New Zealand rated their perceived level of control over food hygiene/food safety for food prepared at home significantly more highly (mean 5.94, S.D. 1.05) than non-main grocery buyers (mean 4.61, S.D. 1.57). Those with particular food concerns rated their control significantly more highly (mean 5.74, S.D. 1.23) than those without particular food concerns (mean 5.11, S.D. 1.62). Those with a high level of health consciousness rated their control significantly more highly (mean 5.90, S.D. 1.26) than those with a medium level (mean 5.66, S.D. 1.22) or low level (mean 4.93, S.D. 1.51) of health consciousness.

### 8.7. Overall confidence in food hygiene/food safety precautions at home

On a scale of one to seven, where one is 'not at all confident' and seven is 'extremely confident', Australian respondents rated their overall confidence that the food hygiene/food safety precautions for food prepared at home were sufficient at a very high mean level of 5.98 (S.D. 0.97), with 92.4% rating their confidence at 5 or more. These results can be seen in Figure 46.

Figure 46: Overall confidence in food hygiene/food safety precautions at home (Australia)

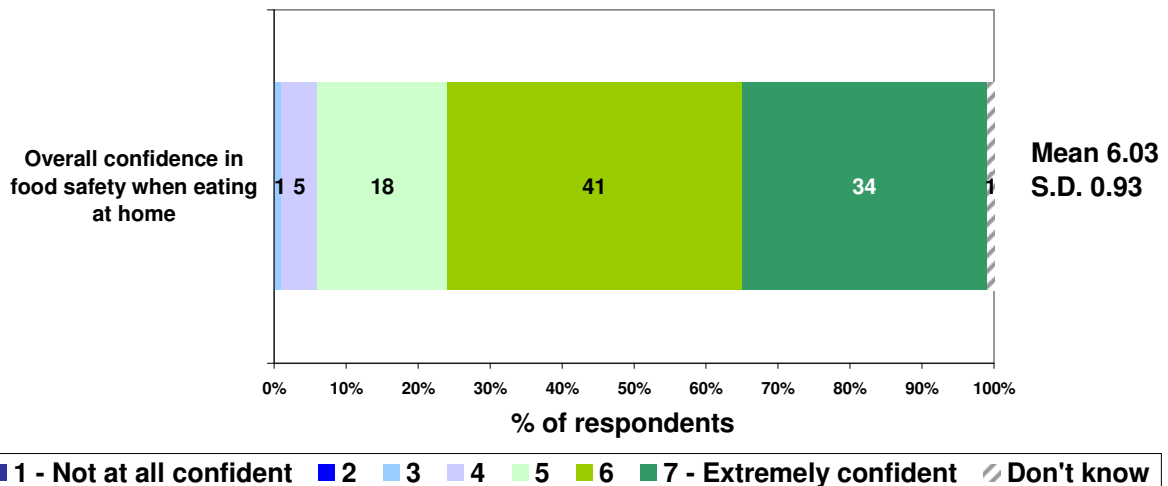


D6. On a scale of 1 to 7, where 1 is "not at all confident" and 7 is "extremely confident", how confident are you that food hygiene/food safety precautions in your household are sufficient in the preparation of food when eating at home? (please choose the one number that best applies) Total may not add to 100% due to rounding  
Base: All respondents (n=1202)

Subgroup differences were minor. Those with a high level of health consciousness reported a significantly higher level of confidence (mean 6.19, S.D. 0.92) than those with a medium level (mean 5.85, S.D. 0.93) or low level (mean 5.69, S.D. 1.23) of health consciousness.

Overall results for New Zealand respondents were not significantly different to Australian respondents, with a mean level of confidence of 6.03 (S.D. 0.93) and 93% rating their confidence at five or more. These results can be seen in Figure 47.

**Figure 47: Overall confidence in food hygiene/food safety precautions at home (New Zealand)**



D6. On a scale of 1 to 7, where 1 is "not at all confident" and 7 is "extremely confident", how confident are you that food hygiene/food safety precautions in your household are sufficient in the preparation of food when eating at home? (**please choose the one number that best applies**)  
Base: All respondents (n=800)

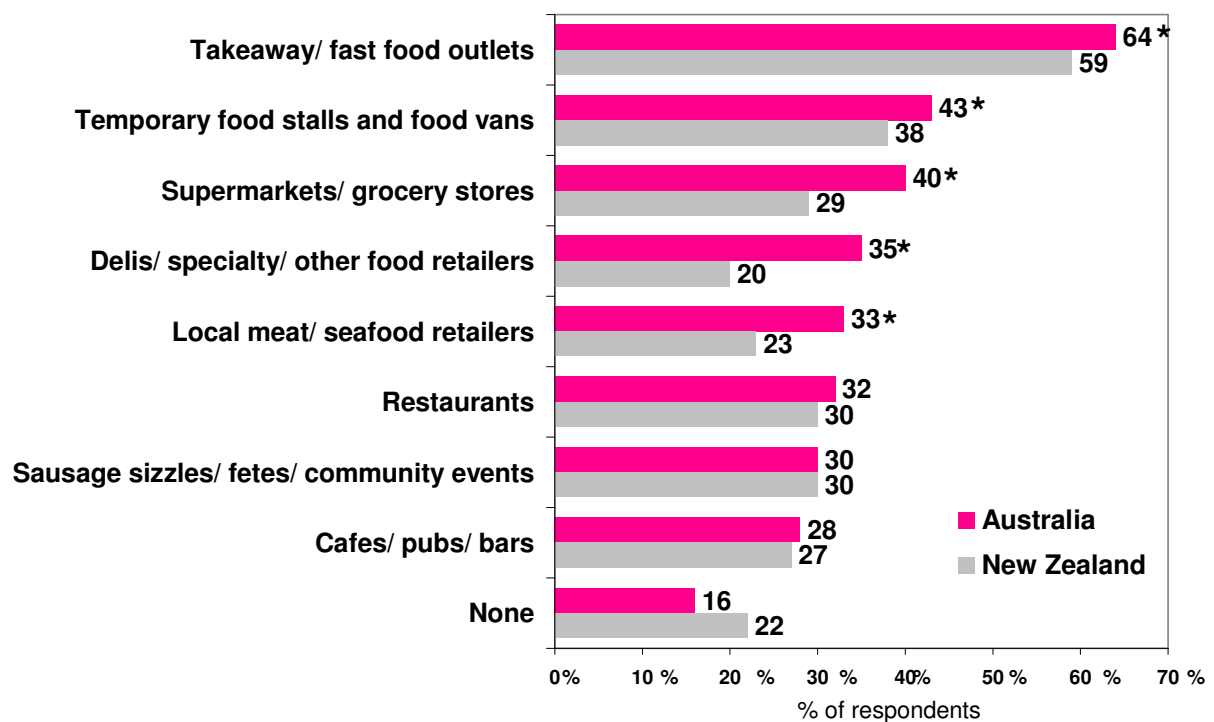
Main grocery buyers reported a significantly higher level of confidence (mean 6.09, S.D. 0.88) than non-main grocery buyers (mean 5.80, S.D. 1.08). Those with particular food concerns had a significantly higher level of confidence (mean 6.06, S.D. 0.90) than those with no particular food concerns (mean 5.82, S.D. 1.08). Those with a high level of health consciousness had a significantly higher level of confidence (mean 6.21, S.D. 0.93) than those with a medium level (mean 5.96, S.D. 0.93) or low level (mean 5.76, S.D.=0.91) of health consciousness.

## 9. Confidence in food safety when eating outside the home

### 9.1. Concern about food hygiene/food safety outside the home

As can be seen in Figure 48, in the last 12 months respondents were most concerned about food safety or food hygiene at takeaway or fast food outlets and temporary food stalls and food vans.

Figure 48: Concerns about food hygiene/food safety outside the home in the past 12 months



D7. Have you been concerned about food hygiene/food safety in any of the following places in the last 12 months? (**select all that apply**)

Base: All respondents (n=1202 Australia, n=800 New Zealand) Multiple responses allowed

Australian respondents were significantly more likely than New Zealand respondents to be concerned about food safety/food hygiene at delis/specialty or other retailers (35% of Australian respondents compared with 20.3% of New Zealand respondents), local meat or seafood retailers (32.8% compared with 23.1%), supermarkets (40.4% compared with 28.8%), takeaway or fast food outlets (63.9% compared with 59.2%) and temporary food stalls and food vans (43.2% compared with 37.7%). New Zealand respondents were significantly more likely than Australian respondents to not be concerned about safety at any food outlets (15.6% of Australian respondents compared with 21.8% of New Zealand respondents).

In Australia, respondents with specific food concerns were significantly more likely than those without concerns to be worried about the food safety precautions at supermarkets (42.3% of those with food concerns compared with 25.3% of those without concerns), delis/specialty or other retailers (37.4% compared with 17.1%).

Overall Australian consumers from lower socio-economic groups were less concerned about food safety practices than those from higher socio-economic groups.

In New Zealand, main grocery buyers were significantly more likely than non-main grocery buyers to be concerned about the food safety in restaurants (31.8% of main grocery buyers compared with 21.5% of non-main grocery buyers), supermarkets (30.6% compared with 22.4%), local meat/seafood retailers (25.2% compared with 15.5%), delis/speciality or other food retailers (22.2% compared with 13.1%), temporary food stalls and food vans (41.4% compared with 24%), takeaway or fast food outlets (62% compared with 48.7%) and sausage sizzles, fetes or other community events (33.3% compared 19.7%). Those with a high level of health consciousness were significantly more likely than other respondents to be concerned about food safety in all locations listed except for temporary food stalls and food vans, where the difference was not significant.

Australian and New Zealand consumers appear to be less concerned about food safety in a range of food outlets when compared to the 2005 consumer study conducted by the NZFSA. As can be seen in Table 18, New Zealand consumers were most concerned (when prompted) about food safety standards in buffets and smorgasbords (58%), mobile food outlets (57%), Asian and other ethnic restaurants (53%) and food halls (53%). Forty two percent of New Zealanders were concerned about restaurants generally, and 40% were concerned about supermarkets<sup>29</sup>.

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<sup>29</sup> New Zealand Food Safety Authority, A Quantitative Study, 2005

**Table 18: New Zealand Food Safety Authority – Concern about food safety standards at specific places**

	1 Very concerned	2	TOTAL 1+2	3	4	5 Not concerned at all	TOTAL 4+5	Unsure
<b>Base: All respondents (n=750)</b>	%	%	%	%	%	%	%	%
Buffets and smorgasbords	29	29	58	21	11	7	18	3
Mobile food outlets	30	27	57	21	10	6	16	6
Asian and other ethnic restaurants	29	24	53	24	12	6	18	5
Food halls	25	28	53	23	11	6	17	7
Franchised fast food outlets	26	25	51	23	16	7	23	3
Dairies	21	26	47	28	15	8	23	2
Food processors and manufacturers	25	20	45	22	19	11	30	3
Service stations	18	25	43	25	16	10	26	6
Restaurants generally	20	22	42	29	18	10	28	1
Pubs & cafes	19	23	42	31	16	8	24	3
BBQs	19	22	41	25	17	14	31	3
Transportation of food	21	20	41	28	16	11	27	4
Supermarkets	20	20	40	21	23	16	39	0
Farm gate sales/ roadside stalls	18	20	38	26	19	13	32	4
At home	23	15	38	13	16	33	49	0

Source: New Zealand Food Safety Authority, *A Quantitative Study, 2005*

Using a scale of 1-5 where 1 means you are very concerned and 5 you are not concerned at all, how concerned are you about the food safety standards at the following places?

When asked a similar question, 28% of UK consumers were concerned about hygiene in takeaway/fast food outlets and 21% were concerned about restaurants/cafes/pubs/wine bars.<sup>30</sup>

Compared to European consumers, Australian and New Zealand consumers appear less concerned overall about food safety outside their home, with close to seven in ten European citizens concerned about hygienic standards in food processing plants, shops or restaurants.<sup>31</sup>

<sup>30</sup> Consumer Attitudes to Food Standards, Food Standards Agency UK, 2007 (See Appendix G, Table 50)

<sup>31</sup> Special Eurobarometer 2005 – Risk Issues, European Food Safety Authority, 2005 (See Appendix G, Table 51)

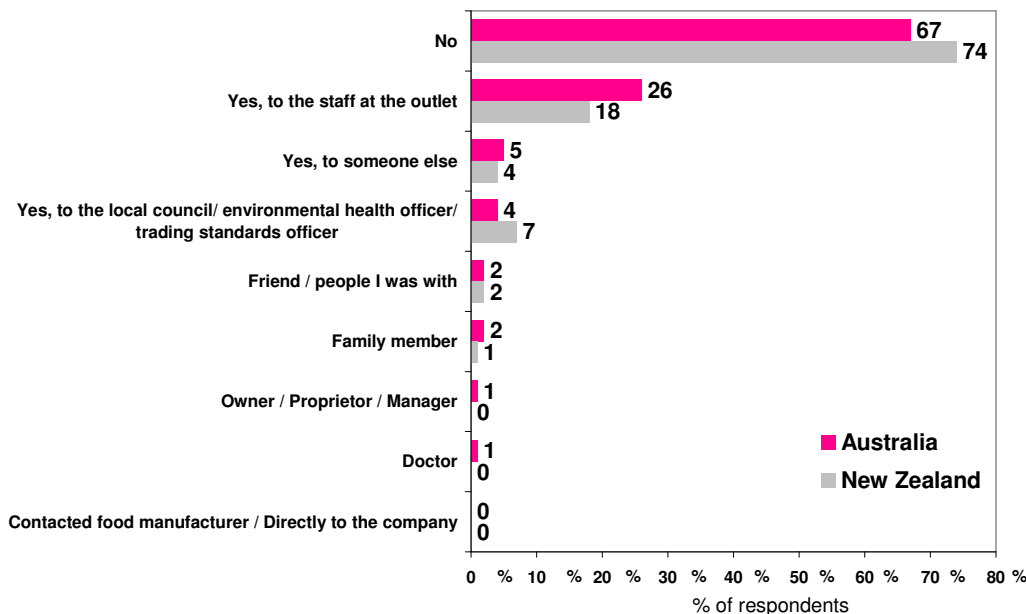
Just over one third (37%) of Irish consumers were concerned about food safety at supermarkets and 49% were concerned about the food safety of food received in restaurants, cafes and hotels, which is lower than results for Australian and New Zealand respondents.<sup>32</sup>

## 9.2. Whether food concerns are reported

Overwhelmingly, respondents who had concerns about food hygiene had not reported their concerns to anyone. New Zealand respondents were significantly less likely to have reported their concern (74%) than Australian respondents (67%). The most common reporting of concerns was to staff at the outlet (26% of Australian respondents and 18% of New Zealand respondents). These results can be seen in the Figure 49.

Similarly, 76% of UK consumers concerned about food hygiene at a food outlet had not reported those concerns to anyone. Of the 23% of UK consumers who did report their concerns, 18% reported their concerns to staff at the food outlet<sup>33</sup>. Irish consumers were slightly more likely to have reported their concerns, with 40% saying they had done so.<sup>34</sup>

Figure 49: Reported concern about food hygiene/food safety outside the home



D8. And the last time you were concerned about food hygiene/food safety did you report your concerns to anyone? (please select all that apply)

Base: Respondents who expressed concern about food hygiene/food safety outside the home (n=1015 Australia, n=626 New Zealand) Multiple responses allowed

Due to small sample sizes, no significant differences between subgroups can be seen.

<sup>32</sup> Consumer Attitudes to Food Safety in Ireland, Food Safety Authority of Ireland, 2003 (See Appendix G, Table 52)

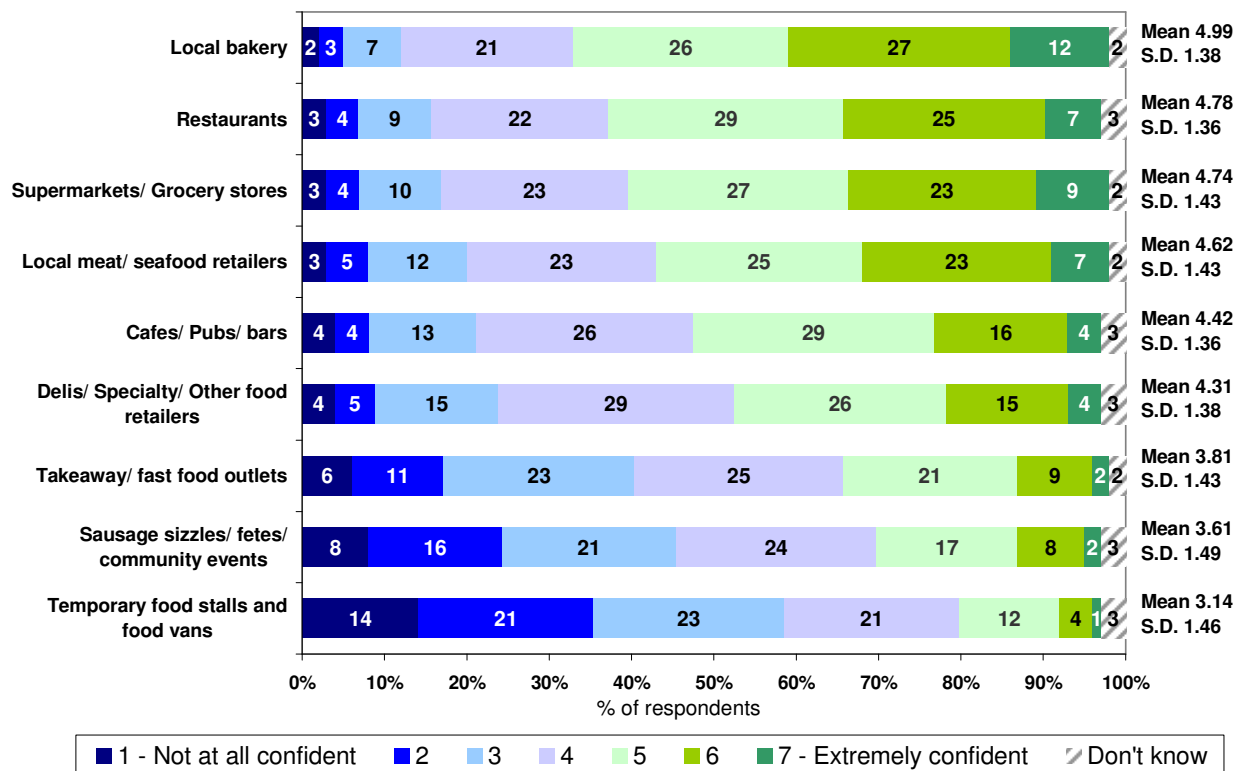
<sup>33</sup> Consumer Attitudes to Food Standards, Food Standards Agency UK, 2007 (See Appendix G, Table 53)

<sup>34</sup> Consumer Attitudes to Food Safety in Ireland, Food Safety Authority of Ireland, 2003 (See Appendix G, Table 54)

### 9.3. Confidence in food hygiene/food safety outside the home

On a scale of one to seven, where one is 'not at all confident' and seven is 'extremely confident', confidence in food hygiene/food safety precautions at different outlets was overall quite low, with no type of food outlet achieving a mean score of five or more, except for confidence in food safety at supermarkets, among New Zealand consumers (Figures 50 and 51). The confidence in the local bakery for Australian consumers was a very close 4.99. Confidence in food safety was lowest for takeaway/fast food outlets, sausage sizzles/fetes/community events and temporary food stalls and food vans.

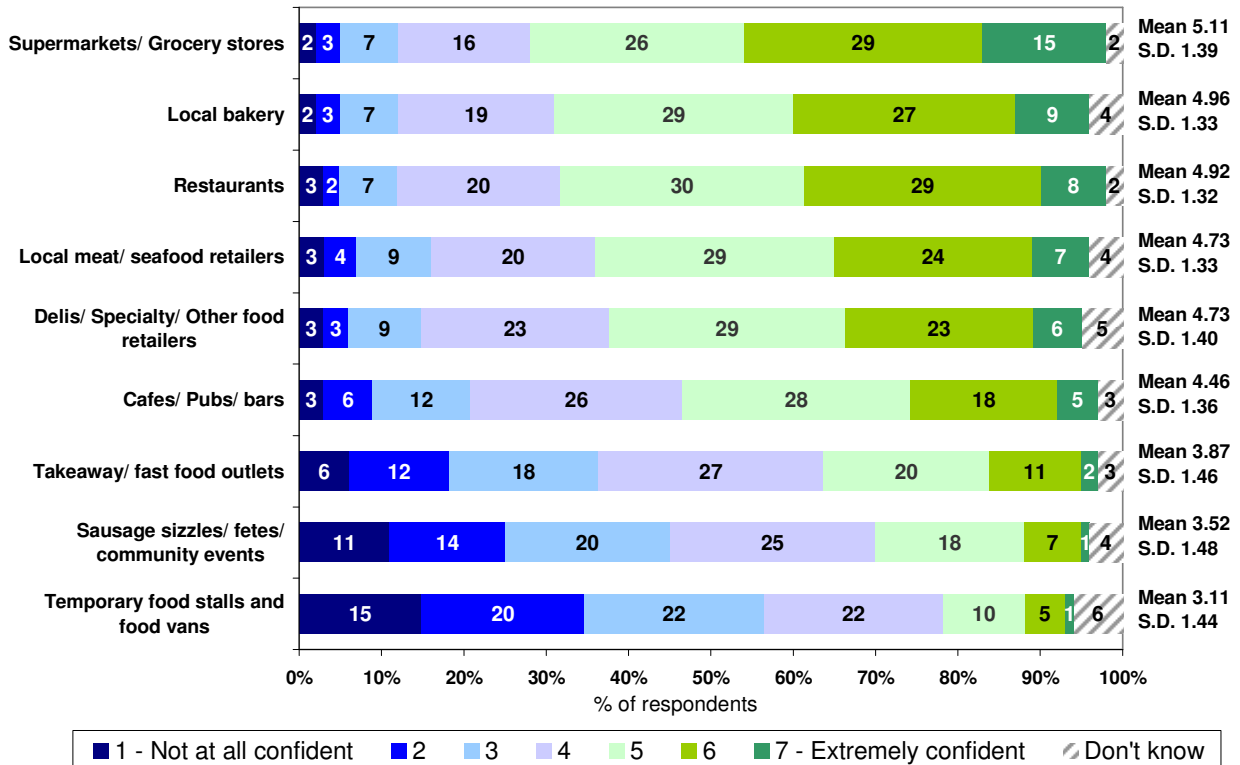
Figure 50: Confidence in food hygiene/food safety precautions in the preparation of food in various places (Australia)



D9. On a scale of 1 to 7, where 1 is "not at all confident" and 7 is "extremely confident", how confident are you that food hygiene/food safety precautions are sufficient in the preparation of food when eating out or purchasing food at each of the following places? (please choose the one number that best applies)



Figure 51: Confidence in food hygiene/food safety precautions in the preparation of food in various places (New Zealand)



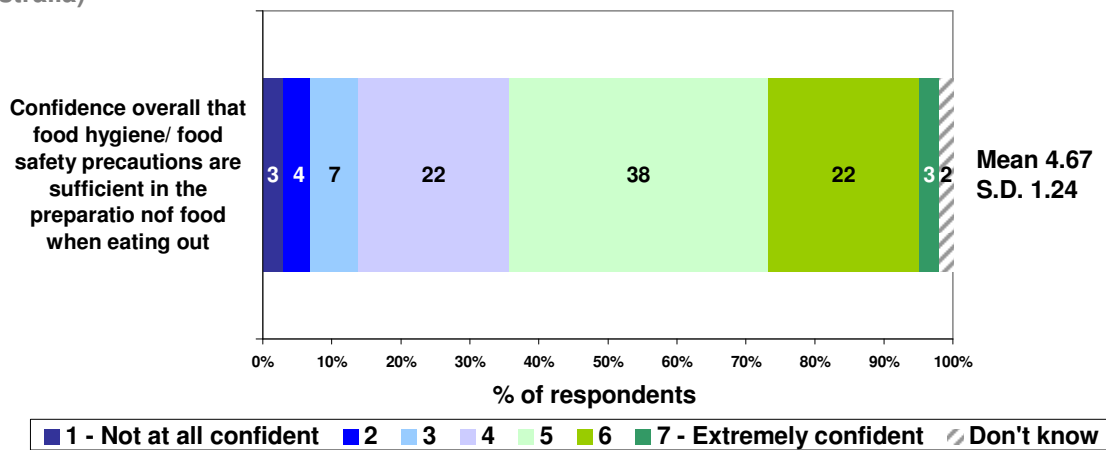
D9. On a scale of 1 to 7, where 1 is “not at all confident” and 7 is “extremely confident”, how confident are you that food hygiene/food safety precautions are sufficient in the preparation of food when eating out or purchasing food at each of the following places? (please choose the one number that best applies)

Respondents in New Zealand were significantly more confident in food safety/food hygiene at restaurants (mean 4.92, S.D. 1.32) than Australian respondents (mean 4.78, S.D. 1.32), and significantly more likely to be confident in delis or specialty or other retailers (mean 4.73, S.D. 1.33 compared with mean 4.31, S.D. 1.38 for Australian respondents).

### 9.4. Overall confidence in food hygiene/safety when eating out

On a scale of one to seven, where one is 'not at all confident' and seven is 'extremely confident', respondents were asked to rate their overall confidence that food hygiene/food safety precautions were sufficient when eating out. The mean score for this variable was 4.67 (S.D. 1.24) for Australian respondents and a significantly higher (4.88 S.D. 1.10) for New Zealand respondents. Figures 52 and 53 set out the distribution of the ratings, showing that nearly two thirds (62.3%) of Australian respondents and 69% of New Zealand respondents had rated their overall confidence at 5 or more.

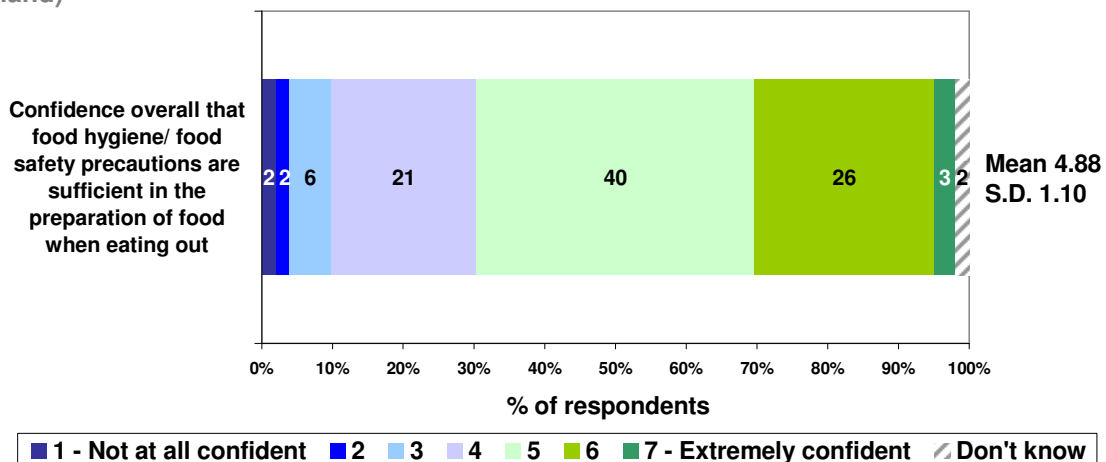
**Figure 52: Overall confidence in food hygiene/food safety precautions when eating out (Australia)**



D10. On a scale of 1 to 7, where 1 is "not at all confident" and 7 is "extremely confident", how confident are you **overall** that food hygiene/food safety precautions are sufficient in the preparation of food when eating out? **(please choose the one number that best applies)**

Base: All respondents (n=1202) Total may not add to 100% due to rounding

**Figure 53: Overall confidence in food hygiene/food safety precautions when eating out (New Zealand)**



D10. On a scale of 1 to 7, where 1 is "not at all confident" and 7 is "extremely confident", how confident are you **overall** that food hygiene/food safety precautions are sufficient in the preparation of food when eating out? **(please choose the one number that best applies)**

Base: All respondents (n=800) Total may not add to 100% due to rounding

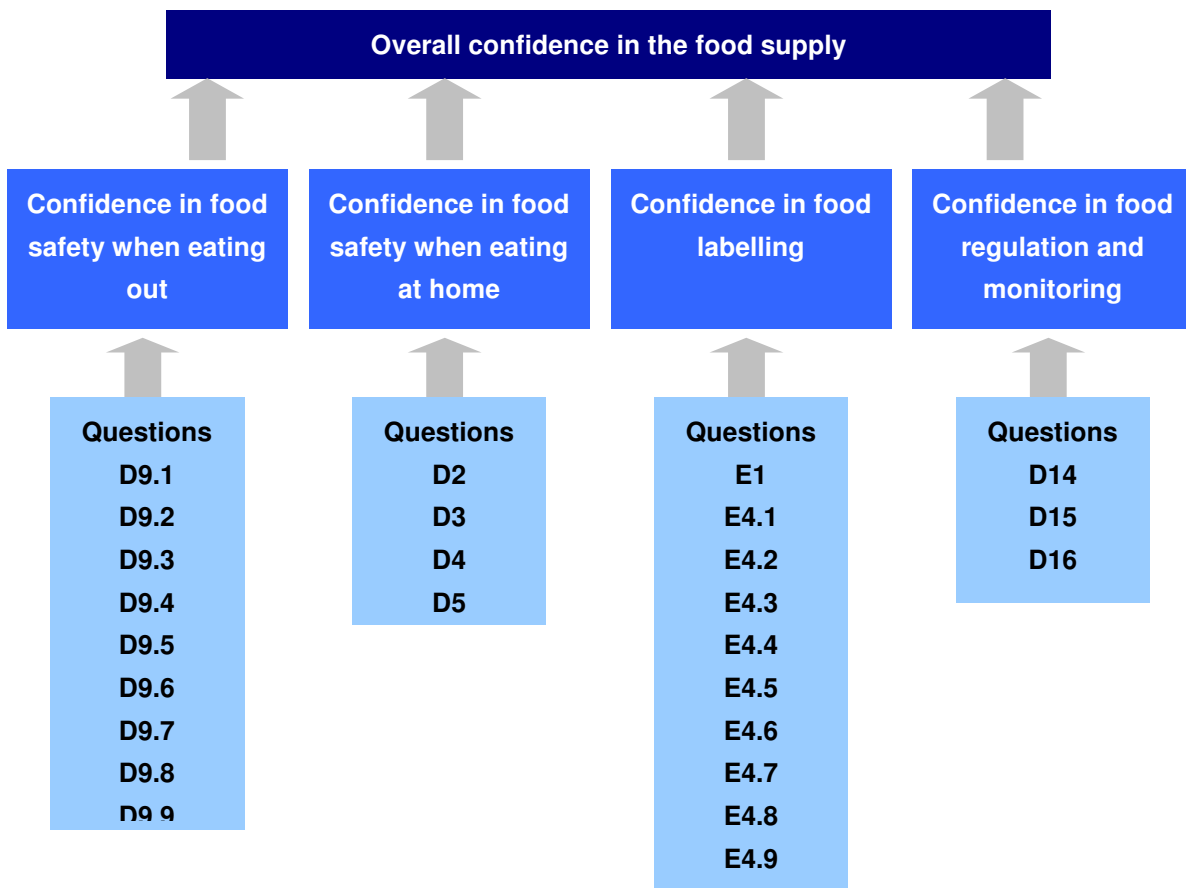
## 10. Regression Models

A standard two tiered multiple regression model was developed to determine the impact of key dependent and independent variables on consumers' overall confidence in the safety of the food supply:

- The first (or top) level of the model measured the impact of the four main dependent variables considered in this survey on the overall dependent variable of overall confidence in the safety of the food supply. The four main dependent variables were: consumers overall confidence in food safety when eating out; consumers overall confidence in food safety when eating at home; consumers overall confidence in their ability to make informed decisions from food labelling; and consumers overall confidence in organisations providing regulation and monitoring of the food supply.
- The second (or underlying) level of the regression model assessed the impact of a range of independent variables on the four main dependent variables considered above, that is, consumers overall confidence in food safety when eating out, when eating at home, in ability to make decisions from food labels and in organisations regulating and monitoring the food supply. Independent variables were drawn from key questions within the survey.

The regression model employed is illustrated in Figure 54:

Figure 54: Hypothesized regression model



Regression analysis generates two important pieces of information:

- The significance of an independent (or dependent) variable's impact on a dependent variable is referred to as relative importance, or impact scores. For example, in defining overall confidence in food safety when eating at home (a dependent variable), a regression model can define what the relative importance of each independent variable is. That is the relative importance of 'knowledge about food safety', 'concern about food safety', 'control over food safety in the home' and 'attention paid to food safety'.
- The second piece of output from a regression analysis indicates the strength of the model, or how well the combination of independent variables explain the value of the dependent variable.

Model strength is expressed as a percentage (e.g. 65%) which can also be called an Adjusted R-squared (e.g.  $r^2=0.65$ ) and provides the following information:

- the Adjusted R-squared figure is interpreted as the amount of variance that two or more independent variables explain in a dependent variable;
- an Adjusted R-squared figure of  $r^2=0.80$  indicates that 80% of satisfaction is explained by the independent variables. The remaining 20% consists of things that were not measured and would probably not be significant enough to be included in the model; and
- in customer satisfaction research, Adjusted R-squared figures ranging from 60% to 80% are typical and are indicative of strong models, however in other areas of research an Adjusted R-squared of 40% to 50% may be considered acceptable.

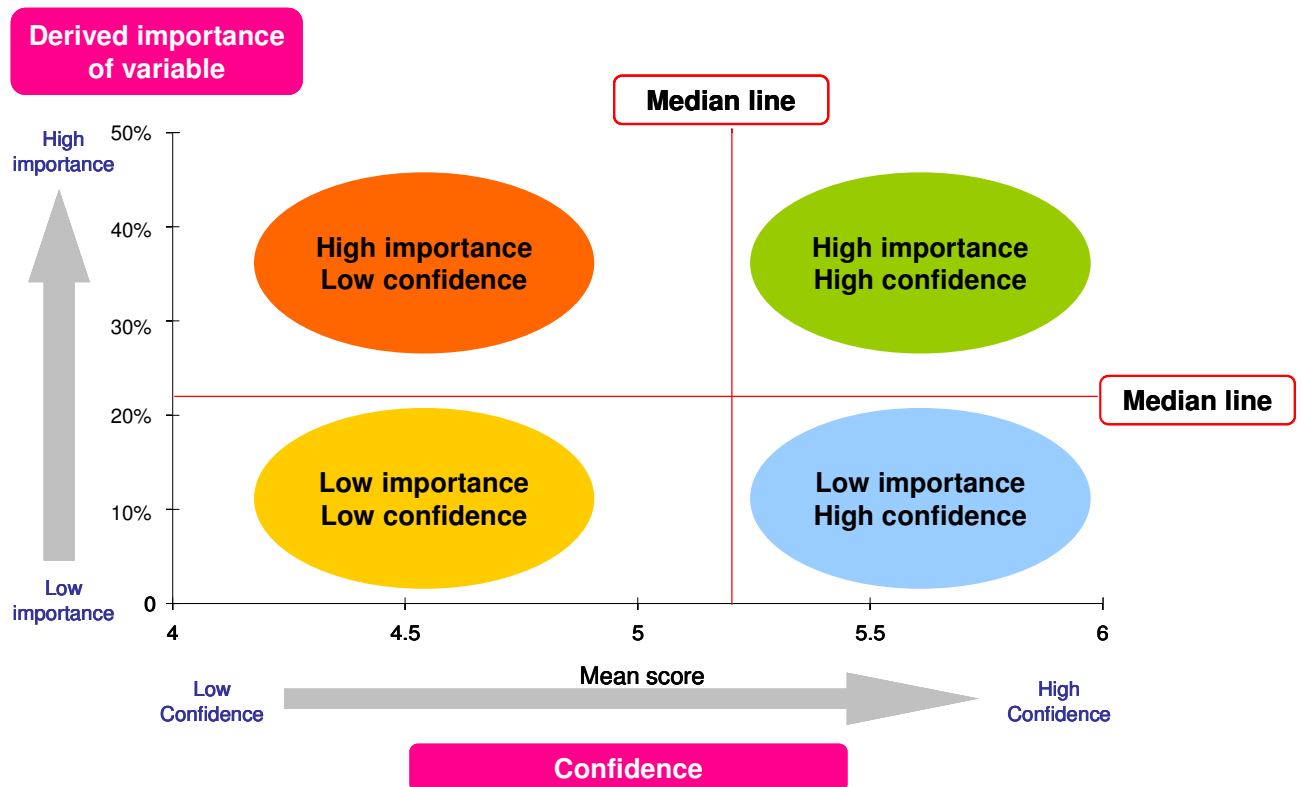
More information about this technique can be found in Appendix F of this report.

The second level regression models show the impact of independent variables on each sub-section of the questionnaire namely: confidence in organisations providing regulation and monitoring; confidence in food labelling; confidence in food safety when eating at home; and confidence in food safety when eating out. Using these regression models, we can translate the results into a strategic matrix model, which identifies areas of priority for future activities, based on the following axes:

- the derived importance was obtained from the overall regression models, and relates to section impact – i.e. a lower figure shows lower importance. These percentage figures are those used from the regression tables shown at the start of each key section of the report; and
- the confidence is the mean score out of 7 (or 5 for some of the labelling questions) for each of these attributes as is reported in each section of the report – i.e. a lower figure shows lower confidence.

The following diagram summarises how to interpret each of the strategic matrix models. The median for confidence and importance is used to create the four quadrants. The areas of high importance to consumers but with low consumer confidence levels are areas to be considered by relevant agencies in the food regulatory system in the future in relation to building consumer confidence in the food supply.

Figure 55: Guide to interpreting the strategic matrix models



### 10.1. Regression model for overall confidence

Overall confidence in the safety of the food supply is the key dependent variable in the overall regression models for each country, detailed in Figures 56 and 57.

Figure 56: First level regression model, Australia

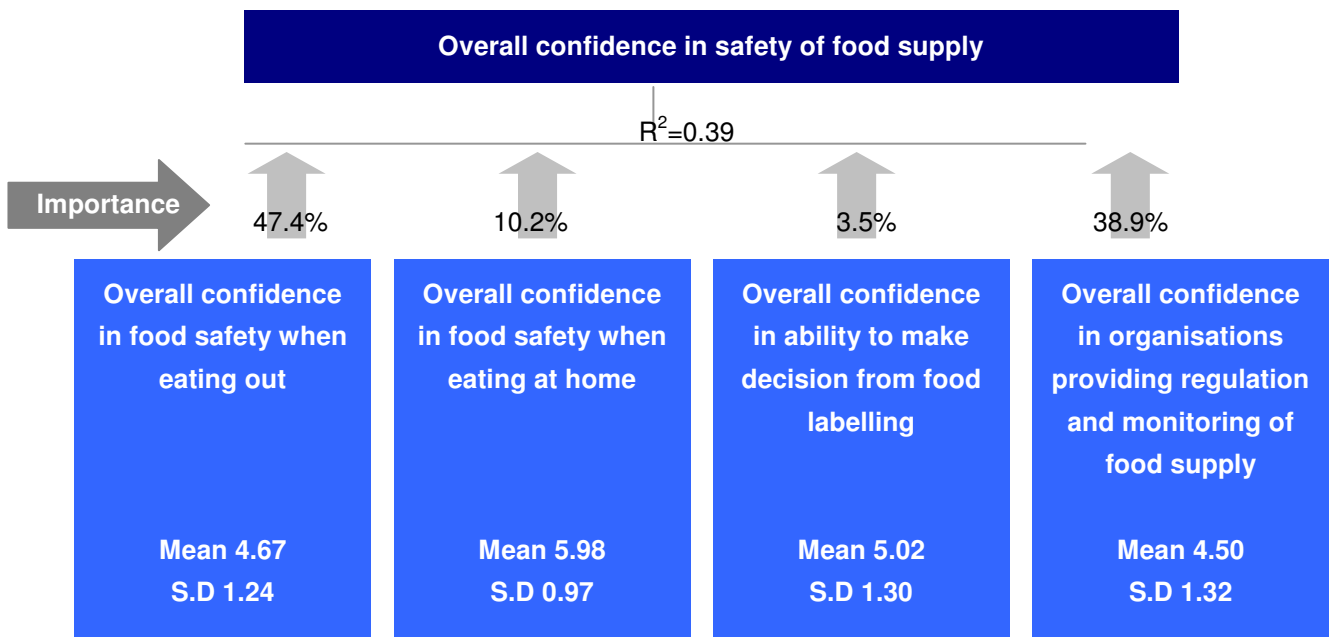
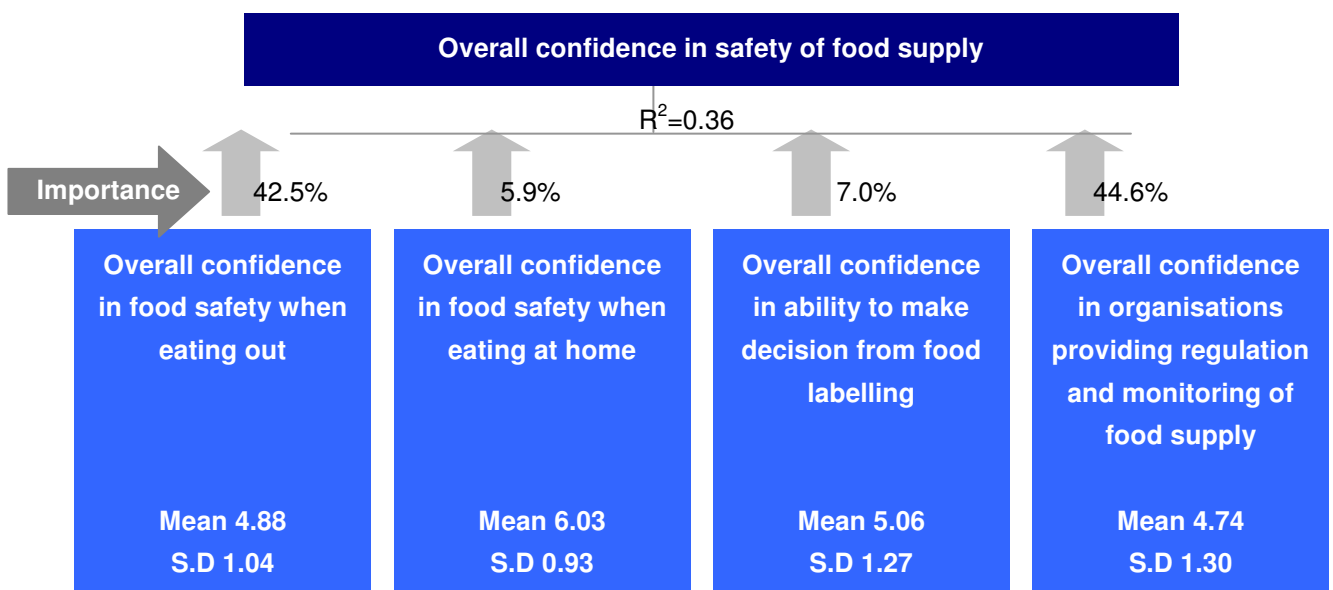


Figure 57: First level regression model, New Zealand



The models show that the four dependent variables explain almost 40% of overall confidence in the food supply (39% for Australia and 36% for New Zealand), indicating that there are other factors which are also having a strong impact on overall confidence, that have not been captured in this model or are outside the scope of FSANZ work.

The models also show that 'overall confidence in food safety when eating out' (importance of 47.4% in Australia and 42.5% New Zealand) and 'overall confidence in organisations providing regulation and monitoring of the food supply' (importance of 38.9% in Australia and 44.6% New Zealand) are the most important variables in the model.

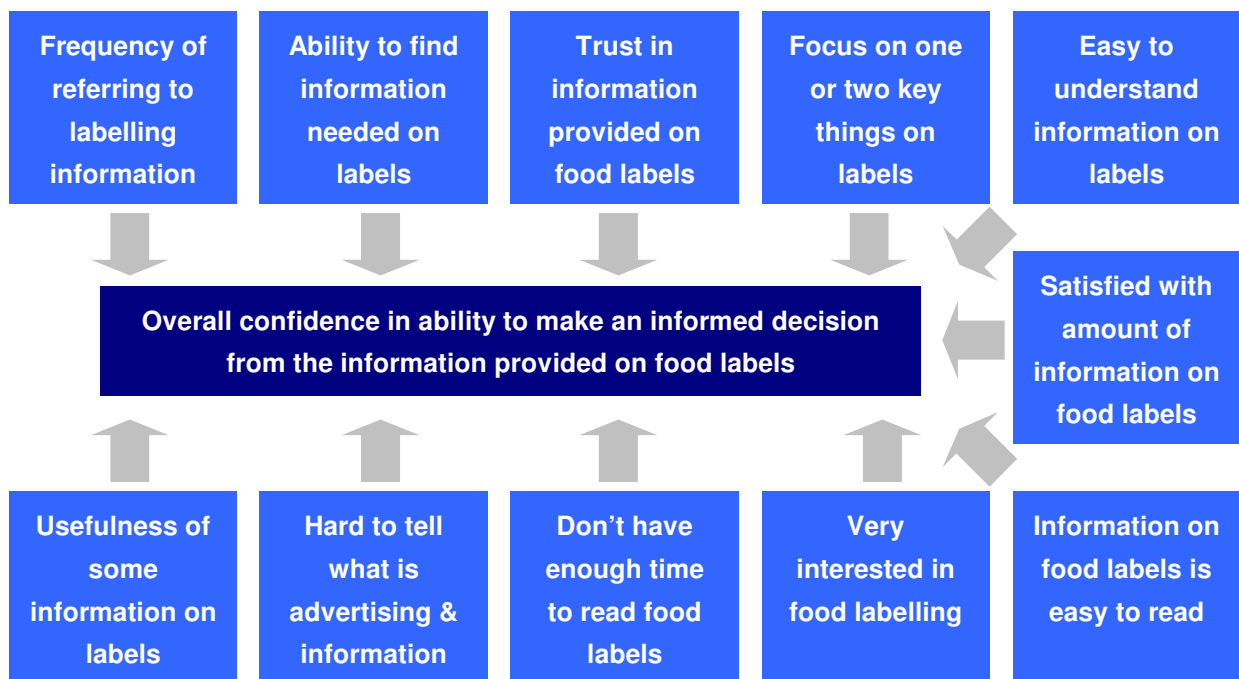
## **10.2. Regression model for food regulation and monitoring**

Overall confidence in organisations providing regulation and monitoring of the food supply had considerable impact on overall confidence in the food supply. Within this variable, a second tier model was developed to examine the impact of a number of factors on overall confidence in organisations providing regulation and monitoring. However given that the organisations responsible for food regulation and monitoring were relatively unknown, with awareness for organisations less than 30% for each (see section 6.1), the model is not presented.

### 10.3. Regression model for food labelling

The overall dependent variable for food labelling was ‘confidence in ability to make an informed decision from the information provided on food labels’. A number of independent variables were then modelled against this, as depicted in Figure 58.

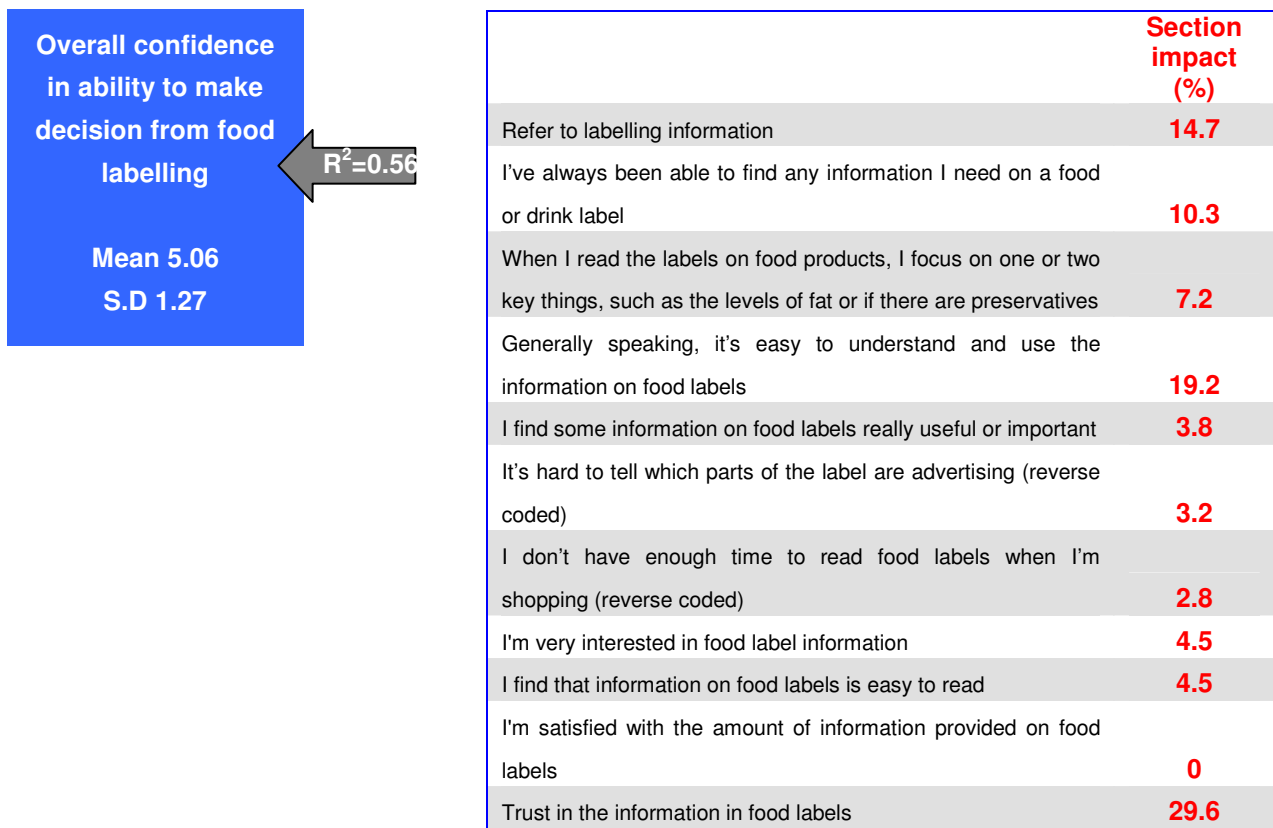
Figure 58: Regression model for overall confidence in food labelling





The model for Australia, displayed in Figure 59, shows that trust in food labelling had the largest impact on overall confidence in food labelling (29.6% section impact). This was followed by labels being easy to understand and use (19.2%), frequency of referring to label information (14.7%) and being able to find the information needed on labels (10.3%). A number of other facets had some impact on overall confidence in consumers' ability to make a decision from food labelling, with the exception of the amount of information provided.

**Figure 59: Second level regression model, confidence in ability to make decisions from food labels, Australia**

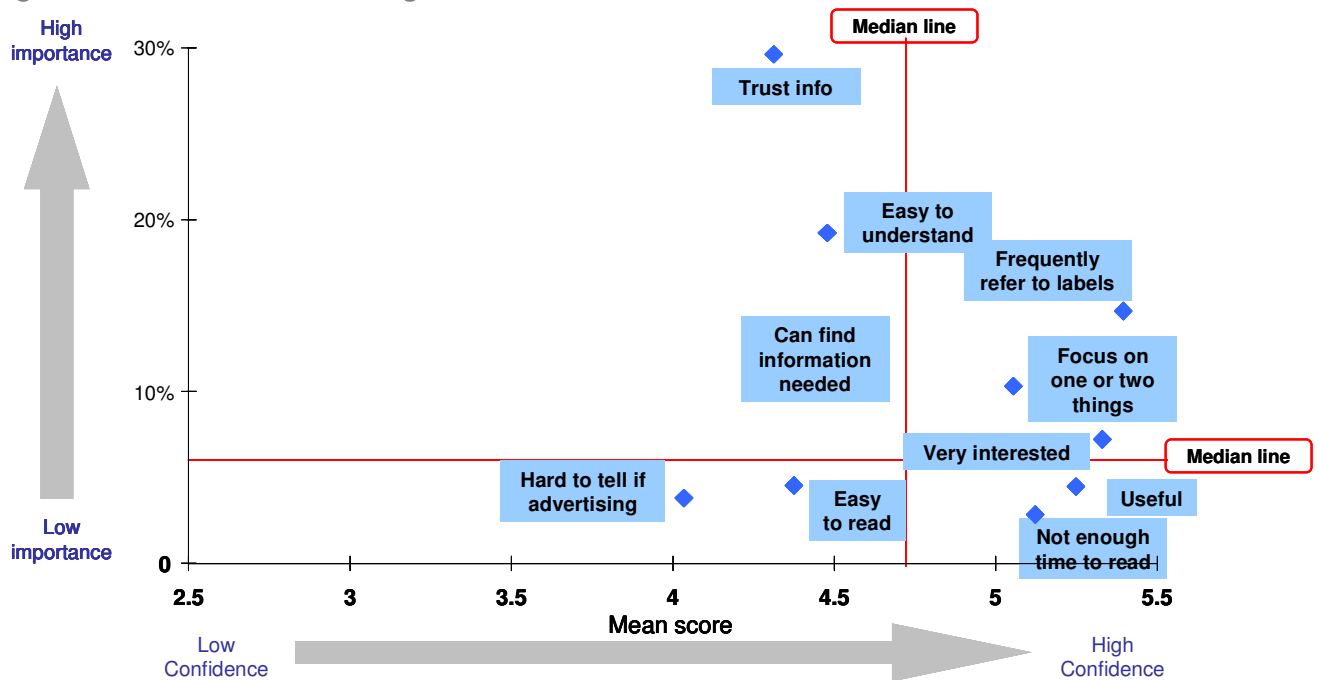


The strategic matrix model for **confidence in food labelling - Australia** identifies the following areas of priority.

<b>High importance Low confidence</b>	<ul style="list-style-type: none"> <li>• Easy to understand</li> <li>• Can find information I need</li> <li>• Trust information on labels</li> </ul>
<b>Low importance Low confidence</b>	<ul style="list-style-type: none"> <li>• Hard to tell if advertising or information</li> <li>• Easy to read</li> <li>• Satisfied with amount of information</li> </ul>
<b>High importance High confidence</b>	<ul style="list-style-type: none"> <li>• Focus on one or two things</li> <li>• Very interested in information on labels</li> <li>• I frequently refer to food labels</li> </ul>
<b>Low importance High confidence</b>	<ul style="list-style-type: none"> <li>• Not enough time to read</li> <li>• Useful information</li> </ul>

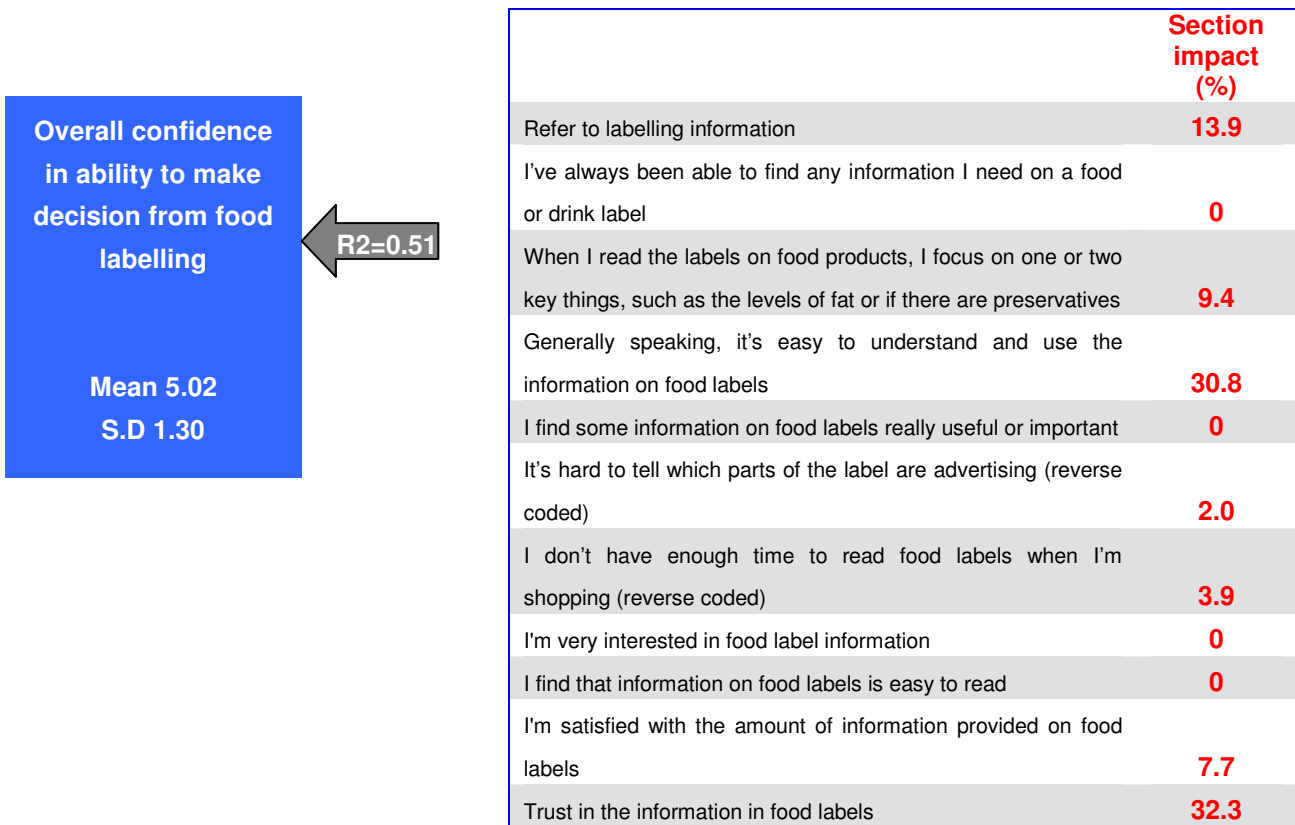
These results can be seen in Figure 60.

Figure 60: Confidence in labelling - Australia

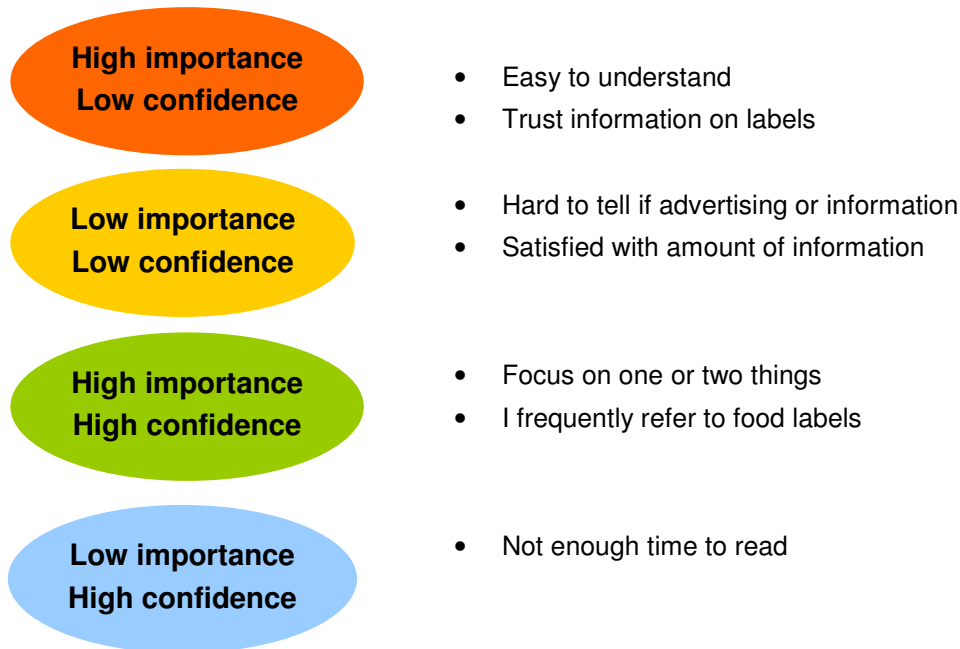


As with Australian consumers, the model for New Zealand consumers (Figure 61) shows that trust in labelling information had the greatest impact on overall confidence in food labels (32.3%). Ease of understanding and use of labels was of greater importance amongst New Zealand consumers than Australians, accounting for 30.8% of the impact on overall confidence in labels. Other factors which had some impact on overall confidence amongst New Zealand consumers were frequency of referring to labelling (13.9%), extent to which consumers focus on one or two key things on labels (9.4%), amount of information provided (7.7%), time to read food labels (3.9%), and ease of distinguishing between advertising and information (2.0%).

**Figure 61: Second level regression model, confidence in ability to make decisions from food labels, New Zealand**

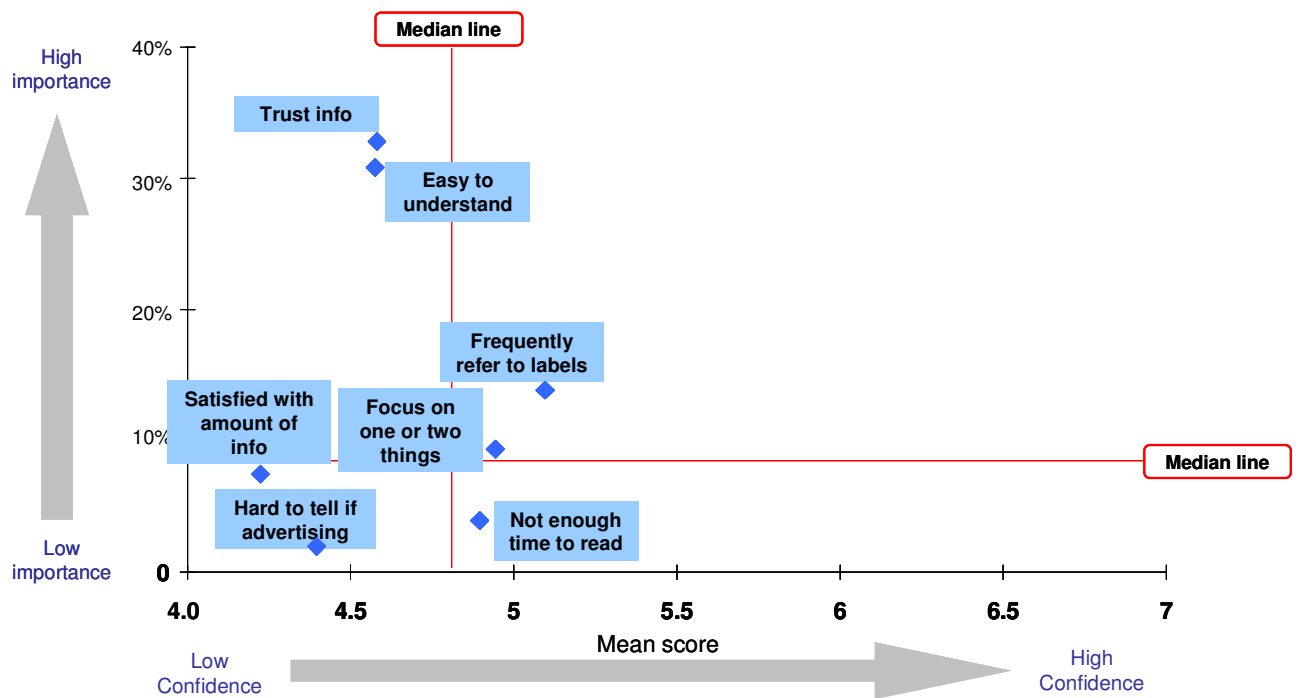


The strategic matrix model for **confidence in food labelling – New Zealand** identifies the following areas of priority.



These results can be seen in Figure 62.

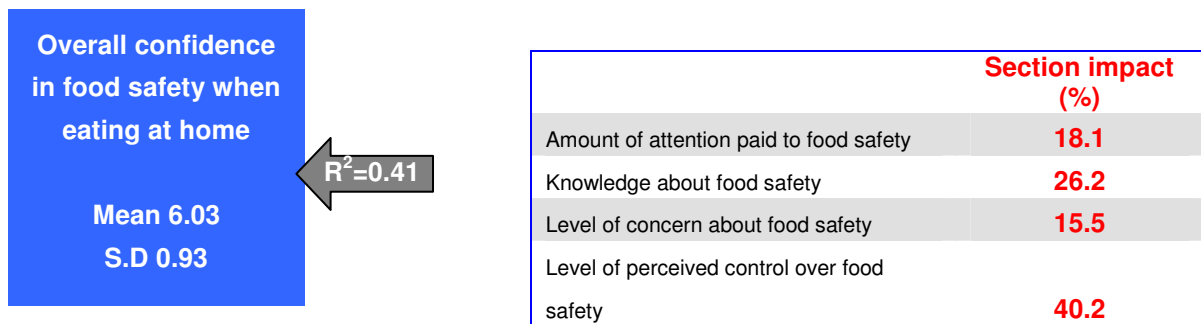
Figure 62: Confidence in labelling – New Zealand



### 10.4. Regression model for food safety when eating at home

The second tier regression model shows that the model explains 41% of overall confidence in food safety when eating at home for Australian respondents, and 33% of overall confidence for New Zealand respondents. As can be seen in the following figures, the level of perceived control over food safety and knowledge about food safety had the most impact on the overall model in both Australia and New Zealand. The models for Australia and New Zealand were quite different in shape, with knowledge about food safety having a much stronger impact on the New Zealand model than the Australian model (42.4% section impact in New Zealand compared to 26.2% section impact in Australia), whereas the level of perceived control over food safety had a stronger impact in Australia (40.2%) than it did in New Zealand (30.3%).

Figure 63: Second level regression model, food safety when eating at home, Australia



The strategic matrix model for **food safety when eating at home - Australia** identifies the following areas of priority.

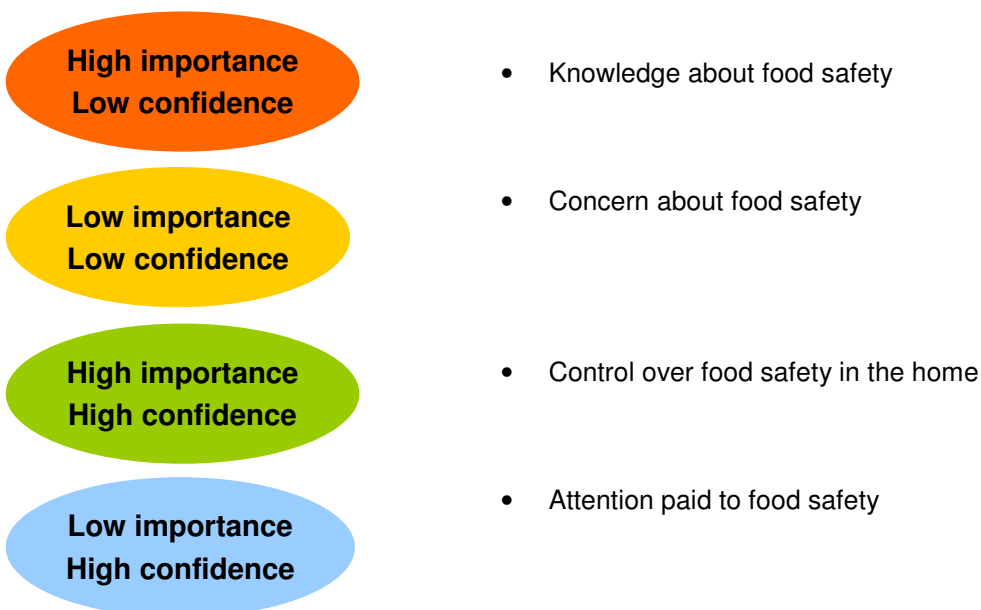


Figure 64: Confidence in food safety when eating at home – Australia

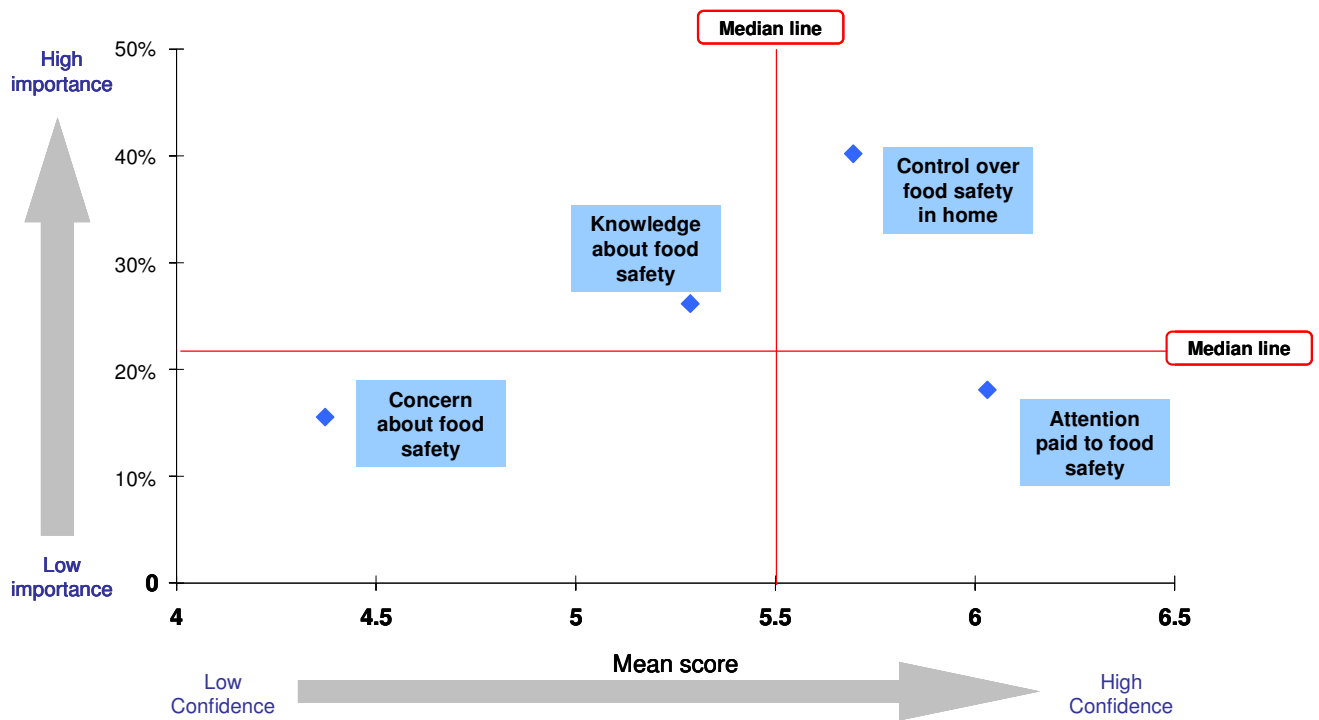
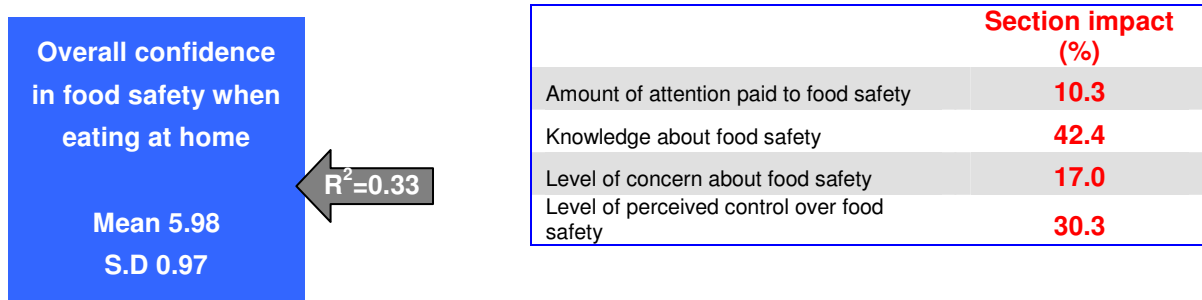


Figure 65: Second level regression model, food safety when eating at home, New Zealand



The strategic matrix model for **food safety when eating at home – New Zealand** identifies the following areas of priority.

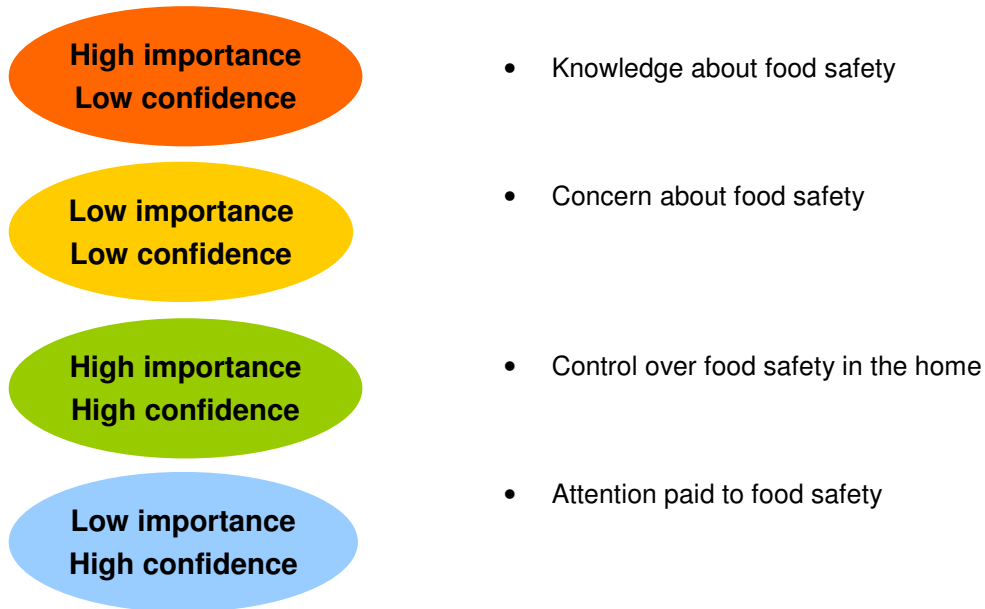
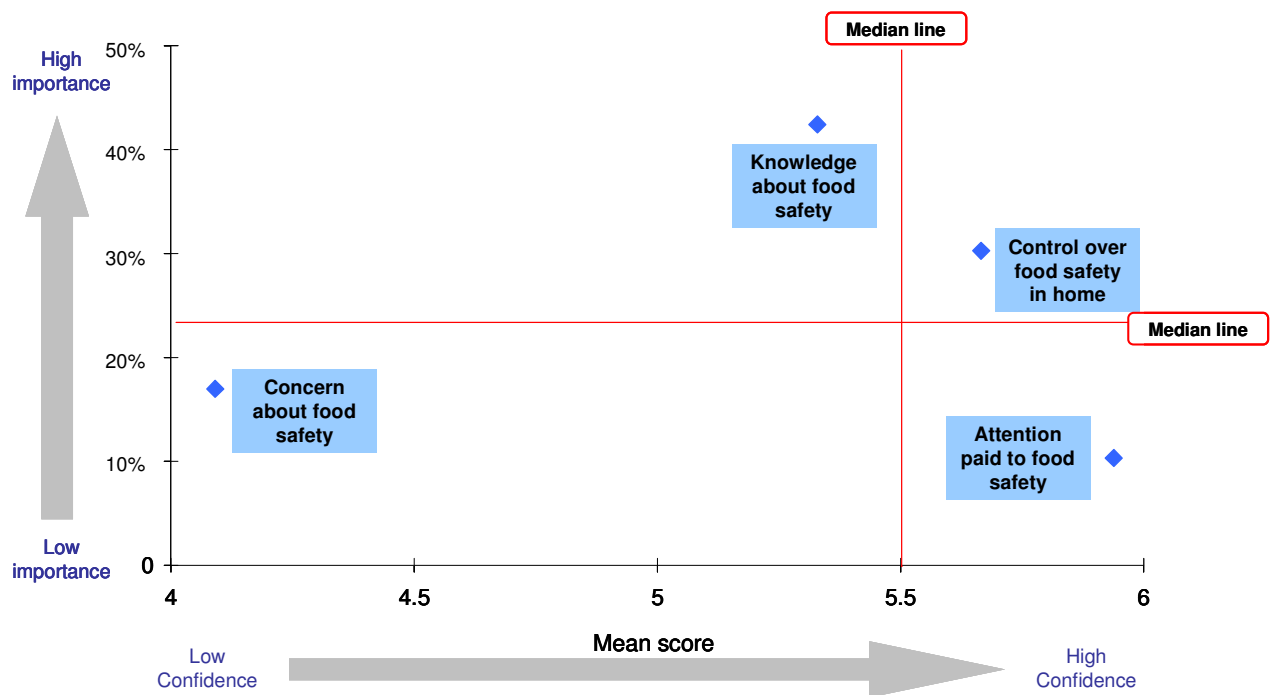


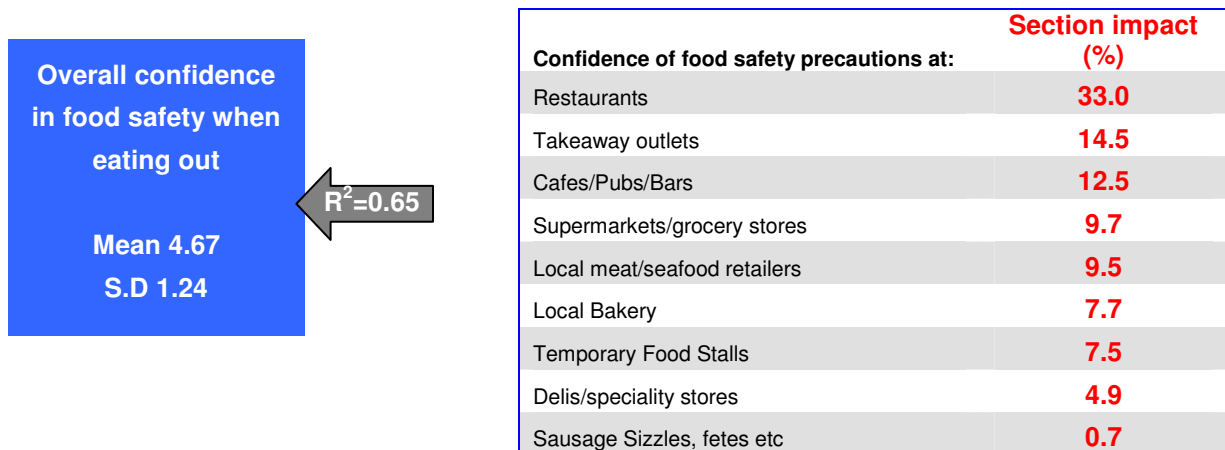
Figure 66: Confidence in food safety when eating at home – New Zealand



## 10.5. Regression model for food safety when eating outside the home

The regression model for food safety when eating outside the home shows that confidence in food safety precautions at different food locations strongly explains overall confidence in food safety when eating out, and that restaurants have the strongest impact on overall confidence in food safety when eating out. Confidence in food safety precautions at delis/speciality stores had stronger impact on the model for New Zealand respondents than the model for Australian respondents. These results can be seen in the following figures.

Figure 67: Second level regression model, food safety when eating out, Australia



The strategic matrix models for **confidence in food safety when eating out – Australia** identify the following areas:

- High importance**  
**Low confidence**

  - Takeaway outlets
- Low importance**  
**Low confidence**

  - Temporary food stalls
  - Sausage sizzles, fetes etc
  - Delis, speciality retailers
- High importance**  
**High confidence**

  - Restaurants
  - Cafes pubs bars
  - Supermarkets
- Low importance**  
**High confidence**

  - Meat/seafood retailers
  - Bakery



These results can be seen in Figure 68.

Figure 68: Confidence in food safety when eating out - Australia

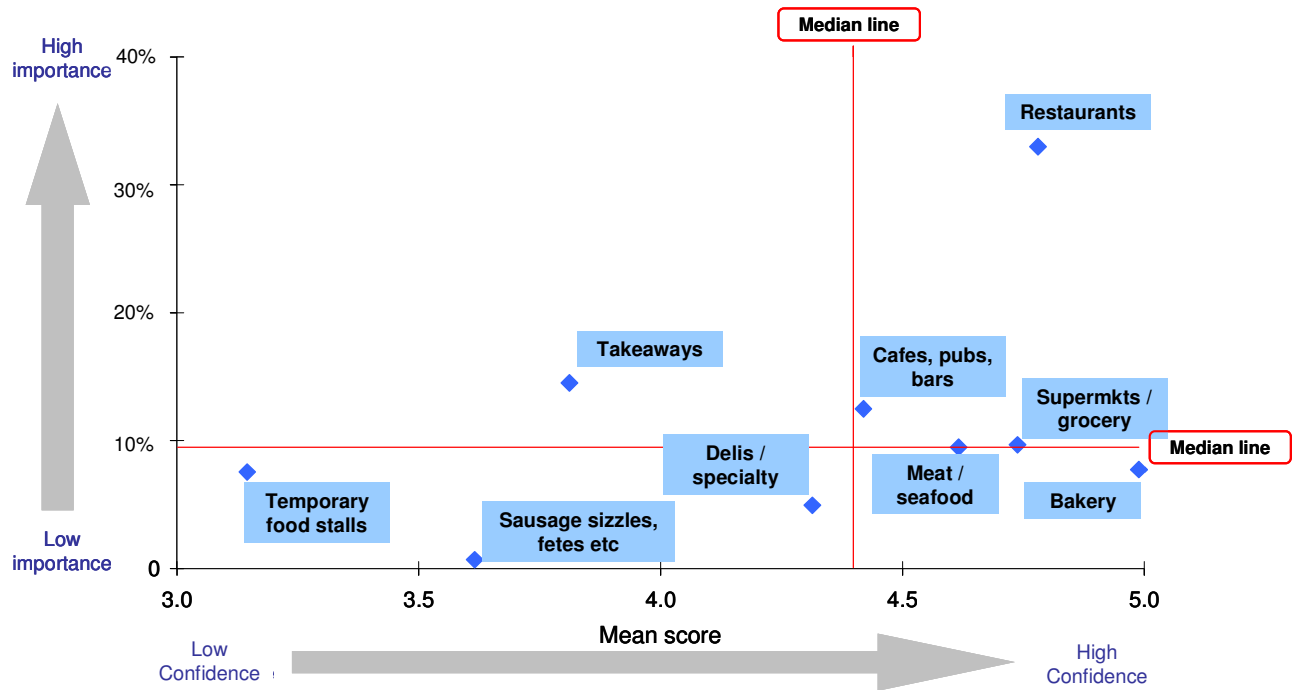
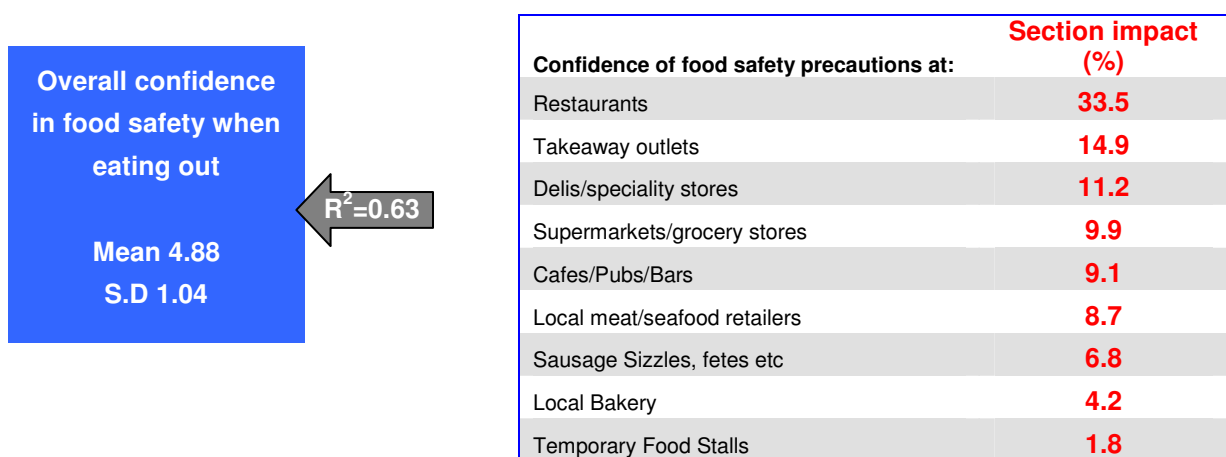


Figure 69: Second level regression model, food safety when eating out, New Zealand

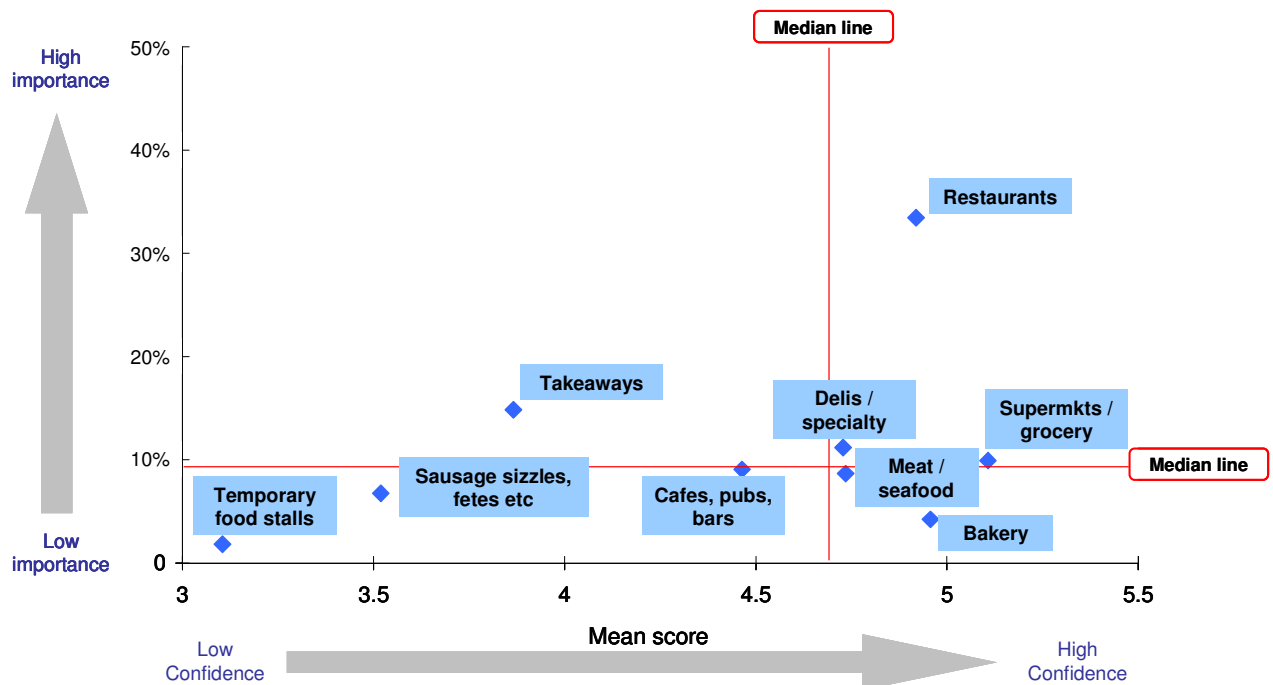


The strategic matrix models for **confidence in food safety when eating out – New Zealand** identify the following areas:

<b>High importance Low confidence</b>	<ul style="list-style-type: none"> <li>• Takeaway outlets</li> </ul>
<b>Low importance Low confidence</b>	<ul style="list-style-type: none"> <li>• Temporary food stalls</li> <li>• Sausage sizzles, fetes etc</li> <li>• Cafes pubs bars</li> </ul>
<b>High importance High confidence</b>	<ul style="list-style-type: none"> <li>• Delis, speciality retailers</li> <li>• Restaurants</li> <li>• Supermarkets</li> </ul>
<b>Low importance High confidence</b>	<ul style="list-style-type: none"> <li>• Meat/seafood retailers</li> <li>• Bakery</li> </ul>

These results can be seen in Figure 70.

Figure 70: Confidence in food safety when eating out – New Zealand



## 11. List of references

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Bednall, D.H.B. and Shaw M. 2003 'Changing response rates in Australian market research', *Australasian Journal of Market Research*, 11(1), pp. 31-41

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# **Appendix A**

## Online Research Validation

# The TNSSR Online Panel

TNSSR Australia and TNSSR New Zealand have set up a community of people who are willing to participate in online research. In Australia, we have over 350,000 active members (and a further 300,000 lapsed members), and more than 110,000 active members in New Zealand. The size of our panel is our key advantage – having this many willing participants means that virtually any subgroup of the population is represented in the membership community.

An active member is a member who has responded to any email or visited the website in the past three months, not just the number of respondent emails that TNSSR has access to at any one time, an important factor when using online panels.

The TNSSR Online Panel is consistently used by both private and government organisations and, because of its size, is capable of enabling the conduct of a significant number of interviews per month, without the need to contact respondents more than once within a specified period.

## **A representative panel**

Given the size, the ability to proportionally sample, the recruitment strategies used, and results from validation tests, the TNSSR Online Panel can be considered to produce results that are generalisable to Australian and New Zealand residents and consumers. Essentially, the size of the TNSSR Online Panel underpins its ability to be representative of the Australian community. Samples can either be proportionally selected in line with ABS figures (and as such, be representative of the population being studied) on key demographics, or data can be post-weighted to be representative on these demographics.

In addition, more than 70% of the population (according to our latest Omnibus study) now access the internet regularly and, while there may be differences in terms of internet use by specific demographics (particularly age), the size of the TNSSR Online Panel and the ability to post weight any research to ABS population proportions negates any negative impact on data quality.

## **Validation of the panel**

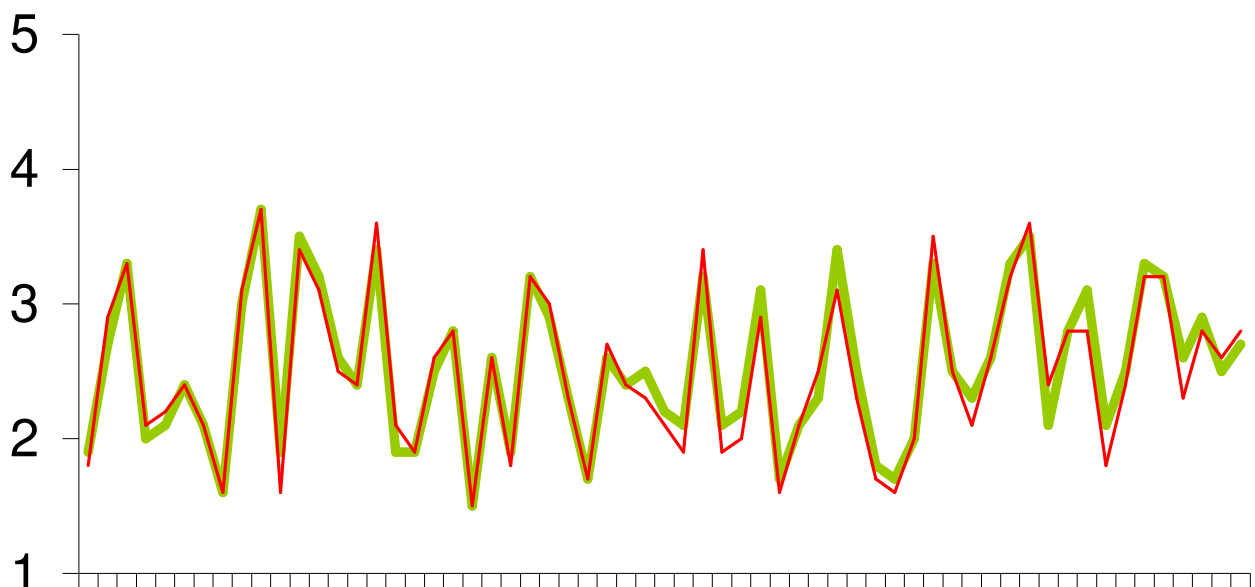
While statistical validity and representativeness is essential (and an important attribute of the TNSSR Online Panel), a valid panel needs to ensure a diversity of attitudes and motivations, not just a statistical comparability. The TNSSR Online Panel set-up and management (see below) ensures that this is the case to a greater degree than any other panels currently available.

In addition to statistical and attitudinal validity, a panel needs to be supported by evidence to show that the panel produces the same results as those gained from other recruitment methodologies. Underpinning the quality and representativeness of the TNSSR Online Panel, validation tests are continually conducted to ensure that the results are representative of the population. Validation tests are

undertaken using parallel studies, utilising the TNSSR Online Panel and other sampling frames. The comparability of findings are then reviewed and results indicate that there is little variation in findings utilising the TNSSR Online Panel and other methods of recruitment – underscoring the validity of the panel as a reliable and accurate sample frame. This is a process which no other panels currently undergo.

The following figure shows the attitudinal similarities between respondents to different methodologies. The survey asked respondents, via both Computer Assisted Telephone Interviewing (CATI) recruitment and Online recruitment, their level of agreement with 61 attitudinal statements. As can be seen in the figure below, respondents in both surveys were very similar attitudinally, with no significant differences. This is an important factor, as it is vital respondents to online research are not only representative demographically of the population, but also attitudinally.

**Figure A1: Level of agreement with attitudinal statements**



### **Panel set up and management**

Our recruitment strategy ensures that we recruit panellists from as wide a background as possible, not just those who are more internet savvy. A panel only recruited online has value, but is not as representative as a panel recruited via offline and online sources. The recruitment strategy needs to ensure that we continue to reach members of the population who may not be regular users of the internet or internet savvy per se – therefore increasing the spectrum of the panel. This reduces any possible skews and ensures that the panel is as representative as possible. Panels that are recruiting using only online methods tend to only attract high level online users, which limits the demographic and attitudinal diversity of respondents.

For the TNSSR Online Panel, panellists are recruited via:

- online banners;
- opt-in email invitations;
- online opt in referrals from partners;
- rewards for recruiting friends via word of mouth;
- from TNSSR's existing telephone and face-to-face business via direct invitation;
- press advertisements;
- television advertisements; and
- television infomercials (e.g. *Bright Ideas*).

Underpinning these recruitment efforts to maintain diversity and the representativeness of the panel, currently more than 50% of the panel are recruited using off-line methods.

Upon visiting the panel website and becoming a member of the panel, members are obliged to complete a registration form which contains information such as:

- gender;
- age;
- household size;
- income;
- location by postcode;
- marital status;
- education;
- profession;
- race / ethnicity; and
- interests and hobbies.

This information is then used to ensure that any sample drawn from the panel can be matched to be representative of population figures on key demographics.

The TNSSR Online Panel also differs from all other panels as it is an online community, not just a panel recruited to conduct survey work. Those signed up to the TNSSR Online Panel are also involved in other activities (such as online bulletin boards etc), and as a result are not solely motivated to be members to be involved in survey work. This means that issues which plague other panels, such as respondent groupies and multiple email addresses (for one respondent) are reduced – resulting in data that is more accurate and less prone to error than panels where participants are only involved in completing questionnaires.

To ensure the exclusion of *research groupies* and *educated respondents* TNSSR excludes any respondent from the sample who has completed any questionnaire within the last three months. In



addition, the panel excludes any respondent from participating in a research project for the same organisation more than once.

### **Security and technology**

There are comprehensive online security measures in place to maintain the integrity of the panel. Some of the measures in place include:

- high levels of systems monitoring around the globe 24 hours a day;
- secure off-site hosting with security protection;
- state of the art firewall protection;
- multiple high speed servers allowing handling of 100,000+ interviews per day;
- dedicated IT support professionals; and
- software to protect copying of any images/concepts shown during course of interview



# **Appendix B**

## **Detailed Methodology**

## DETAILED METHODOLOGY

### Rationale for selection of methodology

The approach, whereby initial exploration is undertaken through both a review of existing international research, and customised qualitative research, followed by quantification of key measures and issues via the final survey, ensures the research program is reflective of and relevant to the population. Initial exploratory research is a crucial step in the overall survey design, in particular ensuring:

- identification of **issues and themes** that are **relevant** both to the research objectives and target audience;
- an understanding of the real-life **context** of consumers in relation to their attitudes to food regulation, labelling, and food safety/hygiene;
- identification of the **language** and **reference points** consumers use in relation to food, so that future survey tools can reflect this;
- identification of the **priorities** of consumers in relation to food, including how important various aspects of food regulation and safety are within their broader behavioural and cognitive framework; and
- identification of any particular **topical** or potentially problematic issues with the administration of the research project going forward.

The exploratory phase therefore provides a reasoned basis on which to develop survey tools in order to quantify measures regarding food regulation and safety. Principally, the qualitative research, desk, research and project scoping with FSANZ stakeholders facilitates design of a questionnaire for quantitative administration which addresses the key issues in a way which is intelligible and relevant to consumers. The quantitative phase subsequently provides rigorous and robust data amongst a representative spread of the Australian and New Zealand population to answer the research objectives.

An online methodology was used to conduct the quantitative phase of the research. The rationale for taking this approach included:

- **efficient and cost-effective**, particularly compared with telephone and face-to-face research. The online methodology allows the capture of data amongst a large number of individuals in a relatively quick timeframe and minimises the amount of data handling needed, such as the need for an interviewer to enter survey responses in a telephone survey;
- **reduced respondent burden** through an attractive, easy to use, more interactive questionnaire, which can be completed in stages and at the respondent's convenience;
- **availability of appropriate sampling frames**, using the TNSSR Online Panel which, given its size (c.350,000) means a sample can be drawn which is representative of the population across both Australia and New Zealand; and

- **greater control over the survey**, with results and field outcomes available as and when respondents complete the survey, the project team can have greater control over field management and monitor outcomes and address any problematical areas immediately.

### Exploratory phase

Following project inception, a number of stages were undertaken to clarify the scope and parameters of the project and confirm the key issues to be addressed in subsequent research. It was crucial at an early stage to consult with FSANZ stakeholders in order to identify their needs from the research and shape the methodology to produce outcomes which satisfied these requirements. Regular liaison took place between the TNSSR and FSANZ project teams with wider stakeholders, including a **scoping workshop** soon after project inception.

Given the goal of the research in establishing benchmarks via the Consumer Attitudes Survey and seeking to track this over time, it was imperative that the research team looked at wider research that had taken place into food regulation and food safety, both within Australia and New Zealand and internationally. Desktop scoping was undertaken by the research team and a **review of available literature** was conducted. This was provided to FSANZ in August 2006.

Following internal consultation and review, the research program included a stage of **qualitative research with consumers**. This effectively took the exploration stage into a real life context, speaking to consumers and hearing their opinions and attitudes in their own language. This was a vital stage in order to identify the key issues and priorities of consumers and develop concepts for subsequent quantitative measurement. The primary objectives of the qualitative research were to:

- **explore** current knowledge, awareness and attitudes towards FSANZ and the environment generally, to understand the salient issues for consumers, and the language consumers use to describe the issues; and
- **identify** the exact questions and flow to enable the questionnaire to be designed to best address consumer issues and FSANZ objectives.

The discussion guide used for the qualitative research is provided in Appendix C.

The qualitative research consisted of eight focus groups, each with approximately 6-8 participants. Four groups were held in Sydney and four in Auckland. Whilst the scale of the research was relatively small, scope was provided to include a range of consumer types, including age and level of health consciousness.

Health consciousness was determined based on answers to a screening question asked during the recruitment process:

Q4 Here are five statements about buying food. Please choose the one which best describes how you feel when buying food for your household.

- I never deliberately choose the healthy or nutritious alternative..... 1 (LOW)
- I rarely deliberately choose the healthy or nutritious alternative.....2 (LOW)
- I sometimes deliberately choose the healthy or nutritious alternative.....3 (MEDIUM)
- I regularly deliberately choose the healthy or nutritious alternative.....4 (MEDIUM)
- I always deliberately choose the healthy or nutritious alternative.....5 (HIGH)

The design of the group structure is outlined in the following table.

**Table 19: Qualitative group structure**

	Low Health Consciousness	Medium Health Consciousness	High Health Consciousness	TOTAL (n)
Sydney, Aus	18 – 39	40 +	18 – 39 / 40 +	4 groups
Auckland, NZ	40 +	18 – 39	18 – 39 / 40 +	4 groups
<b>TOTAL</b>	2 groups	2 groups	4 groups	<b>8 groups</b>

The groups were conducted by senior members of the TNSSR project team and lasted approximately 90 minutes. Participants were recruited from the general population and received an incentive of AU\$60 or NZ\$70 to take part. The groups took place on the 10<sup>th</sup> and 11<sup>th</sup> July 2006.

Outcomes and findings from the qualitative research were presented to FSANZ at the end of July 2006.

**Design of survey instruments**

An iterative approach to questionnaire development was undertaken between TNSSR and FSANZ, with ongoing liaison and consultation throughout the formulation of the survey instruments. As indicated previously, the questionnaire development drew on a number of resources, including:

- initial scoping of the research priorities and needs through desktop review and consultation with FSANZ stakeholders;
- qualitative consultation undertaken by TNSSR with the target population in Australia and New Zealand;

- review of existing research and questions used in surveys both across Australia and New Zealand and internationally;
- review of previous research undertaken by TNSSR for FSANZ; and
- ongoing feedback from project teams, statistical teams and wider stakeholders within and outside FSANZ.

### ***Concepts and measures framework***

An initial survey framework was developed following the qualitative consultation, which was circulated amongst the project team. The framework consisted of a discussion of methodology including sampling procedures and stratification variables and proposed modules for the questionnaire design. The initial framework was provided to FSANZ in August 2006 and is included in Appendix D. This was subsequently developed and refined through iteration with FSANZ stakeholders before specific questions were drafted.

### ***Nationally and internationally researched questions***

The literature review identified a body of similar research conducted previously in Australia and New Zealand and internationally. This provided a key resource for the development of questions for the Consumer Attitudes Survey, in effect enabling a) the use of questions which had been tested and quantitatively validated and b) the potential for comparability with international surveys. The major sources which were consulted and assisted development of survey questions for the Consumer Attitudes Survey were:

- UK Food Standards Agency – Consumer Attitudes Surveys (2000-2007)
- The New Zealand Food Safety Authority (NZFSA) – A Quantitative Study (2005)
- The Food Safety Authority of Ireland (FSAI) – Consumer Attitudes to Food Safety in Ireland (2003)
- Department of Human Services Victoria – Food Safety Report (2005)
- The European Commission Special Eurobarometer – Risk Issues (2006)
- United States Department of Agriculture – PR/HACCP Rule Evaluation Report (2001)
- Trust in Food – Trust in Food in Europe (2003)

TNSSR also drew on other research studies conducted for FSANZ (such as labelling and health claim surveys), as well as other public sector clients, in developing appropriate and validated questions for measurement in the Consumer Attitudes Survey.

### ***Questionnaire drafting and finalisation***

A draft questionnaire was provided to the FSANZ project team along with supporting documentation in January 2007. Modifications to the questionnaire were undertaken as a result of project team comments and input. Following the pilot survey, no further modifications were considered to be necessary with final approval of the questionnaire provided by FSANZ in April 2007. The final questionnaire used for the survey is provided in Appendix E.

**Fieldwork*****Sampling and quotas***

The target audience for the Consumer Attitudes Survey were Australian and New Zealanders aged 14 years and above. Random sampling was undertaken, with a sample drawn from the TNSSR Online Panel separately for Australia and New Zealand. Given the size of the panel and validation tests undertaken, a random sample was considered to yield a representative spread of respondents.

In order to ensure robust coverage in both Australia and New Zealand a total sample size of n=2000 consumers was targeted, with n=1200 Australian and n=800 New Zealand respondents. Screening questions were included in the questionnaire to ensure the desired quotas of Australian and New Zealand respondents took part and that no-one under the age of 14 was included in the survey. No other quotas were set, however the sample was monitored on an ongoing basis to ensure a broad representation of participants which corresponded to the demographics of the target population. Analysis of the sample was undertaken post-fieldwork to determine whether correctional weighting was required.

**Questionnaire programming and testing**

Once approval was provided by FSANZ for the questionnaire, this was programmed for online facilitation by specialist programmers within the TNSSR Interactive division using SurveyCraft software. The TNSSR research team fully briefed the programmers and conducted an internal Questionnaire Review Committee (QRC) meeting with the programmers and analysts to ensure any anomalies or uncertainty was clarified prior to programming. This is a standard step in the TNSSR online research process. Checks of the scripted questionnaire were made first by the programmer and then the TNSSR team and through a small internal pilot amongst TNSSR employees. A version of the questionnaire was also provided to FSANZ for testing online.

**Pilot survey**

A pilot survey was conducted online with n=103 members of the TNSSR Online Panel between 13<sup>th</sup> and 18<sup>th</sup> April 2007. Forty-nine interviews were completed with Australian residents and fifty-four with New Zealand residents. Other than country of residence, there were no other quotas set for the pilot survey, however analysis of the respondent profile showed the survey was inclusive of a broad range of respondents, as shown in Table 20.



Table 20: Overall profile of respondents to pilot survey

<b>Gender</b>	56% male
	44% female
<b>Age</b>	26% aged 14-29
	40% aged 30-49
	34% aged 50+
<b>Employment status</b>	39% full time employment
	18% part time employment
	4% unemployed
	30% not in the labour force
	9% unknown

The survey length was on average 20 minutes, which was as budgeted. Overall, the survey was felt to have flowed well and feedback from respondents was positive. Analysis of the topline results showed there to be no issues with routing or data capture.

A pilot survey report was provided to FSANZ on 19<sup>th</sup> April 2007; no changes were recommended to the questionnaire.

### **Main survey**

Invitations were sent to a random selection of 7,585 panel members to take part in the survey on 23<sup>rd</sup> April 2007. The fieldwork then took place between 23<sup>rd</sup> and 30<sup>th</sup> April 2007, ensuring respondents had sufficient time to take part (i.e. this period included a weekend and public holiday). During this time, n=2000 members of the panel completed the survey – n=1200 in Australia and n=800 in New Zealand.

The main survey was found to last on average 21 minutes, slightly above the intended length. There were no major issues raised by respondents through feedback mechanisms with many commenting positively about the survey and finding it interesting to complete.

## DATA ANALYSIS

### Response analysis

Overall, n=2000 respondents completed the survey, n=1200 in Australia and n=800 in New Zealand. An analysis of the respondent profile was conducted to verify the representativeness of respondents and establish the need for any post-fieldwork correctional weighting. Key indicators of the sample profile are presented in Table 21.

**Table 21: Respondent profile**

%	TOTAL	Australia	New Zealand
	(n=2000)	(n=1200)	(n=800)
<b>Base: All respondents</b>			
Male	47	48	47
Female	53	52	53
14-24	13	8	21
25-34	19	13	24
35-44	19	16	24
45-54	21	22	19
55-64	15	19	9
65+	13	20	4
Responsible for all or most of grocery shopping	58	61	54
Responsible for about half of grocery shopping	24	24	25
Responsible for less than half of grocery shopping	11	10	13
Not responsible for any grocery shopping	6	5	5
Employed full-time	40	34	48
Employed part-time	17	17	16
Unemployed	4	4	4
Retired/not in labour force	27	33	18
Not identifiable/refused	13	12	14

*Totals may not equal 100% due to rounding*

The respondent profile showed a spread of respondents across the total Australian and New Zealand population, inclusive of both young and old residents and those from different employment backgrounds. However, breaking down the response profile by country, it was evident that there was an under reporting of older residents in New Zealand and of younger residents in Australia. Whilst these balanced each other out in terms of the overall population, by individual country there were some discrepancies which meant correctional weighting was required.

### **Response rates**

The breakdown of invitations sent to the survey, screen-outs, and respondent completions is shown in Table 22:

**Table 22: Response data**

	<b>TOTAL</b>	<b>AUS</b>	<b>NZ</b>
E-mail invitations sent out	7585	4375	3210
Completed surveys	2000	1200	800
Screened out due to fail quotas	8	3	5
Incomplete surveys	198	108	90

Overall, 7585 invitations were sent out to participate in the survey resulting in 2000 completions, with a further 8 people who responded being screened out and 198 responding to the survey but not completing it. This represents an overall response rate of 29%, which, although not ideal, is in line with response rates achieved by TNSSR for commercial online surveys such as those completed for major financial institutions and retailers and comparable to other methodologies. Indeed, in comparison to alternate methodologies, this response rate is strong. For example, Computer Assisted Telephone Interviewing has undergone a significant decline in response rates, and rates of below 20% are now the norm.<sup>35</sup> The sample was batched, with a small number of additional invitations sent in a second wave to achieve some sample criteria. In order to improve the response rate in the future, TNSSR recommends a longer field time be scheduled, to allow for the sample to be further batched and additional reminder emails to be sent to potential respondents.

### **Non-response bias**

Maintaining high response rates are a considerable challenge in today's environment for all methodologies, as respondents grow more sophisticated in their decision making, are more mobile and difficult to reach, and generally are less likely to be willing to take part in research. A critical question is the extent to which answers may be different amongst those who respond and those who do not respond to surveys, that is to say, is there a non-response bias?

TNSSR has undertaken considerable work with the Online Panel to investigate the impact of non-response bias, conducting analysis on length of time taken to respond to an invitation to participate (within three days of receiving an invitation and after three days), to a large number of studies conducted for a variety of clients. Results did not reveal any statistically significant differences between the demographic profiles of these two groups nor between the actual item responses. In addition, analysis of respondents and non-respondents (from data collected about panel members) showed few statistically significant differences in the demographic profile of those responding and those not responding in several studies.

<sup>35</sup> Bednall, D.H.B. and Shaw M. (2003) "Changing response rates in Australian market research", *Australasian Journal of Market Research*, 11(1), pp. 31-41

To ensure the impact of non-response bias was negligible to this research, similar analysis of early and late responders from the Consumer Attitudes Survey was undertaken, with the first 100 and last 100 respondents to complete the survey in each country compared in terms of characteristics and attitudes. The analysis shows few significant differences between those who are more likely to respond straight away and those who took longer to respond to the survey (one week after the survey invitation was sent).

In terms of profile (Table 23, below), the only significant difference between early and late responders was in relation to gender amongst Australian consumers, with males more likely to respond to the survey straight away. However, given there were no significant differences in early and late responders in respect of other characteristics it is unlikely this has a significant impact on the results.

**Table 23: Profile of early and late responders to survey in Australia and New Zealand**

%	Australia first respondents (a)	Australia last respondents (b)	New Zealand first respondents (c)	New Zealand last respondents (d)
	(n=100)	(n=101)	(n=100)	(n=102)
<b>Base: All respondents</b>				
Male	68 <sup>b</sup>	49 <sup>a</sup>	52	47
Female	32 <sup>b</sup>	51 <sup>a</sup>	48	53
14-24	20	27	16	13
25-34	13	16	13	16
35-44	20	16	16	20
45-54	15	15	21	19
55-64	18	12	19	11
65+	13	13	16	21
Main grocery buyer	85	80	79	80
Very low/low attention to diet	8	8	15	15
Medium attention to diet	52	46	47	49
High/very high attention to diet	40	46	38	36
Full-time employment	42	44	37	46
Part-time employment	17	18	21	14
Unemployed	4	10	1	2
Retired/not in labour market	27	21	29	24

*abcd indicates categories where there is a significant difference between the results in the respective columns for that row (significance at the 95% confidence level)*

This is verified when examining the attitudes of early and late responders, with no significant differences in their attitudes to the food supply (Table 24), food safety concerns at home (Table 25), trust in food labels (Table 26), and confidence in FSANZ (Table 27). Therefore, the impact of non-response bias on the results of this survey is likely to be negligible, assuming non-responses were similar to late responders, with no differences in the attitudes of those more likely and less likely to respond. This method of analysis is standard in the social and market research industry, and is used regularly in other studies undertaken by TNSSR for commercial organisations, who are often adversely affected by very low response rates.

**Table 24: Confidence in food supply**

	Australia first respondents (a)	Australia last respondents (b)	New Zealand first respondents (c)	New Zealand last respondents (d)
<b>Base: All respondents</b>	<b>(n=100)</b>	<b>(n=101)</b>	<b>(n=100)</b>	<b>(n=102)</b>
Mean	4.80	4.62	4.99	4.76
Std Dev	1.23	1.49	1.36	1.49

*B2. On a scale of 1 to 7, where 1 is "not at all confident", and 7 is "extremely confident", how confident are you that the food supply as a whole, from the farm to your plate, is producing safe food for consumption?*

**Table 25: Level of concern with food safety at home**

	Australia first respondents (a)	Australia last respondents (b)	New Zealand first respondents (c)	New Zealand last respondents (d)
<b>Base: All respondents</b>	<b>(n=100)</b>	<b>(n=101)</b>	<b>(n=100)</b>	<b>(n=102)</b>
Mean	3.69	3.70	3.87	3.76
Std Dev	2.02	1.87	2.23	2.14

*D4. On a scale of 1 to 7, where 1 is "not at all concerned" and 7 is "extremely concerned", how concerned are you about getting food poisoning from something you or anyone else has **prepared and eaten at home**? (please choose the one number that best applies)*

Table 26: Trust in information provided on food labels

	Australia first respondents (a)	Australia last respondents (b)	New Zealand first respondents (c)	New Zealand last respondents (d)
<b>Base: All respondents</b>	<b>(n=100)</b>	<b>(n=101)</b>	<b>(n=100)</b>	<b>(n=102)</b>
Mean	4.26	4.57	4.60	4.36
Std Dev	1.32	1.38	1.40	1.19

E6. On a scale of 1 to 7, where 1 is "cannot trust at all", and 7 is "can trust completely", how much do you feel you can trust the information provided on food labels? (please choose the one number that best applies)

Table 27: Confidence in FSANZ

	Australia first respondents (a)	Australia last respondents (b)	New Zealand first respondents (c)	New Zealand last respondents (d)
<b>Base: All respondents</b>	<b>(n=100)</b>	<b>(n=101)</b>	<b>(n=100)</b>	<b>(n=102)</b>
Mean	4.78	4.73	4.51	4.40
Std Dev	1.35	1.32	1.64	1.52

D14. Overall, on a scale of 1 to 7, where 1 is "not at all confident", and 7 is "extremely confident", how confident are you in the work of Food Standards Australia New Zealand? (please choose the one number that best applies)

## Weighting

The overall sample profile for Australia and New Zealand was broadly in line with population data. However, as outlined in the previous section, further investigation highlighted an under-representation of young adults in Australia and older adults in New Zealand. As a result, the sample for each country was weighted by age within gender using 2006 population estimates from ABS and Statistics New Zealand data. The weighting matrix used is as follows:

Table 28: Weighting matrix

Target group	Australia			New Zealand		
	Survey %	Census %	Weights	Survey %	Census %	Weights
Male 14yrs	0.2500	0.8556	3.4223	1.0000	1.0054	1.0054
Male 15-19yrs	1.6667	4.2293	2.5376	4.5000	4.7290	1.0509
Male 20-24yrs	2.2500	4.3274	1.9233	3.7500	4.1907	1.1175
Male 25-29yrs	3.6667	4.1694	1.1371	4.0000	3.6363	0.9091
Male 30-34yrs	3.0000	4.3802	1.4601	4.7500	4.0603	0.8548
Male 35-39yrs	3.7500	4.4677	1.1914	6.6250	4.4362	0.6696
Male 40-44yrs	3.5833	4.5009	1.2561	5.0000	4.6813	0.9363
Male 45-49yrs	5.4167	4.3994	0.8122	5.6250	4.4378	0.7889
Male 50-54yrs	4.6667	3.9867	0.8543	4.5000	3.8563	0.8570
Male 55-59yrs	4.9167	3.8140	0.7757	3.0000	3.5745	1.1915
Male 60-64yrs	4.9167	2.9594	0.6019	2.3750	2.7404	1.1538
Male 65+ yrs	9.6667	7.3152	0.7567	1.6250	6.8603	4.2217
Female 14yrs	0.0833	0.8159	9.7903	0.3750	0.9528	2.5407
Female 15-19	0.9167	4.0209	4.3865	4.0000	4.5839	1.1460
Female 20-24	3.0000	4.1051	1.3684	6.8750	4.2158	0.6132
Female 25-29	4.1667	4.0529	0.9727	6.3750	3.8847	0.6094
Female 30-34	4.3333	4.4117	1.0181	9.0000	4.5192	0.5021
Female 35-39	4.8333	4.5207	0.9353	6.1250	4.9186	0.8030
Female 40-44	3.7500	4.5414	1.2110	5.8750	5.0504	0.8596
Female 45-49	6.5000	4.4518	0.6849	5.3750	4.6648	0.8679
Female 50-54	5.7500	4.0421	0.7030	3.5000%	3.9839	1.1383
Female 55-59	4.4167	3.8182	0.8645	2.7500	3.6714	1.3351
Female 60-64yrs	4.6667	2.9075	0.6230	1.0000	2.8317	2.8317
Female 65+ yrs	9.8333	8.9067	0.9058	2.0000	8.5143	4.2572

The sample profile was representative of the Australian and New Zealand population relating to other demographic and geographic aspects such as employment status, metro/regional location, income, and education.

## **Data preparation**

### ***Coding of open ended responses***

Upon finalisation of the questionnaire, internal coding teams were fully briefed regarding the requirements for coding of open ended and 'other specify' responses and took part in the Questionnaire Review Committee. Where applicable, coding frames were developed during the questionnaire design stage drawing on responses provided to nationally and internationally developed questions and the consumer language used during the qualitative consultation and pilot survey. For questions in which no initial coding frame was available, coding teams extracted the verbatim responses and developed suitable coding frames in conjunction with the TNSSR project team. All coding was conducted internally and subject to quality procedures including back-checking and back-coding of residual 'other' answers by the project team.

### ***Data cleaning and editing***

When using an online survey methodology the necessity for data cleaning is minimised as routing and questionnaire logic can be controlled through the programmed questionnaire script and responses transfer directly to a data file. The data files were examined to ensure they were clean, including checking of variable and value labels, checking and correcting of any 'out of range' codes, and checking consistency of skip patterns and base sizes for any one question.

## **Analysis**

### ***Univariate analysis***

SurveyCraft (a data analysis program provided by SPSS) was used to produce data tables with full significance testing across subgroups. Initially, unweighted data tables were checked by the researcher and any errors or data anomalies detected were corrected. Once the tables were clean, weighting and significance testing was applied. Separate tables were produced for Australia and New Zealand. In addition to total data, column percentages were provided across the following subgroups:

- location (metro/regional);
- grocery buyer status;
- food/dietary concerns;
- health consciousness;
- physical activity levels;
- education;
- household income;
- household structure;
- employment status;
- gender; and
- age.

Where applicable, the data tables provided mean, standard deviation and standard error to scale questions. The tables are provided in a separate volume.



The detail relating to each of these key subgroups can be found in the 'about the respondents' section of the report (see Section 4 of this report for full definitions). These characteristics were chosen so as to explore the results in the most detail possible, and because demographic and behavioural attributes allow FSANZ to target interventions relating to results at the most appropriate audiences.

### ***Significance testing***

In order to understand the differences between subgroups (e.g. older and younger consumers, Australian and New Zealand consumers) significance testing was conducted between subgroups. To test for significant differences between percentage scores a standard z-test of 2 independent samples was conducted. This is a two-tailed test meaning the null hypothesis that the two proportions are equal is tested. All tests use the 95% confidence level (z score = 1.96).

### ***Multivariate analysis***

In order to explore the relationship between attitudes and behaviour with relation to food hygiene, confidence in the food supply, labelling and food regulation, multiple regression analysis was undertaken by the TNSSR Advanced Methods Group. Multiple regression is used to understand the inter-relationships between a group of independent variables (e.g. performance issues) and a dependent variable (e.g. overall confidence in food safety). The objective of multiple regression is to determine which issues have the most significant and unique impact on overall confidence and which in combination, explain the most about overall confidence.

### ***Comparison to international studies***

Wherever possible throughout the results, an attempt to compare results of the Australian/New Zealand study to international studies has been made. As each study uses different sampling and questioning methodologies, and as the level of detail in available data varies, this is not possible with every question. A full analysis of the international data available was detailed in the initial literature review conducted to aid in developing the questionnaire and is not provided here. Results from comparable international studies are included where applicable in the main body of the report, with further detailed survey data from these studies provided in Appendix G.



# Appendix C

## Qualitative Discussion Guide

## Community Attitudes Tracking Survey Developmental Qualitative Research for Food Standards Australia New Zealand

This discussion guide is intended as an outline only. There will be considerable scope within the discussion for exploring issues as they arise. Questions are indicative only of subject matter to be covered and are not word for word descriptions of the moderator's questions.

### **INTRODUCTION AND CONTEXT** **5 MINS**

- Introduce self
- Introduce company and the types of research we do
- Thank the participants for their time
- Topic: Today we are talking about food regulation and related issues.
- We're interested in opinions and views, all opinions are valid and respected
- Housekeeping (turn off phones, toilets, talking one at a time)

### **WARM UP AND BACKGROUND** **5 MINS**

(Here we want to start building rapport with participants and help them relax)

- First name, who lives at your house?
- What are the main things you think about when buying food

### **CURRENT SHOPPING BEHAVIOUR** **10 MINS**

- Lets talk more about shopping and cooking. What sorts of food do you eat at home? Do you eat much pre-prepared foods? How pre-prepared, sauce mixes, frozen dinners, etc.
- What are the things that affect your shopping and cooking? What about price, taste, convenience, brand, labels, healthy?

### **AWARENESS OF FOOD RELATED ISSUES** **50 MINS**

- What do you think are the big issues that face the food system these days? What has changed? What things do you worry about? (probe understanding of specific issues – what do you know about that issue? How did you find out about that? Why do you think it is a problem/issue?)

#### **Food Safety**

- Have you ever thought about food safety? What do you think that means? Why is it important? What about additives, pesticides, chemical contaminants?
- What do you think is a problem in this area? Which ones are more or less of a problem? (specifics might be food service hygiene, home hygiene, imported food, additives, genetically modified foods, irradiation, organic production, environmental impacts of food)
- What things have to happen for good food safety in restaurants and food service businesses?
- What things can you do about food safety? What things do you do about food safety at home? What can happen if you don't practice good food safety?

- Have you, or anyone in your family, experienced food poisoning? Did you see a doctor for treatment? Were you able to identify the cause of the food poisoning?
- What things have to happen for good food safety in restaurants and food service businesses?

#### **Food labelling**

- When you are considering buying packaged food, what information is important to you? What information is critical in your buying decisions?
- Do you use food labels? How well do you think you are able to use food labels? What makes it easier? What makes it harder? Do you use them differently for different types of foods? Do you use them differently depending on who you buy for? Why?
- Do you have enough information about food labels? What would you like to know about food labels?
- Is there anything that is new or different on food labels in recent years? (could include endorsements, claims, contact details, ingredients, allergens, expiry dates, country of origin) Is there enough information? Is there too much information?
- How much do you trust the information on food labels? What affects this trust?

#### **AWARENESS OF FOOD REGULATION SYSTEM**

**20 MINS**

- Are there rules and regulations that affect the way food is provided to consumer? What are they?
- Who makes these rules? (Federal/state/local governments, private bodies?)
- Who enforces the rules?
- How confident do you feel that someone is looking after these things?
- Why do you think we have these rules? What are the advantages of these rules? What are the disadvantages?
- What things would you like to see changed?
- What sorts of things would you like to hear about? Where would you expect to hear these things?

ANY OTHER COMMENTS?

THANK AND CLOSE



## **Appendix D**

# Initial Questionnaire Framework

## Consumer Confidence Framework

This document contains the proposed framework for the survey process. The document contains two sections. The first section details the proposed sample strategy for the survey including the population for the survey, the stratification variables and the sample sizes. The second section contains details about the proposed modules for the questionnaire, the data items and possible measurement issues that may be encountered.

This framework is based on the findings from the qualitative research, previous literature and the start up workshop.

### **Sampling strategy:**

The sampling strategy for the project is yet to be finalised, however based on the initial qualitative research and the research proposal the following is proposed:

***Population:*** The population for the survey is the general population who is 18 years and over within Australia and New Zealand.

***Stratification:*** The sample can be stratified by a number of variables. These include:

- **State/territory:** This information will come directly from the TNSSR Online Panel.
- **Region:** A maximum of three geographical location classifications will be used e.g. Metropolitan, regional, other (containing rural and remote). This classification will be based on postcode.
- **Age:** Age categories agreed with FSANZ would be represented adequately.
- **Income:** Household income which should be divided into two categories high and low.
- **Ethnicity:** English as first language spoken at home



**Questionnaire structure**

<p><b><i>Preamble</i></b></p>
<p><b>Confidence, risk and trust</b></p>
<p><b>Specific issues impacting on confidence in food supply</b></p> <ul style="list-style-type: none"><li>- food safety of specific types of food</li><li>- priority issues around the quality of food purchased<ul style="list-style-type: none"><li>- long term issues or major threats</li><li>- instances of food poisoning</li></ul></li></ul>
<p><b>Food safety issues</b></p> <ul style="list-style-type: none"><li>- in the home</li><li>- at the restaurant</li></ul>
<p><b>Food labelling</b></p>
<p><b>Sources of information</b></p> <ul style="list-style-type: none"><li>- awareness of food safety associations, institutions etc</li></ul>
<p><b>Shopping behaviour</b></p>
<p><b>Demographics</b></p>

Below are the details for all questionnaire modules within the questionnaire. Each module contains a series of data items and from these items questions will be formed to measure each aspect. Prior to designing the questionnaire it is important to agree on the data items that are essential and relevant for the survey. The total duration for the survey will be 20 minutes and it is not likely that all of the data items listed will be included, thus we will need to prioritise.

Module	Data items	Scale options	Sources
<p><b><u>Module A Preamble</u></b></p> <p>Introduce the survey as a survey commissioned by the Australian government to understand views on the food we cook, purchase and eat.</p> <p>Do not include any details about who is sponsoring the survey. That can be revealed at the close of the survey.</p> <ul style="list-style-type: none"> <li>- survey length of 20 minutes</li> <li>- confidentiality and privacy</li> <li>- instructions on how to complete the questions</li> </ul>	<ul style="list-style-type: none"> <li>- main grocery buyer/or not</li> <li>- age</li> </ul>	<ul style="list-style-type: none"> <li>- yes/no</li> <li>- age categories</li> </ul>	

Module	Data items	Scale options	Sources
<ul style="list-style-type: none"> <li>• Module B Confidence, risk and trust</li> <li>• <b>Prior to measuring any other issues overall confidence in the food consumed will be measured. Also includes measures of trust that government and other agencies are controlling and monitoring food safety.</b></li> <li>• <b>This question can be used as a dependent or segmentation variable during analysis.</b></li> </ul>	<p><b>Confidence</b></p> <ul style="list-style-type: none"> <li>- confidence in safety of food at restaurants and other out of home places (take away stores, food vans, sandwich shops, bakeries etc)</li> <li>- confidence in safety of food prepared at home</li> <li>- confidence in safety of food purchased from supermarkets and other convenience stores</li> <li>- Improvement in food safety over recent years</li> <li>- confidence in food regulations 'eating out'</li> </ul> <p><b>Risk</b></p> <ul style="list-style-type: none"> <li>- the risk of eating food which will damage your health compare to other global safety issues such as car accidents, terrorism etc</li> </ul> <p><b>Trust</b></p> <ul style="list-style-type: none"> <li>- the organisations, individuals they would trust to provide information</li> <li>- that government, associations etc are looking after the food supply</li> </ul>	<ul style="list-style-type: none"> <li>- scaled questions should be used 0-10 preferably</li> <li>- agree/disagree</li> <li>- confident/not confident</li> <li>- yes/no</li> <li>- worried/not worried</li> </ul>	<ul style="list-style-type: none"> <li>- questions about the safety of food outside the home can be found in DHS Food Safety Unit (2005)</li> </ul>

Module	Data items	Scale options	Sources
<p><b><u>Module C Specific issues impacting on confidence in food supply</u></b></p> <p>Need to measure the extent to which specific issues raised in the qualitative research, literature review, FSANZ workshops are important.</p>	<ul style="list-style-type: none"> <li>- food safety of specific types of food               <ul style="list-style-type: none"> <li>- confidence in chicken vs. beef vs. eggs etc</li> </ul> </li> <li>- priority issues around the quality of food purchased               <ul style="list-style-type: none"> <li>- pesticides, chemicals, additives</li> <li>- GM foods</li> <li>- hormones/antibiotics</li> <li>- imported food/the source of food/organic</li> <li>- supermarkets have too much control</li> <li>- commodity over quality</li> <li>- world wide concerns (e.g. Mad cow)</li> <li>- healthiness, low fat etc</li> <li>- bacteria</li> <li>- availability of food/can the environment cope                   <ul style="list-style-type: none"> <li>- food management (cold storage etc)</li> <li>- instances of food poisoning</li> </ul> </li> </ul> </li> </ul>	<p>Generally scaled questions should be used 0-10 preferably</p> <ul style="list-style-type: none"> <li>- agree/disagree</li> <li>- yes/no</li> <li>- Worried/not worried</li> <li>- safe/not safe</li> <li>- open ended question</li> </ul>	<ul style="list-style-type: none"> <li>- Questions were sourced from the qualitative process</li> <li>- Food safety questions also sourced from Trustinfood (2003)</li> <li>- DHS Food Safety Unit (2005) contains questions about food borne illness</li> <li>- Biotechnology Australia – Public Awareness Research (2005) contains questions on GM products</li> </ul>

Module	Data items	Scale options	Sources
<p><b><u>Module D Food safety issues</u></b> Issues around the handling of food in restaurants and the home.</p> <p>In the home are people taking the necessary precautions? What issues impact on peoples restaurant choices?</p>	<p><b>Eating out</b></p> <ul style="list-style-type: none"> <li>- how often people eat out</li> <li>- issue that effect restaurant decisions               <ul style="list-style-type: none"> <li>- cleanliness of kitchens</li> <li>- instances of food poisoning</li> <li>- types of cuisine</li> <li>- businesses follow food regulations</li> <li>- businesses know enough about food safety</li> </ul> </li> </ul> <p><b>Eating in the home</b></p> <ul style="list-style-type: none"> <li>- safety precautions taken in the home</li> <li>- storing food</li> <li>- preparing food</li> <li>- personal hygiene</li> </ul>	<p>Generally scaled questions should be used 0-10 preferably</p> <ul style="list-style-type: none"> <li>- agree/disagree</li> <li>- worried/not worried</li> <li>- yes/no</li> <li>- always/never</li> <li>- open ended question</li> </ul>	<ul style="list-style-type: none"> <li>- DHS Food Safety Report (2005) contained questions relating to the preparation and eating of food in the home and purchasing and eating food outside the home</li> </ul>
<p><b><u>Module E Food labelling</u></b> To what extent food labels are used and peoples concerns around labels. What are the expectations around food labelling.</p>	<ul style="list-style-type: none"> <li>- awareness of food labelling and accuracy</li> <li>- information requirements what is important               <ul style="list-style-type: none"> <li>- use by date</li> <li>- pesticides/herbicides</li> <li>- country of origin</li> <li>- fortification</li> <li>- GM</li> <li>- recommended daily intake</li> <li>- GI</li> <li>- health claims (fat, low carb)</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>- important/not important</li> </ul>	<ul style="list-style-type: none"> <li>- questions developed through qualitative process</li> <li>- questions regarding labelling were sourced from FSAUK (2005)</li> </ul>

Module	Data items	Scale options	Sources
<p><b><u>Module F Sources of information</u></b> Where do people find information from and which sources do people trust most.</p>	<ul style="list-style-type: none"> <li>- main source of information               <ul style="list-style-type: none"> <li>- television (ACA, news programs)</li> <li>- magazines (professional vs. women's day)</li> <li>- brochures (government, food orgs)</li> <li>- newspapers</li> <li>- cook books</li> <li>- supermarkets</li> <li>- professional bodies</li> <li>- government</li> </ul> </li> <li>- level of trust in these sources</li> </ul>	<ul style="list-style-type: none"> <li>- yes/no</li> </ul>	<ul style="list-style-type: none"> <li>- data items sourced from qualitative process</li> <li>- Eurobarometer contains questions relating to media publication of information and the public's trust in the truthfulness of these reports.</li> <li>- questions also found in DHS Food Safety Unit (2005)</li> </ul>
<p><b><u>Module G Shopping behaviour</u></b> What drives people decisions when shopping.</p>	<ul style="list-style-type: none"> <li>- cost of the product</li> <li>- brand</li> <li>- lifestyle</li> <li>- taste</li> <li>- availability</li> <li>- convenience</li> <li>- visual presentation</li> <li>- sustainability for family requirements</li> <li>- specific food features e.g. low GI</li> <li>- organic</li> </ul>	<ul style="list-style-type: none"> <li>- yes/no</li> </ul>	

Module	Data items	Scale options	Sources
<b><u>Module H Demographics</u></b>	<ul style="list-style-type: none"> <li>- age</li> <li>- gender</li> <li>- income</li> <li>- health consciousness</li> <li>- location (capital city, regional, remote)</li> <li>- ethnicity</li> <li>- education</li> <li>- employment</li> </ul>		
<b><u>Module I Demographics</u></b>	<ul style="list-style-type: none"> <li>- thank and close</li> <li>- reveal survey is sponsored by FSANZ</li> </ul>		





# Appendix E

## Final Questionnaire

## Introduction

### Hello from TNS Australia.

Thank you for agreeing to participate in this survey.

Please remember:

- Your views are important to us and your answers will be kept in the strictest confidence.
- None of the responses you give are directly linked to you as an individual. They are used purely for statistical purposes only. To see our privacy statement click here. [Privacy Policy](#)
- The reward you will receive and expected length are outlined in the invitation e-mail.
- You must complete this survey to receive your reward.
- To understand the benefits of participating in legitimate research visit



**To answer a question:** Most questions have a round button to click or a tick box to check. Click on the box or button that best describes your answer to each question. Sometimes you may need to type in your answer in the spaces provided.

If you forget to answer a question, or miss part of a question, then a message reminding you that the question needs to be answered will appear. If this happens, you need to complete your answer to carry on with the survey. **[Sometimes you'll need to scroll down or across the page to see all of the possible answers].**

**To change an answer:** For questions with a single choice, click on a different button. For questions with multiple choices (tick boxes), click again on your original answer to clear the box and make a new choice.

**To go to the next question:** When you've finished answering a question, click the Next button at the bottom of the screen.

**To pause the survey and return to it later:** Simply close the window and click on the link in the invitation e-mail to resume.

**Dial-up users:** If you are on a dial up modem or other slow connection, some of the questions may take a few moments to load. Please be patient.

To begin the survey, click on the button below. As you move through the survey please do not use your browser buttons - use the buttons at the bottom of each screen.

Screenener

Firstly, a few questions to make sure we have a wide range of participants...

**S1 Age**

*(Please enter below)*

**[IF 13 OR LESS TERMINATE]**

**S2 Gender**

Male	1
Female	2

**S3a [AUSTRALIA ONLY]**

What is your postcode?

**S3b [NEW ZEALAND ONLY]**

Which of the following regions do you live in?

Northland Region	1
Auckland Region	2
Waikato Region	3
Bay of Plenty Region	4
Gisborne Region	5
Hawke's Bay Region	6
Taranaki Region	7
Manawatu-Wanganui Region	8
Wellington Region	9
West Coast Region	10
Canterbury Region	11
Otago Region	12
Southland Region	13
Tasman Region	14
Nelson Region	15
Marlborough Region	16
Area Outside Region	17

S4. Thinking about food/grocery shopping, which of these best describes the level of responsibility you have for the shopping in your household? **(please select one)**

Responsible for all or most of the food/ grocery shopping	1
Responsible for about half of the food/ grocery shopping	2
Responsible for less than half of the food/grocery shopping	3
Not responsible for any of the food/grocery shopping	4

[SOFT QUOTA CHECK – Quota fail here if screener quotas are full]

[SOFT SCREENER CHECK – Terminate respondents here]

## Welcome Page

Congratulations.

You have qualified for the survey. This survey will take you approximately **20 minutes** to complete. You will be rewarded **<XXX>** emailcash points for completing this survey.

Please click the next button to continue.

**Section B – Confidence, risk and trust**

B1. Looking at the screen which of the following are the major concerns facing you today?  
*(Please select your top three concerns)*

**[RANDOMIZE ORDER, ALLOW THREE CHOICES ONLY]**

Traffic congestion	1
Standards in education	2
Drugs	3
Food safety	4
Pollution/environmental issues	5
Crime levels	6
Healthy eating	7
The health system	8
Terrorism	9
The economy	10
House prices	11
Household finances	12
Drought / water shortages	13
Immigration	14
Other <b>[WRITE IN]</b>	96
Don't know	99

B2. On a scale of 1 to 7, where 1 is “not at all confident”, and 7 is “extremely confident”, how confident are you that the food supply as a whole, from the farm to your plate, is producing safe food for consumption? *(please choose the one number that best applies)*

1	2	3	4	5	6	7	9
Not at all confident						Extremely confident	Don't know


B3. Taking everything into account, do you feel that food safety generally has got better or worse over the last year? *(please select one)*

A lot better	1
A little better	2
About the same	3
A little worse	4
A lot worse	5
Don't know	9

**[If code either 1, 2, 3, 4 or 5 at B3, ask]**

B4. Why do you say that?

**(OPEN ENDED RESPONSE)**



## Section C – Specific issues impacting on confidence in food supply

[Ask all]

C1a. Do you have any concerns about the safety of any particular types of food?

Yes	1
No	2
Don't know	9

[If code 1 at C1a, ask:]

C1b. And which particular types of foods do you have concerns about?

(OPEN ENDED RESPONSE)

[PRE-CODED LIST – NOT SHOWN TO RESPONDENTS:]

Raw Pork	1
Raw Lamb	2
Raw Beef	3
Raw Chicken	4
Other raw meat/poultry	5
Cooked Meat/poultry	6
Processed meat/poultry (e.g. sausages, burgers)	7
Meat (unspecified)	8
Eggs	9
Milk	10
Other dairy product	11
Dairy Products (unspecified)	12
Fish	13
Shellfish	14
Fresh fruit/vegetables	15
Tinned foods	16
Frozen foods	17
Dried foods	18
Ready made meals	19
Other packaged foods	20
Foods with Genetically Modified ingredients	21
Irradiated foods / food ingredients	22
Baby foods	23
Oils and sauces	24
Organic fruit/vegetables	25
Organic meat	26
Organic foods (unspecified)	27
Soft drinks	28

Bottled waters	29
Other	96
None	97
Don't know	99

**[Ask all]**

C2a. And are you concerned about any of the following food issues?

*(select all that apply)***[RANDOMIZE ORDER]****(Ask****Yes/No for each)**

	<b>YES</b>	<b>NO</b>
Food poisoning such as a Salmonella and E. Coli	1	2
Genetically Modified foods	1	2
BSE (Bovine Spongiform Encephalopathy, Mad Cow Disease)	1	2
The feed given to livestock	1	2
The use of antibiotics/hormones/steroids in meat	1	2
Conditions in which food animals are raised and slaughtered	1	2
The use of pesticides to grow food	1	2
The use of additives (such as preservatives and colouring) in food products	1	2
The addition of nutrients and other substances not usually found in that food, e.g. calcium in orange juice	1	2
Food allergies and intolerance	1	2
The amount of salt in food	1	2
The amount of sugar in food	1	2
The amount of fat in food	1	2
The amount of saturated fat in food	1	2
Bird/Avian flu	1	2
Whether foods are organic	1	2
The amount of trans fats in food	1	2
Foods aimed at children	1	2
The sustainability of agriculture	1	2



The addition of folic acid to the food supply	1	2
The use of iodised salt in foods	1	2
The safety of imported foods	1	2
The use of cloned animals in the food supply	1	2
Food safety/hygiene	1	2
Food labelling	1	2
Storage times of foods sold as “fresh”	1	2
Irradiation of food or food ingredients	1	2
Obesity levels in the population	1	2
Other <b>[WRITE IN]</b>	1	2

**C2b. [FOR ALL SELECTED AT C2a, Maximum of 10 randomly selected if more than 10 answered at C2a]** On a scale of 1 to 7, where 1 is “not at all concerned”, and 7 is “extremely concerned”, how concerned are you about **(INSERT EACH FOOD CONCERN FROM C2a)** *(please choose the one number that best applies)*

1	2	3	4	5	6	7	9
Not at all concerned						Extremely concerned	Don't know

**C3.** Do you think you have had food poisoning in the last 12 months? (Symptoms may include upset stomach, diarrhoea and/or vomiting)

Yes	1
No	2
Unsure	9


**[IF ANSWER NO / UNSURE AT C3, SKIP TO D1]**

**C4.** Do you think this food poisoning was from:

Food prepared at home/private venue	1
Food purchased/prepared outside the home	2
Both (if more than one food poisoning episode in last 12 months)	3
Don't know	9

C5. Who, if anyone, did you report this food poisoning to?  
**(select all that apply)**

My doctor	1
Staff at the food outlet	2
Person/household responsible for food preparation	3
Did not report it to anyone	4
Other <b>(please specify)</b>	5





D4. On a scale of 1 to 7, where 1 is “not at all concerned” and 7 is “extremely concerned”, how concerned are you about getting food poisoning from something you or anyone else has prepared and eaten at home? *(please choose the one number that best applies)*

1	2	3	4	5	6	7	9
Not at all concerned						Extremely concerned	Don't know

D5. Using a scale of 1 to 7, where 1 represents “no control at all” and 7 represents “complete control”: how much control do you think that you have over food hygiene / food safety in your household in the preparation of food when eating at home?

*(please choose the one number that best applies)*

1	2	3	4	5	6	7	9
No control at all						Complete control	Don't know

D6. On a scale of 1 to 7, where 1 is “not at all confident”, and 7 is “extremely confident”, how confident are you that food hygiene/food safety precautions in your household are sufficient in the preparation of food when eating at home?

*(please choose the one number that best applies)*

1	2	3	4	5	6	7	9
Not at all confident						Extremely confident	Don't know

**FOOD SAFETY OUTSIDE THE HOME**

D7. Have you been concerned about food hygiene / food safety in any of the following places in the last 12 months?

*(select all that apply)*

**[RANDOMIZE ORDER]**

Restaurants	1
Cafes / pubs / bars	2
Supermarkets / grocery stores	3
Local meat / seafood retailers (butchers, poultry shops etc)	4
Delis / specialty / other food retailers	5
Temporary food stalls and food vans (excluding community events)	6
Takeaway / fast food outlets	7
Sausage sizzles, fetes or other community events	8
Local bakery	9
Other <b>[PLEASE SPECIFY]</b>	96
None	97

**[IF CODE 1-96 ASK D8, CODE 97 SKIP TO D9]**

D8. And the last time you were concerned about food hygiene / food safety did you report your concerns to anyone?

***(please select all that apply)***

Yes, to the local council / environmental health officer / trading standards officer	1
Yes, to the staff at the outlet	2
Yes, to someone else <b>[WRITE IN]</b>	3
No	4

D9. On a scale of 1 to 7, where 1 is “not at all confident”, and 7 is “extremely confident”, how confident are you that food hygiene / food safety precautions are sufficient in the preparation of food when eating out or purchasing food at each of the following places? ***(please choose the one number that best applies)***

**[RANDOMIZE ORDER]**

Restaurants /	1
Cafes / pubs / bars	2
Supermarkets / grocery stores	3
Local meat / seafood retailers (butchers, poultry shops	4





	Serving size <b>per serve figure</b>	14
Ingredient List	The ingredient list <b>generally</b>	15
	<b>Additives</b> (e.g. colours and preservatives)	16
	<b>Quantity</b> of the main ingredients (% Labelling)	17
Other Elements	Information about <b>allergens</b> , such as in ingredient list or statement on package	18
	The best before/Use by <b>date</b>	19
	Whether the product is of <b>Genetically Modified/non-Genetically Modified</b> origin	20
	Whether the products are <b>organic</b>	21
	<b>Free range/Animal welfare</b>	22
	The <b>name</b> of the food	23
	<b>Country</b> of origin	24
	Cooking/Storage <b>instructions</b>	25
	Claims about the <b>health benefit</b> of a food, such as 'calcium is good for healthy bones'	26
	Claims about the <b>nutrient content</b> of a food, such as 'low fat' or 'high in fibre'	27
	<b>Glycemic Index</b> values / symbol	28
	Name of <b>manufacturer</b>	29
	Other [ <b>write in</b> ]	96
	None	97

**[If code None at E2a skip to E3]**

E2b. Why do you specifically look for this type of information when buying products for the first time? Because of...

**(select all that apply)**



Food allergies	1
Specific health concerns, such as migraine, asthma, diabetes, heart disease, high blood pressure, cholesterol	2
Digestive concerns such as coeliac disease, irritable bowel syndrome	3
On a specific diet	4
Watching my health/others' health generally	5
Watching my weight/others' weight generally	6
Pregnancy or breast feeding	7
Vegetarian / vegan	8
Religious / ethical beliefs that influence dietary choices	9
Training for sports	10
None of the above	97
Prefer not to answer	98

E3a What are the main sources you use to gain information on the nutritional content of foods? **(select all that apply)**

Labels on food packaging	1
Doctor/other health professional	2
Fact sheets/brochures	3
Television	4
Magazines/cook books	5
Internet	6
Supermarket/retail store	7
Education institution e.g. school, TAFE, University	8
Food Standards Australia New Zealand	9
Other Government Department/Non-Government Organisation	10
Family member or friend	11
Other	96
None – I don't look for information	97

E3b (IF CODE 10 IN E3a) Please name the other Government Department or Non-Government Organisation you use as a source of information.  
(OPEN-ENDED)

E3c (IF CODE 96 in E3a) Please name this other source of information.  
(OPEN ENDED)

E4 Here are a number of things other people have said about selecting food products. On a scale of 1 to 5, where 1 is “strongly disagree”, and 5 is “strongly agree”, please tell me how strongly you agree or disagree with each statement.

**ROTATE ORDER ASKED**

- a) I've always been able to find any information I need on a food or drink label
- b) When I read the labels on food products, I focus on one or two key things, such as the levels of fat or if there are preservatives
- c) Generally speaking, it's easy to understand and use the information on food labels
- d) I find some information on food labels really useful or important
- e) It's hard to tell which parts of the label are advertising and which parts of the label are standard information that manufacturers have to put on
- f) I don't have enough time to read food labels when I'm shopping, even if I wanted to
- g) I'm very interested in food label information
- h) I find that information on food labels is easy to read
- i) I'm satisfied with the amount of information provided on food labels

---

1	2	3	4	5	9
Strongly disagree				Strongly agree	Don't know

---

**[ASK ALL]**

E5. On a scale of 1 to 7, where 1 is “not at all confident”, and 7 is “extremely confident”, how confident are you in your ability to make an informed decision from the information provided on food labels? **Please choose the one number that best applies.**

1	2	3	4	5	6	7	9
Not at all confident						Extremely confident	Don't know

E6. On a scale of 1 to 7, where 1 is “cannot trust at all”, and 7 is “can trust completely”, how much do you feel you can trust the information provided on food labels?

1	2	3	4	5	6	7	9
Cannot trust at all						Can trust completely	Don't know

## FOOD REGULATION

D11a. **[AUSTRALIA ONLY]** Please name any organisations you can think of who have a role in food regulation and monitoring? **Please list all the organisations you can think of.**

**OPEN ENDED**

**PRE-CODED LIST [NOT SHOWN TO RESPONDENTS]**

Food Standards Australia New Zealand (FSANZ, ANZFA)	1
The Australian Government Department of Health and Ageing	2
Biotechnology Australia	3
Department of Agriculture, Forestry and Fisheries (DAFF)	4
Australian Quarantine Inspection Service (AQIS)	5
Local council organizations	6
State or Territory Health Department	7
State or Territory Department of Agriculture or Primary Industry	8
Australian Pesticide and Veterinary Medicines Authority (APVMA)	9
Office of the Gene Technology Regulator (OGTR)	10

Local Council/Local Government organisations or Public Health Units	11
Others (specify)	96
None / Don't know / no idea	97

D11b. **[NEW ZEALAND ONLY]** Please name any organisations you can think of who have a role in food regulation and monitoring? **Please list all the organisations you can think of.**  
**OPEN ENDED**

**PRE-CODED LIST [NOT SHOWN TO RESPONDENTS]**

Food Standards Australia New Zealand (FSANZ, ANZFA)	1
Ministry of Health	2
Ministry of Research, Science and Technology	3
Ministry of Agriculture and Forestry	4
MAF Quarantine Service	5
Regional councils or Public Health Units	6
New Zealand Food Safety Authority (NZFSA)	7
Agricultural Compounds and Veterinary Medicines Unit	9
Environmental Risk Management Authority (ERMA)	10
Territorial authorities (city councils)	11
Others (specify)	96
None / Don't know / no idea	97

D12a. **[AUSTRALIA ONLY]** Which, if any, of the following organisations are you aware have a role in food regulation and monitoring? **Choose all that apply**

Food Standards Australia New Zealand (FSANZ, ANZFA)	1
The Australian Government Department of Health and Ageing	2
Biotechnology Australia	3
Department of Agriculture, Forestry and Fisheries (DAFF)	4
Australian Quarantine Inspection Service (AQIS)	5
Local council organizations	6
State or Territory Health Department	7
State or Territory Department of Agriculture or Primary	8

Industry	
Australian Pesticide and Veterinary Medicines Authority (APVMA)	9
Office of the Gene Technology Regulator (OGTR)	10
Local Council/Local Government organisations or Public Health Units	11
Others (specify)	96
None of the above	97

D12b. **[NEW ZEALAND ONLY]** Which, if any, of the following organisations have a role in food regulation and monitoring? **Choose all that apply**

Food Standards Australia New Zealand (FSANZ, ANZFA)	1
Ministry of Health	2
Ministry of Research, Science and Technology	3
Ministry of Agriculture and Forestry	4
MAF Quarantine Service	5
Regional councils or Public Health Units	6
New Zealand Food Safety Authority (NZFSA)	7
Agricultural Compounds and Veterinary Medicines Unit	9
Environmental Risk Management Authority (ERMA)	10
Territorial authorities (city councils)	11
Others (specify)	96
None of the above	97

**[ASK ALL]**

D13. Overall, on a scale of 1 to 7, where 1 is “not at all confident”, and 7 is “extremely confident”, how confident are you about the current measures taken by the organisations regulating and monitoring food? **(please choose the one number that best applies)**

1	2	3	4	5	6	7	9
Not at all confident						Extremely confident	Don't know

D14. Overall, on a scale of 1 to 7, where 1 is “not at all confident”, and 7 is “extremely confident”, how confident are you in the work of Food Standards Australia New Zealand? **(please choose the one number that best applies)**

1	2	3	4	5	6	7	9
Not at all						Extremely	Don't
confident						confident	know

D15. Thinking about purchasing foods in general, on a scale of one to seven where one is “no regulation” and seven is “high level of regulation” to what level do you believe the government should regulate the food supply to **manage for public health issues like obesity?** *(please choose the one number that best applies)*

1	2	3	4	5	6	7	9
No						High level	Don't
regulation						of	know
						regulation	

D16. Thinking about purchasing foods in general, on a scale of one to seven where one is “no regulation” and seven is “high level of regulation” to what level do you believe the government should regulate the food supply to **manage for food safety?** *(please choose the one number that best applies)*

1	2	3	4	5	6	7	9
No						High level	Don't
regulation						of	know
						regulation	



## About you

And finally, some questions about you.

F1. Do any of the following apply to you or any members of your household? **Please indicate as many as apply.**

Food allergy to nuts	1
Food allergy to seafood, or fish, or milk, or gluten, or eggs, or soybeans	2
Asthma	3
Diabetes	4
Heart disease	5
Digestive concerns such as coeliac disease, irritable bowel syndrome	6
Other health concerns such as high blood pressure or cholesterol	7
On a specific diet	8
Watching my weight/others' weight generally	9
Watching my health/others' health generally	
Migraine	10
Pregnancy or breast feeding	11
Vegetarian / vegan	12
Religious / ethical beliefs that influence dietary choices	13
Training for sports	14
Other [ <b>Specify</b> ]	96
No, none	97
Prefer not to answer	98

F2. How much attention do you pay to keeping a healthy diet?

Very low amount of attention	1
Low amount of attention	2
Medium amount of attention	3
High amount of attention	4
Very high amount of attention	5

F3. How many serves of vegetables do you **usually** eat **each day**? (one serve = ½ cup cooked vegetables or 1 cup of salad vegetables)

1 serve or less	1
2 serves	2
3 serves	3
4 serves	4
5 serves	5
6 serves or more	6
Don't eat vegetables	7

F4. How many serves of fruit do you **usually** eat **each day**? (one serve = 1 medium piece or 2 small pieces of fruit or 1 cup of diced pieces)

1 serve or less	1
2 serves	2
3 serves	3
4 serves	4
5 serves	5
6 serves or more	6
Don't eat fruit	7

F5. **In the last week**, how many times have you walked for recreation or fitness?

XX times

F5a. **[IF F5 IS GREATER THAN 0]** What do you estimate was the total time that you spent walking in this way **in the last week**?

XX Hours XX Minutes

F6. **In the last week**, how many times have you participated in moderate exercise (apart from walking) such as household work, gardening, sport, recreation or fitness activities? This is exercise that causes a moderate increase in your heart rate or breathing.

XX times

F6a. **[IF F6 IS GREATER THAN 0]** What do you estimate was the total time that you spent exercising in this way **in the last week**?

XX Hours XX Minutes



F7. In the last week, how many times have you participated in vigorous exercise such as heavy work around the yard, vigorous housework, or sport, recreation or fitness activities? This is exercise that causes a large increase in your heart rate or breathing.

XX times

F7a. [IF F7 IS GREATER THAN 0] What do you estimate was the total time that you spent exercising in this way **in the last week**?

XX Hours XX Minutes

**Education:**

F8a. [AUSTRALIA ONLY]:

What is the highest level of primary or secondary school you have completed?

*(Please select one)*

Year 8 or below	1
Year 9 or equivalent	2
Year 10 or equivalent	3
Year 11 or equivalent	4
Year 12 or equivalent	5
Still at school	6
Did not go to school	7
Prefer not to answer	8

F8b. [AUSTRALIA ONLY]:

What is the highest qualification you have completed?

*(Please select one)*

Postgraduate Degree	1
Graduate Diploma and Graduate Certificate	2
Bachelor Degree	3
Advanced Diploma and Diploma	4
Certificate	5
None of the above	7
Prefer not to answer	8

F8c. **[NEW ZEALAND ONLY]:**

What is the highest qualification you have completed?

*(Please select one)*

No Qualification / Fourth Form or lower	1
Fifth Form Qualification / school certificate / NCEA Level 1	2
Sixth Form Qualification / university entrance / NCEA Level 2	3
Higher School Qualification / Bursary / NCEA Level 3	4
Other NZ Secondary School Qualification	5
Overseas Secondary School Qualification	6
Basic Vocational Qualification	7
Skilled Vocational Qualification	8
Intermediate Vocational Qualification	9
Advanced Vocational Qualification	10
Bachelor Degree	11
Higher Degree	12
None of the above	97
Prefer not to answer	98

**Household Income:**F10a. **[AUSTRALIA ONLY]:**

What is your household's **total** annual income (before tax)? Numbers in brackets are the weekly equivalents.

*(Please select one)*

Negative / Nil income	1
\$1 - \$10,399 (\$1-\$199)	2
\$10,400 - \$15,599 (\$200-\$299)	3
\$15,600 - \$20,799 (\$300-\$399)	4
\$20,800 - \$25,999 (\$400-\$499)	5
\$26,000 - \$31,199 (\$500-\$599)	6
\$31,200 - \$36,399 (\$600-\$699)	7
\$36,400 - \$41,599 (\$700-\$799)	8
\$41,600 - \$51,999 (\$800-\$999)	9
\$52,000 - \$62,399 (\$1,000-\$1,199)	10
\$62,400 - \$77,999 (\$1,200-\$1,499)	11
\$78,000 - \$103,999 (\$1,500-\$1,999)	12
\$104,000 or more (\$2,000 or more)	13
Prefer not to answer	98

F10b. **[NEW ZEALAND ONLY]:**

What is your household's **total** annual income (before tax)? Numbers in brackets are the weekly equivalents.

**(Please select one)**

Negative / Nil income	1
\$1 - \$15,899 (\$1-\$306)	2
\$15,900 - \$22,999 (\$307-\$442)	3
\$23,000 - \$28,799 (\$443-\$554)	4
\$28,800 - \$37,899 (\$555-\$729)	5
\$37,900 - \$47,299 (\$730-\$910)	6
\$47,300 - \$58,899 (\$911-\$1,133)	7
\$58,900 - \$71,299 (\$1,134-\$1,371)	8
\$71,300 - \$87,599 (\$1,372-\$1,685)	9
\$87,600 - \$119,999 (\$1,686-\$2,308)	10
\$120,000 and over (\$2,309 or more)	11
Prefer not to answer	98

**Household Structure:**

F11. How many people live in your household in each of the following age groups? **(Please enter below)**

Persons aged 18 years and over	
Persons aged 15-17 years	
Persons aged under 15 years	

**Employment Status:**

F12. What is your employment status?

**(Please select one)**

Full-time	1
Part-time	2
Unemployed and looking for work	3
Retired /Not in the labour force	4
Student (and not in full time employment)	5
Other (please specify)	6
Prefer not to answer	7

## Honesty & Feedback

Please confirm that you have answered the questions in this survey honestly and to the best of your ability

Yes	1
No	2

Please confirm that you are the person that the email was originally sent to

Yes	1
No	2

And finally, do you have any feedback, or comments, about the survey which you have just completed?

## Close

We would like to thank you for taking the time to complete our survey. Your opinions and responses are gratefully received and extremely important to us.

The insight which you have given us will be used to develop future products and others like it.

Your responses will be used at an aggregate level only, and as such we would like to assure you once again that your details will be used in the strictest of confidence and will not be passed on to any other party for any purpose other than that which it was intended.

If at any stage you wish to change your responses, discuss this survey, or have any questions please contact us at **TNS**. If you wish to talk to someone regarding any issues with Market research please contact SurveyLine on 1300 364 832.

**Once again thank you for your interest. To ensure that you receive further relevant surveys, please make sure that your details are always up to date.**

# Appendix F

## Technical Appendix

## Technical Appendix

The following gives more technical information regarding two key areas of statistical analysis – significance testing, and regression analysis.

### Measures of Confidence and Significance Testing

Where it is not possible to survey the entire target population a sample of this population is used. In this case, a sample of Australian and New Zealand consumers was surveyed as conducting a census of the entire population would have been a costly exercise. Using a random sample, we assume that the statistics gathered are representative of the total population. We can make inferences about the actual population statistic by creating confidence intervals around the sample statistic.

A **confidence interval** assumes that the statistics gathered are distributed on an approximately normal distribution, and is used to describe the precision around a statistic, and to give a range of reasonable values for the population parameter.

The width of the confidence interval for a proportion depends on:

- sample size (n);
- level of confidence (95% in this case); and
- size of the proportion (p).

The sample size required to assume a normal distribution is:

$$n \cdot p \geq 5 \text{ and } n \cdot (1-p) \geq 5$$

As a rule of thumb, an acceptable confidence interval is  $\pm 5\%$  at a 95% confidence level. That is, if a sample proportion is 50%, we can be 95% confident that the population proportion is between 45% and 55%.

The width of the confidence interval for a mean depends on:

- sample size;
- level of confidence; and
- standard deviation of sample.

If this is not the case, the tests are not valid and another test would have to be used. The sample sizes used for this survey meet this requirement, so these tests can be used.

A **significance test** is used to determine whether a particular estimate of the population parameter is reasonable.

Factors impacting on statistically significant differences between two means are:

- sample size;
- standard deviations of the samples; and
- confidence level.

In order to conduct this test we require that:

- the 2 sample sizes are both at least 30; and
- the 2 samples are independent. The same people can not be in both samples (e.g. Males versus Total, multiple response questions).

Factors impacting on tests of significant difference between proportions are:

- sample size;
- confidence level; and
- size of proportions.

Again, this test assumes that the difference in proportions has an approximately normal distribution, and that the two samples are independent:

- the sample size required to assume a normal distribution is  $n_1 \cdot p_1 \geq 5$  and  $n_1 \cdot (1-p_1) \geq 5$  and  $n_2 \cdot p_2 \geq 5$  and  $n_2 \cdot (1-p_2) \geq 5$

In the case of weighted data (as is the case for the 2007 Consumer Attitudes Survey), unweighted base sizes are used in all tests of difference, to ensure that differences observed are actual differences, and not due to the change in sample sizes as a result of weighting.

## Multivariate Analysis

The analysis for the 2007 Consumer Attitudes Survey utilised regression analysis, a form of multivariate analysis, to understand the interplay between individual variables and overall confidence. Regression seeks to explain the relationship between independent variables and a dependent variable; that is, if one or more independent variables change, how will the dependent variable change.

Regression analysis is also a measure of association, but with the added features of:

- implying causality: that is, variable X causes variable Y to change; and
- the ability to consider relationships beyond 2 variables.

The statistical objective of regression analysis is to explain as much of the variation in the dependent variable with as few independent variables as possible. However, the managerial objective sometimes differs in a business sense, and many of the variables outside of the control of the business are not measured, because these variables cannot be impacted by the work of the business.

Multiple regression is used to understand the inter-relationships between a group of independent variables (e.g. performance issues) and a dependent variable (e.g. overall satisfaction). The objective of multiple regression is to determine which performance issues have the most significant and unique impact on overall satisfaction and which in combination, explain the most about overall performance.

Regression analysis generates two important pieces of information:

■ **The relative importance of particular drivers.** These are the percentages shown as 'drivers' or 'importance scores'. The driver percentages are derived from a linear regression model. Linear regression is conducted to determine which service level issues have the most significant impact on satisfaction with the area. The output from the linear regression which indicates impact, or importance, is called a standardised beta coefficient. These beta coefficients are converted into percentages which total 100% and indicate the importance of each service level issue.

■ **The strength of the model, or how well the combination of independent variables explain the dependent variable.** Model strength is expressed as a percentage and is called an Adjusted R-squared:

- the Adjusted R-squared figure is interpreted as the amount of variance that two or more independent variables explain in a dependent variable;
- an Adjusted R-squared figure of 80% indicates that 80% of satisfaction is explained by the independent variables. The remaining 20% consists of things that were not measured and would probably not be significant enough to be included in the model; and
- in customer satisfaction research, Adjusted R-squared figures ranging from 60% to 80% are typical and are indicative of strong models, however in other types of research, particularly where there are a large number of variables not explored in the research, a model which explains 40% or more is acceptable.

There are several types of regression:

- independent variables: simple (one independent) vs. multiple (2 or more independents).
- dependent variables: standard (scale) vs. logistic (binary); and
- 'method' (stepwise, backwards, etc), 'enter' (linear).

It is best to have scale (interval or ratio) independent variables. This is the case in most of the questions included in the Consumer Attitudes Survey. Binary variables are possible but difficult to interpret beyond 2 binary variables.



The equation for a **simple regression** is:

$$Y = a + bx + e$$

Where:

- Y = Dependent variable
- x = Independent variable
- a = point the regression line intercepts the y axis
- b = beta coefficient
- e = residual error

The equation for a **multiple regression** is:

$$Y = a + b_1x_1 + b_2x_2 + \dots + e$$

Where:

- $b_1$  = beta for independent variable 1
- $x_1$  = independent variable 1
- $b_2$  = beta for independent variable 2
- $x_2$  = independent variable 2

### Managing missing cases

Cases with completed responses were taken into the regression models. Thus, missing cases and missing values were excluded in the analysis.

### Tests for multicollinearity

Multicollinearity is the undesirable situation when one independent variable is a linear function of other independent variables. Eigenvalues of the scaled and uncentred cross-products matrix, condition indices, and variance-decomposition proportions are displayed along with variance inflation factors (VIF) and tolerances for individual variables. Particularly with this project, VIF was used to indicate whether the independent variable is highly correlated with the dependent measure. Factors with VIF over 3 would have been removed from the regression models. However no factors were removed on this basis.

### Rationale for excluding socio-demo variables from the regression models

In general, socio-demo variables are moderating variables rather than independent. Factors such as age, gender, income, etc tend to heighten the impact of independent variables on the dependent variable rather than having a direct impact.

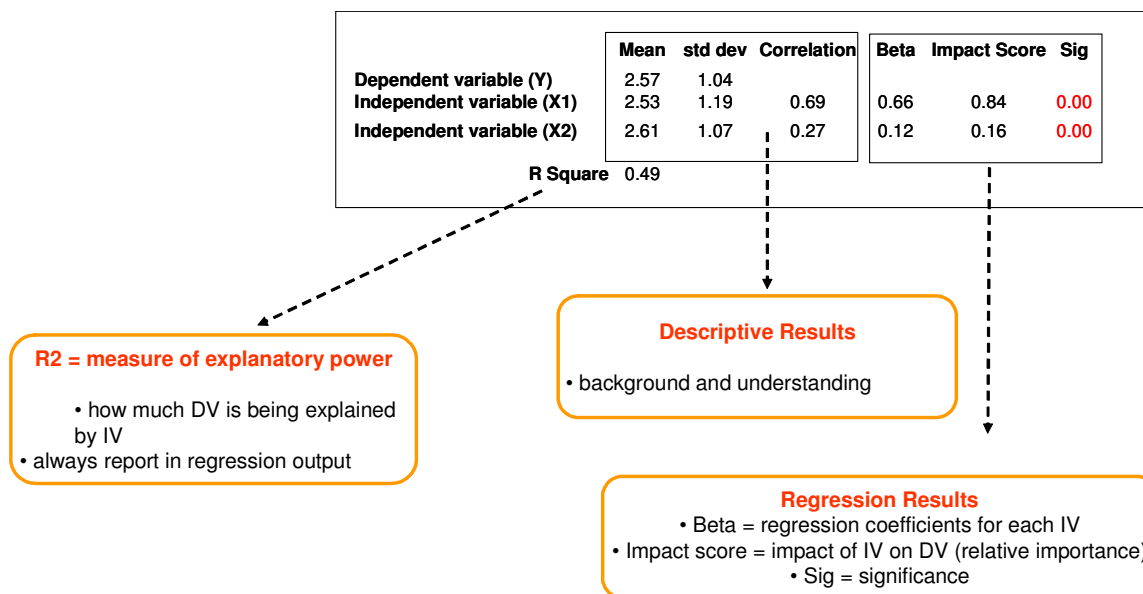
Regression models would also be more useful when independent variables are the factors that businesses can 'do something about' (i.e. increasing or reducing) to have an impact on the dependent variable. Socio-demographic variables are uncontrollable factors, therefore have limitations in terms of business implications.

## One-factor regression model

All of the hypothesized independent variables had been entered into the regression model, however the result showed only one factor with significant impact on the dependent measure. A linear regression model consists of one dependent variable and at least two independent variables. However, to determine whether the regression model is plausible is also up to the researcher as well.

## Understanding the results

The following diagram provides a guide to interpreting the results.



There is one beta coefficient for each independent variable:

- betas may be positive or negative and also ranges between -1 and +1;
- simple regression: the beta coefficient = correlation coefficient; and
- multiple regression: the beta coefficient can also be thought of as a weighting reflective of the magnitude of the relationship between an IV and the DV.

For example:  $Y = 1 + 0.59x_1 - 0.37x_2 + e$

- for 1 unit increase in  $x_1$ ,  $Y$  increases by 0.59
- for 1 unit increase in  $x_2$ ,  $Y$  decreases by 0.37.

Impact scores = beta value/sum of all betas

- % reflecting the contribution of each IV to explaining the DV
- e.g., 30% is explained by  $x_1$  and 70% explained by  $x_2$ .

# **Appendix G**

## **International Studies**

The following section presents data from international surveys to which comparisons have been made in the main body of this report. The relevant international data are presented with headings referring to the section and page number of this report where the international comparisons can be found.

**This report, Section 5, page 22: Areas of concern**

**Table 29: Eurobarometer – risk issues**

	Very likely	Likely	Not very likely	Not at all likely	DK
<b>Base: All respondents (n=24642)</b>	%	%	%	%	%
Being the victim of a crime	6	25	43	21	5
Being the victim of terrorism	3	17	45	30	5
A serious illness	10	39	33	7	10
The food you eat damaging your health	8	34	41	14	3
Being injured in a car accident	9	42	34	8	7
Consumer goods (other than food) damaging your health	9	33	40	13	5
Environmental pollution damaging your health	18	43	28	8	3

Source: Special Eurobarometer 2005 – Risk Issues, European Food Safety Authority, 2005  
QB2.1 I will read out a list of potential risks. For each of them please tell me how likely you think they are to happen to you personally.

**Table 30: Food Safety Authority of Ireland –issues**

	Respondents worried
<b>Base: All respondents (n=800)</b>	%
Drugs and drug abuse	80
The health service	67
The environment	64
The safety of the food you buy and eat	53
Racism	48
Crime in your area	44
The education service	42

Source: Consumer Attitudes to Food Safety in Ireland, Food Safety Authority of Ireland, 2003  
Consumers were given a list of seven general issues and asked to rate these in order of concern.

**This report, Section 5, page 25: Whether food safety improved/stayed the same/got worse****Table 31: Eurobarometer – whether food safety improved/stayed the same/got worse**

	Total
<b>Base: All respondents (n=24642)</b>	<b>%</b>
Has improved	38
Stayed about the same	29
Has worsened	28
Don't know	5

Source: Special Eurobarometer 2005 – Risk Issues, European Food Safety Authority, 2005  
 QB4b Compared to ten years ago, would you say that, overall, food safety has improved, stayed about the same or has gotten worse?

**Table 32: Food Safety Authority of Ireland – whether food safety improved**

	Total
<b>Base: All respondents (n=800)</b>	<b>%</b>
Much more safe	30
A little more safe	23
About the same	14
A little less safe	18
Much less safe	12
Don't know	3

Source: Consumer Attitudes to Food Safety in Ireland, Food Safety Authority of Ireland, 2003  
 Do you think that the food you buy or eat nowadays is more or less safe than it was 10 years ago?

**This report, Section 5.1, page 29: Specific food concerns****Table 33: Eurobarometer – spontaneous food related concerns**

	Total
<b>Base: All respondents (n=24642)</b>	<b>%</b>
Poisoning/food poisoning	16
Chemicals/pesticides/toxic substances	14
Obesity, over-weight	13
Illnesses/health problems	9
GMOs	8
Food additives	7
No problems or risk	7
Bacteria	6
Expiry dates/lack of fresh products	6
Lack of quality/bad food	5
Allergies/Allergic reaction to certain food	5

Cholesterol	5
Mad cow disease	5
Cardiovascular problems/circulatory problems	5
Other illnesses	5
Fats	4
Pollution	4
Indigestion/digestive problems	4
Cancer	4
Lack of sanitary controls/hygiene	3
Bad diet	3
Diabetes	3

Source: Special Eurobarometer 2005 – Risk Issues, European Food Safety Authority, 2005  
 QB3 What are all the things that come to your mind when thinking about possible problems or risks associated with food?

**Table 34: Food Safety Authority of Ireland – specific food safety concerns**

	Total Worried
<b>Base: All respondents (n=800)</b>	<b>%</b>
Pesticide and herbicide residues	70
BSE/Mad Cow Disease	67
Food poisoning	65
Antibiotic residues	63
Genetically modified food	62
Food irradiation	62
Additives	62
Animal welfare	60
Microorganisms	55

Source: Consumer Attitudes to Food Safety in Ireland, Food Safety Authority of Ireland, 2003  
 The percentage of consumers who expressed concerns in relation to a prompted list of specific food safety concerns.

**This report, Section 5.1, page 33: Food poisoning**

**Table 35: New Zealand Food Safety Authority – incidence of food poisoning**

	Total
<b>Base: All respondents (n=750)</b>	<b>%</b>
Yes	22
No	77
Unsure	1

Source: New Zealand Food Safety Authority, A Quantitative Study, May 2005  
 Have you experienced food poisoning at any time over the past two years?

Table 36: New Zealand Food Safety Authority – source of food poisoning

	Total who have had food poisoning
<b>Base: All respondents who report having food poisoning (n=165)</b>	%
Outside home	83
Contaminated products	6
Food cooked at home	6
Volunteered – other	3
Unsure	2

Source: New Zealand Food Safety Authority, *A Quantitative Study, May 2005*  
Thinking of your most recent experience - do you think your food poisoning was caused by food purchased outside your home, from contaminated products you used at home, or from food cooked at home?

**This report, Section 6.1, page 35: Awareness of organisations**

Table 37: Food Safety Authority of Ireland – spontaneous awareness of organisations

	Total
<b>Base: All respondents (n=800)</b>	%
Bord Bia	22
Food Safety Authority of Ireland	8
Health and Safety Authority	8
Department of Agriculture & Food	6
Health boards	4
Food Safety Promotion Board	3
Bord Iascaigh Mhara	3
Bord Glas	3

Source: *Consumer Attitudes to Food Safety in Ireland, Food Safety Authority of Ireland, 2003*  
Can you tell me the names of any organisations that oversee food safety regulation in Ireland?

**This report, Section 6.1, page 36: Awareness of organisations**

Table 38: Food Standards Agency UK – prompted awareness of organisation

	Total
<b>Base: All respondents (n=3513)</b>	%
Yes	82
No/Don't Know	18

Source: *Consumer Attitudes to Food Standards, Food Standards Agency UK, 2007*  
Q44a-d Can I check, have you ever heard of the Food Standards Agency?

Table 39: Food Safety Authority of Ireland – prompted awareness of organisations

	Total
<b>Base: All respondents (n=800)</b>	%
Department of Agriculture & Food	95
Bord Bia	86
Health and Safety Authority	86
Bord Iascaigh Mhara	73
Bord Glas	71
Food Safety Authority of Ireland	60
Food Safety Promotion Board	46

Source: Consumer Attitudes to Food Safety in Ireland, Food Safety Authority of Ireland, 2003  
Which of these organisations have you ever heard of?

**This report, Section 6.2, page 39: Confidence in organisations regulating and monitoring food**

Table 40: Food Standards Agency UK – confidence in organisations involved in food safety

	Total
<b>Base: All respondents (n=3513)</b>	%
Very/fairly confident	62
Neither/not very/not at all confident	38

Source: Consumer Attitudes to Food Standards, Food Standards Agency UK, 2007  
Q42 Overall, how confident are you about the current measures taken by all organisations involved in protecting your health with regards to food safety?

Table 41: Eurobarometer – agreement with public authorities are quick to act when a danger to health is identified

	Total
<b>Base: All respondents (n=24642)</b>	%
Totally agree	12
Tend to agree	44
Tend to disagree	25
Totally disagree	8
Don't Know	12

Source: Special Eurobarometer 2005 – Risk Issues, European Food Safety Authority, 2005  
QB8.1 For each of the following statements, would you say that you totally agree, tend to agree, tend to disagree, totally disagree?...Public authorities in the European Union are quick to act when a danger to citizens' health is identified



Table 42: Food Safety Authority of Ireland – prompted awareness of organisations

	Total
<b>Base: All respondents (n=800)</b>	<b>%</b>
Confident in food safety measures	61
Not confident in food safety measures	21
Don't know/neither confident or not confident	18

Source: Consumer Attitudes to Food Safety in Ireland, Food Safety Authority of Ireland, 2003  
Consumer confidence in the food safety measures currently in place

**This report, Section 6.4, page 45: Support for regulation**

Table 43: Eurobarometer – Support for food regulation

	Total
<b>Base: All respondents (n=24642)</b>	<b>%</b>
Totally agree	15
Tend to agree	28
Tend to disagree	32
Totally disagree	13
Don't know	13

Source: Special Eurobarometer 2005 – Risk Issues, European Food Safety Authority, 2005  
QB8.7 For each of the following statements, would you say that you totally agree, tend to agree, tend to disagree, totally disagree?... There are too many rules and regulation about food

**This report, Section 7.1, page 47: Support for regulation**

Table 44: Food Standards Agency UK – frequency of referring to food labelling

	Total
<b>Base: All respondents (n=3513)</b>	<b>%</b>
Always	32
Usually	20
Occasionally	18
Rarely	13
Never	13

Source: Consumer Attitudes to Food Standards, Food Standards Agency UK, 2007  
Q30. Thinking just about products that you purchase for the first time how frequently, if at all, do you refer to the labelling information

Table 45: Food Safety Authority of Ireland – attention paid to food labels

	Total
<b>Base: All respondents (n=800)</b>	<b>%</b>
A lot	45
A little	38
None at all	16
Don't know	1

Source: Consumer Attitudes to Food Safety in Ireland, Food Safety Authority of Ireland, 2003  
In general, how much attention do you pay to the labels on food that you buy in shops or supermarkets?

**This report, Section 7.2, page 51: Labelling information**

Table 46: Food Safety Authority of Ireland – information looked for on food labels

	Total
<b>Base: All respondents (n=800)</b>	<b>%</b>
Best before date	36
Additives	31
Fat content	25
Where it's produced	21
Preservatives	16
Guaranteed Irish	14
Price	12
Calorie content	11
Manufacturers name	10
Ingredients	6
Sugar content	4
Monosodium Glutamate/colourings/E numbers	3
Gluten free	3

Source: Consumer Attitudes to Food Safety in Ireland, Food Safety Authority of Ireland, 2003  
What if anything, do you look for on the labels of food you buy in shops or supermarkets?

**This report, Section 7.4, page 57: Behaviour and attitudes to labelling****Table 47: Food Safety Authority of Ireland – amount of information on food labels**

	Total
<b>Base: All respondents (n=800)</b>	%
The right amount of information	50
Too little information	31
Too much information	11
Don't know	7

Source: Consumer Attitudes to Food Safety in Ireland, Food Safety Authority of Ireland, 2003  
Opinions of labels on food

**Table 48: Food Safety Authority of Ireland – whether labels are clear or confusing**

	Total
<b>Base: All respondents (n=800)</b>	%
Information on labels is clear	51
Information on labels is confusing	41
Neither clear nor confusing	6
Don't know	4

Source: Consumer Attitudes to Food Safety in Ireland, Food Safety Authority of Ireland, 2003  
Opinions of labels on food

**Table 49: Food Standards Agency UK – amount of information on food labels**

	Total
<b>Base: All respondents (n=3513)</b>	%
Too much information	9
About right	58
Not enough information	24
Don't know	8

Source: Consumer Attitudes to Food Standards, Food Standards Agency UK, 2007  
Q32 What do you think about the amount of information that is provided for on food labels?

**This report, Section 9.1, page 76: Concern about food safety and hygiene outside of the home**

Table 50: Food Standards Agency UK – food hygiene concerns

	Total
<b>Base: All respondents (n=3513)</b>	<b>%</b>
Takeaway/fast food outlets	28
Restaurants/cafes/pubs and wine bars	21
Supermarkets	11
Market stalls	9
Local butchers	7
Other shops	4
Others	1

Source: Consumer Attitudes to Food Standards, Food Standards Agency UK, 2007  
Q37 Have you been concerned about hygiene in any of the following places in the last 12 months?

Table 51: Eurobarometer – concern about unhygienic conditions

	Total
<b>Base: All respondents (n=24642)</b>	<b>%</b>
Very worried	25
Fairly worried	43
Not very worried	24
Not at all worried	6
Don't know	1

Source: Special Eurobarometer 2005 – Risk Issues, European Food Safety Authority, 2005  
QB5.13 For each of the following issues, please tell me if you are very worried, fairly worried, not very worried or not at all worried by it?...Unhygienic conditions in food handling outside home like in food processing plants, shops or restaurants

**This report, Section 9.1, page 77: Concern about food safety and hygiene outside of the home**

Table 52: Food Safety Authority of Ireland – concern for food safety outside of the home

	Total
<b>Base: All respondents (n=800)</b>	<b>% worried</b>
Food produced on Irish farms	36
Food that you buy in shops and supermarkets	37
Food you get in restaurants, cafes or hotels	49

Source: Consumer Attitudes to Food Safety in Ireland, Food Safety Authority of Ireland, 2003  
How worried are you about the safety of food that's produced on Irish farms nowadays?  
How worried are you about the safety of food that you buy in shops and supermarkets nowadays?  
How worried are you about the safety of food you get in restaurants, cafes or hotels nowadays?

**This report, Section 9.2, page 77: Whether food concerns are reported****Table 53: Food Standards Agency UK – where reported food safety concerns**

	Total
<b>Base: All respondents concerned about food hygiene (n=1502)</b>	%
Yes – staff at outlet	18
Yes – council etc	4
Yes – somewhere else	1
No – did not report concern	76

Source: *Consumer Attitudes to Food Standards, Food Standards Agency UK, 2007*  
 Q37 And the last time you were concerned about hygiene did you report your concerns to anyone?

**Table 54: Food Safety Authority of Ireland – whether made a complaint about food hygiene**

	Total
<b>Base: All respondents (n=800)</b>	%
Yes	40
No	60

Source: *Consumer Attitudes to Food Safety in Ireland, Food Safety Authority of Ireland, 2003*  
 Whether ever made a complaint about food hygiene in a supermarket, shop, hotel, restaurant or bar.