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
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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

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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
Base: All respondents	**(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
Base: All respondents	**(n=1202)**	**(n=800)**
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

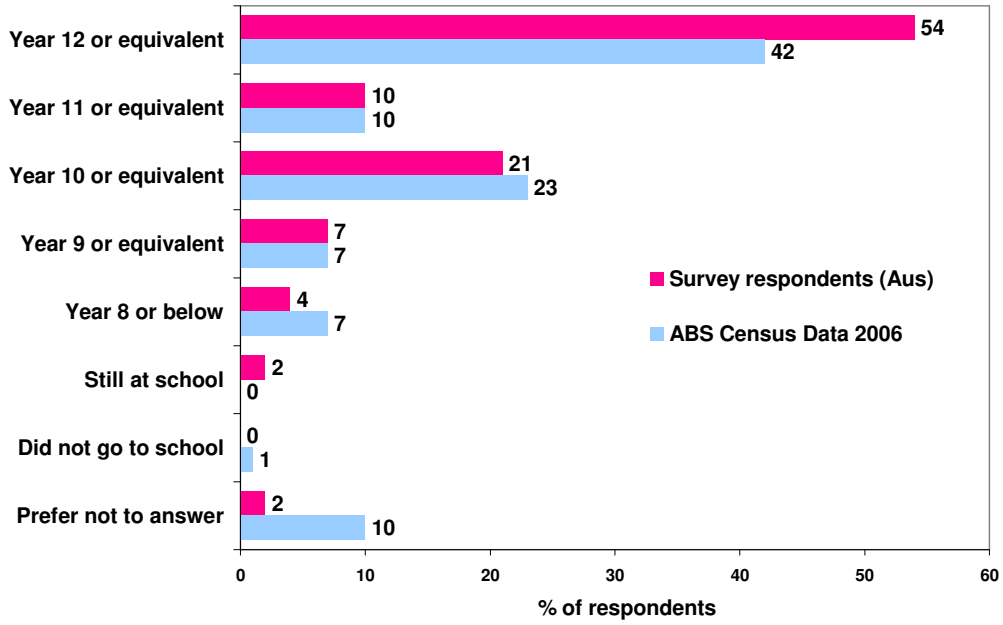
%	Australia	New Zealand
Base: All respondents	**(n=1202)**	**(n=800)**
No children in household	60.6	54.1
Children in household	39.4	45.9
- Children aged 15 – 17 years in household	17.4	20.4
- Children aged 14 or under in household	32.2	35.5

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)
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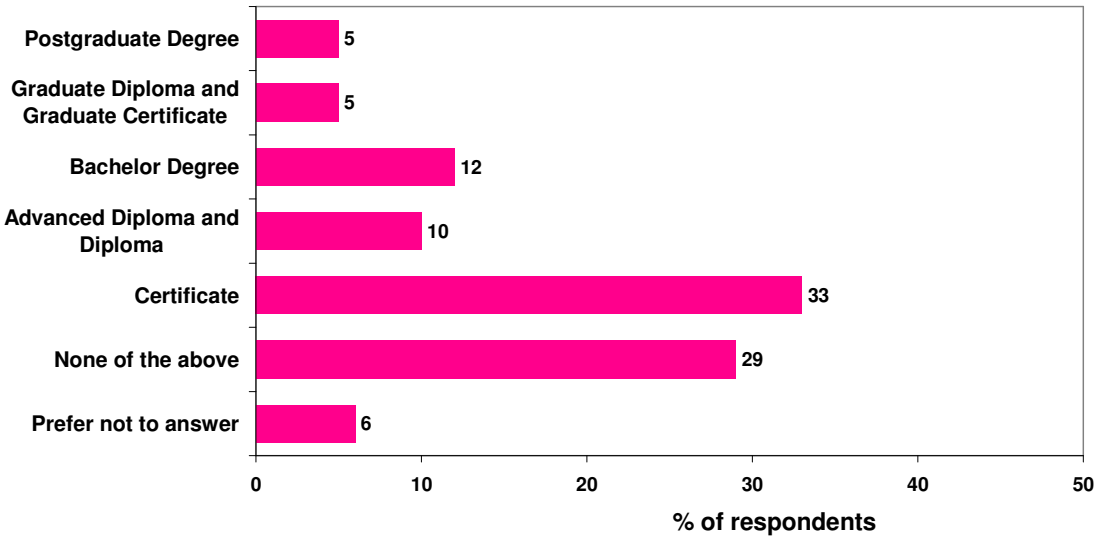

F8b. What is the highest qualification you have completed? (please choose the one that best applies)
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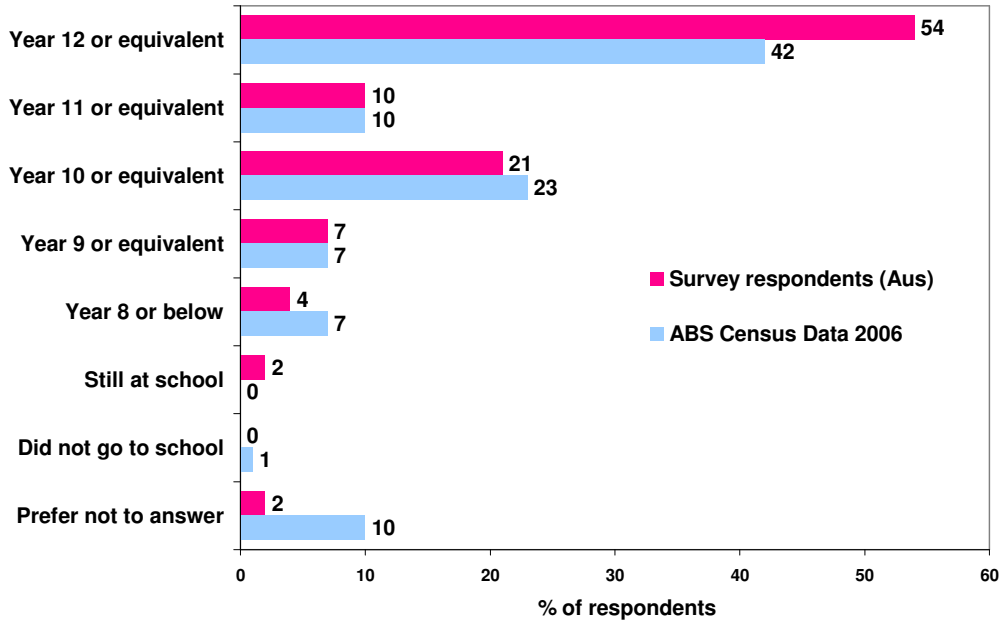
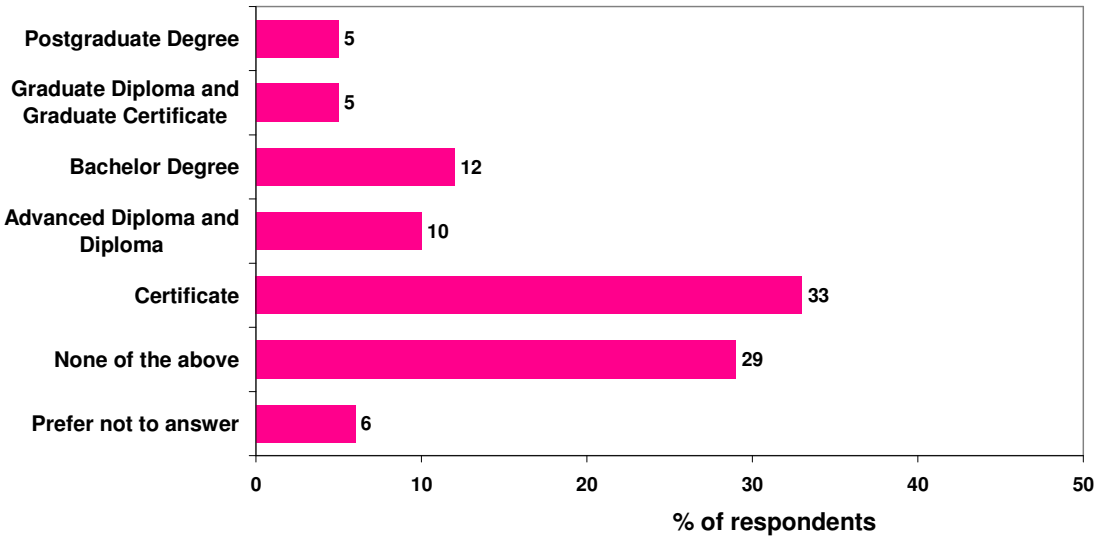


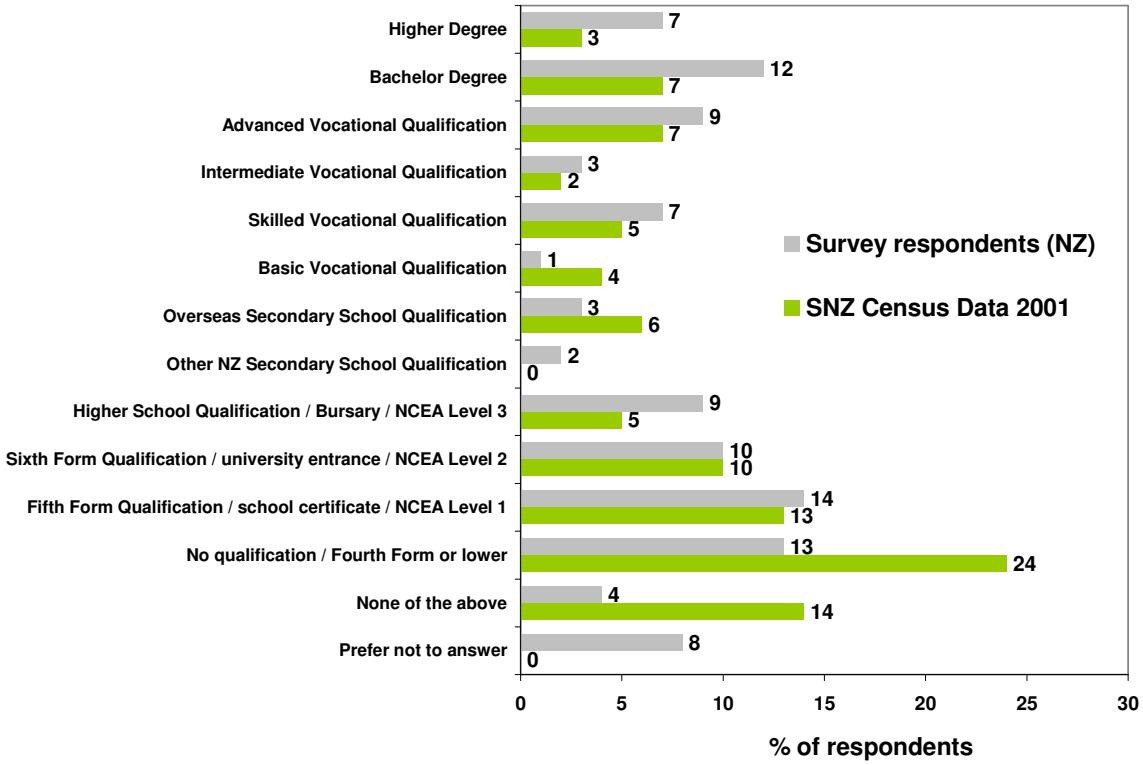
F8a. What is the highest level of primary or secondary school you have completed? (please choose the one that best applies)
Base: All respondents (Australia: n=1202)
Census data from 2006 Census of Australia
Total may not equal 100% due to rounding

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

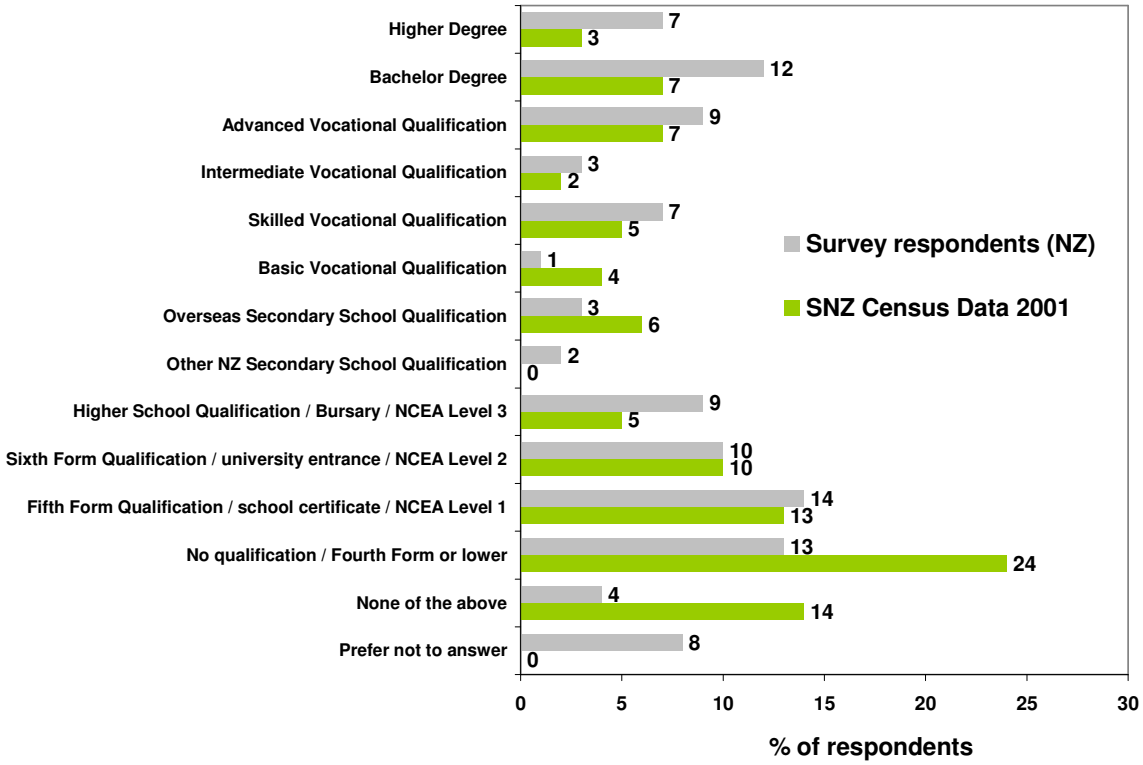
Figure 4: Education – highest qualification completed (New Zealand)



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.

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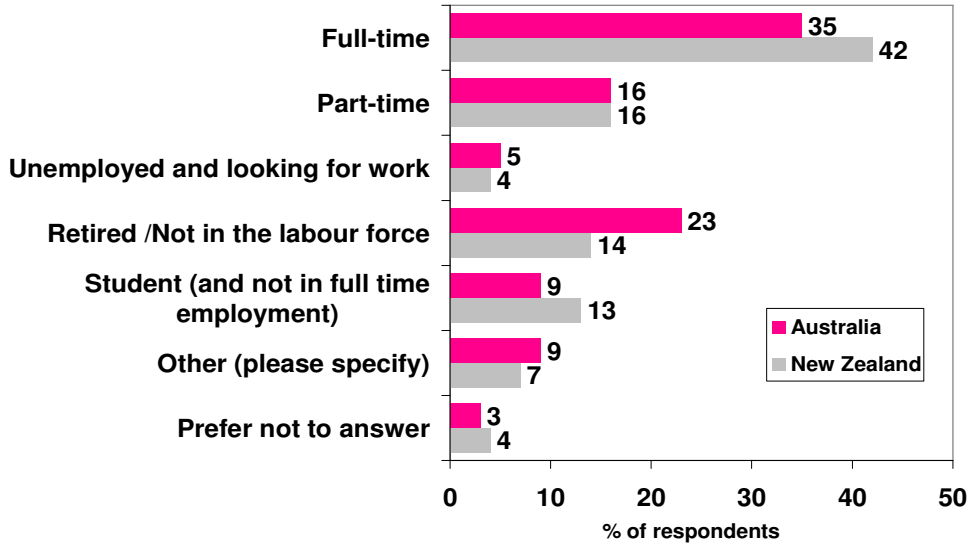
There was a clear diversity in the educational attainment of respondents, ranging from consumers with no qualifications to those of degree level or equivalent standard.

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

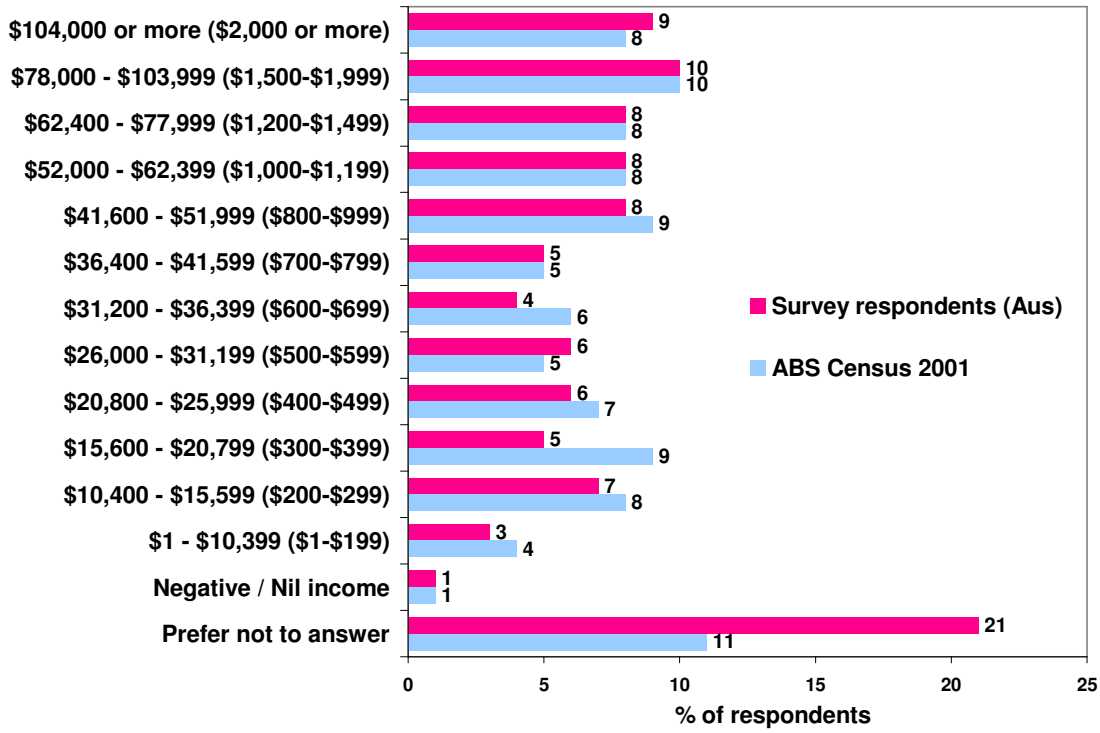


F12. What is your employment status? ***(Please select one)***
Base: All respondents (Australia: n=1202; New Zealand n=800)
Total may not equal 100% due to rounding

Income

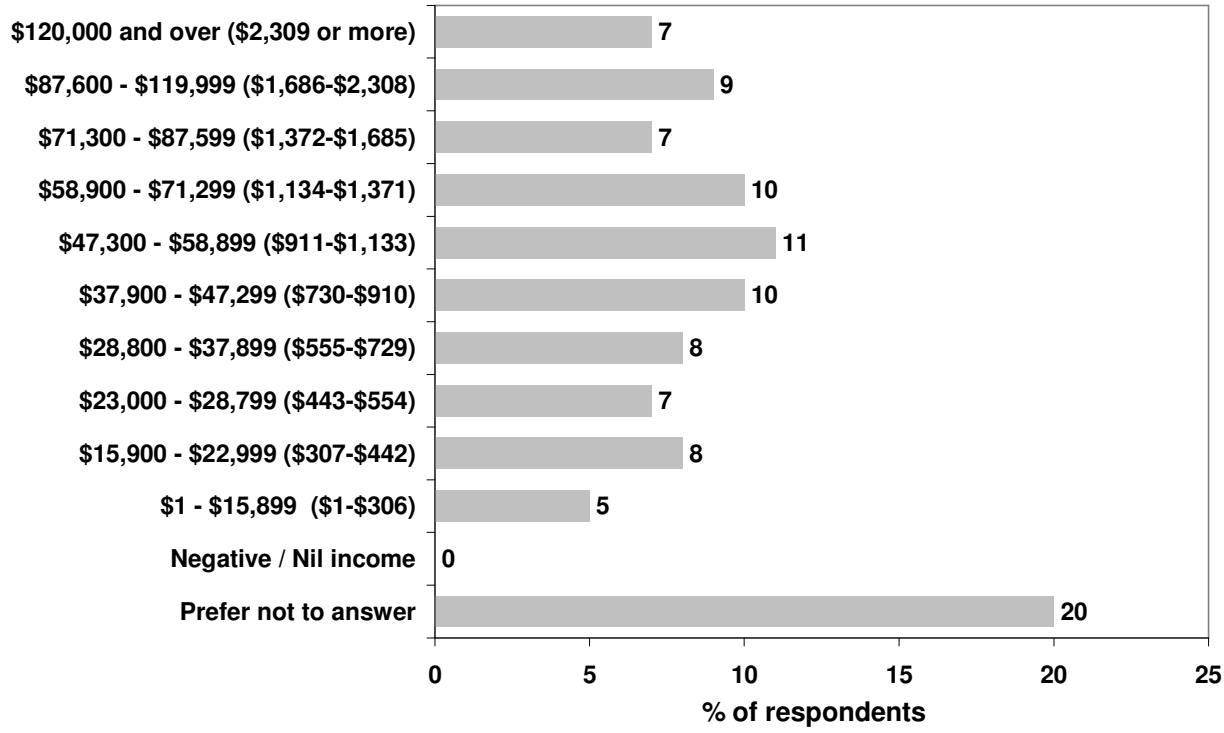
The household income of respondents was again diverse, and respondents with a varied range of income levels were represented in the survey. Figure 6 and Figure 7 illustrate the household income ranges of respondents in Australia and New Zealand (note, responses are in the local currency for each country).

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

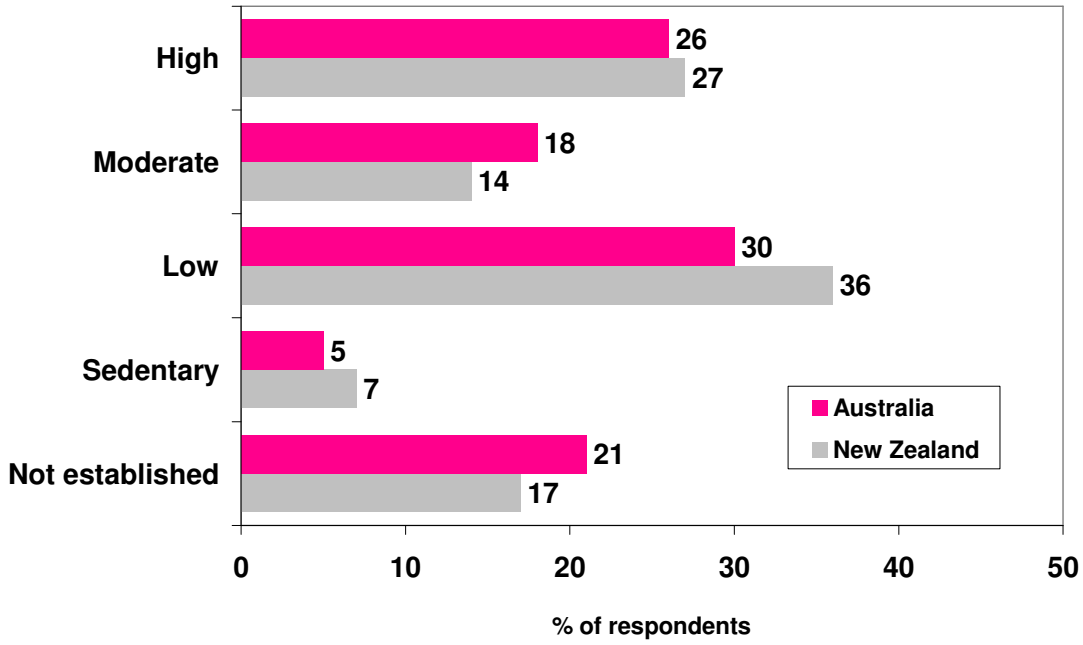
Respondents were asked a series of questions about level and duration of physical activity that mirror questions used in the National Health Survey 2005 (ABS) and the New Zealand Sport and Physical Activity Survey 2002-2003. Responses were calculated to give a score of physical activity such that a score 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.

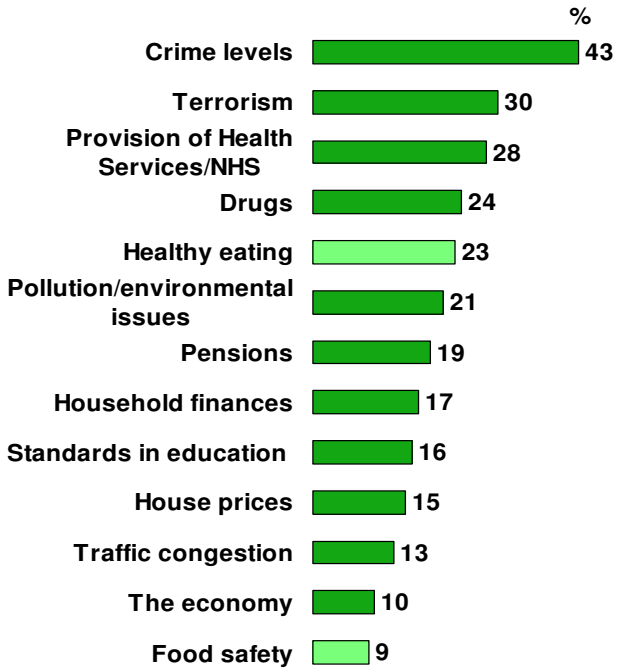
Table 7: Major concerns of respondents (general)

%	Australia	New Zealand	Significant difference
Base: All respondents	***(n=1202)***	***(n=800)***	***(p<0.05)***
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.[2] For Irish consumers, food safety was less of a concern than drugs and drug abuse, the health service and the environment.[3] 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[4]



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.

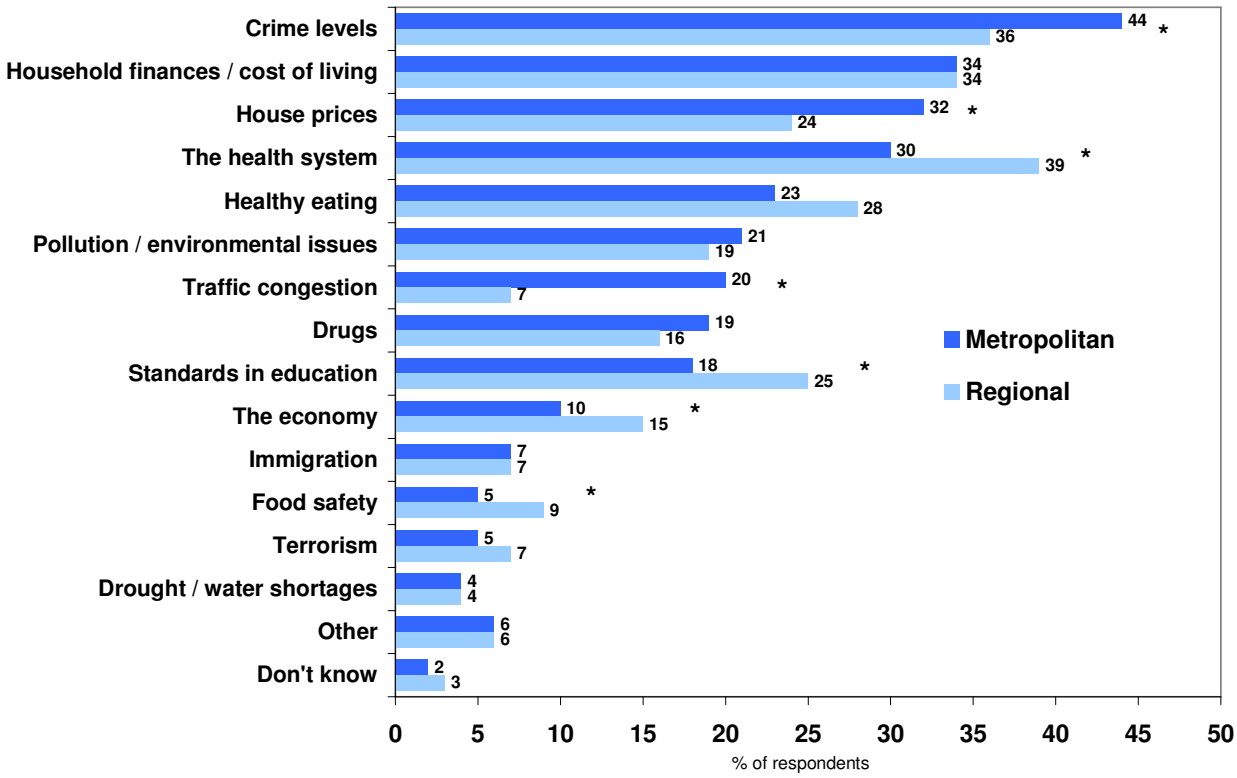
[2] Special Eurobarometer 2005 – Risk Issues, European Food Safety Authority, 2005 (See Appendix G, Table 29)

[3] Consumer Attitudes to Food Safety in Ireland, Food Safety Authority of Ireland, 2003 (See Appendix G, Table 30)

[4] 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

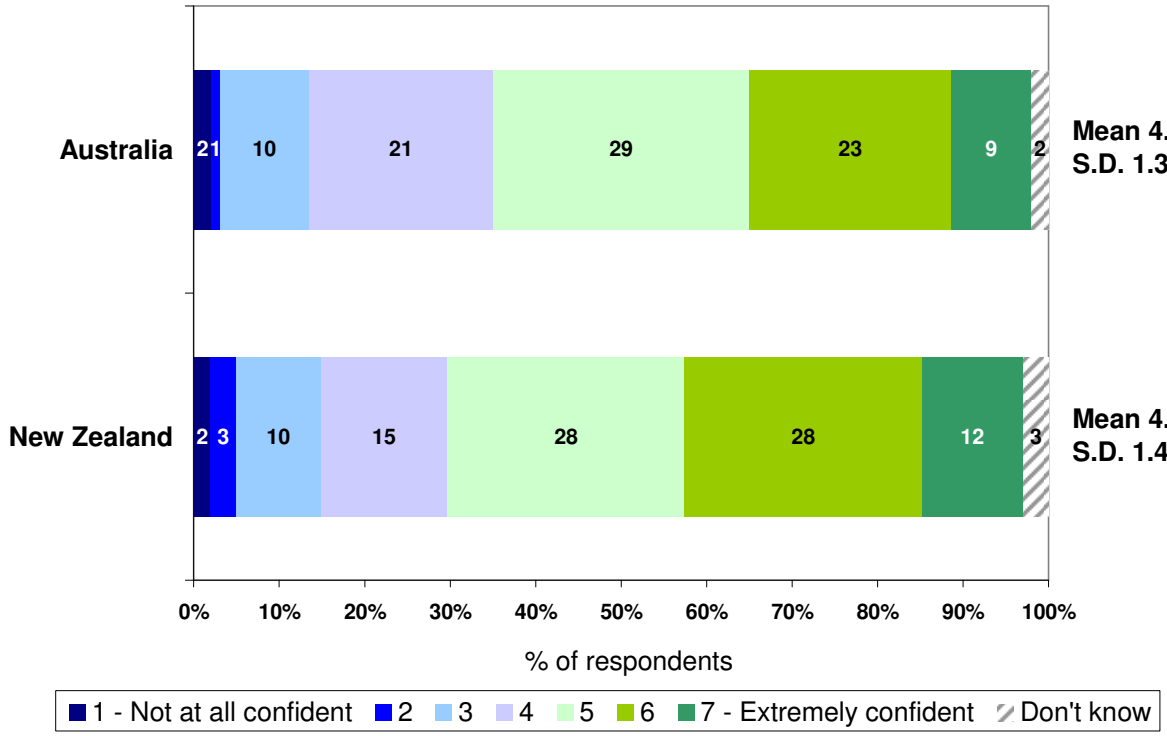


*B1. Looking at the screen which of the following are the major concerns facing you today? (**Please select your top three concerns**)*
Base: All NZ respondents (n=800), n=486 metropolitan locations, n=314 regional locations,
** denotes significant differences between regional and metropolitan locations.*
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

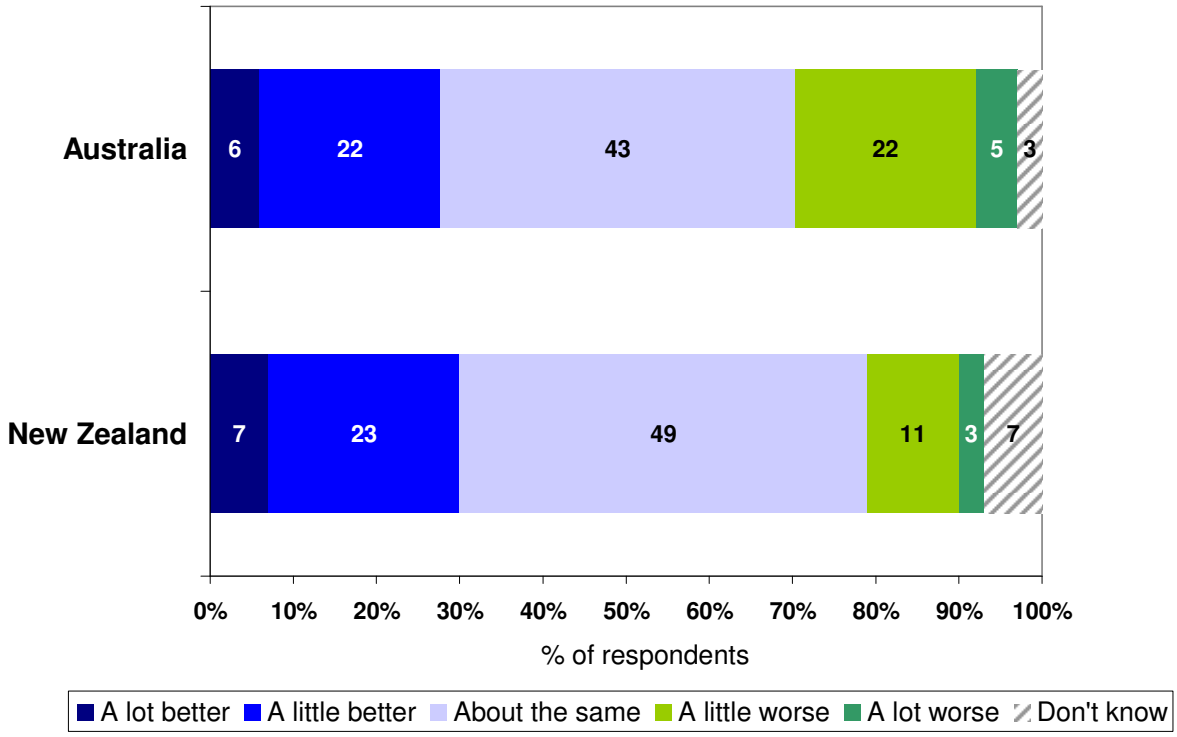


B2. On a scale of 1 to 7, where 1 is "not at all confident", and 7 is "extremely confident", how confident are you that the food supply as a whole, from the farm to your plate, is producing safe food for consumption? ***(please choose the one number that best applies)***
Base: All respondents (n=1202 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.[5] 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.[6]

[5] Special Eurobarometer 2005 – Risk Issues, European Food Safety Authority, 2005 (See Appendix G, Table 31)

[6] 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%).

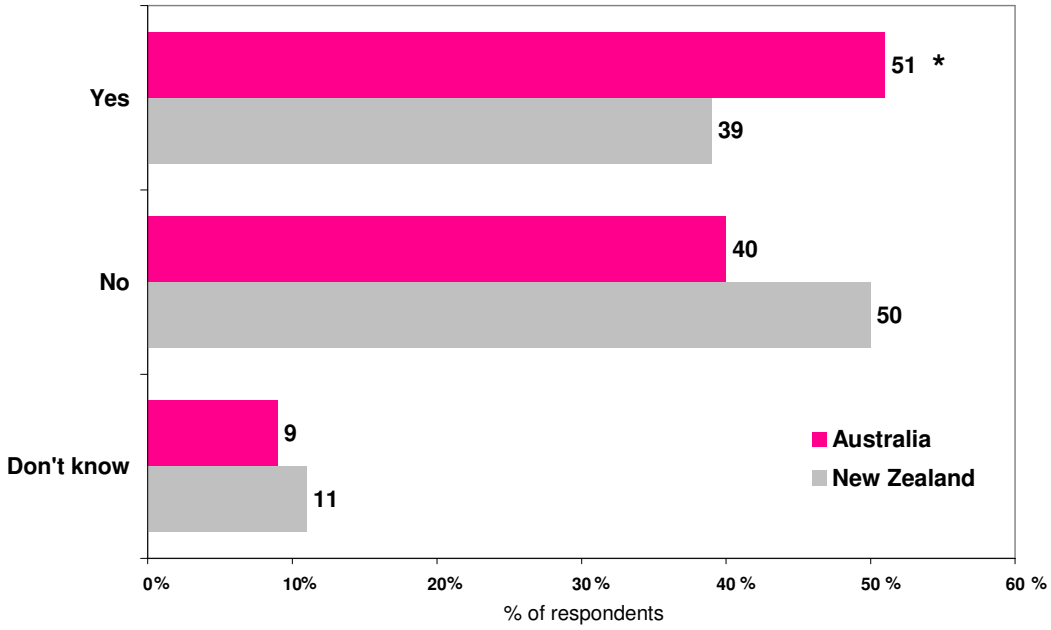
Reasons given by those saying that food safety generally was a lot or a little **worse** included:

- 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	New Zealand	Significant difference
Base: Respondents expressing concern	***(n=618)***	***(n=315)***	***(p<0.05)***
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.[7] Irish consumers were more concerned about pesticide and herbicide residues, and Bovine Spongiform Encephalopathy than they were about food poisoning.[8]

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.

[7] Special Eurobarometer 2005 – Risk Issues, European Food Safety Authority, 2005 (See Appendix G, Table 33)

[8] 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
Base: Respondents who expressed concern			
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
Base: Respondents who expressed concern			
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[9]

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

[9] 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[10].

[10] 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.[11]

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
Base: All respondents	**(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.

[11] 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
Base: All respondents	**(n=800)**
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[12]. In Ireland, 60% of consumers said they were aware of the Food Standards Authority of Ireland.[13]

[12] Consumer Attitudes to Food Standards, Food Standards Agency UK, 2007 (See Appendix G, Table 38)

[13] 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

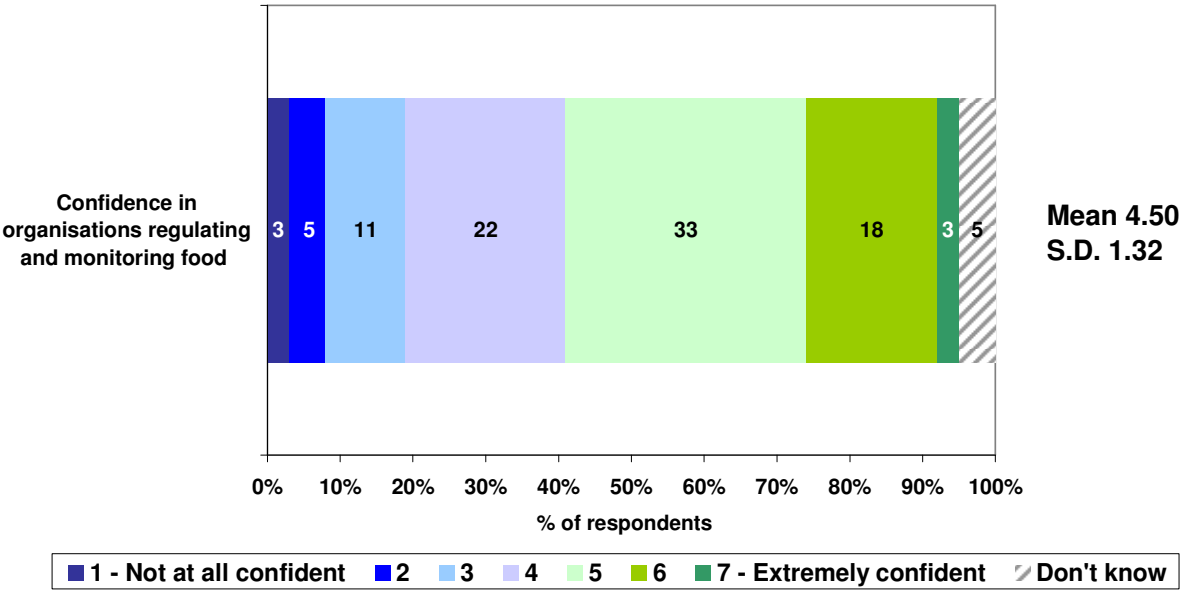
D12b. Which, if any, of the following organisations are you aware have a role in food regulation and monitoring? ***Choose all that apply.***
F2.How much attention do you pay to keeping a healthy diet?
F1. Dietary concerns construct
S4. Thinking about food/grocery shopping, which of these best describes 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)

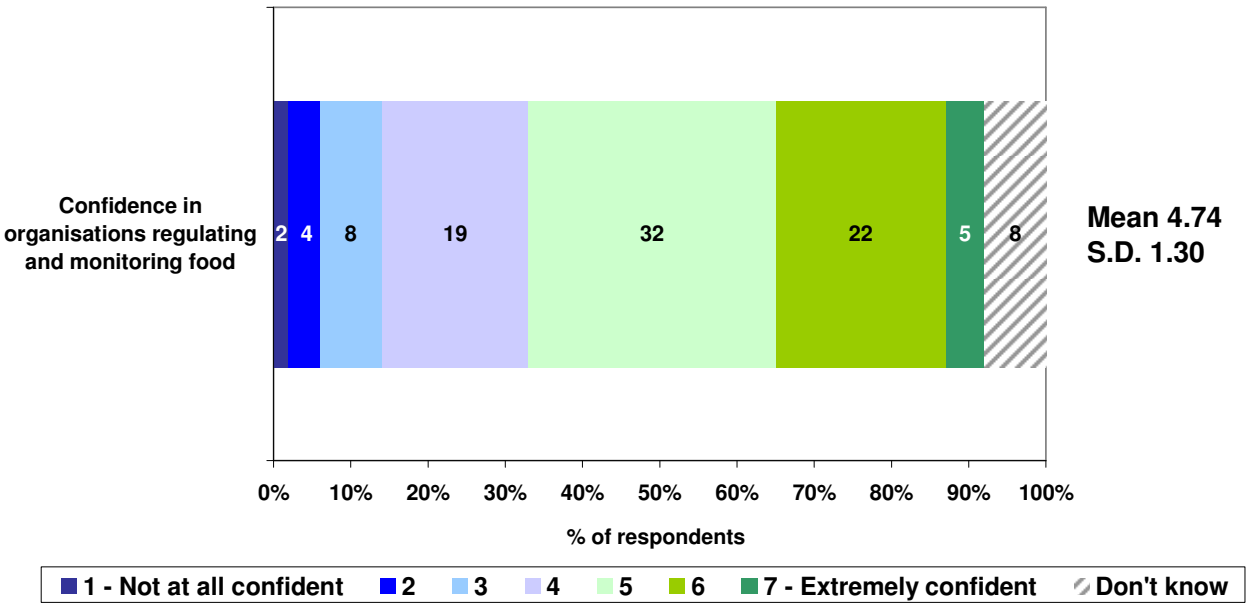


D13. On a scale of 1 to 7, where 1 is "not at all confident" and 7 is "extremely confident", how confident are you about the current measures taken by the organisations regulating and monitoring food? ***(please choose the one number that best applies)***
Base: Respondents (n=1202) Total may not equal 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[14]. Just over half of European consumers (55%) agreed that public authorities are quick to act when a danger to citizens' health is identified. [15] In Ireland, 61% of respondents cited that they were confident in the food safety measures currently in place.[16]

[14] Consumer Attitudes to Food Standards, Food Standards Agency UK, 2007 (See Appendix G, Table 40)

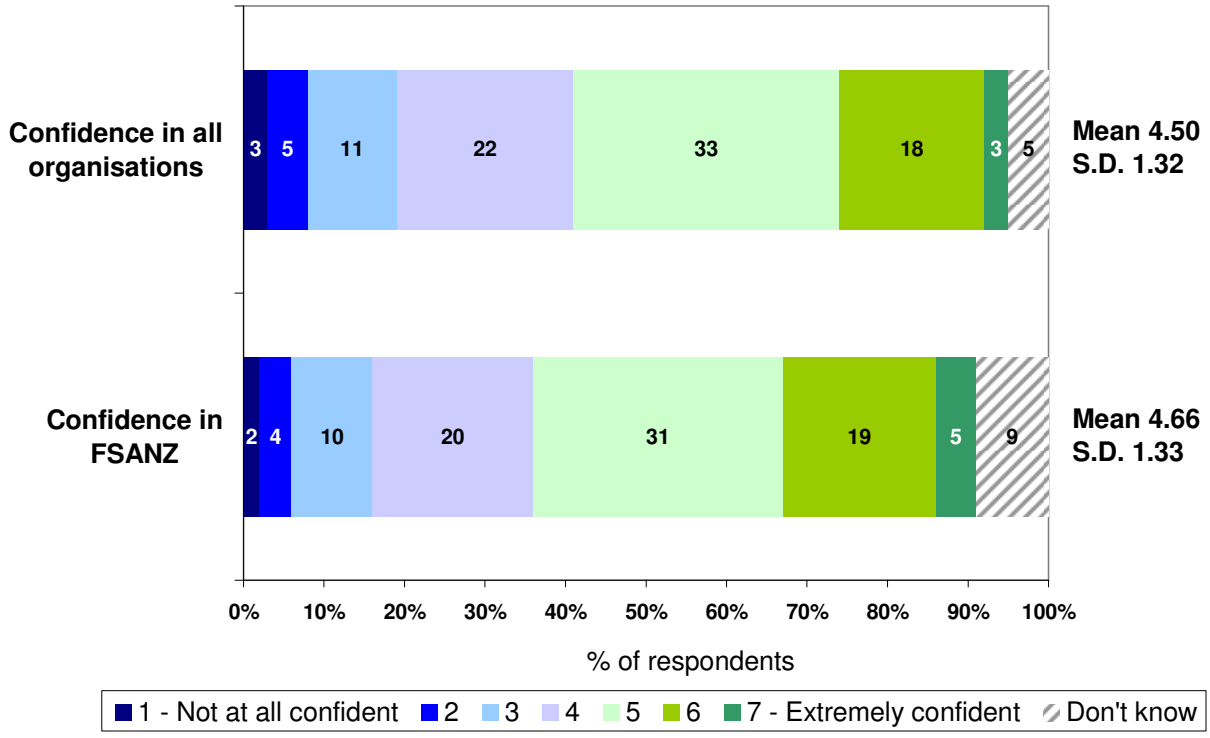
[15] Special Eurobarometer 2005 – Risk Issues, European Food Safety Authority, 2005 (See Appendix G, Table 41)

[16] 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).

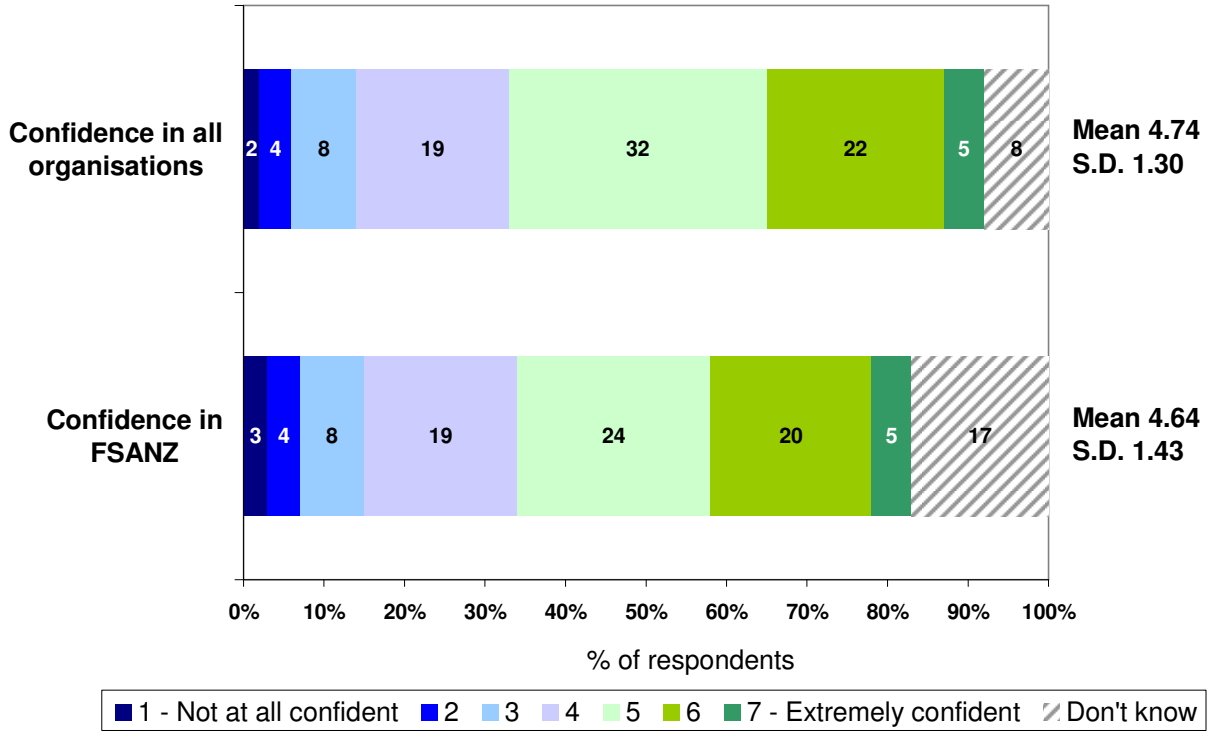
Figure 18: Confidence in the work of all organisations and FSANZ (Australia)



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)

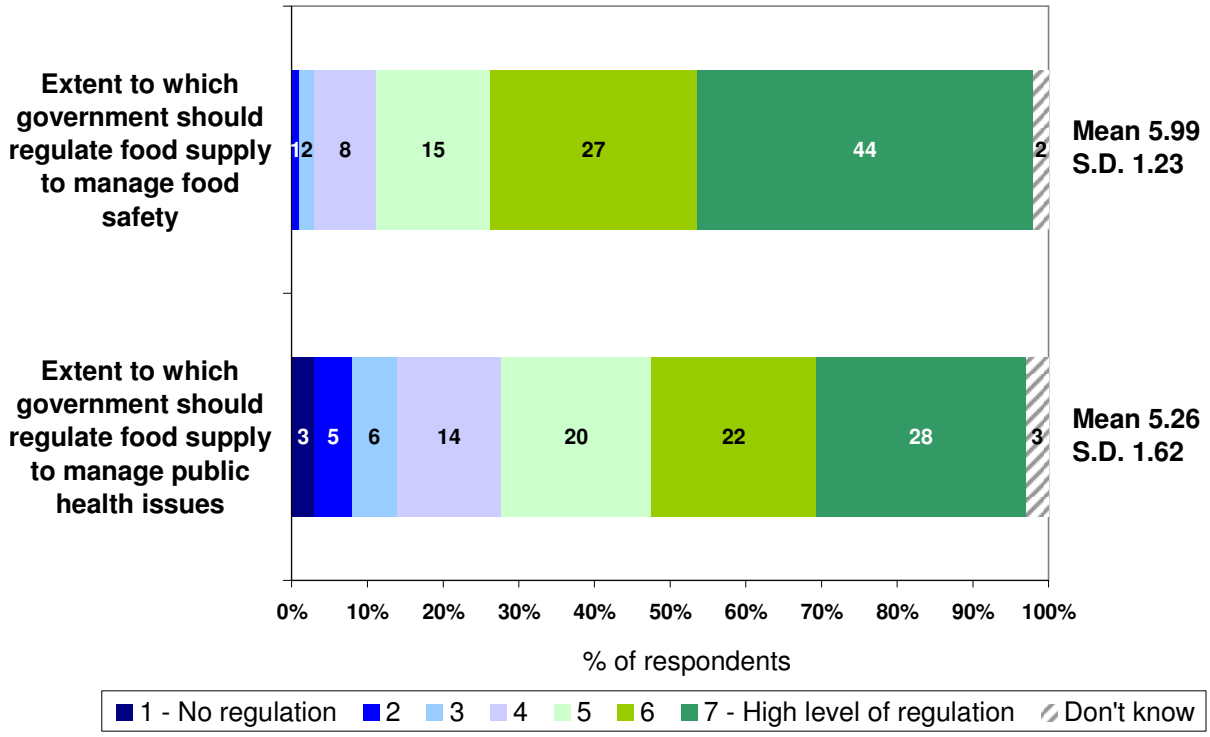
D14. On a scale of 1 to 7, where 1 is "not at all confident" and 7 is "extremely confident", how confident are you in the work of Food Standards Authority New Zealand New Zealand? ***(please choose the one number that best applies)***
Base: All respondents (n=800)

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.

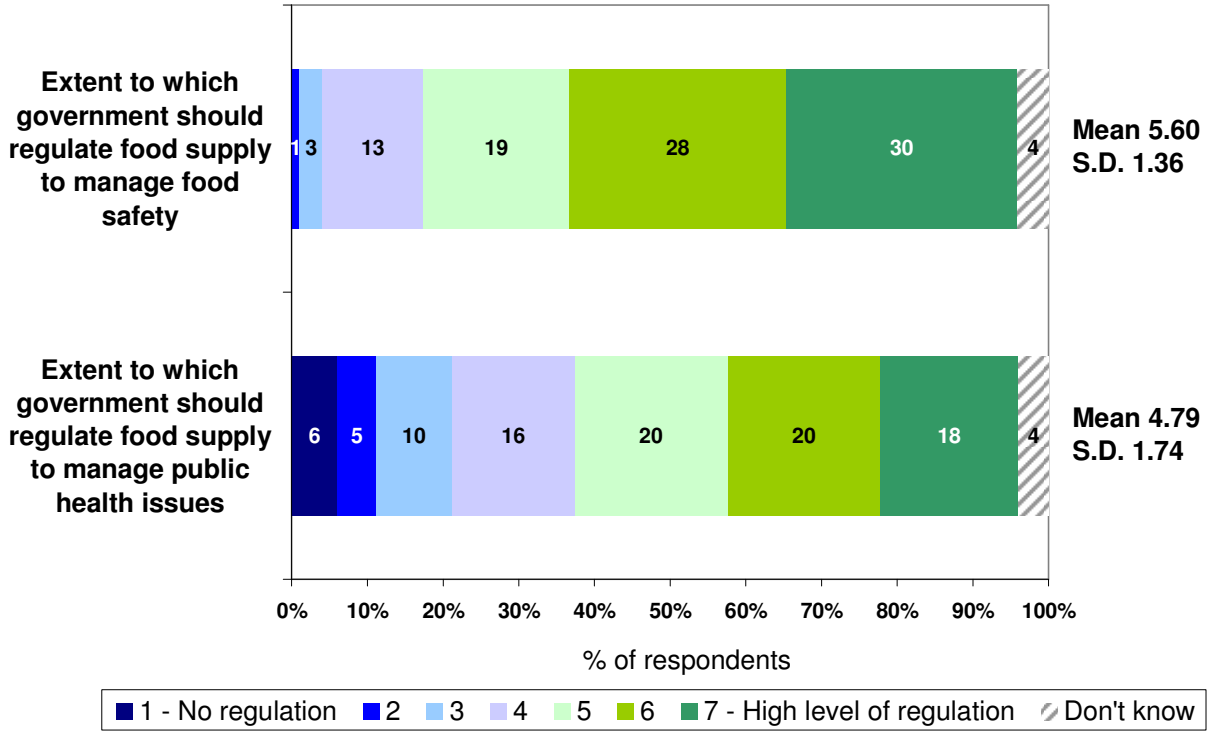
Figure 20: Extent to which government should regulate the food supply to *manage for public health issues like obesity* and *manage for food safety* (Australia)



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

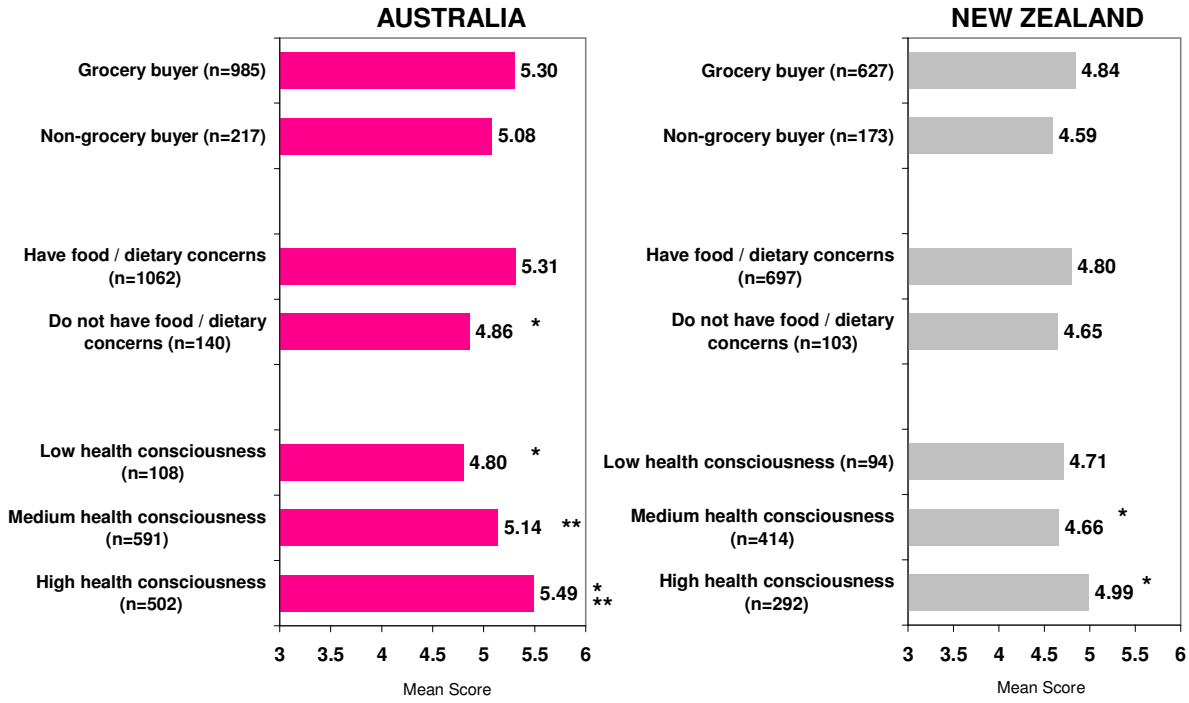
Australian consumers reported a mean score of 5.26 (S.D. 1.62) and New Zealanders reported a significantly lower 4.79 (S.D. 1.74) out of 7 with regards to regulation of the food supply to manage public health issues. Given obesity was mentioned in the question as an example of a public health issue, 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%)[17] than New Zealand (21%)[18] in recent surveys.

[17] National Health Survey 2004-05, Australian Bureau of Statistics

[18] 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*

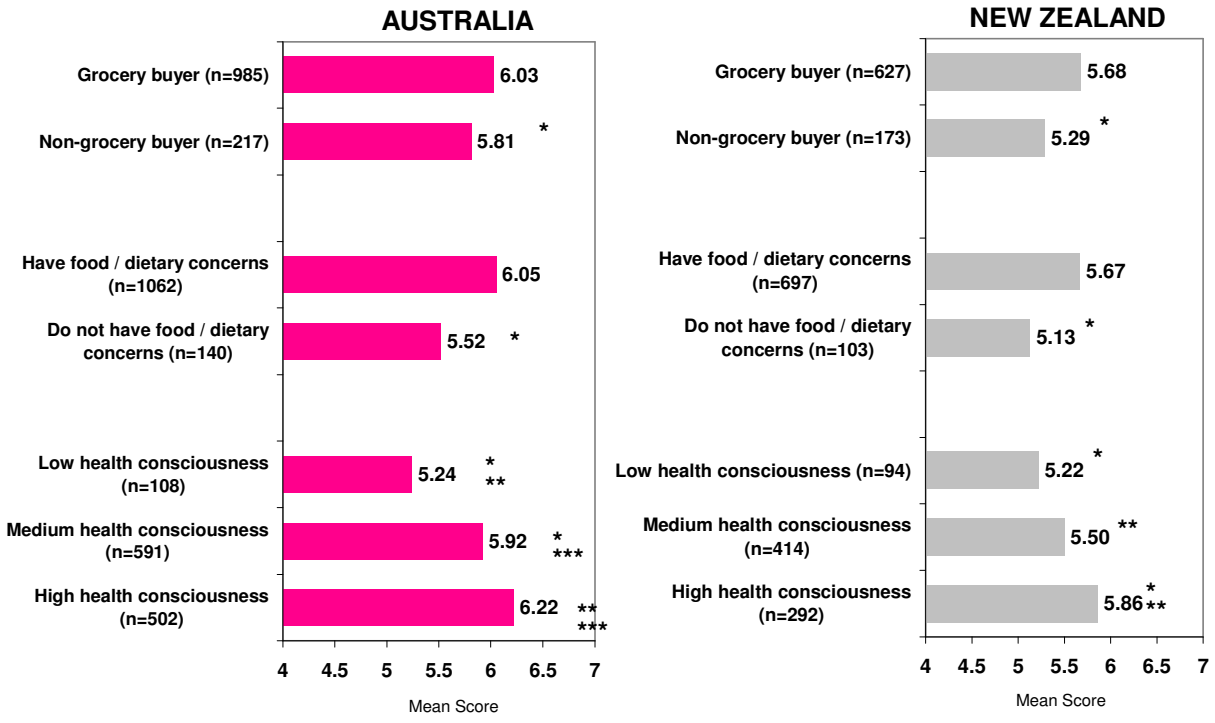
Food Safety

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.[19]

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*

[19] Special Eurobarometer 2005 – Risk Issues, European Food Safety Authority, 2005 (See Appendix G, Table 43)

7. Confidence in ability to use labelling

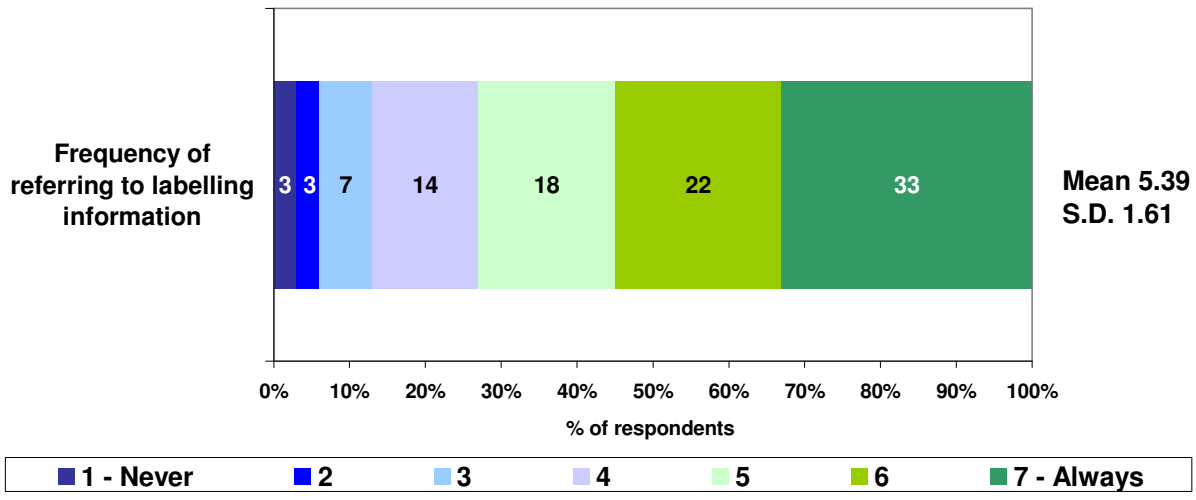
Respondents were asked a series of questions relating to food labelling, specifically examining:

- 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

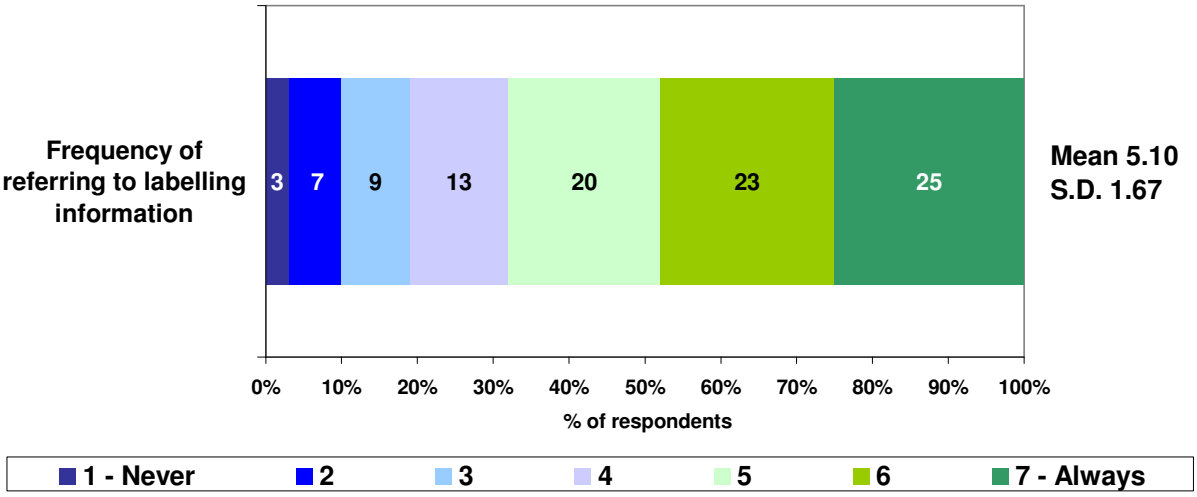
On a scale from one to seven, where one represents 'never' and seven 'always', respondents who had a role in grocery shopping were asked the extent to which they referred to labelling information when they purchased products for the first time. Australian consumers reported a mean score of 5.39 (S.D. 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

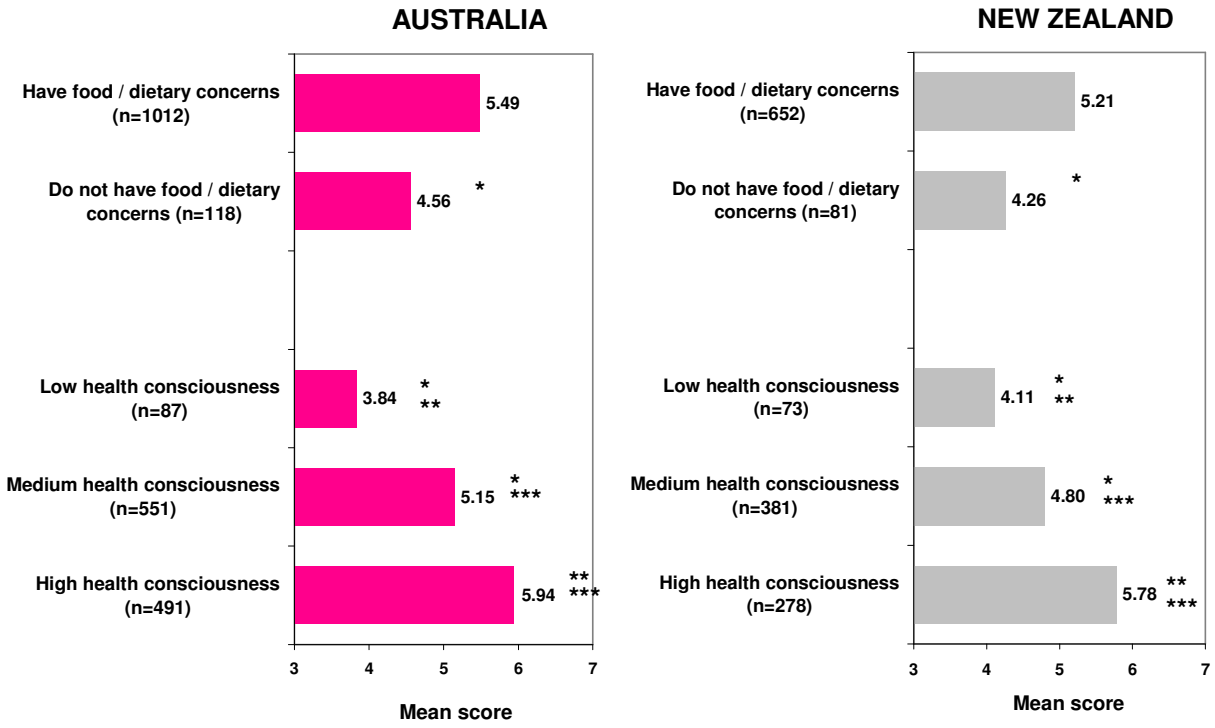
The spread of consumers' frequency of referring to labelling information was similar to that of consumers in the UK, where (on a five point scale) 70% reported always (32%), usually (20%), or occasionally (18%) referring to labelling information the first time they purchase products[20]. A higher proportion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

[20] Consumer Attitudes to Food Standards, Food Standards Agency UK, 2007 (See Appendix G, Table 44)

[21] 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.

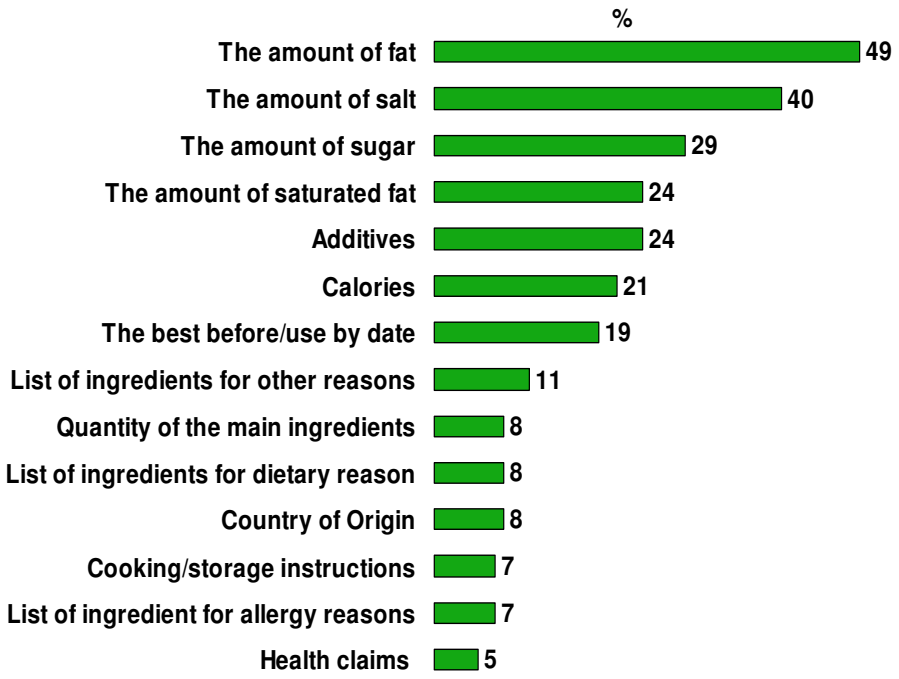
Table 13: What information is looked for when purchasing a product *for the first time* (Australia)

%		Australia	New Zealand	Significant difference
Base: Respondents who purchase food		***(n=1129)***	***(n=732)***	***(p<0.05)***
Nutrition Information Panel	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	*
Ingredient List	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	
Other Elements	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[22]. 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.[23]

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

[22] Consumer Attitudes to Food Standards, Food Standards Agency UK, 2007

[23] 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
Base: Respondents who look at food labels when purchasing food	***(n=1076)***	***(n=691)***	***(p<0.05)***
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
Base: Respondents who purchase food	***(n=1129)***	***(n=732)***	***(p<0.05)***
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.

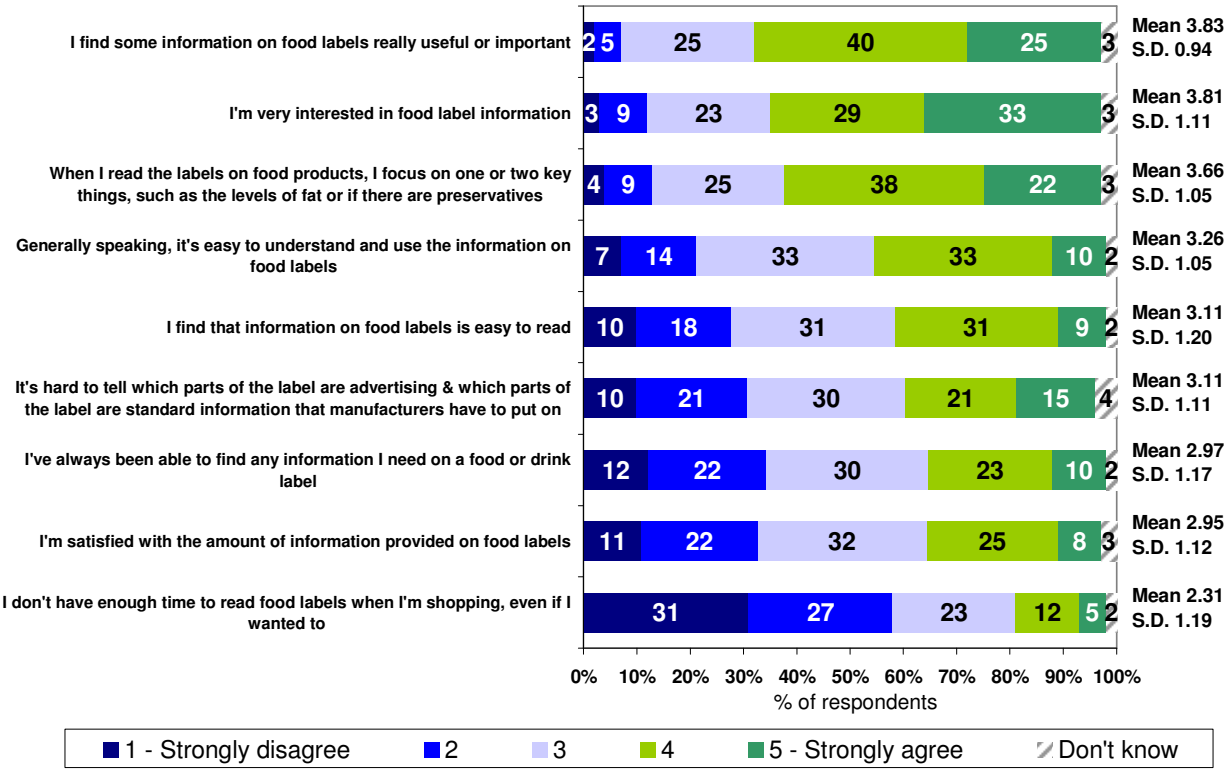
With the exception of labels, consumers were more likely to refer to more informal, potentially unregulated sources, such as printed materials, articles on the Internet, family and friends.

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

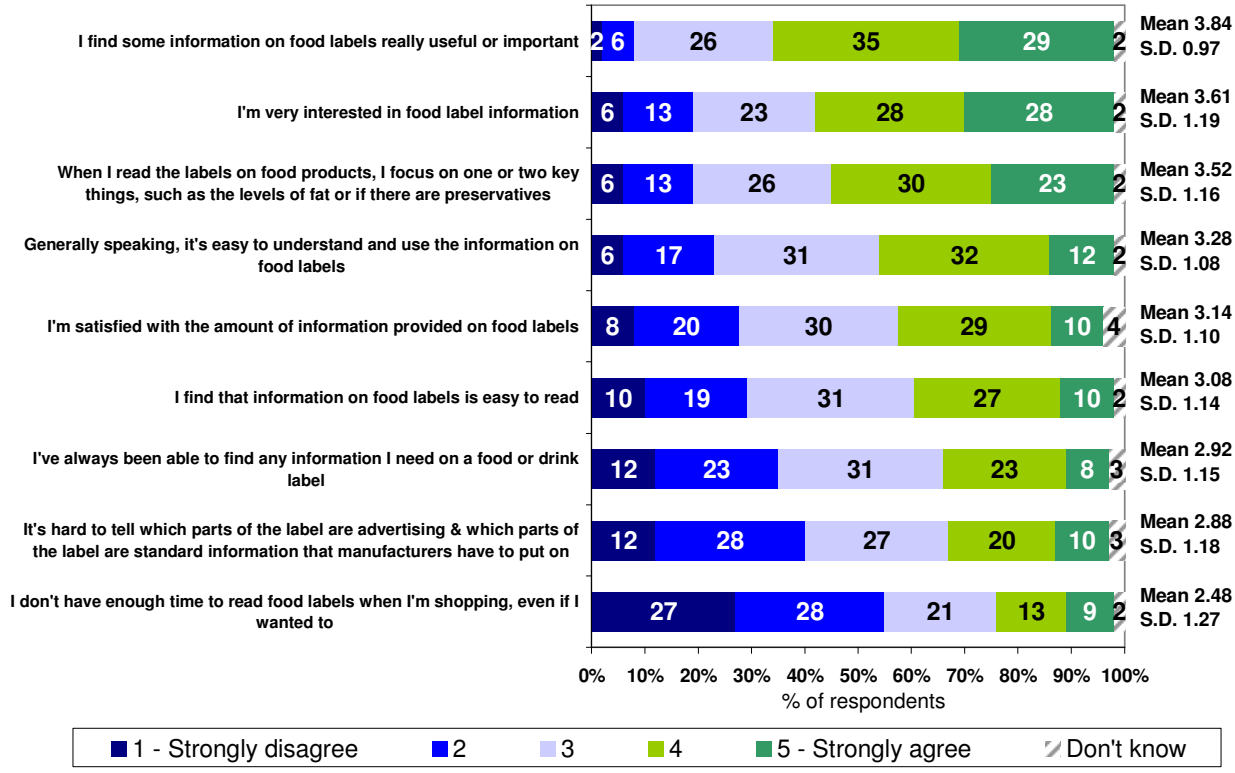
Consumers were asked their extent of agreement towards a number of statements relating to food labelling, on a scale of one to five, where one was 'strongly disagree' and five was 'strongly agree'. The mean scores and percentage of respondents rating the statements from one to five for these statements 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 1to 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[24] (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
Base:All respondents (n=1940)	%	%	%	%	%
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

[24] 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[25]

	Total
Base: All respondents (n=750)	**%**
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[26]. 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[27].

[25] New Zealand Food Safety Authority, A Quantitative Study, 2005

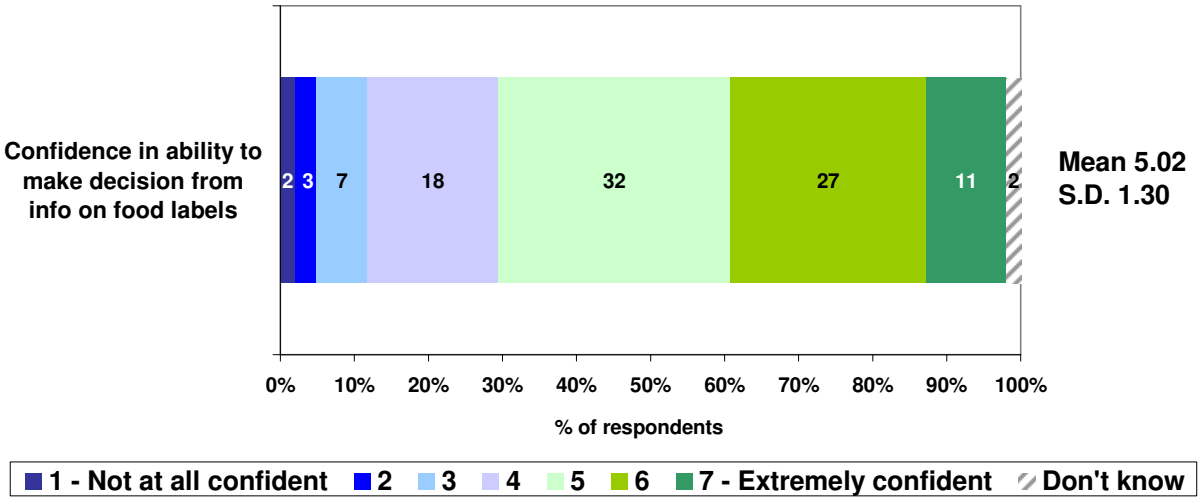
[26] Consumer Attitudes to Food Safety in Ireland, Food Safety Authority of Ireland, 2003 (See Appendix G, Table 47 & Table 48)

[27] Consumer Attitudes to Food Standards, Food Standards Agency UK, 2007 (See Appendix G, Table 49)

7.5. Confidence and trust in food labelling

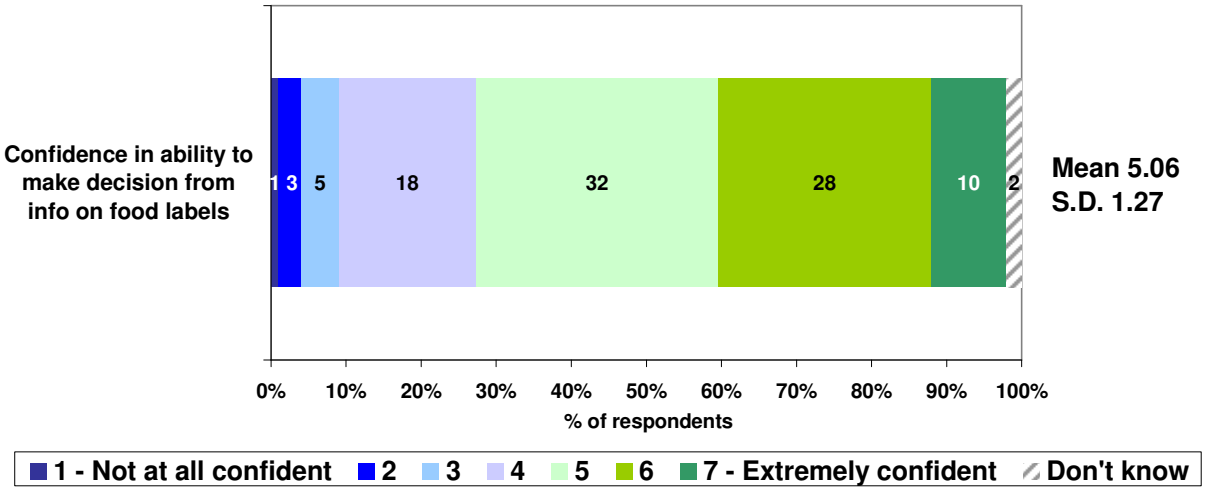
The majority of Australian and New Zealand consumers were confident in their ability to make an informed decision from the information provided on food labels. On a scale of one to seven, where one represented 'not at all confident' and seven 'extremely confident', 70% of Australians and New Zealanders 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)



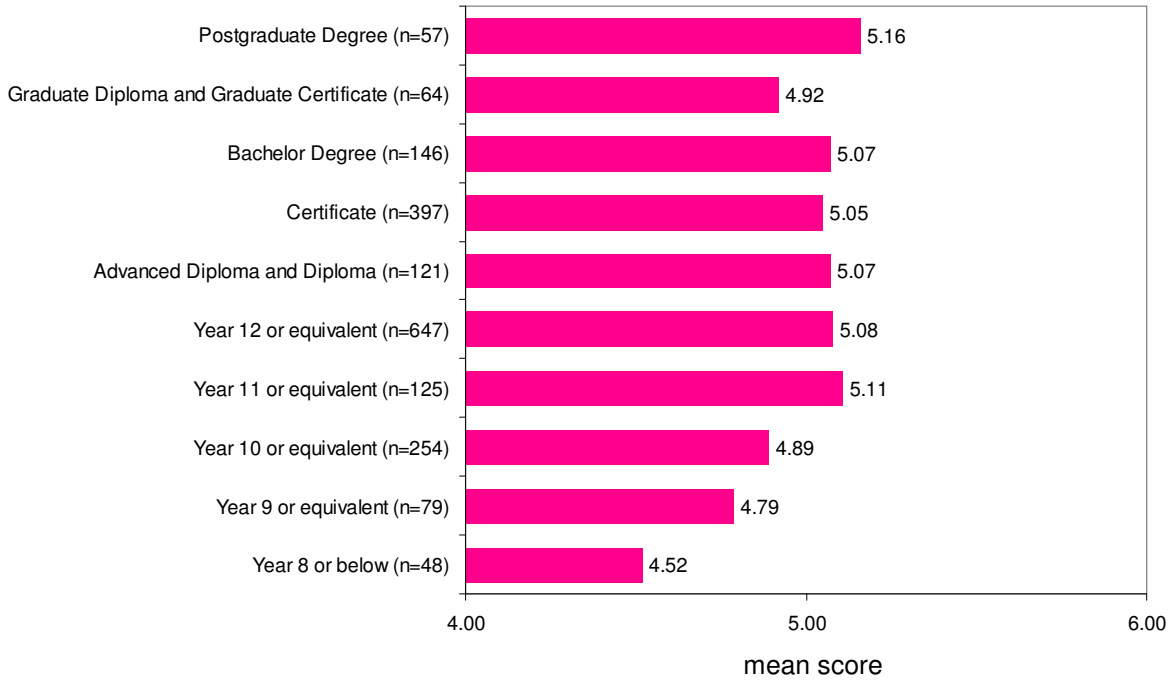
E5. On a scale of 1 to 7, where 1 is "not at all confident" and 7 is "extremely confident", how confident are you in your ability to make an informed decision from the information provided on food labels? ***(please choose the one number that best applies)***
Base: Respondents (n=800) Total may not add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

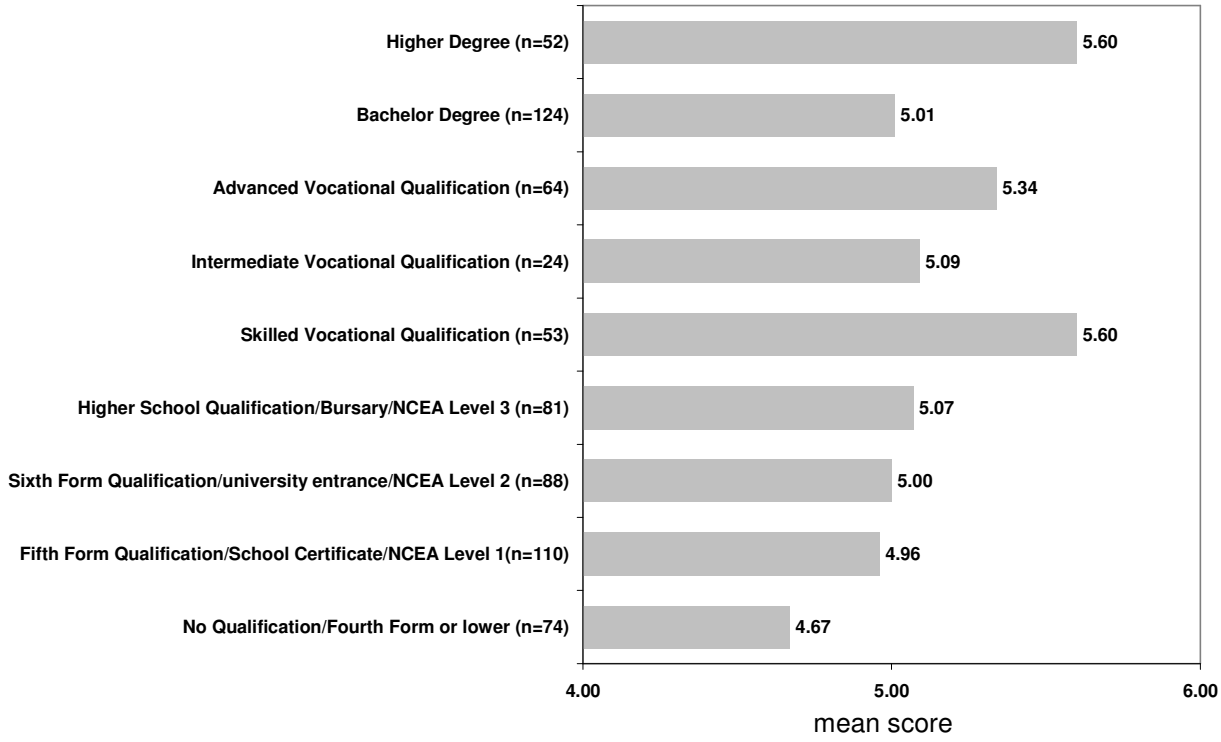


E5. On a scale of 1 to 7, where 1 is "not at all confident" and 7 is "extremely confident", how confident are you in your ability to make an informed decision from the information provided on food labels? ***(please choose the one number that best applies)***
Base: All respondents (base size varies)

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.

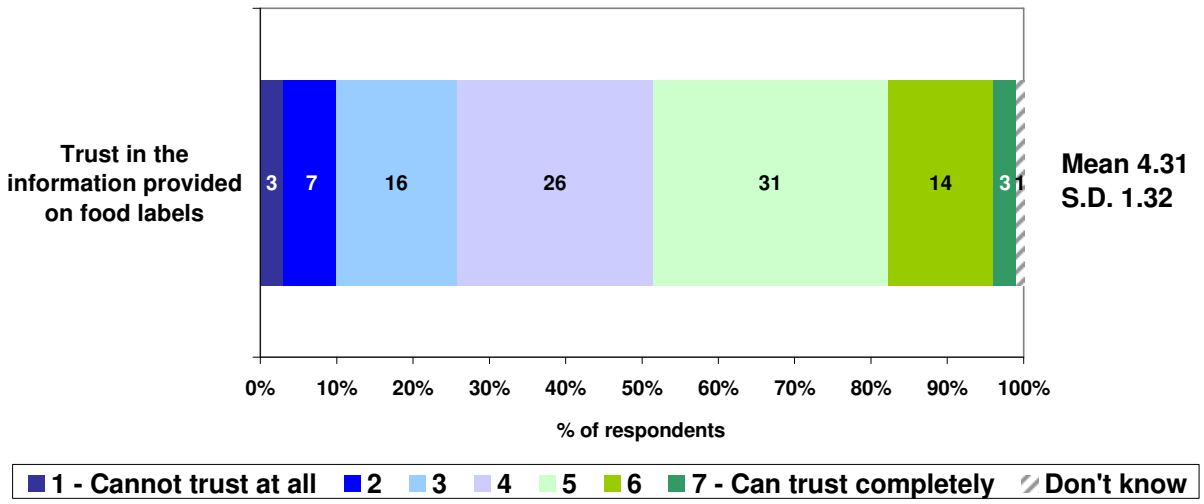
Figure 33: Overall confidence (mean scores) in ability to make an informed decision from food labels by educational attainment (New Zealand)



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)

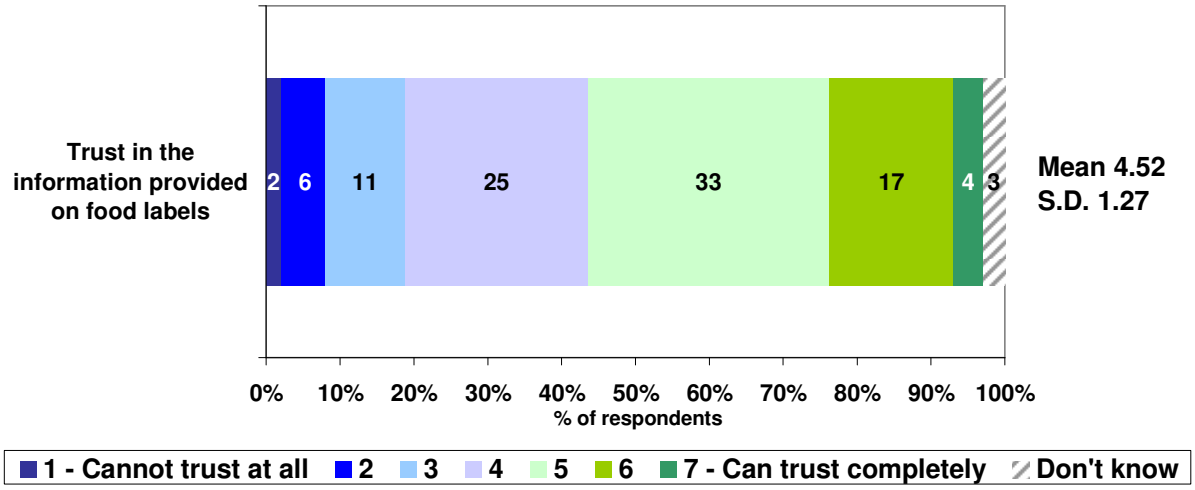
Trust in food labelling was at a lower level than confidence, with Australian consumers significantly less likely to trust the information provided on food labels than New Zealanders. On a scale of one to seven, where one represents 'cannot trust at all' and seven represents 'can trust completely', Australian 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

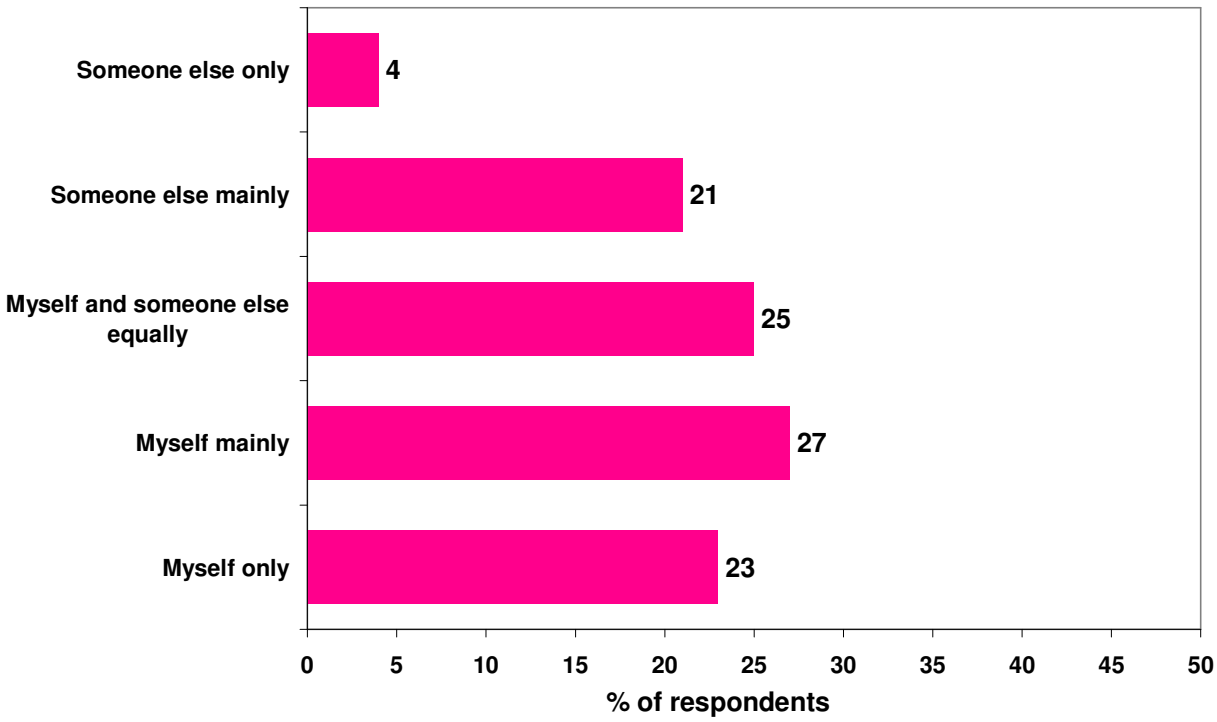
8.1. Note about results

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

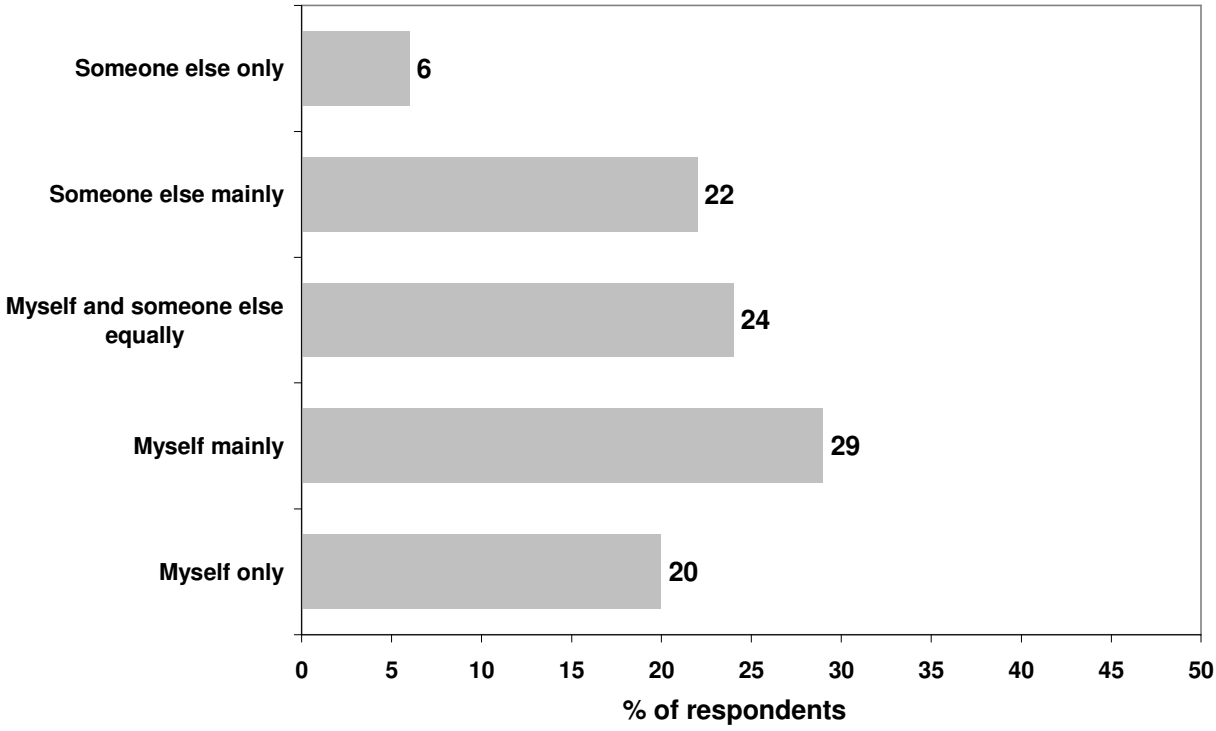
Most respondents (75% in Australia and 73% in New Zealand) had a role in preparing meals in their home, as can be seen in the following figures. As expected, this was more likely among primary grocery buyers, those with higher levels of health consciousness and women.

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)

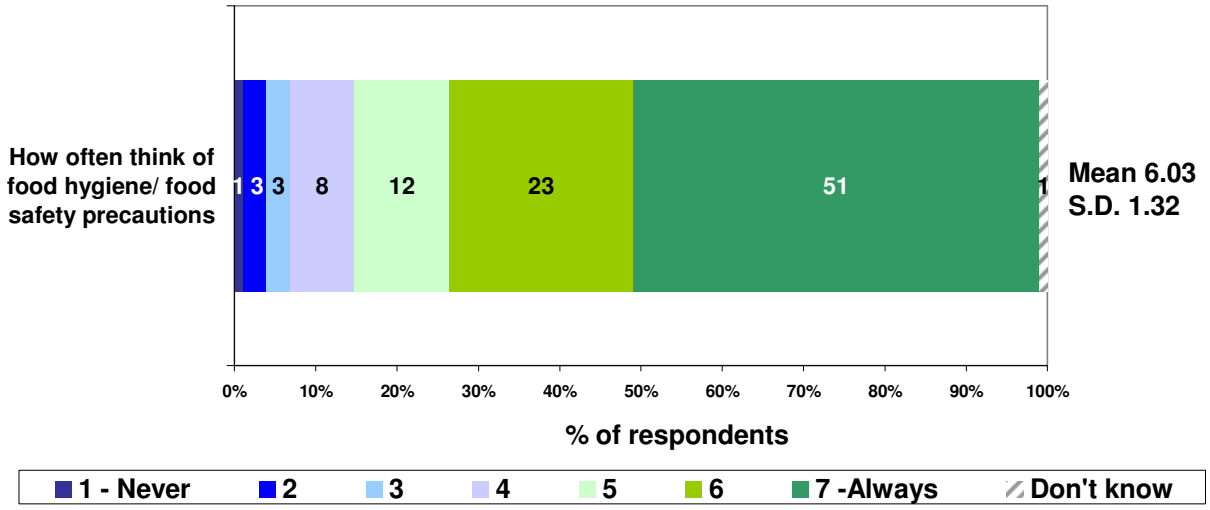


D1. Which of these statements best describes who is responsible for preparing and cooking meals in your household? ***(please select one)*** *Base: All respondents (n=800) Total may not add to 100% due to rounding*

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)

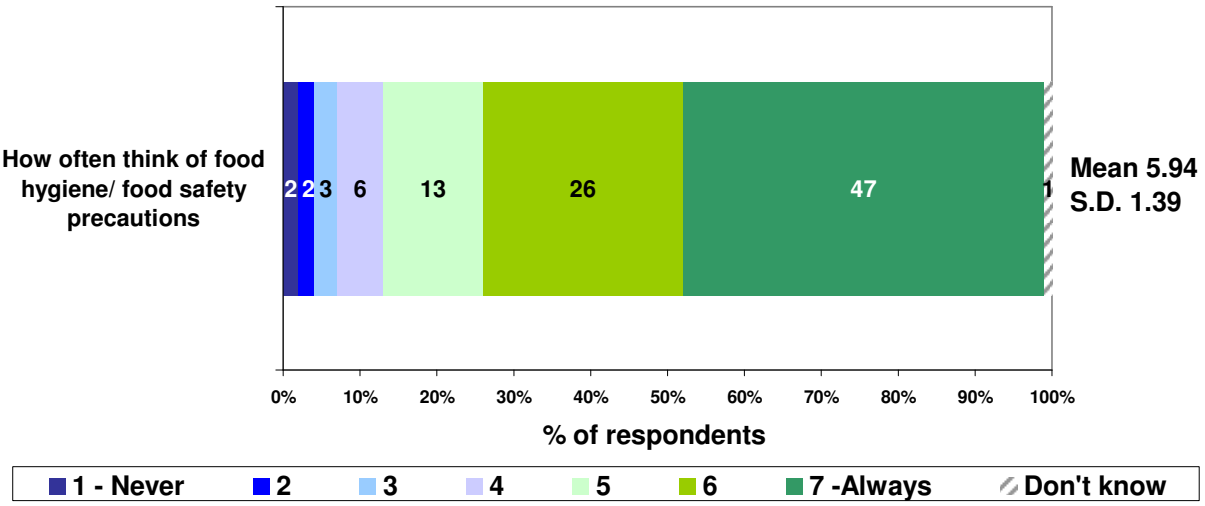


D2.On a scale of 1 to 7, where 1 is "never" and 7 is "always", how often do you consciously think about food hygiene/ safety precautions when preparing food at home? ***(please choose the one number that best applies)***
Base: Respondents partially or wholly involved in food preparation (n=1156) Total 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)



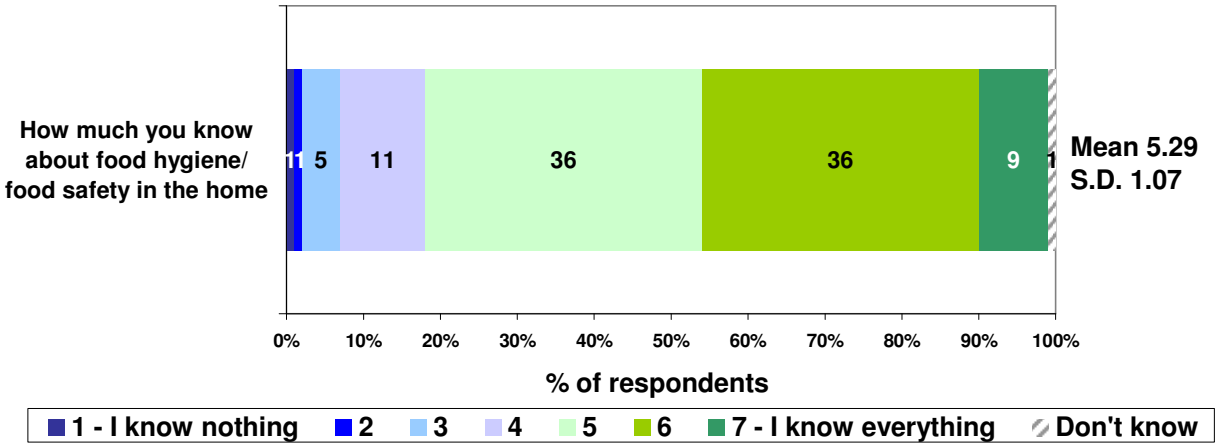
D2.On a scale of 1 to 7, where 1 is "never" and 7 is "always", how often do you consciously think about food hygiene/ safety precautions when preparing food at home? ***(please choose the one number that best applies)***
Base: Respondents partially or wholly involved in food preparation (n=756) Total 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)

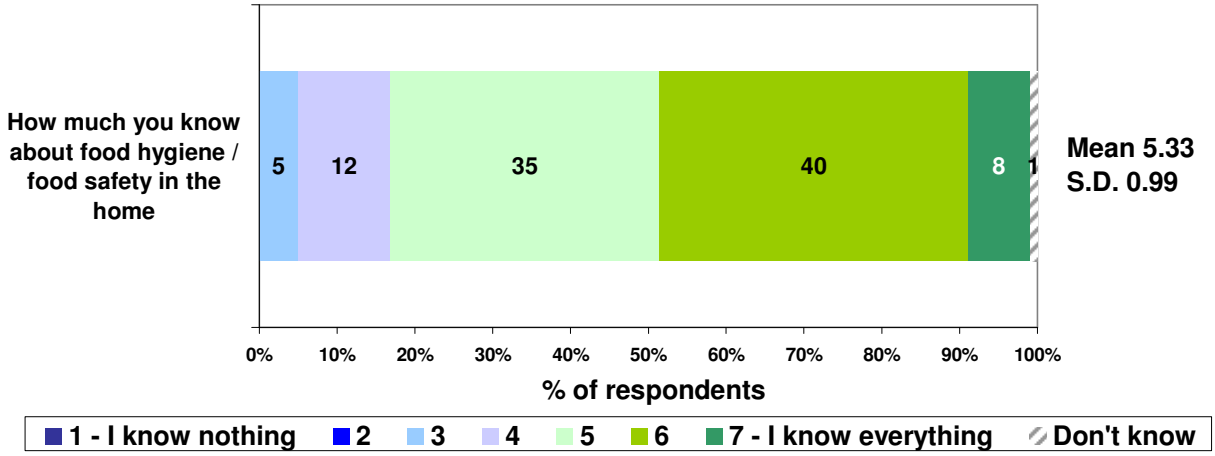


D3.On a scale of 1 to 7, where 1 is "I know nothing at all about food hygiene/food safety" and 7 is "I know everything there is to know about food hygiene/food safety", how much do you believe you know about food hygiene/food safety in the home? ***(please choose the one number that best applies)***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

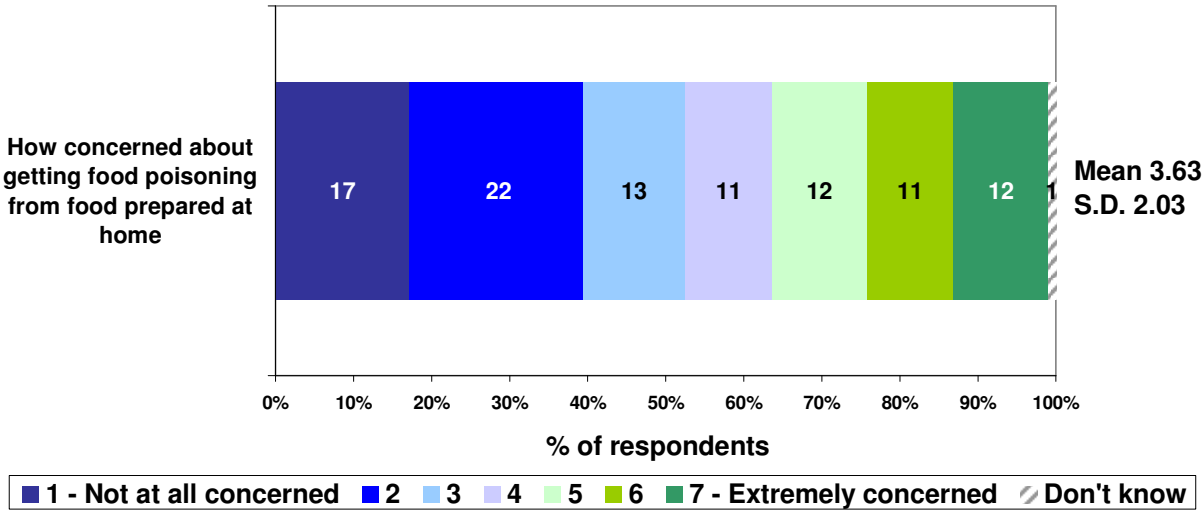
US consumers reported similar levels of knowledge, with nearly 40% of consumers saying that they know a great deal about food safety, and another 44% reporting that they have some knowledge of food safety.[28]

[28] 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)

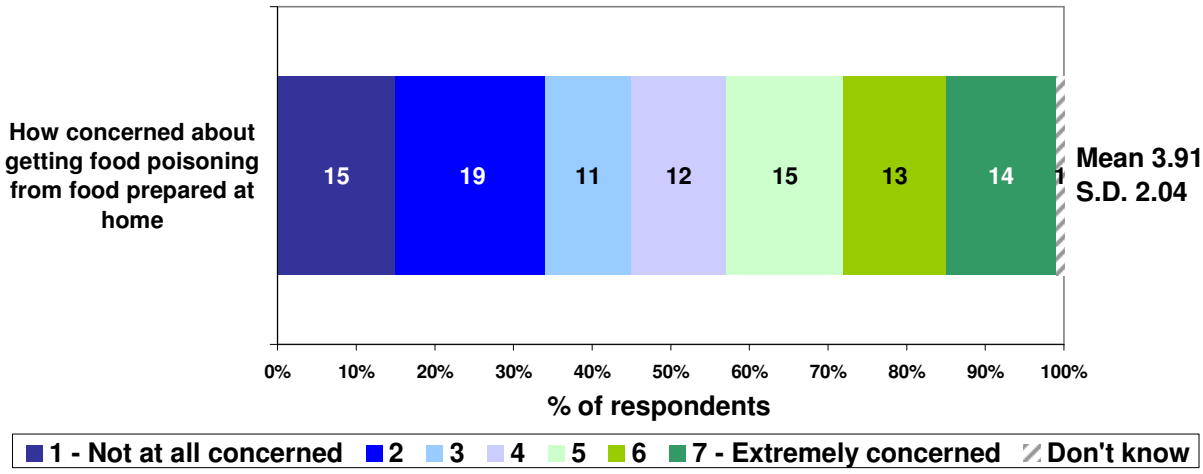


D4. On a scale of 1 to 7, where 1 is "not at all concerned"" and 7 is "extremely concerned", how concerned are you about getting food poisoning from something you or anyone else has prepared and eaten at home? ***(please choose the one number that best applies)***
Base: All respondents (n=1202) Total 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)



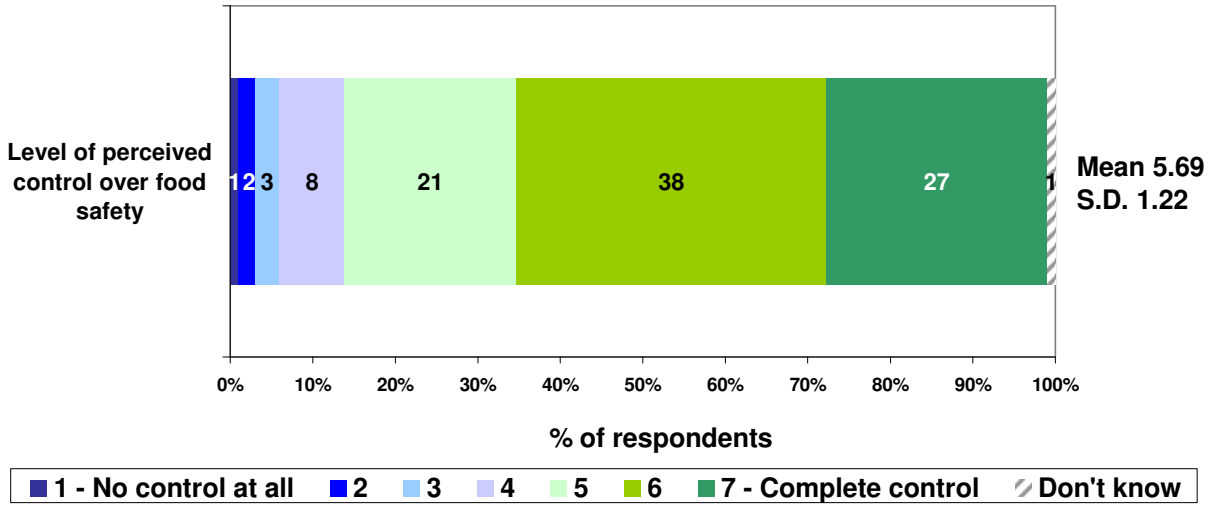
D4. On a scale of 1 to 7, where 1 is "not at all concerned" and 7 is "extremely concerned", how concerned are you about getting food poisoning from something you or anyone else has prepared and eaten at home? ***(please choose the one number that best applies)***
Base: All respondents (n=800) Total may 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)

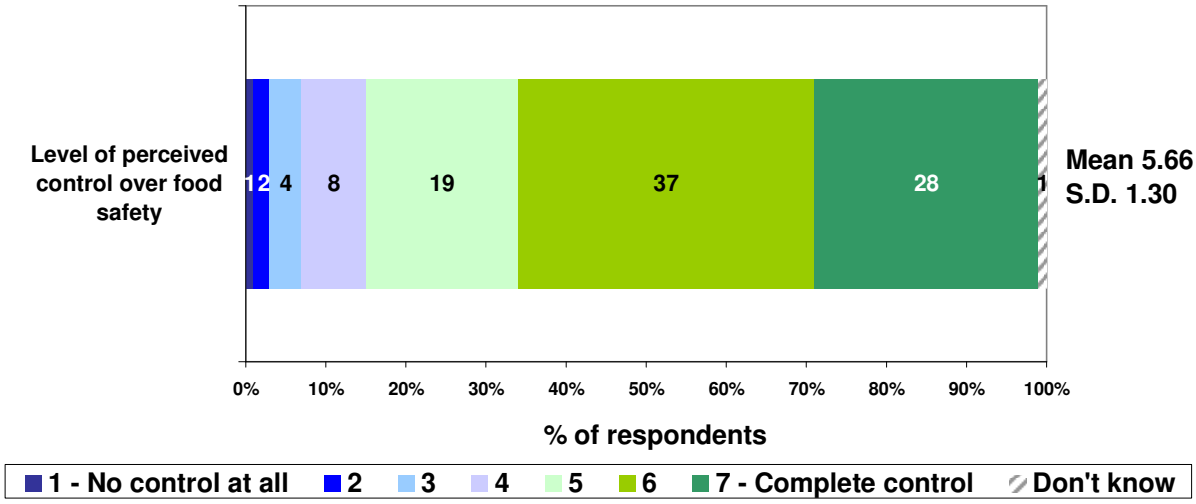


D5. On a scale of 1 to 7, where 1 is "no control at all" and 7 is "complete control", how much control do you think that you have over the food hygiene/food safety in your household in the preparation of food when eating at home? ***(please choose the one number that best applies)***
Base: All respondents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



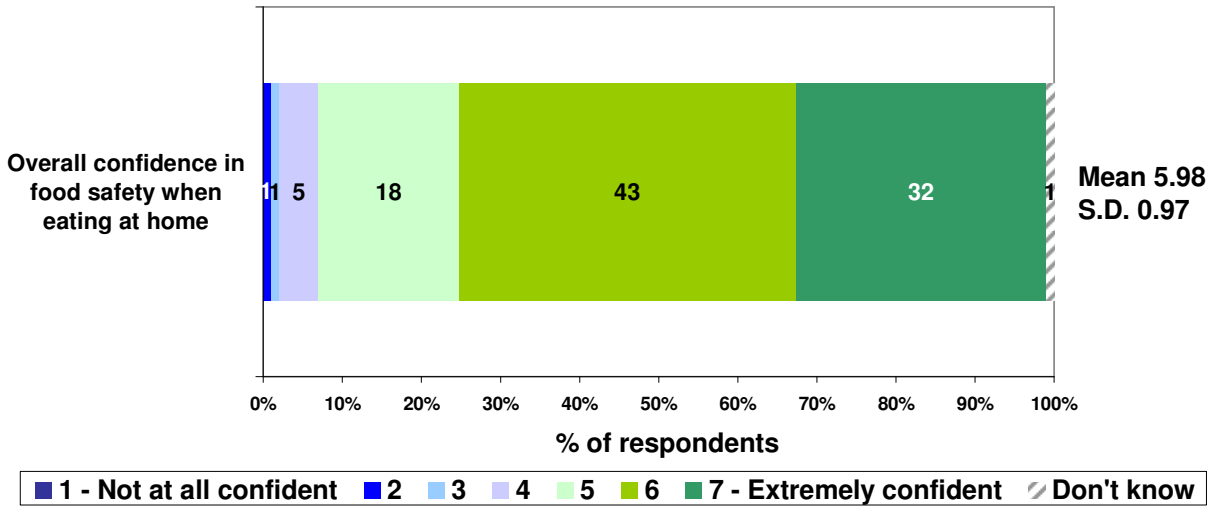
D5. On a scale of 1 to 7, where 1 is "no control at all" and 7 is "complete control", how much control do you think that you have over the food hygiene/food safety in your household in the preparation of food when eating at home? ***(please choose the one number that best applies)***
Base: All respondents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

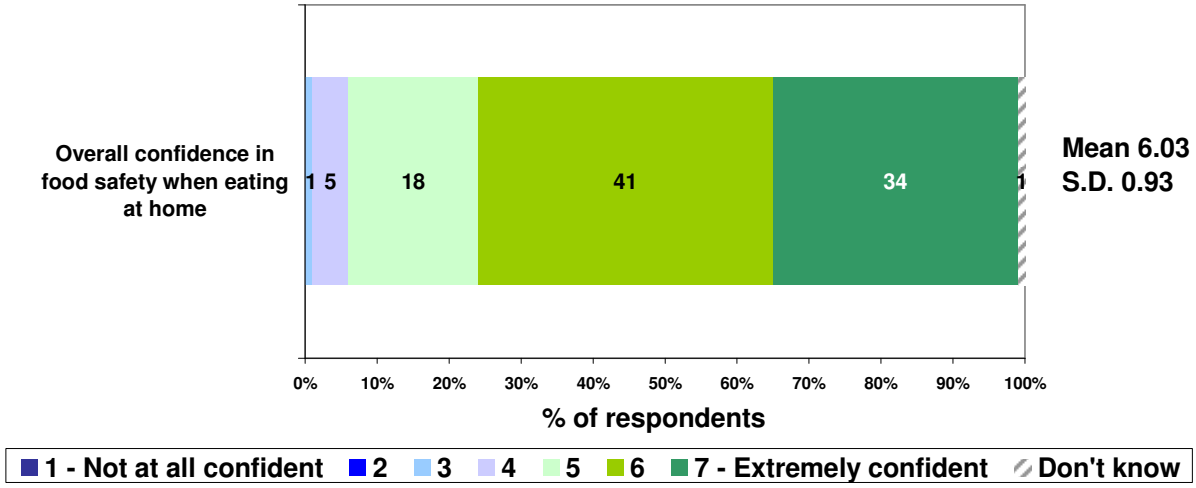


D6. On a scale of 1 to 7, where 1 is "not at all confident" and 7 is "extremely confident", how confident are you that food hygiene/food safety precautions in your household are sufficient in the preparation of food when eating at home? ***(please choose the one number that best applies)*** *Total may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

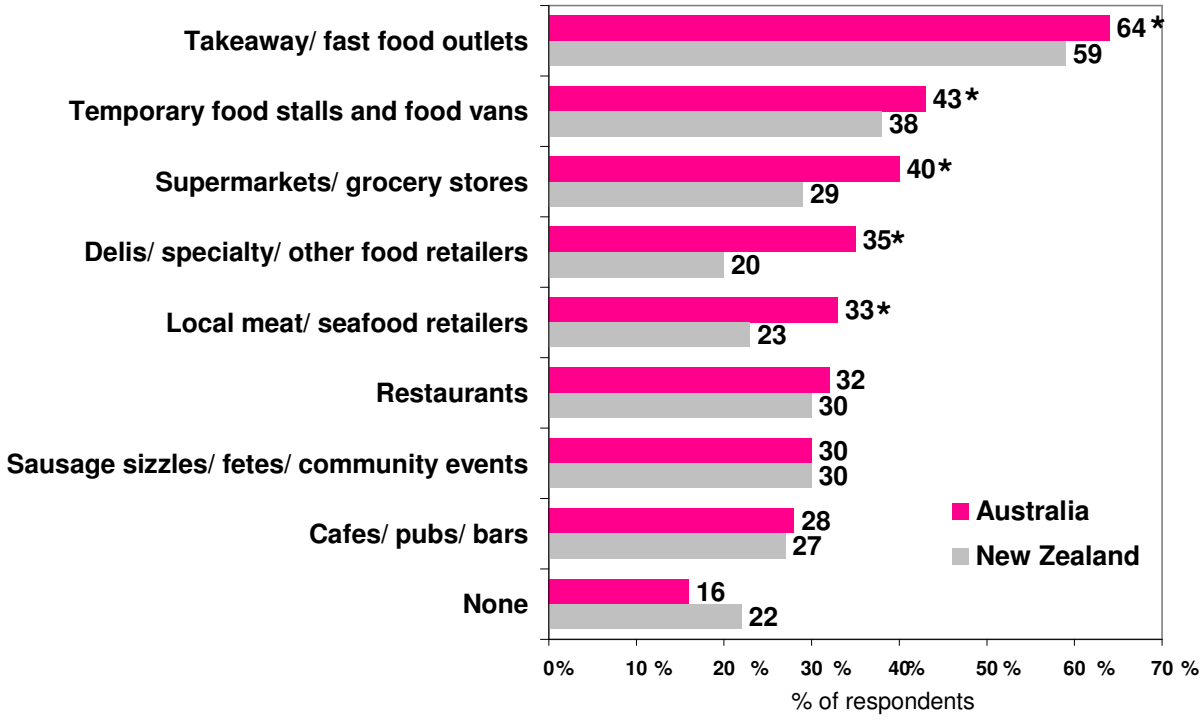
Main grocery buyers reported a significantly higher level of confidence (mean 6.09, S.D. 0.88) than non-main grocery buyers (mean 5.80, S.D. 1.08). Those with particular food concerns had a significantly higher level of confidence (mean 6.06, S.D. 0.90) than those with no particular food concerns (mean 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[29].

[29] 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
Base:All respondents (n=750)	%	%	%	%	%	%	%	%
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.[30]

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.[31]

[30] Consumer Attitudes to Food Standards, Food Standards Agency UK, 2007 (See Appendix G, Table 50)

[31] Special Eurobarometer 2005 – Risk Issues, European Food Safety Authority, 2005 (See Appendix G, Table 51)

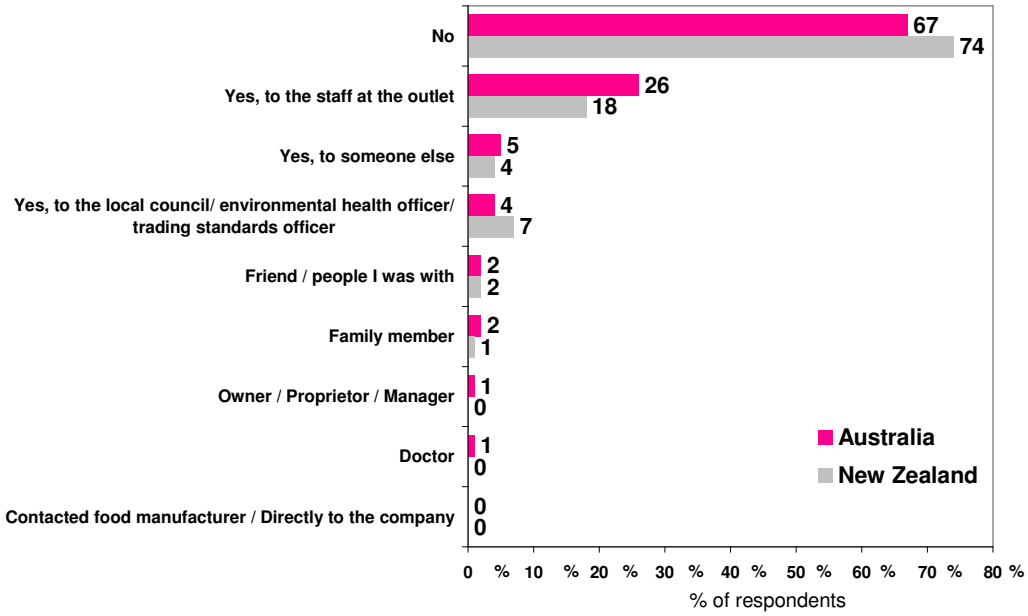
Just over one third (37%) of Irish consumers were concerned about food safety at supermarkets and 49% were concerned about the food safety of food received in restaurants, cafes and hotels, which is lower than results for Australian and New Zealand respondents. [32]

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[33]. Irish consumers were slightly more likely to have reported their concerns, with 40% saying they had done so.[34]

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.

[32] Consumer Attitudes to Food Safety in Ireland, Food Safety Authority of Ireland, 2003 (See Appendix G, Table 52)

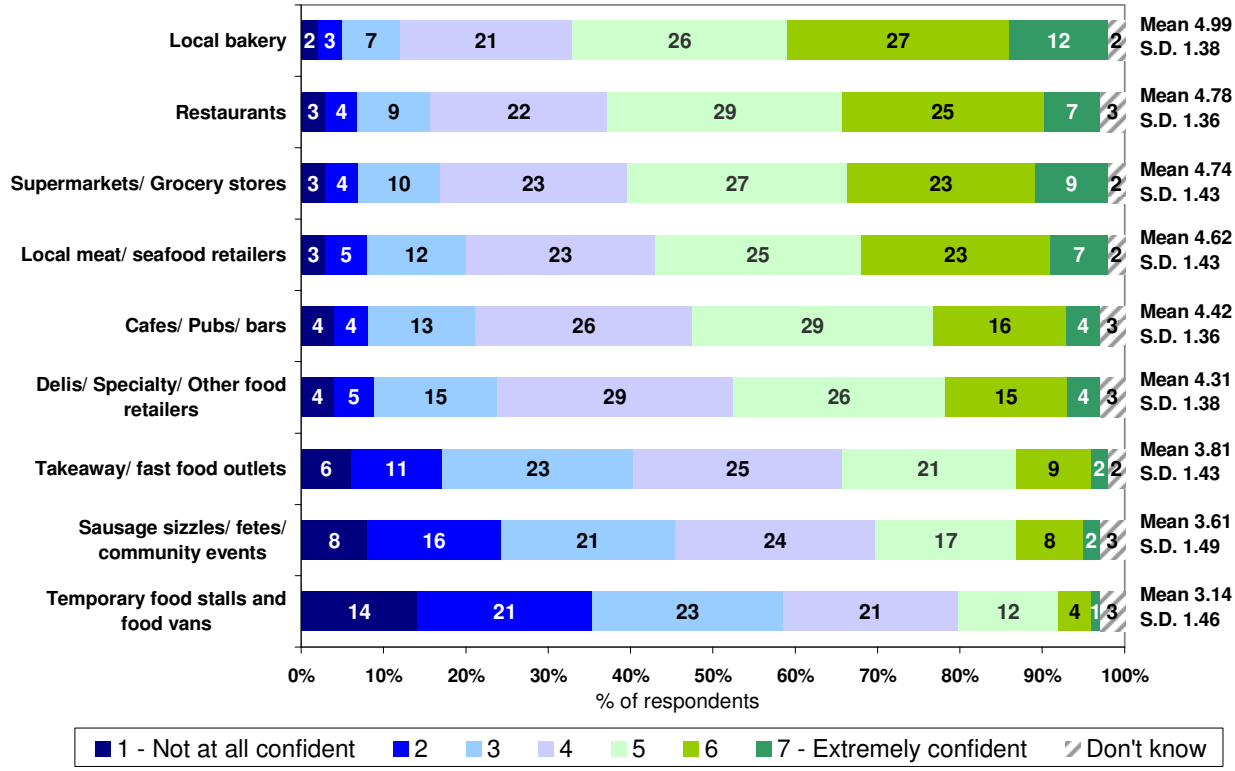
[33] Consumer Attitudes to Food Standards, Food Standards Agency UK, 2007 (See Appendix G, Table 53)

[34] 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

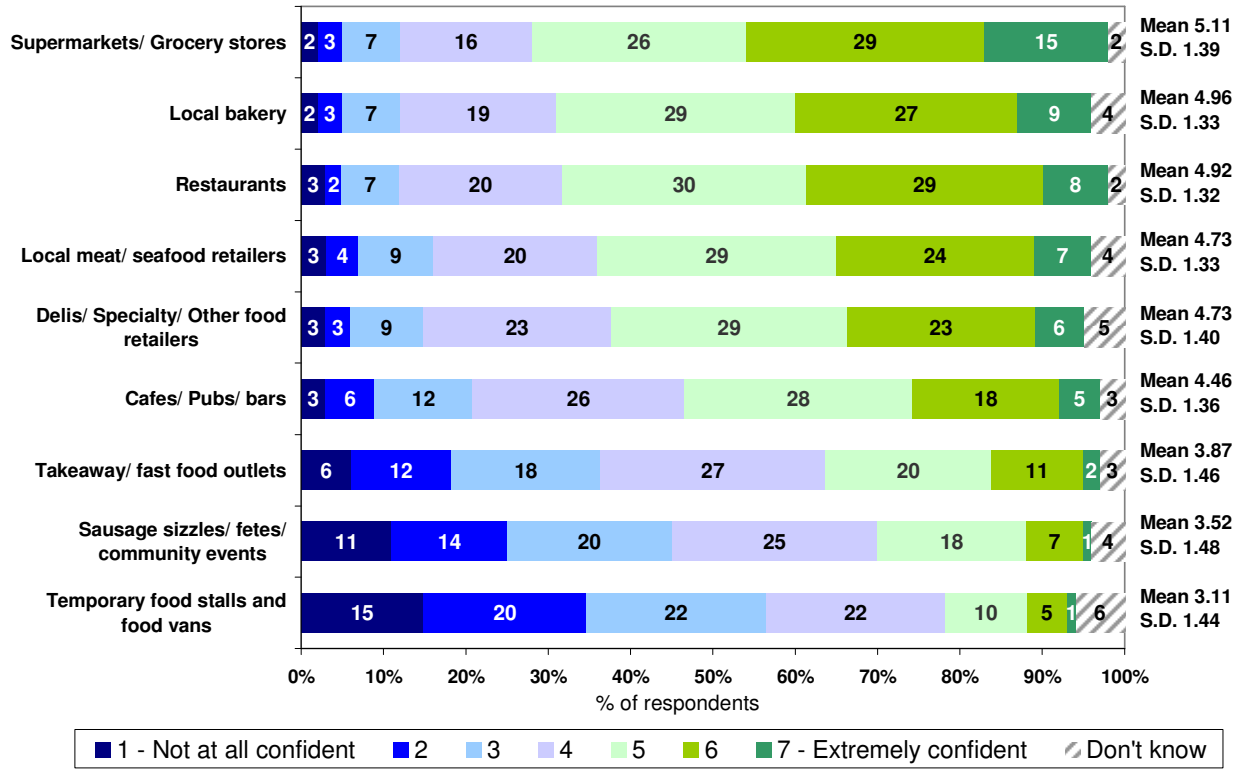
On a scale of one to seven, where one is 'not at all confident' and seven is 'extremely confident', confidence in food hygiene/food safety precautions at different outlets was overall quite low, with no type of food outlet achieving a mean score of five or more, except for confidence in food safety at 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)



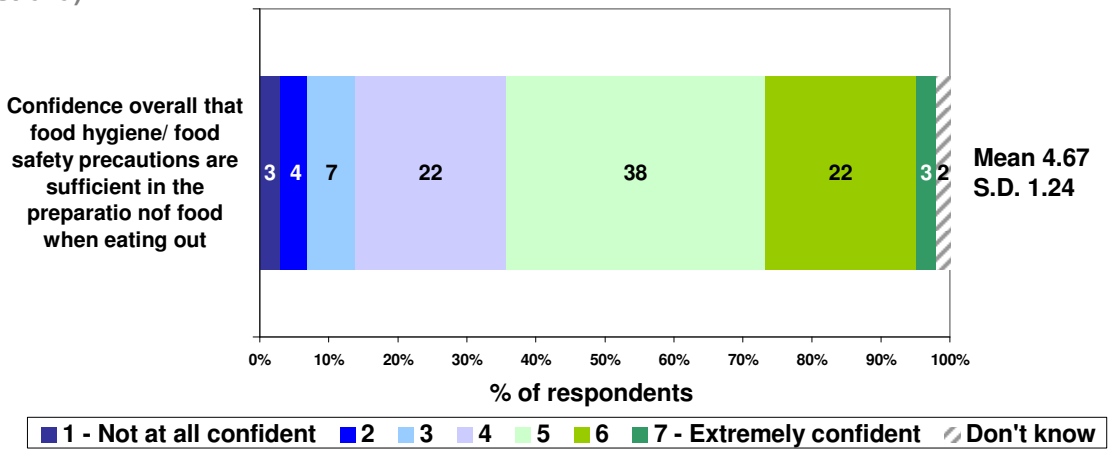
D9. On a scale of 1 to 7, where 1 is "not at all confident" and 7 is "extremely confident", how confident are you that food hygiene/food safety precautions are sufficient in the preparation of food when eating out or purchasing food at each of the following places? ***(please choose the one number that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

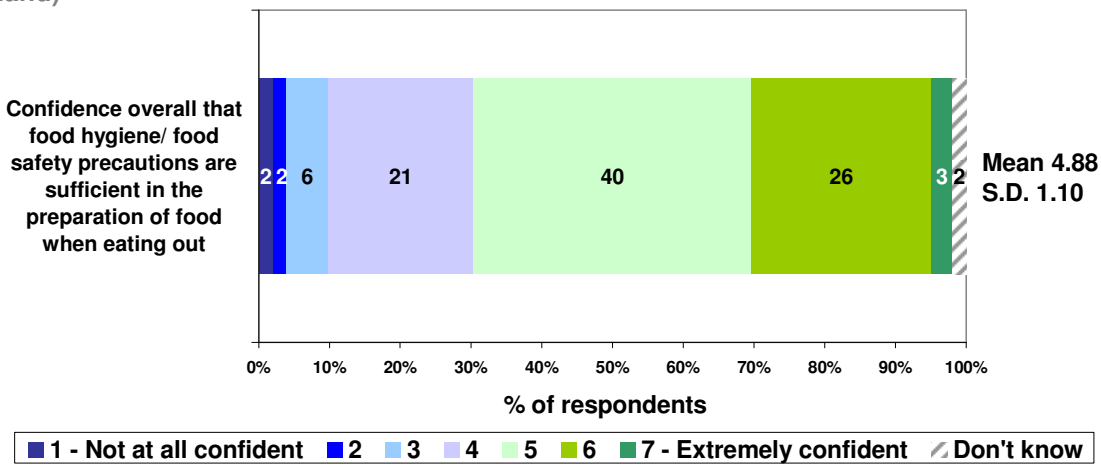
On a scale of one to seven, where one is 'not at all confident' and seven is 'extremely confident', respondents were asked to rate their overall confidence that food hygiene/food safety precautions were sufficient when eating out. The mean score for this variable was 4.67 (S.D. 1.24) for Australian respondents 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

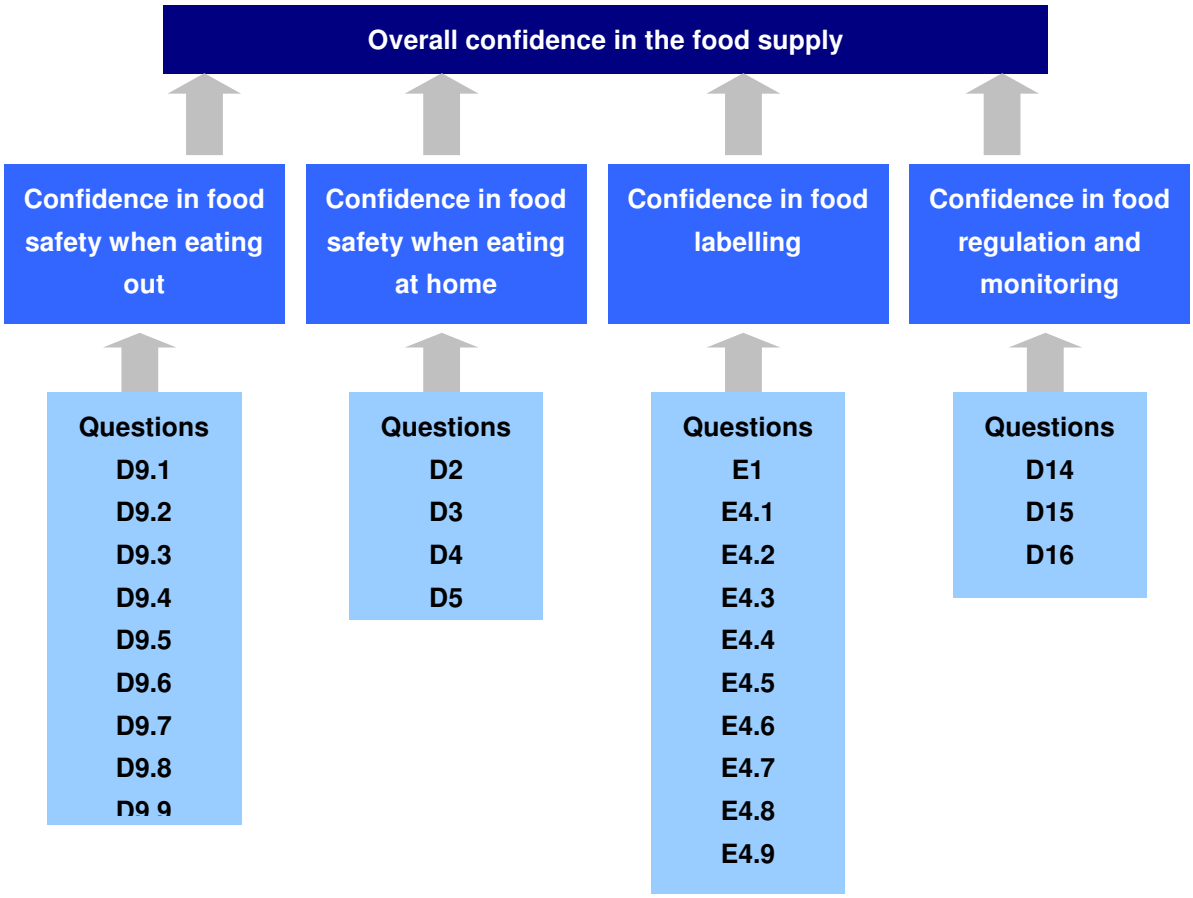
10. Regression Models

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.

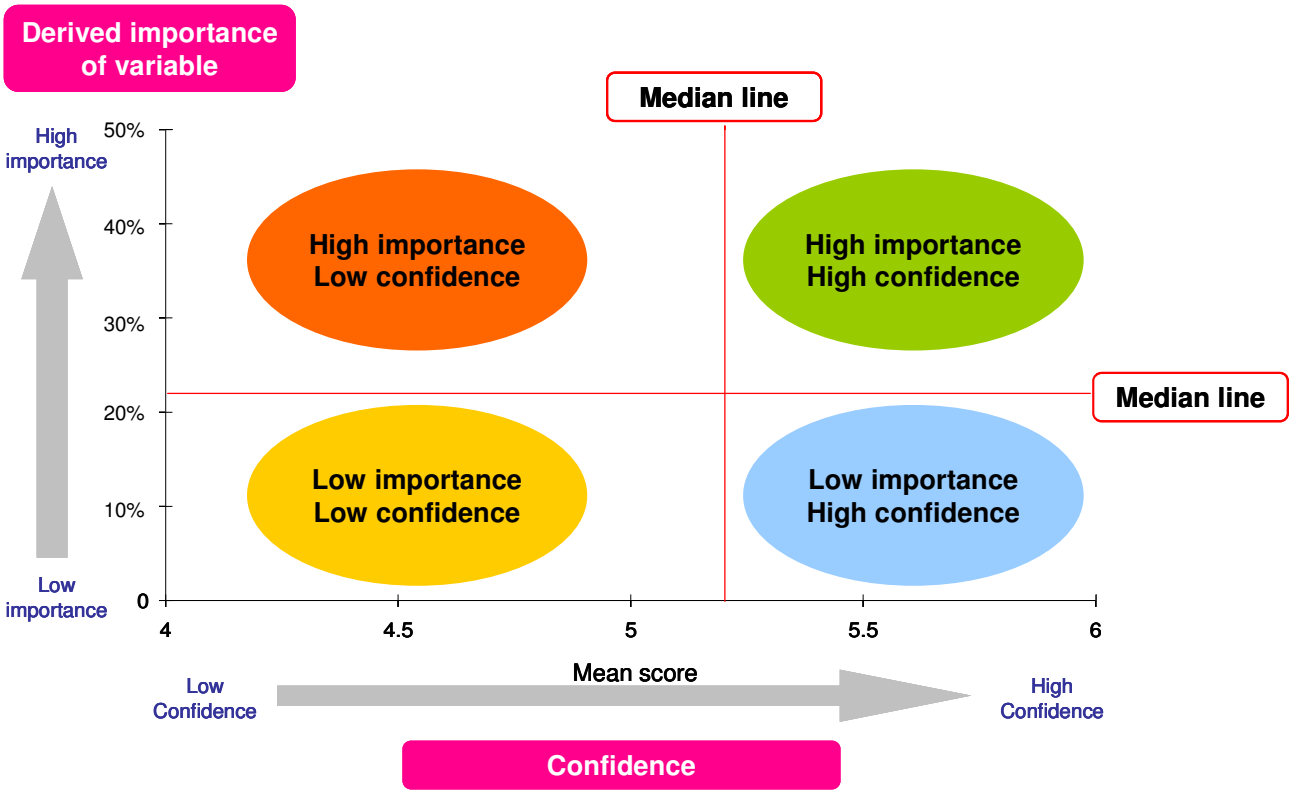
More information about this technique can be found in Appendix F of this report.

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

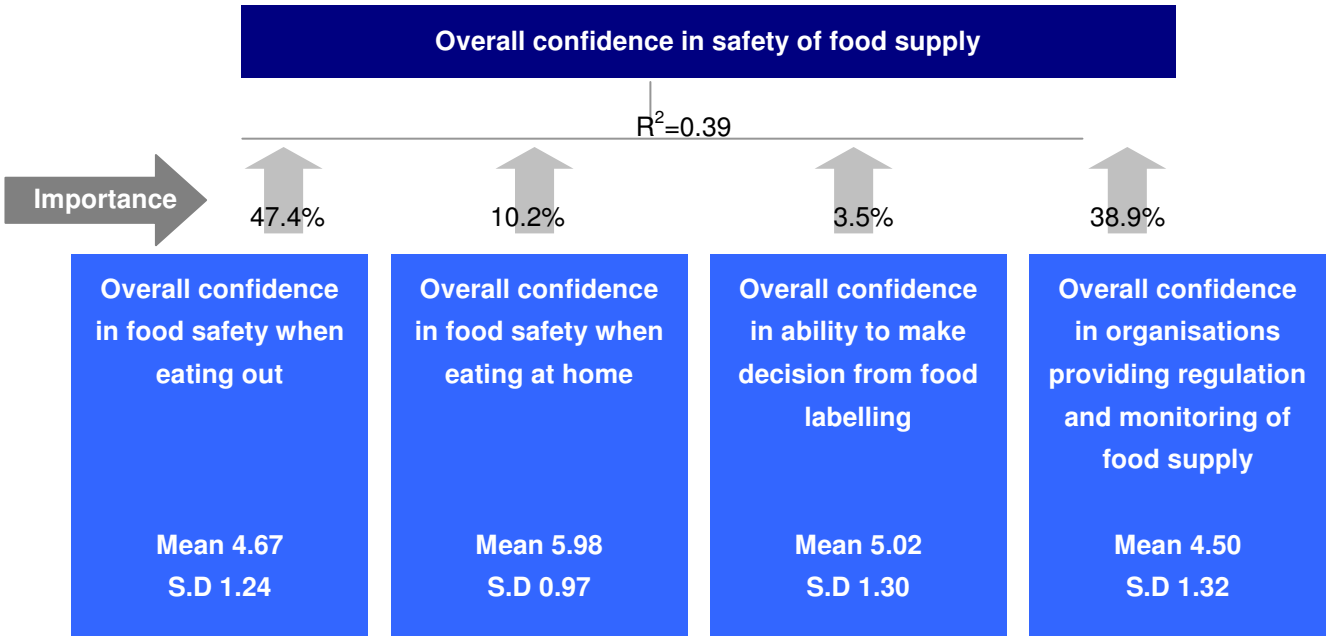
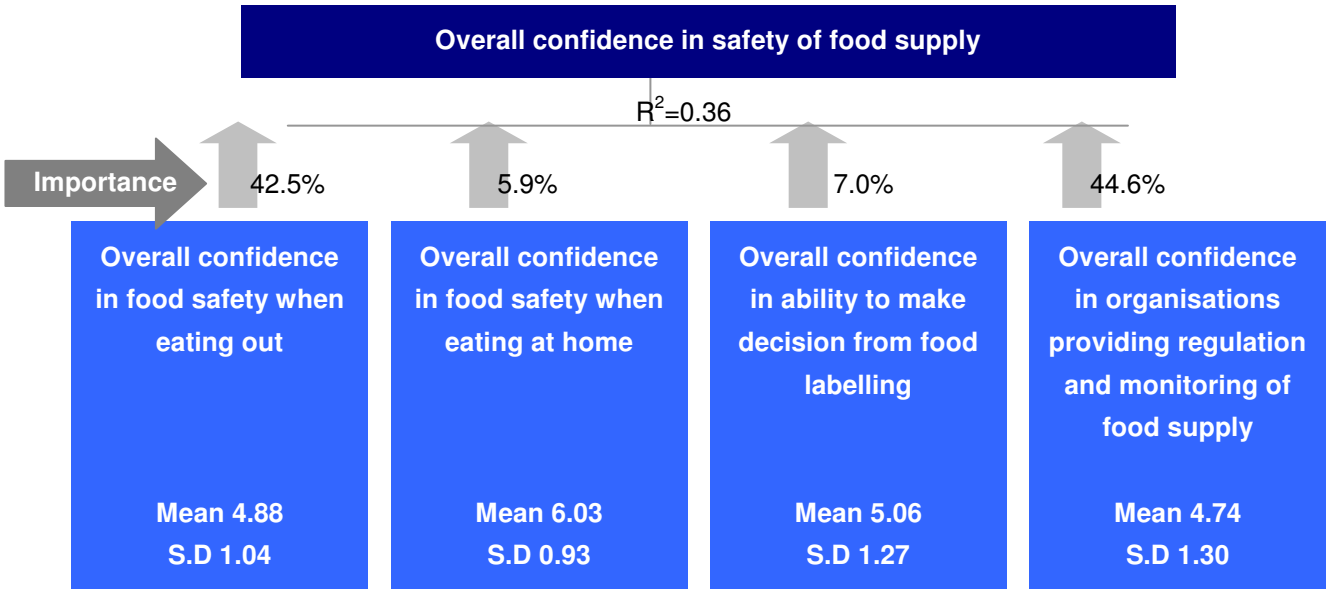


Figure 57: First level regression model, New Zealand



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.

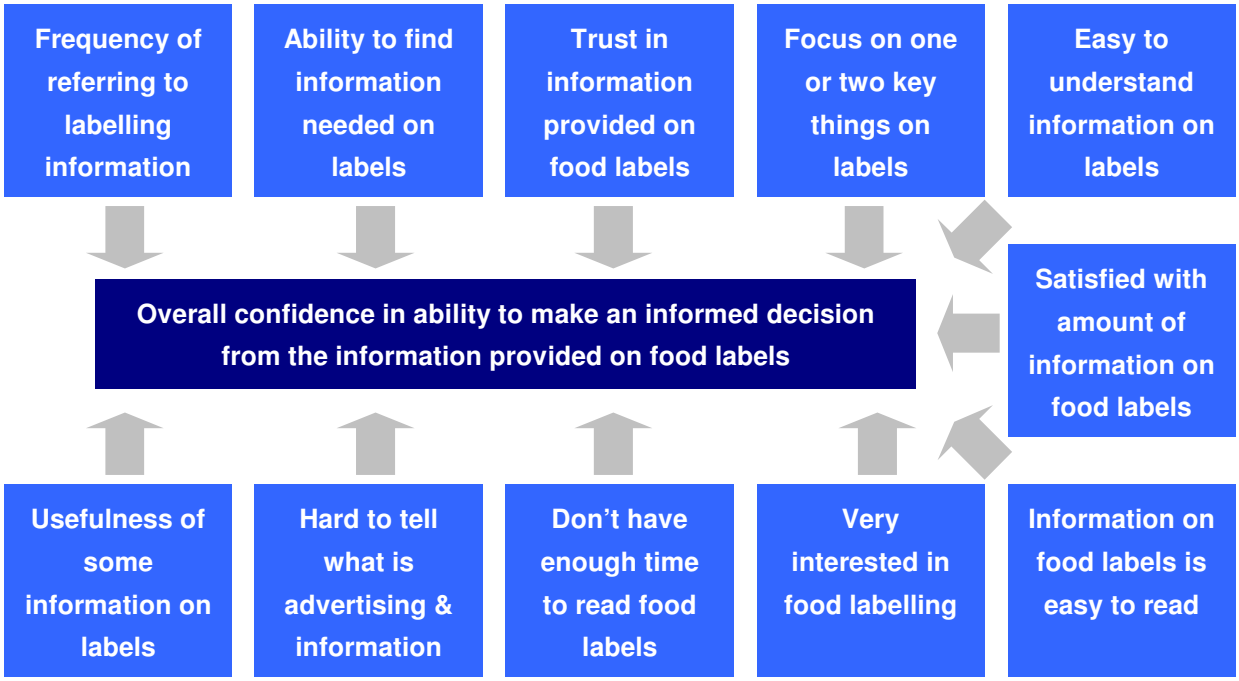
10.2. Regression model for food regulation and monitoring

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

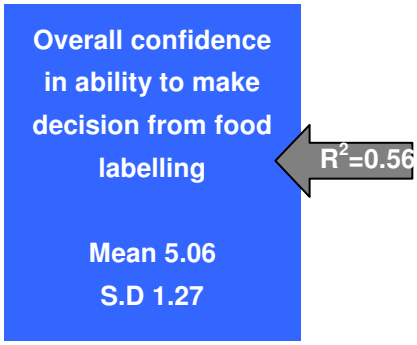
The overall dependent variable for food labelling was 'confidence in ability to make an informed decision from the information provided on food labels'. A number of independent variables were then modelled against this, as depicted in Figure 58.

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



	Section impact (%)
Refer to labelling information	14.7
I've always been able to find any information I need on a food or drink label	10.3
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	7.2
Generally speaking, it's easy to understand and use the information on food labels	19.2
I find some information on food labels really useful or important	3.8
It's hard to tell which parts of the label are advertising (reverse coded)	3.2
I don't have enough time to read food labels when I'm shopping (reverse coded)	2.8
I'm very interested in food label information	4.5
I find that information on food labels is easy to read	4.5
I'm satisfied with the amount of information provided on food labels	0
Trust in the information in food labels	29.6

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

High importance Low confidence

- Easy to understand
- Can find information I need
- Trust information on labels

Low importance Low confidence

- Hard to tell if advertising or information
- Easy to read
- Satisfied with amount of information

High importance High confidence

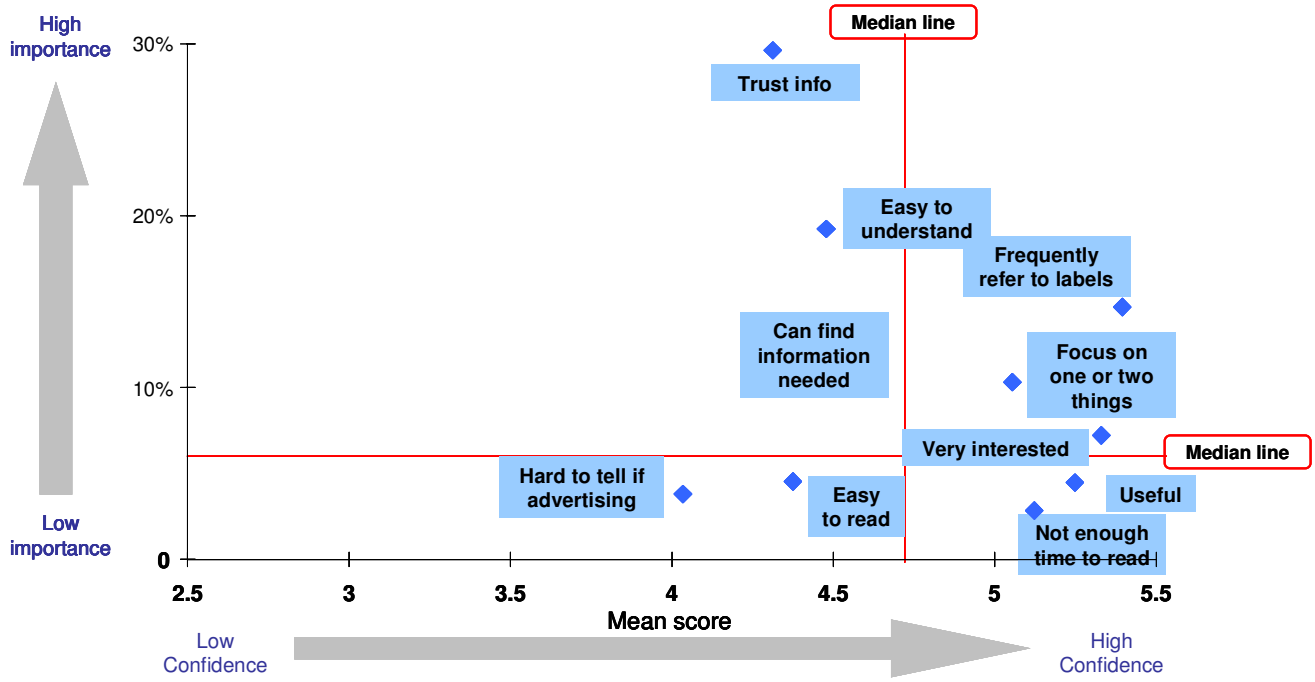
- Focus on one or two things
- Very interested in information on labels
- I frequently refer to food labels

Low importance High confidence

- Not enough time to read
- Useful information

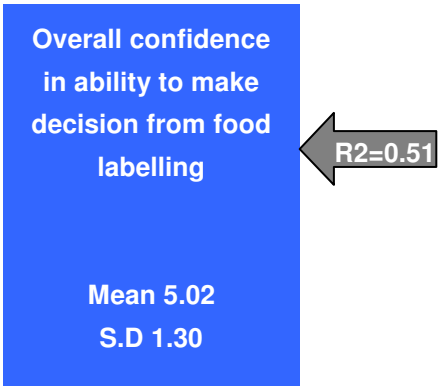
These results can be seen in Figure 60.

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



	Section impact (%)
Refer to labelling information	13.9
I've always been able to find any information I need on a food or drink label	0
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	9.4
Generally speaking, it's easy to understand and use the information on food labels	30.8
I find some information on food labels really useful or important	0
It's hard to tell which parts of the label are advertising (reverse coded)	2.0
I don't have enough time to read food labels when I'm shopping (reverse coded)	3.9
I'm very interested in food label information	0
I find that information on food labels is easy to read	0
I'm satisfied with the amount of information provided on food labels	7.7
Trust in the information in food labels	32.3

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

High importance Low confidence

- Easy to understand
- Trust information on labels

Low importance Low confidence

- Hard to tell if advertising or information
- Satisfied with amount of information

High importance High confidence

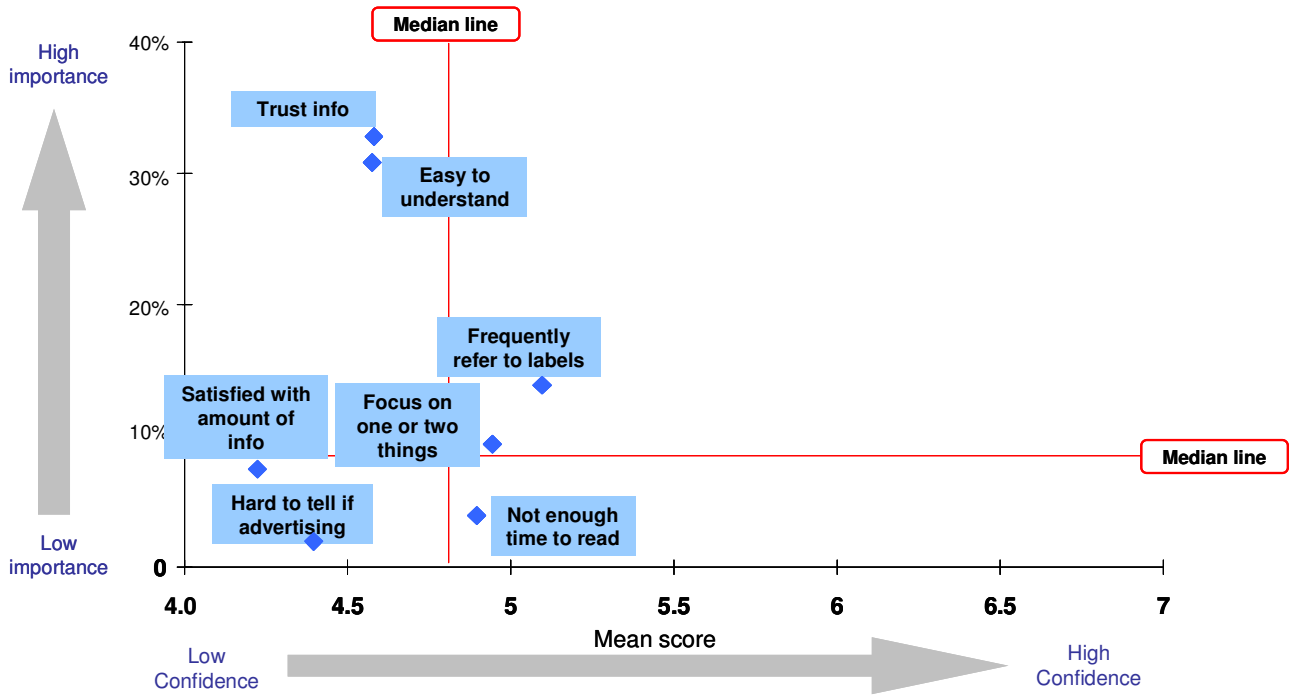
- Focus on one or two things
- I frequently refer to food labels

Low importance High confidence

- Not enough time to read

These results can be seen in Figure 62.

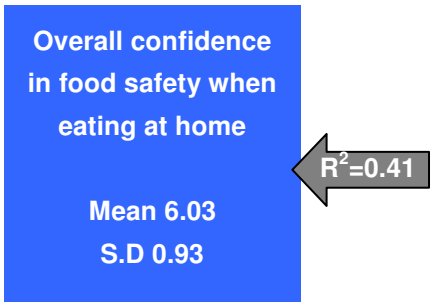
Figure 62: Confidence in labelling – New Zealand



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



	Section impact (%)
Amount of attention paid to food safety	18.1
Knowledge about food safety	26.2
Level of concern about food safety	15.5
Level of perceived control over food safety	40.2

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

- Knowledge about food safety
- Concern about food safety
- Control over food safety in the home
- Attention paid to food safety

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

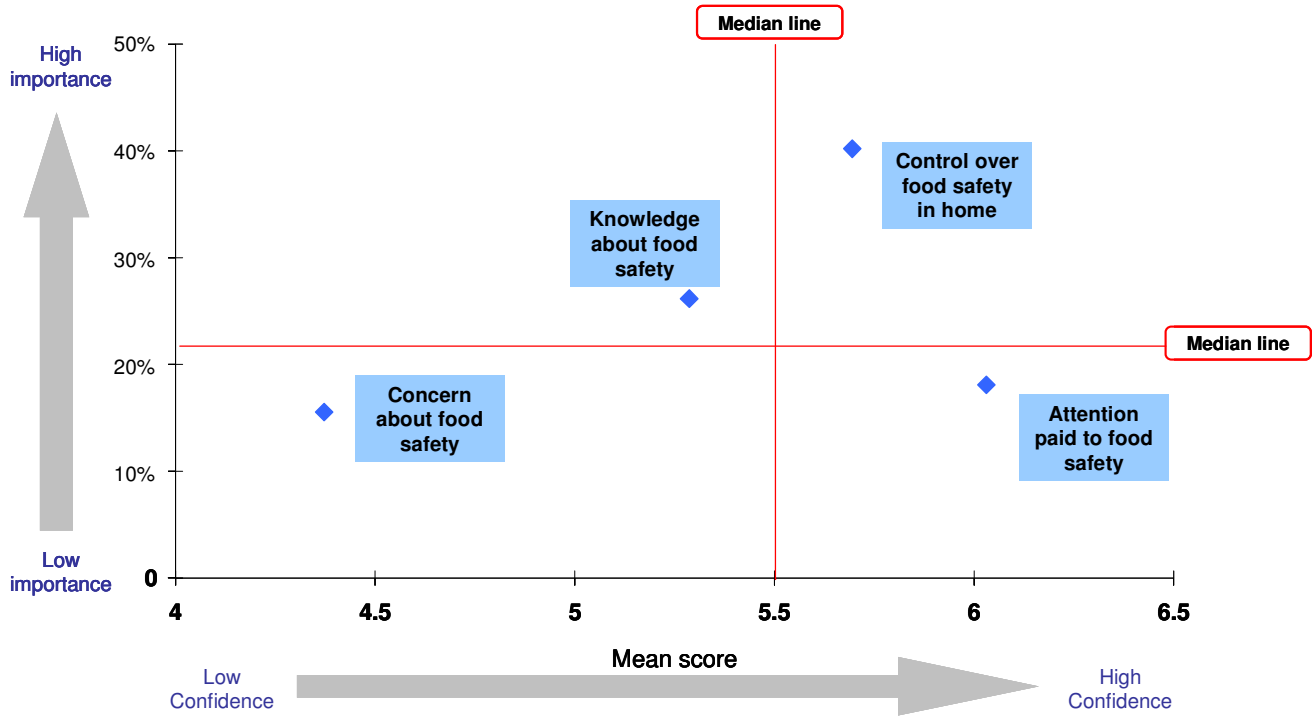
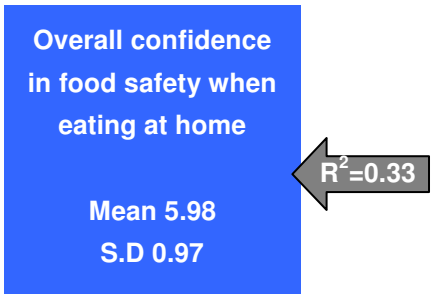


Figure 65: Second level regression model, food safety when eating at home, New Zealand



	Section impact (%)
Amount of attention paid to food safety	10.3
Knowledge about food safety	42.4
Level of concern about food safety	17.0
Level of perceived control over food safety	30.3

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

High importance Low confidence

- Knowledge about food safety

Low importance Low confidence

- Concern about food safety

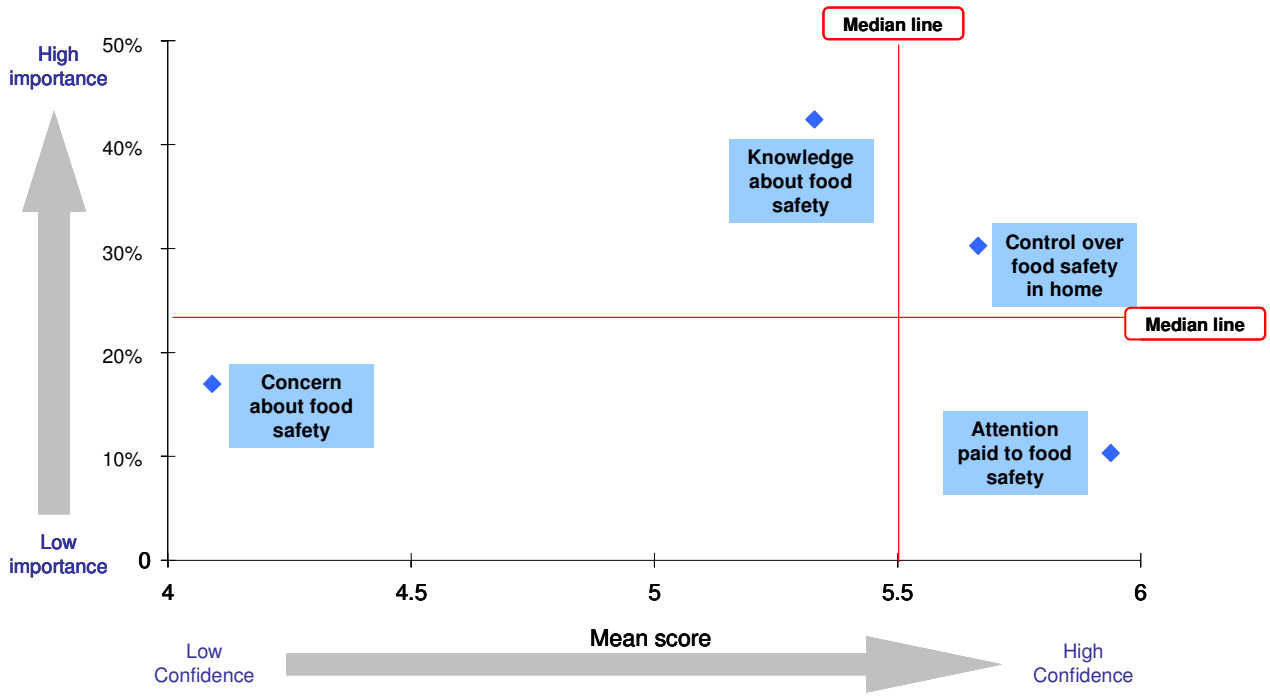
High importance High confidence

- Control over food safety in the home

Low importance High confidence

- Attention paid to food safety

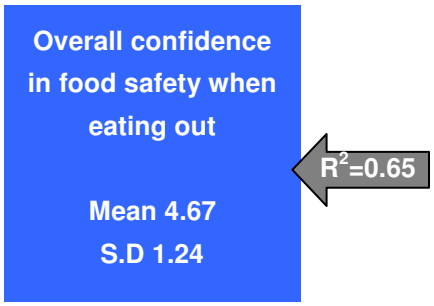
Figure 66: Confidence in food safety when eating at home – New Zealand



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

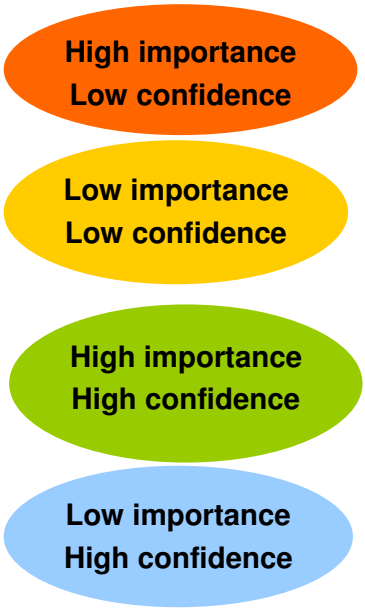
The regression model for food safety when eating outside the home shows that confidence in food safety precautions at different food locations strongly explains overall confidence in food safety when eating out, and that restaurants have the strongest impact on overall confidence in food safety when 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



Confidence of food safety precautions at:	Section impact (%)
Restaurants	33.0
Takeaway outlets	14.5
Cafes/Pubs/Bars	12.5
Supermarkets/grocery stores	9.7
Local meat/seafood retailers	9.5
Local Bakery	7.7
Temporary Food Stalls	7.5
Delis/speciality stores	4.9
Sausage Sizzles, fetes etc	0.7

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



- Takeaway outlets

- Temporary food stalls
- Sausage sizzles, fetes etc
- Delis, speciality retailers

- Restaurants
- Cafes pubs bars
- Supermarkets

- Meat/seafood retailers
- Bakery

These results can be seen in Figure 68.

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

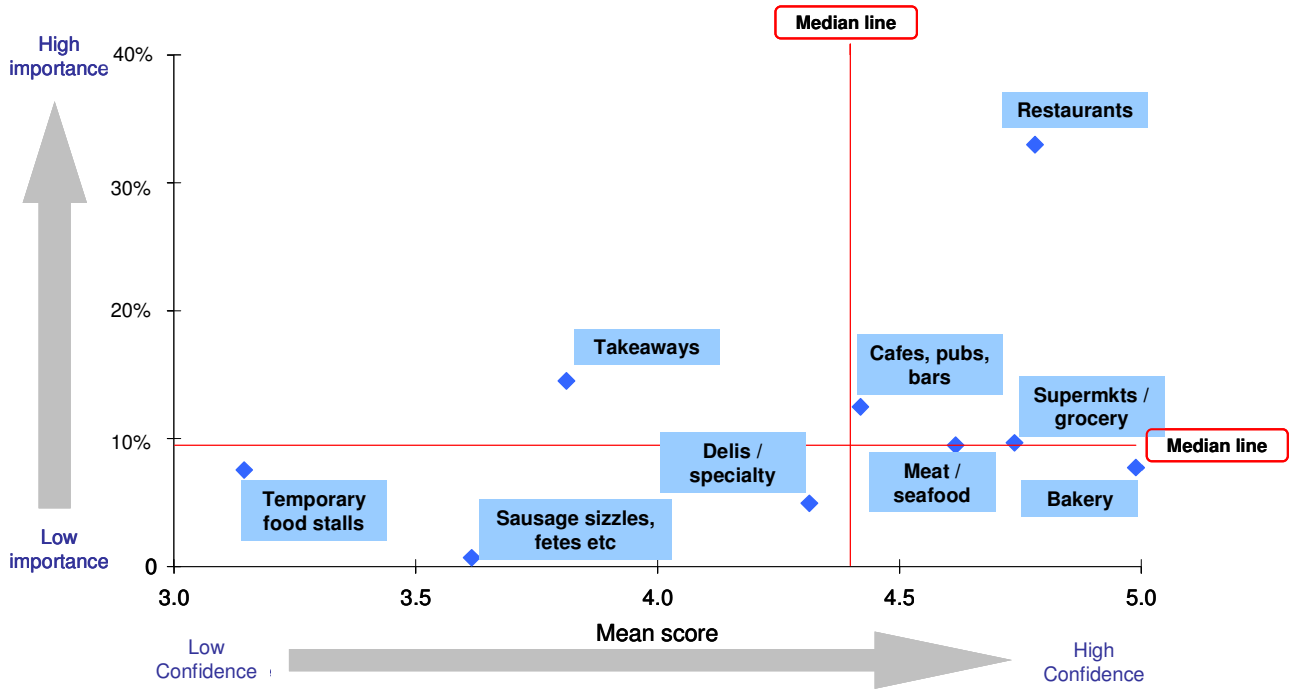


Figure 69: Second level regression model, food safety when eating out, New Zealand

Overall confidence in food safety when eating out

Mean 4.88
S.D 1.04

R^2=0.63

Confidence of food safety precautions at:	Section impact (%)
Restaurants	33.5
Takeaway outlets	14.9
Delis/speciality stores	11.2
Supermarkets/grocery stores	9.9
Cafes/Pubs/Bars	9.1
Local meat/seafood retailers	8.7
Sausage Sizzles, fetes etc	6.8
Local Bakery	4.2
Temporary Food Stalls	1.8

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

High importance Low confidence

- Takeaway outlets

Low importance Low confidence

- Temporary food stalls
- Sausage sizzles, fetes etc
- Cafes pubs bars

High importance High confidence

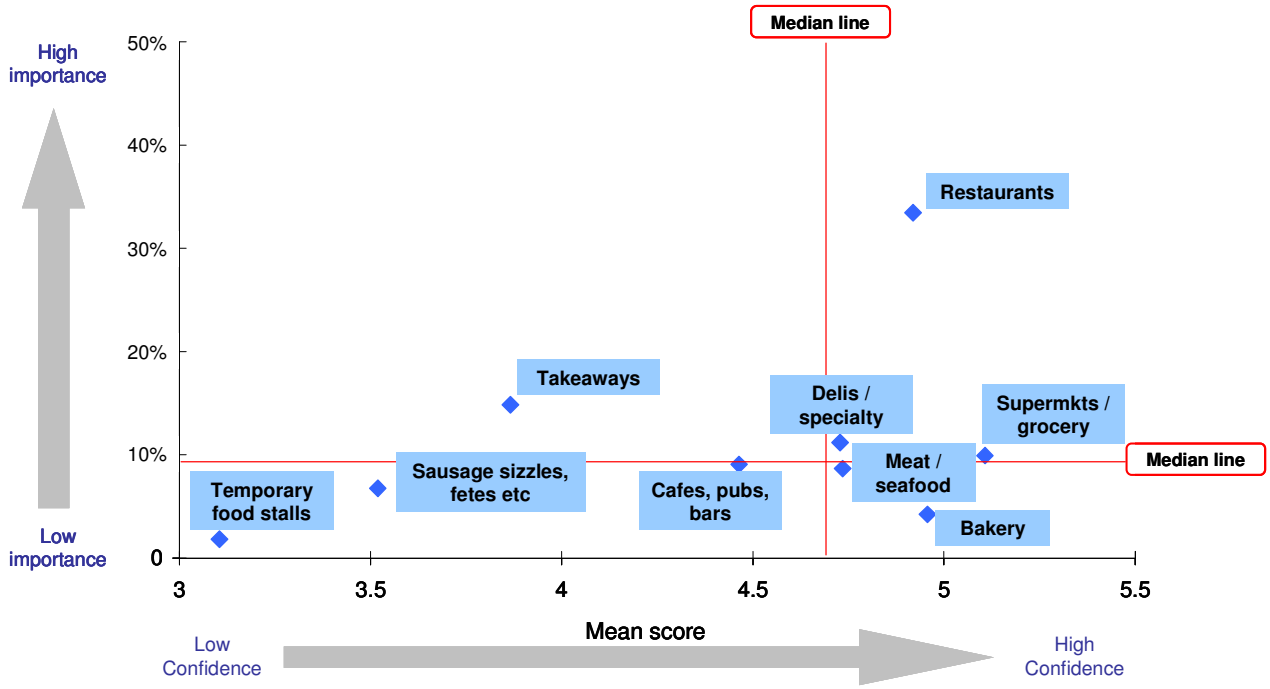
- Delis, speciality retailers
- Restaurants
- Supermarkets

Low importance High confidence

- Meat/seafood retailers
- Bakery

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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