FOOD STANDARDS Australia New Zealand
Te Mana Kounga Kai – Ahitereiria me Aotearoa

Consumer Insights Tracker 2023 Technical Report

Trust and confidence in food regulation, use and understanding of food labelling, and food safety perceptions and behaviours

April 2024

Suggested citation

© Food Standards Australia New Zealand. (2024). *FSANZ Consumer Insights Tracker 2023: Technical Report*. Canberra, Australia and Wellington, New Zealand.

Executive summary

Public confidence in the food supply is a cornerstone of a healthy population and a strong economy. Food Standards Australia New Zealand (FSANZ) is committed to maintaining and enhancing public trust in the food regulatory system in partnership with food and health authorities across Australia and New Zealand. The annual Consumer Insights Tracker (CIT) is a mechanism for understanding everyday consumers' views on the food regulatory system, providing access to our most important but least accessible stakeholders.

The CIT is an online survey of approximately 1,200 Australian and 800 New Zealand consumers aged 18+ years. It is based on a nationally representative sample by the interlocked quotas of age, gender and location. The CIT consists of approximately 40 quantitative questions that measure consumer trust and confidence in the food system, use and understanding of food labelling, attitudes and consumption intentions around new and emerging foods, and food safety perceptions and behaviours. The key findings from the CIT undertaken in 2023 are outlined below.

Trust and confidence in food regulation

People generally have confidence in the safety of the food supply, likely because they trust the food actors who make up our food system.

- 72% of consumers have confidence in the safety of the food supply.
- Those who trust food system actors, particularly manufacturers and producers, are more likely to be confident in the safety of the food supply.
- All food actors were trusted by a majority of respondents. Most trusted were farmers and producers (trusted by 83%). Least trusted were manufacturers/processors (57%).
- 63% of respondents trusted government/public food authorities.

FSANZ is generally trusted by those who know something about what it does.

- 52% of consumers have heard of FSANZ, and 25% report knowing at least something about what FSANZ does.
- Of those who know something about what FSANZ does, 79% trust FSANZ.

Trust and use of food labelling

Consumers tended to trust back-of-pack labelling information more than front-of-pack. Trust in government predicted trust in back-of-pack labelling, while trust in food manufacturers/processors and retailers predicted trust in front-of pack labelling.

- 65% of respondents trusted mandatory food labels overall, however, some labelling elements were more trusted than others.
- Most trusted were 'Allergen information', 'Ingredient lists', 'Best before/use by dates' and the 'Nutrition Information Panel' (trusted by approximately 70% of respondents).

- Least trusted were ‘Claims about health benefits’ (trusted by 40% of respondents) and ‘Claims about nutrition/ingredient content’ (trusted by 53% of respondents).
- Trust in food manufacturers/processors and retailers predicted trust in on-label claims, while trust in government predicted the other FSANZ-regulated labelling elements (such as the Nutrition Information Panel and ingredients list).
- The Health Star Rating (not regulated by FSANZ) was trusted by 55% of respondents, and was predicted by trust in retailers (e.g., shops and supermarkets).
- Most consumers (71%) felt confident in their ability to make informed choices using food labels. However, the CIT measured perceived understanding rather than objective ability, which has historically been found to be much lower.

Nutrition labelling is important to consumers, but there is a disconnect between the level of importance consumers give to nutrition content claims and the Health Star Rating, and their trust in them.

- Consumers rated nutrition-related labelling elements (the Nutrition Information Panel, ingredients list, nutrient/ingredient content claims and Health Star Rating) as the most important for making food choices.
- The Nutrition Information Panel and ingredients list were both the most important and among the most trusted.
- However, nutrition/ingredient content claims and the Health Star Rating were among the most important but the *least* trusted.
- The different predictors of trust suggest this may be because consumers believe nutrition content claims and the HSR are insufficiently regulated by government.

Sugar content was the most referred to part of the Nutrition Information Panel when buying packaged food or drink for the first time.

- Sugar content was the most important NIP element for the majority of people when buying food for the first time (63%), followed by fat (40%) and energy content (36%).
- No element of the ingredients list was selected as being most important by a majority, however food additives, key ingredients, and artificial sweeteners were the most commonly selected.

Up to a third of consumers do not understand date-marking, and a further third understand but report behaviour inconsistent with their understanding.

- Most people understand best before dates (77%) and use-by dates (67%), however a substantial minority (23-33%) expressed an incorrect understanding.
- Further, 27% of people who correctly understood best before dates reported throwing food out after its best before date without testing it, and 33% who correctly understood use-by dates reported using a product after its use-by date had expired.

Health and dietary behaviours

Cost of living pressures and weight management are key factors affecting people's food choices today.

- 65% of consumers reported cost of living pressures as a factor affecting their food choices.
- 42% of consumers reported 'watching my weight/others' weight generally' as a factor affecting their food choices.
- 17% identified a food allergy or intolerance as affecting their dietary choices.

People report being generally health conscious in their food choices, and tend to value nutrition above other food attributes (excluding taste and price).

- Nearly three-quarters of respondents (73%) reported that they put effort into maintaining a healthy diet.
- Nutrition was both the most selected food value (by 66% of respondents) and the most commonly first-rated food value, excluding taste and price.

Food safety knowledge and behaviours

Foodborne illness was consumers' key food safety concern, but there may be a gap in food safety awareness.

- Foodborne illness was the most common top 3 food safety issue (59%) and, by a large margin, the most commonly selected #1 food safety issue (31%).
- However, consumers did not perceive eggs to be one of the riskiest foods, despite them being one of the most common sources of foodborne illness.
- Consumers reported relatively high levels of engagement in the food safety behaviours measured, however were significantly more likely to engage in food safety behaviours that concerned raw animal products than those about general hygiene.
- Older consumers were less likely to engage with the behaviours around raw animal products, while younger consumers were less likely to engage with general hygiene behaviours. Men were less likely to report engagement with all measured behaviours.
- Product labels were by far the most preferred source of information on how to store and prepare food safely (chosen by 52% of respondents).

New foods and food technologies

Some sports food consumers may be consuming them in a manner inconsistent with their intended purpose.

- Less than half (48%) of sports foods consumers reported *only* using sports foods within a physical-activity related context.

- Although not all sports foods are intended to be consumed immediately around physical activity, this finding suggests that some consumers may be using sports foods in a manner inconsistent with their intended purpose.

Most consumers would not be confident in the safety of cell-based meat, however slightly more than half of consumers may be open to trying it.

- 62% of consumers said they would not be confident in the safety of cell-based meat if it became available for sale in Australia and New Zealand.
- Only 24% of respondents said that they would include cell-based meat in their diet. However, another 29% were unsure, perhaps indicating they may be open to trying it.
- Of those who said they would consume cell-based meat, 51% said it would partly replace traditional meat and 37% said it would be in addition to traditional meat.

Contents

List of Tables

Tables in Appendices

List of Figures

1. Introduction

Public confidence in the food supply is a cornerstone of a healthy population and a strong economy. Food Standards Australia New Zealand (FSANZ) is committed to maintaining and enhancing public trust in the food regulatory system in partnership with food and health authorities across Australia and New Zealand. The Consumer Insights Tracker (CIT) is a nationally representative and rigorous measure of everyday consumers' attitudes, understanding, and trust in food labelling and the food regulation system in Australia and New Zealand, providing access to our most important but least accessible stakeholders.

The CIT is an annual online survey of approximately 1,200 Australian and 800 New Zealand consumers aged 18+ years based on a nationally representative sample by the interlocked quotas of age, gender and location. The inaugural CIT was undertaken by FSANZ in April 2023 and will be repeated on an annual basis in order to track trends over time. The survey findings will inform FSANZ's key performance measures of 'consumer trust in food labels and the food regulation system', and provide valuable data to make assessments about consumer attitudes, understanding and behaviour to inform standards development.

2. Methods

Development of survey instrument

The survey instrument was designed by FSANZ social scientists, in consultation with specialist areas across the organisation. The majority of survey questions were adapted from existing Australian, New Zealand or international consumer surveys in the area of food regulation. The survey instrument was peer-reviewed by an academic with statistical and survey design expertise – Associate Professor Michael Burton, from the University of Western Australia's School of Agriculture and Environment – and by international social scientists working in food regulation.

In order to ensure its comprehension and usability, the survey instrument was cognitively tested by Cultural Lens Pty Ltd with 15 participants from diverse cultural backgrounds. Cognitive testing consisted of one hour online interviews with a trilingual qualitative researcher. The interviews examined participants' understanding of the survey, their experience of flow, routing, and sequencing, and whether response options were appropriate as they undertook the survey while sharing their screen. Both PC and mobile devices were tested during the interviews.

Cognitive testing participants were recruited from PureProfile's online panel based on a sample framework. The sample was designed to skew towards those who were more likely to have difficulty with the survey, specifically: non-native English speakers; those with lower education levels; and those on the two ends of the adult age spectrum. Cultural and linguistic diversity within the small sample was a key sampling criterion (see Table 2.1 for further detail on cognitive testing participant characteristics.)

Table 2.1. Cognitive testing participant characteristics (n = 15)

Overall			
Country	Australia (8)	New Zealand (7)	
Gender	Female (6)	Male (9)	
Age	18-29 (7)	30-54 (3)	55+ (5)
	Australia	**New Zealand**	**Total**
Education			
Up to high school	1	3	4
Vocational/trade qualification	3	2	5
Undergraduate degree	4	1	5
Postgraduate degree	0	1	1
Linguistic/Cultural Background			
English	1	1	2
Chinese – Mandarin, Cantonese	1	1	2
Indian – Punjabi, Hindi	1	1	2
Aboriginal and/or Torres Strait Islander	1	0	1
Māori	0	1	1
Samoan	0	1	1
Arabic	1	0	1
Other language	3 (Hungarian, Armenian, French)	2 (Bahasa, Afrikaner, Italian)	5

Changes made to the survey instrument following cognitive testing included re-ordering of questions for better flow, slight language changes to aid understanding, and streamlining the section on labelling so that it was less repetitive.

An amended survey was then piloted with a sample of 120 participants drawn from PureProfile's Australia and New Zealand market research consumer panels before being fully implemented. Changes following piloting involved amending the format of a question from a 'heatmap' to multiple choice options, as a problem was detected for participants answering the survey on mobile devices.

The final survey instrument consisted of 42 quantitative questions across domains including:

- Trust and confidence in the food supply and FSANZ
- Health and dietary behaviours
- Use, understanding and trust in food labelling
- Food safety knowledge and concerns
- New and emerging foods and food technologies
- Demographics

Of the 42 questions, 31 were core questions that will be repeated annually to collect trend data. Eleven questions were specific to the 2023 survey, and will be used to provide point in time data to support current applications, proposals or provide advice on topical issues in food regulation. The final survey instrument is available in Appendix A.

Sampling

1,237 Australians and 810 New Zealanders aged 18 years and over were recruited for this survey via PureProfile's online market research panel. PureProfile is an Australian company with a panel of 450,000 members in Australia and 180,000 members in New Zealand. The sample was nationally representative by the interlocked quotas of age, gender and location. Separate nationally representative quotas were also used for Aboriginal and Torres Strait Islanders in Australia, Māori in New Zealand, level of education and (Australia only) household income. Details of the sample achieved are outlined below.

Analysis

PureProfile provided de-identified raw data to FSANZ for analysis. Analysis was carried out by FSANZ using IBM SPSS Statistics software, Version 28.

Descriptive statistics (percentages, means, standard deviations) are reported where appropriate. Differences in means were tested using ANOVAs/t-tests with Sequential Bonferroni-corrected alphas. Although some statisticians consider that normality testing is not required when sample sizes are large, there is no clear consensus on how large is large enough, particularly when data are highly skewed. Thus, a bootstrapping procedure was used when data were highly skewed to increase confidence in the findings (Field, 2018)[1].

We used several regression models to test associations between multiple predictor variables and dependent variables of interest. The regression models tested whether a given variable uniquely predicted a dependent variable, while controlling for all other predictor variables in the model. For each regression analysis, relevant statistical assumptions were tested and met (e.g., no multicollinearity, no heteroscedasticity or outliers, linearity of the logit for continuous variables, proportional odds assumption, etc., see Field, 2018). For some demographic measures (country of birth, gender and income), participants had the option to respond 'prefer not to say.' For analyses that included these measures as predictor variables, participants who responded 'prefer not to say' were excluded from that regression analysis because samples were not high enough to include 'prefer not to say' as a separate category in the model.

Factors affecting dietary choice (see Question 14 in Appendix A) were divided into two subtypes for analysis: 'Medical-related factors' and 'Lifestyle related factors'. 'Medical-related factors' incorporated participants who had selected any of the following: Food allergy or food intolerance; Digestive concerns such as coeliac disease, irritable bowel syndrome, etc.; Other diet-related health concerns such as diabetes, heart disease, high blood pressure, etc; and Pregnancy or breast feeding. Whereas 'Lifestyle-related factors' incorporated participants who had selected any of the following: Looking to lose weight and/or maintain a

[1] A bootstrapping procedure estimates the shape of the sampling distribution by taking 2,000 samples of the data.

healthy weight; Vegetarian or vegan; Religious beliefs that affect food choices; and Training for sports that affects food choices.

For predictor variables that were averaged for analytical purposes (e.g., creation of the 'Generalised trust index' variable by averaging levels of trust across the education system, legal system, media, federal government, police, health system, scientists), we firstly conducted factor analysis to confirm that it would be appropriate to treat these individual measures as one construct. Where responses to multiple 7-point scales were averaged, this resulted in decimal numbers (as opposed to whole numbers). In these instances, the midpoint was defined as an average score between 3.5 and 4.4 (as these decimal numbers round to 4). Positive responses were therefore considered to be an average score of 4.5 or above, and negative responses were considered to be an average score of 3.4 or below.

When the dependent variable of interest was measured on a continuous scale, we used multiple linear regression analysis. Hierarchical multiple linear regression was used when associations between certain variables were expected based on the previous literature, and therefore these were added first to the model. The expected associations are described for each model in the findings. When associations were more exploratory, these predictor variables were added last to the model. Where there was no theoretical reasoning for the ordering of variables, we used simultaneous multiple linear regression. When categorical predictor variables had more than two categories (e.g., birth country) we created dummy variables and nominated a reference category. The strength of statistically significant predictors was compared based on standardised beta values (β).

When the dependent variable of interest was dichotomous, we used binomial logistic regression. Although one dependent variable was ordinal (awareness of FSANZ), ordinal logistic regression was not possible because the data violated the proportional odds assumption of ordinal regression analysis[2]. We therefore dichotomised responses regarding awareness of FSANZ (respondents who selected that they knew a little or a lot about what FSANZ does vs. those who selected that they had either never heard of FSANZ or had heard of FSANZ but didn't know what it does) and used binomial logistic regression.

Pearson's Chi square tests were used to test associations between categorical variables when there were a high number of categories and analyses were more exploratory. The continuous variables of age and equivalised household income[3] were coded into categorical variables for the purposes of conducting these analyses since Chi square tests require all variables to be categorical (note these variables were kept as continuous for regression analyses). Age was coded into three categories: 18-34 years, 35-54 years, and 55+ years. Equivalised household income was coded into three categories based on Australian Bureau of Statistics' data on the prevalence of equivalised household income levels (2021) such that each category captured approximately one-third of Australian households. Low equivalised

[2] Proportional odds is a fundamental assumption of ordinal regression analysis, where it is assumed that each independent variable has an identical effect at each cumulative split of the dependent variable (the test of parallel lines in SPSS).

[3] Equivalised annual household income is an adjusted measure that takes into account the size of the household and the age of its members. Equivalised annual household income was calculated according to the OECD-modified equivalence scale using the average income for each income bracket response option.

household income was up to $41,599 per year, medium was between $41,600 and $77,999, and high was $78,000+. Compared to the regression models, chi square tests are more descriptive (as opposed to predictive), as they do not control for other variables. The nature of the chi-square associations were tested with a series of pairwise z-tests with p-values adjusted according to the Bonferroni method, with significance set at the .05 level. The SPSS output for z-tests does not report exact p values, only where p values are < 0.05.

Peer review

The survey instrument, data analysis plan and draft research report were externally reviewed by an academic with expertise in statistical analysis – Associate Professor Michael Burton at the University of Western Australia's School of Agriculture and Environment.

Peer review comments were considered and incorporated into the final data analysis plan and final version of the research report.

3. Sample description

The sample was nationally representative by the interlocked quotas of age, gender and location. Separate quotas also provided a good spread of different levels of education and equivalised household income. The survey slightly oversampled Aboriginal and Torres Strait Islanders in Australia (4.93%) and of Māori in New Zealand (17.90%). A more detailed overview of the key demographics of the respondents is provided in Tables 3.1-3.3 below.

Table 3.1. Age, gender, level of education, birth country, cultural background, household composition, equivalised annual household income, shopper status, food service experience and meal preparation involvement.

	Australia		New Zealand		Total	
	N	%	N	%	N	%
Age group						
18-24 years	97	7.84	83	10.24	180	8.79
25-34 years	255	20.61	192	23.70	447	21.84
35-44 years	231	18.67	160	19.75	391	19.10
45-54 years	200	16.17	138	17.04	338	16.51
55-64 years	187	15.12	98	12.10	285	13.92
65+ years	267	21.58	139	17.16	406	19.83
Gender						
Male	601	48.59	379	46.79	980	47.87
Female	633	51.17	430	53.09	1063	51.93
Nonbinary and Other	2	0.16	0	0.00	2	0.10
Prefer not to say	1	0.08	1	0.12	2	0.10
Education						
High school or below	374	30.23	227	28.02	601	29.36
Vocational/trade qualification	356	28.78	205	25.31	561	27.41
Undergraduate degree	331	26.76	247	30.49	578	28.24
Postgraduate degree	176	14.23	131	16.17	307	15.00
Birth Country						
Australia or New Zealand	949	76.72	599	73.95	1548	75.62
Other English-speaking country	151	12.21	114	14.07	265	12.95
Non-English-speaking country	125	10.11	88	10.86	213	10.41
Prefer not to say	12	0.97	9	1.11	21	1.03

	Australia		New Zealand		Total	
	N	%	N	%	N	%
Cultural Background*						
Australian	622	50.28	6	0.74	628	30.78
New Zealand European	8	0.65	567	70	575	28.09
Aboriginal and/or Torres Strait Islander	61	4.93	0	0.00	61	2.98
Māori	4	0.32	145	17.90	149	7.28
Pacific Islander	2	0.16	40	4.94	42	2.05
European	549	44.38	26	3.21	575	28.09
Asian	126	10.19	109	13.46	235	11.48
African and Middle Eastern	15	1.21	6	0.74	21	1.03
People of the Americas	8	0.65	10	1.23	18	0.88
Prefer not to say	18	1.46	11	1.36	29	1.42
European/Non-European Background						
AU/NZ and/or European background	1041	84.16	595	73.46	1636	79.92
No AU/NZ or European background	178	14.39	204	25.19	382	18.66
Prefer not to say	18	1.46	11	1.36	29	1.42
Household Composition						
Children < 15 years in household	352	28.46	294	36.30	646	31.56
No children < 15 years in household	885	71.54	516	63.70	1401	68.44
Equivalised Annual Household Income Tiers#						
Low income (≤ $41,599)	453	36.62	273	33.70	726	35.47
Middle income ($41,600-$77,999)	373	30.15	290	35.80	663	32.39
High income (≥ $78,000)	344	27.81	180	22.22	524	25.60
Prefer not to say	67	5.42	67	8.27	134	6.55
Shopper Status						
Does the majority of food shopping	867	70.09	511	63.09	1378	67.32
Shares the food shopping	344	27.81	270	33.33	614	30.00
Someone else does the majority of food shopping	26	2.10	29	3.58	55	2.69
Food industry experience						
Has experience in the food industry	406	32.82	354	43.70	760	37.13
Has no experience in the food industry	831	67.18	456	56.30	1287	62.87
Meal preparation involvement						
Does the majority of meal preparation/cooking	831	67.18	496	61.23	1327	64.83
Shares the meal preparation/cooking	321	25.95	241	29.75	562	27.45
Someone else does the majority of meal preparation/cooking	85	6.87	73	9.01	158	7.72

* As respondents were able to select multiple responses, percentages may not add up to 100.
# Equivalised annual household income was calculated according to the OECD-modified equivalence scale using the average income for each income bracket response option.

Table 3.2. State or territory location of Australian respondents

	N	%
Australian State or Territory		
New South Wales	396	32.01
Victoria	319	25.79
Queensland	249	20.13
South Australia	86	6.95
Western Australia	129	10.43
Tasmania	22	1.78
Northern Territory	27	2.18
Australian Capital Territory	9	0.73
Total	1237	100.00
Metro or Regional Location		
Metro Australia	858	69.36
Regional Australia	379	30.63

Table 3.3. Regional location of New Zealand respondents

	N	%
New Zealand Regions		
Northland Region	32	3.95
Auckland Region	270	33.33
Bay of Plenty Region	49	6.05
Waikato	77	9.51
Gisborne District	6	0.74
Hawke's Bay Region	32	3.95
Taranaki	24	2.96
Manawatu-Wanganui	43	5.31
Wellington Region	90	11.11
Tasman District	5	0.62
Nelson	10	1.23
Marlborough Region	5	0.62
Canterbury	109	13.46
West Coast	2	0.25
Otago	40	4.94
Southland	16	1.98
Total	810	100.00

4. Results

Trust and confidence

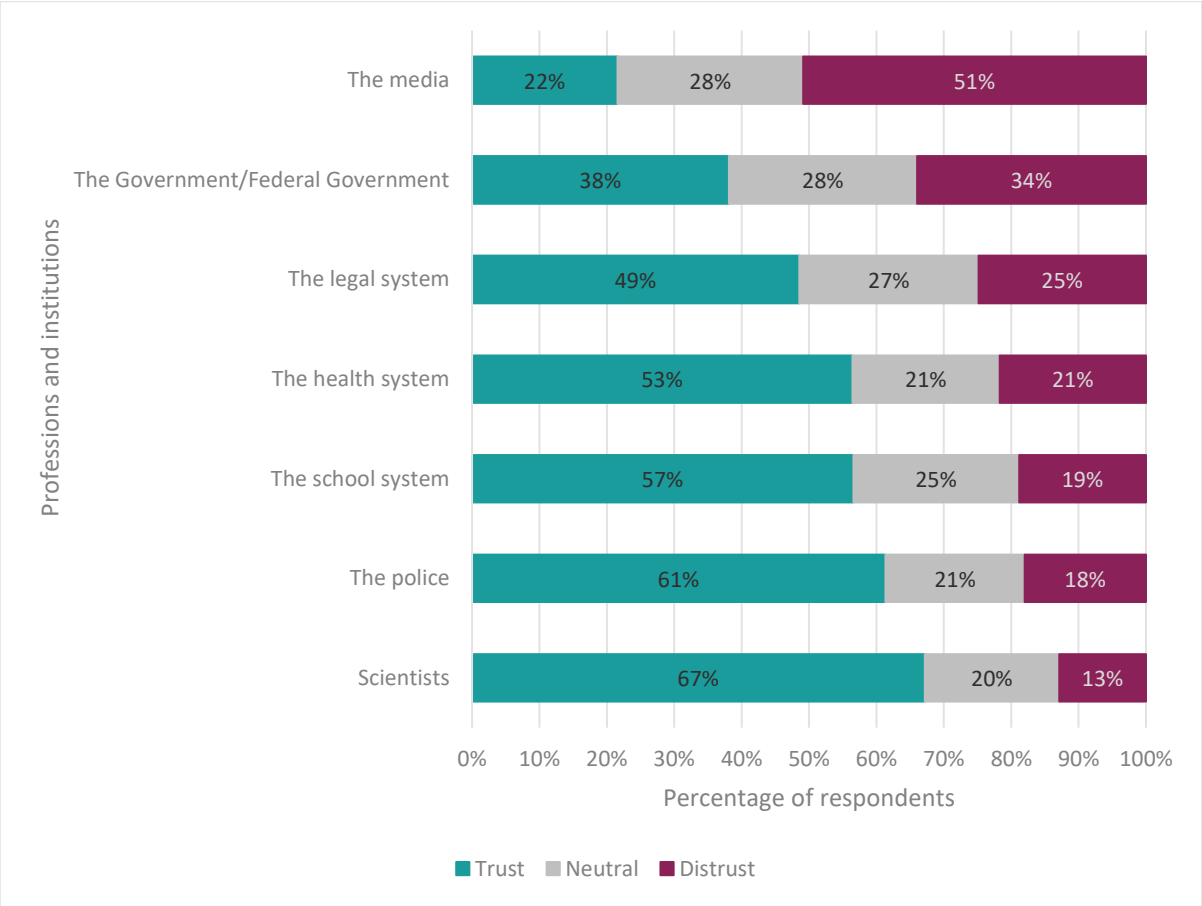
This section of the survey was designed to ascertain consumers' levels of trust and confidence in the safety of the food supply, food system actors, and FSANZ specifically.

Generalised trust

Respondents were first asked a question to gauge their general level of trust in professions and institutions in order to enable us to control for this factor in subsequent analyses. The question asked was: "How much do you personally trust the following institutions or professions? Even if you have had very little or no contact with these institutions or professions, please base your answer on your general impression of them." Responses were on seven-point scale, where 1 = "Do not trust at all" and 7 = "Trust completely".

Figure 4.1 shows the percentage of respondents who generally trusted each type of profession/institution (selected a rating of 5-7), who were neutral (selected a rating of 4), and who generally distrusted each type of profession/institution (selected a rating of 1-3).

Figure 4.1. Proportion of respondents who trust professions and institutions.



Q: How much do you personally trust the following institutions or professions in Australia/New Zealand? (Proportion of respondents who rated their trust above 4 on a scale from 1 = "Not at all" to 7 = "Completely")
Base: All respondents (n = 1,237 Australia, n = 810 New Zealand)

As shown in Figure 4.1, scientists were the most trusted among the institutions, with 67.17% of respondents having a level of trust above the midpoint, followed by the police (61.36%) and the school system (56.57%). The least trusted institution was the media, with 21.59% of respondents having a level of trust above the midpoint, followed by government (38.10%).

The group means, standard deviations are summarised in Table 4.1.

Table 4.1. Means and standard deviations (SD) for trust in professions and institutions.

	Mean	SD
Professions and institutions		
Scientists	4.91	1.34
The police	4.68	1.43
The school system	4.51	1.37
The health system	4.48	1.39
The legal system	4.30	1.42
The Government/Federal Government	3.95	1.54
The media	3.38	1.48
Generalised institutional trust index	4.32	1.09

A repeated measures ANOVA confirmed that the level of trust significantly differed across the different professions and institutions ($F(5.62, 11505.09) = 539.61$, $p < 0.001$). Follow-up t-tests showed that all pairwise comparisons were significantly different (all $p < 0.001$), except for between the health system and the legal system ($p = 0.302$).

A generalised trust index (also shown in Table 4.1) was computed by averaging the scores from the different professions and institutions for each participant. A factor analysis was conducted prior to averaging the scores, which indicated that the survey questions measuring trust in the seven different professions/institutions were measuring one factor, and thus it was appropriate to combine them. The full results of the factor analysis are reported in Appendix A. This measure of generalised trust was controlled for in analyses examining trust in food system actors and trust in FSANZ among others (see below).

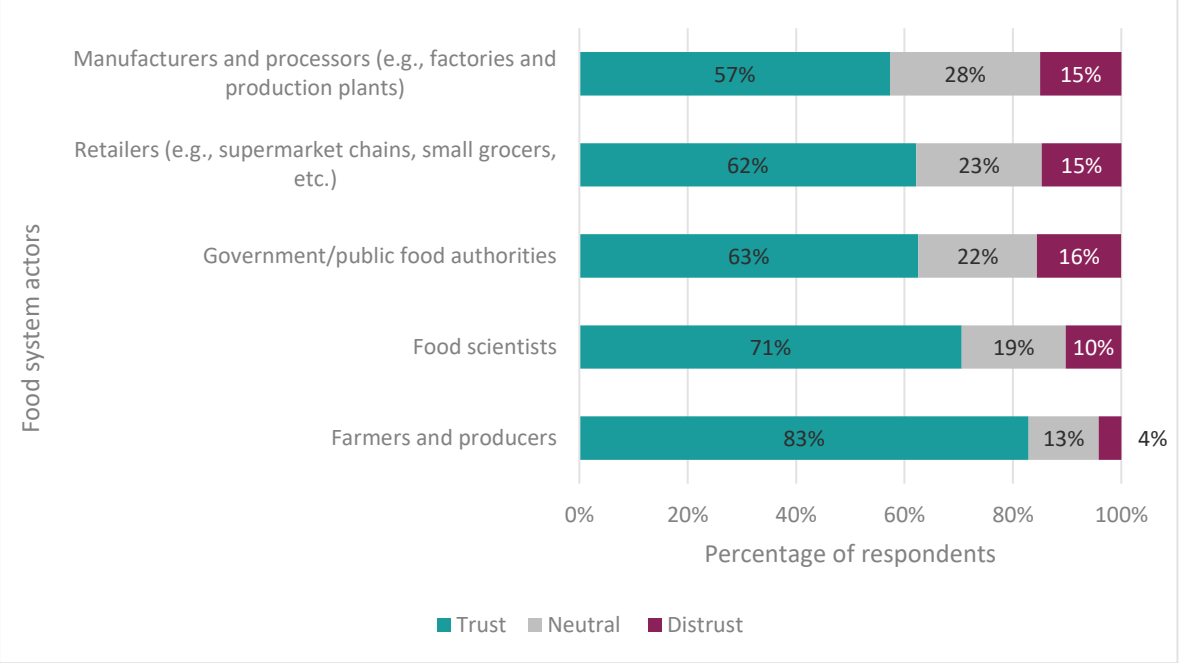
Australian respondents had a significantly higher level of generalised trust ($M = 4.37$, $SD = 1.07$) compared to New Zealand respondents ($M = 4.24$, $SD = 1.11$; $t(2045) = 2.61$, $p = 0.009$). However, both countries had a mean generalised trust index within the midpoint (from 3.5 to 4.4 inclusive).

Trust in food system actors

Respondents were asked to rate how much they trust a range of food system actors to do their part to ensure that all food (including drinks) sold in Australian/New Zealand shops and supermarkets is safe to eat. Responses were on a seven-point scale, where 1 = “Do not trust at all” and 7 = “Trust completely”.

Figure 4.2 below shows the percentage of respondents who generally trusted each food system actor (selected a rating of 5-7), who were neutral (selected a rating of 4), and who were generally distrusting (selected a rating of 1-3).

Figure 4.2. Proportion of respondents who trusted actors in the food system.



Q: How much do you trust the following people or groups to do their part to ensure that all food (including drinks) sold in Australia/New Zealand shops and supermarkets is safe to eat? (Proportion of respondents who rated their trust above 4 on a scale from 1 = "Not at all" to 7 = "Completely")
Base: All respondents (n = 1,237 Australia, n = 810 New Zealand)

As shown in Figure 4.2, farmers and producers were the most trusted (with 82.90% of respondents having a level of trust above the midpoint), followed by food scientists (70.54%), government/public food authorities (62.53%) and retailers (62.14%). The least trusted food system actor was manufacturers and processors (57.35%).

The group means and standard deviations are summarised in Table 4.2 below.

Table 4.2. Means and standard deviations (SD) for trust in food system actors.

	Australia		New Zealand		Total	
	Mean	**SD**	**Mean**	**SD**	**Mean**	**SD**
Trust in different food system actors						
Farmers and producers	5.47	1.07	5.35	1.08	5.42	1.07
Food scientists	5.06	1.28	4.99	1.29	5.03	1.28
Government/public food authorities	4.77	1.36	4.72	1.40	4.75	1.38
Retailers (e.g. supermarket chains, small grocers, etc.)	4.78	1.24	4.70	1.24	4.75	1.24
Manufacturers and processers (e.g., factories and production plants)	4.62	1.23	4.71	1.21	4.65	1.22

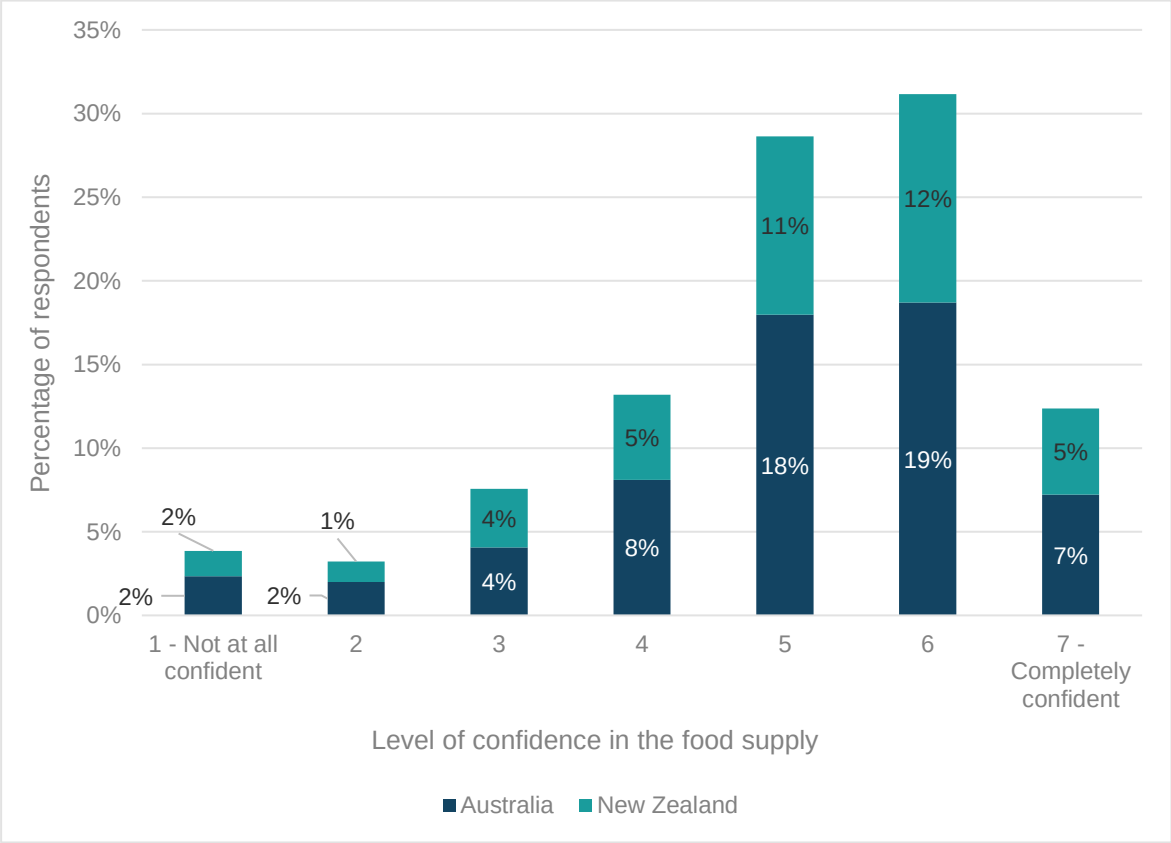
A two-way mixed ANOVA (type of food system actor x country) confirmed that level of trust significantly differed across the different food system actors ($F(3.51, 7170.96) = 272.74$, $p < 0.001$). Follow-up t-tests showed that all pair-wise comparisons were significantly different (all $p < 0.001$), except for between retailers and government/public food authorities ($p = 0.779$).

There were no significant differences in levels of trust for any food system actors between Australia and New Zealand[4].

Confidence in the safety of the food supply

Respondents were asked to rate how confident they were that "all food (including drinks) sold in Australian/New Zealand shops and supermarkets is safe to eat." Responses were on a seven-point scale, where 1 = "Not at all confident" and 7 = "Completely confident". As shown in Figure 4.3 below, the majority of respondents (72.15%) had confidence in the Australian New Zealand food supply (i.e., selected a rating above the midpoint). Only 14.66% of respondents selected a rating below the midpoint, and 13.19% selected at the midpoint.

Figure 4.3. Level of confidence in the Australian/New Zealand food supply.



Q: How confident are you that all food (including drinks) sold in Australian/New Zealand shops and supermarkets is safe to eat?" (1 = "Not at all confident") and 7 = "Completely confident")
Base: All respondents (n = 1,237 Australia, n = 810 New Zealand)

The mean level of trust overall was 5.02 (SD = 1.47), with Australia's mean at 5.03 (SD = 1.45) and New Zealand's mean at 5.02 (SD = 1.49). An independent samples t-test found there was no significant difference in level of confidence in the food supply between countries ($p > .05$).

[4] Although the ANOVA test showed a significant interaction between type of food system actor and country ($F(3.51, 7170.96) = 4.77$, $p = 0.001$), follow up t-tests (using sequential Bonferroni corrected-alphas) showed that no pairwise comparisons were statistically significant.

Factors predicting level of confidence in the safety of the food supply

A hierarchical multiple regression was conducted to determine whether any of the demographic, behavioural, or attitudinal factors that were measured in the survey predicted having a greater level of confidence in the food supply.

Our analysis found that consumers who were more confident in the food supply were more likely to:

- be younger;
- identify as male (as opposed to female; there was not enough data to consider non-binary or other forms of gender identification);
- be tertiary-educated; or
- have selected at least one medical-related factor as affecting their food choices (e.g. food allergies, pregnancy or breastfeeding, or diabetes).

However, these factors alone only accounted for 2.2% of the variation in responses, suggesting that these demographic factors only weakly predicted level of confidence in the safety of the food supply.

After both trust in professionals and institutions more broadly (the generalised trust index) and trust in food system actors (farmers and producers, manufacturers and processors, retailers, government/public food authorities, and food-related scientists) were added to the statistical model, the amount of variance explained by the model increased substantially to 45.5%, with trust in all food system actors (but not trust in professions and institutions more broadly) significantly predicting level of confidence in the safety of the food supply. This suggests that the most important predictor for level of confidence in the safety of the food supply was having a high level of trust in food system actors. Out of all food system actors, trust in manufactures and processors was the strongest predictor of level of confidence in the safety of the food supply, whereas trust in farmers and producers was the weakest predictor.[5]

Further details of how the regression was conducted is provided in Appendix C, with the full statistical results of the hierarchical regression analysis (including beta and p-values for each association and adjusted R^2 for each model) available in Table C.1.

[5] While trust and confidence can be difficult to distinguish, as noted in the literature (e.g. Siegrist 2010), the results of the regression analysis nevertheless suggest that confidence in the safety of the food supply chain and trust in food system actors are likely to be measuring two different constructs. It was therefore appropriate to include both measures in the regression model. Evidence to support this argument is that:

i) trust in some types of food system actors (manufacturers and processors) were much stronger predictors of confidence in the safety of the food supply compared to trust in other food system actors (e.g., farmers and producers), indicating that trust in food system actors in general is not measuring the same construct as confidence in the safety of the food supply, and

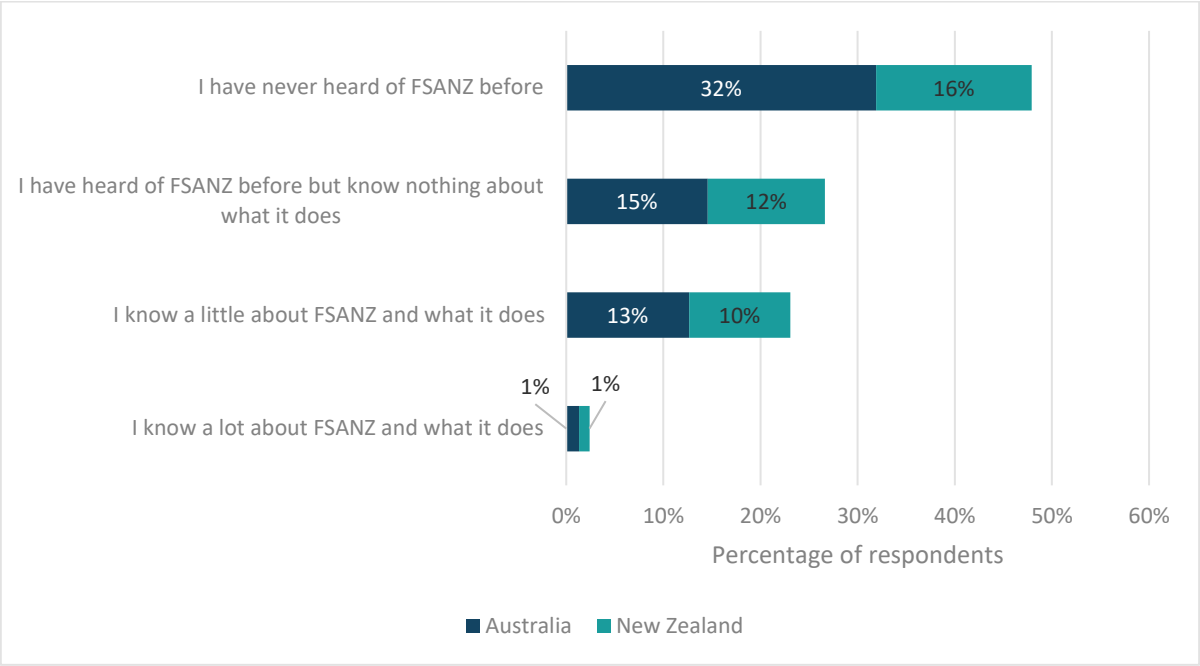
OFFICIAL

ii) correlation coefficients between levels of confidence in the safety of the food supply chain and trust in the various food system actors ranged from 0.41-0.59. If these questions were measuring the same construct, these correlations would be expected to be much greater.

Awareness of FSANZ

Respondents were asked how much they knew about FSANZ. As shown in Figure 4.4 below, 52.08% of respondents had at least heard of FSANZ, and 25.45% knew at least something about what FSANZ does.

Figure 4.4. Level of awareness of Food Standards Australia New Zealand (FSANZ).



Q: How much, if anything, do you know about Food Standards Australia New Zealand, also known as FSANZ?
Base: All respondents (n = 1,237 Australia, n = 810 New Zealand)

Factors predicting knowledge of what FSANZ does

Binomial logistic regression was used to test if various factors significantly predicted whether respondents knew at least a little about what FSANZ does. Our analysis found that respondents were more likely to report that they know at least a little about what FSANZ does if they:

- were from New Zealand;
- identified as female;
- had a tertiary-level education;
- had food industry experience;
- were more health conscious;
- selected at least one lifestyle-related factor (i.e., looking to lose weight and/or maintain a healthy weight, vegetarian/vegan, religious beliefs or training for sports) as currently affecting their food choices; or
- remembered a food recall

Further details of the binomial logistic regression analysis is available in Appendix D, with the statistical results available in Table D.1.

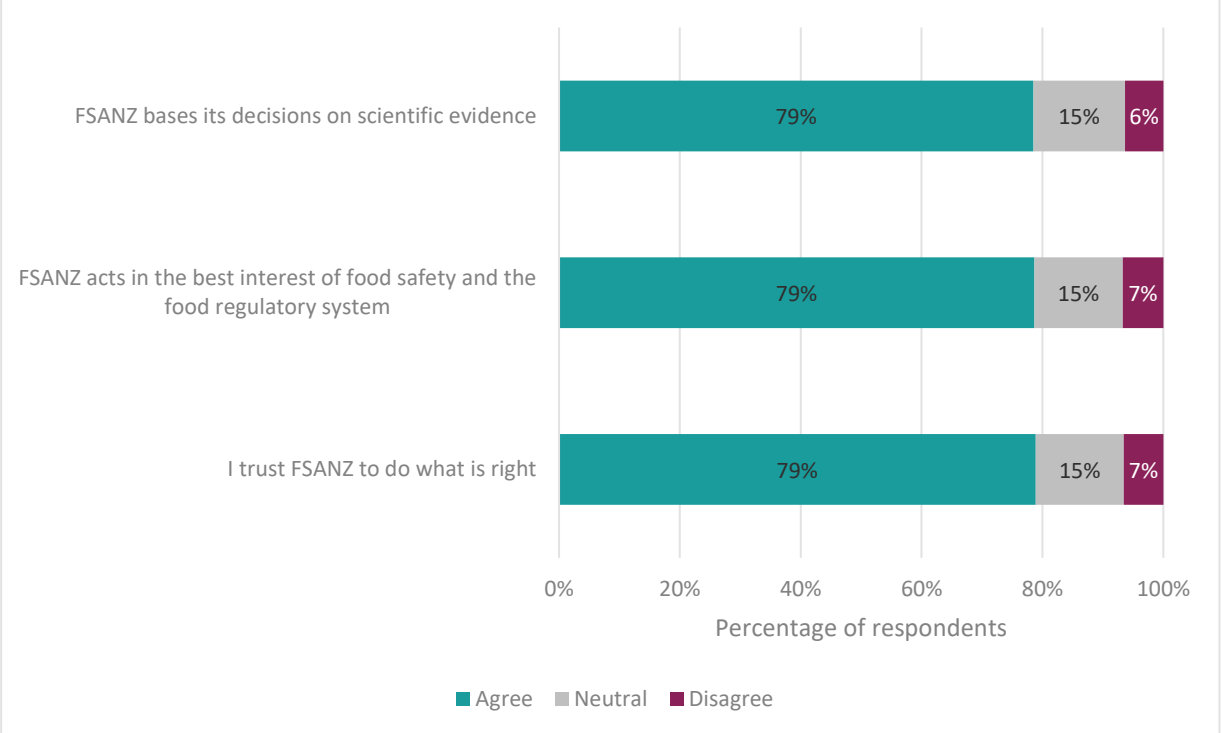
Trust in FSANZ

Respondents who said that they at least "know a little about FSANZ and what it does" (n = 521) were asked how much they agreed or disagreed with a series of statements designed to measure their level of trust in FSANZ and its scientific basis. Responses were on a scale from 1 = "Strongly disagree" to 7 = "Strongly agree".

Figure 4.5 shows the percentage of respondents who generally agreed with each statement (selected a rating of 5-7), who were neutral (selected a rating of 4), and who generally disagreed with each statement (selected a rating of 1-3). As shown in the figure, most respondents (79%) generally agreed with each statement. A repeated measures ANOVA found no significant differences in the level of agreement between the different statements about trust in FSANZ ($F(2, 1040) = 0.46$, $p = 0.633$).

An index of overall trust in FSANZ was computed by averaging the level of agreement with the above three statements for each participant. Overall, 80.2% of respondents had an average level of trust across the three measures that was above the midpoint (defined as between 3.5 and 4.4 on a 7-point scale). The mean level of trust was 5.31 (SD = 1.15), with a mean of 5.36 in Australia (SD = 1.18) and 5.26 in New Zealand (SD = 1.11). An independent samples t-test found no significant difference in level of trust in FSANZ between Australia and New Zealand.

Figure 4.5. Level of trust in FSANZ.



Q: How much do you agree or disagree with the following statements? (In these statements, FSANZ means Food Standards Australia New Zealand) (1 = "Strongly disagree" and 7 = "Strongly agree")
Base: Respondents who said that they at least knew a little about FSANZ (n = 286 Australia, n = 235 New Zealand)

Factors predicting level of trust in FSANZ

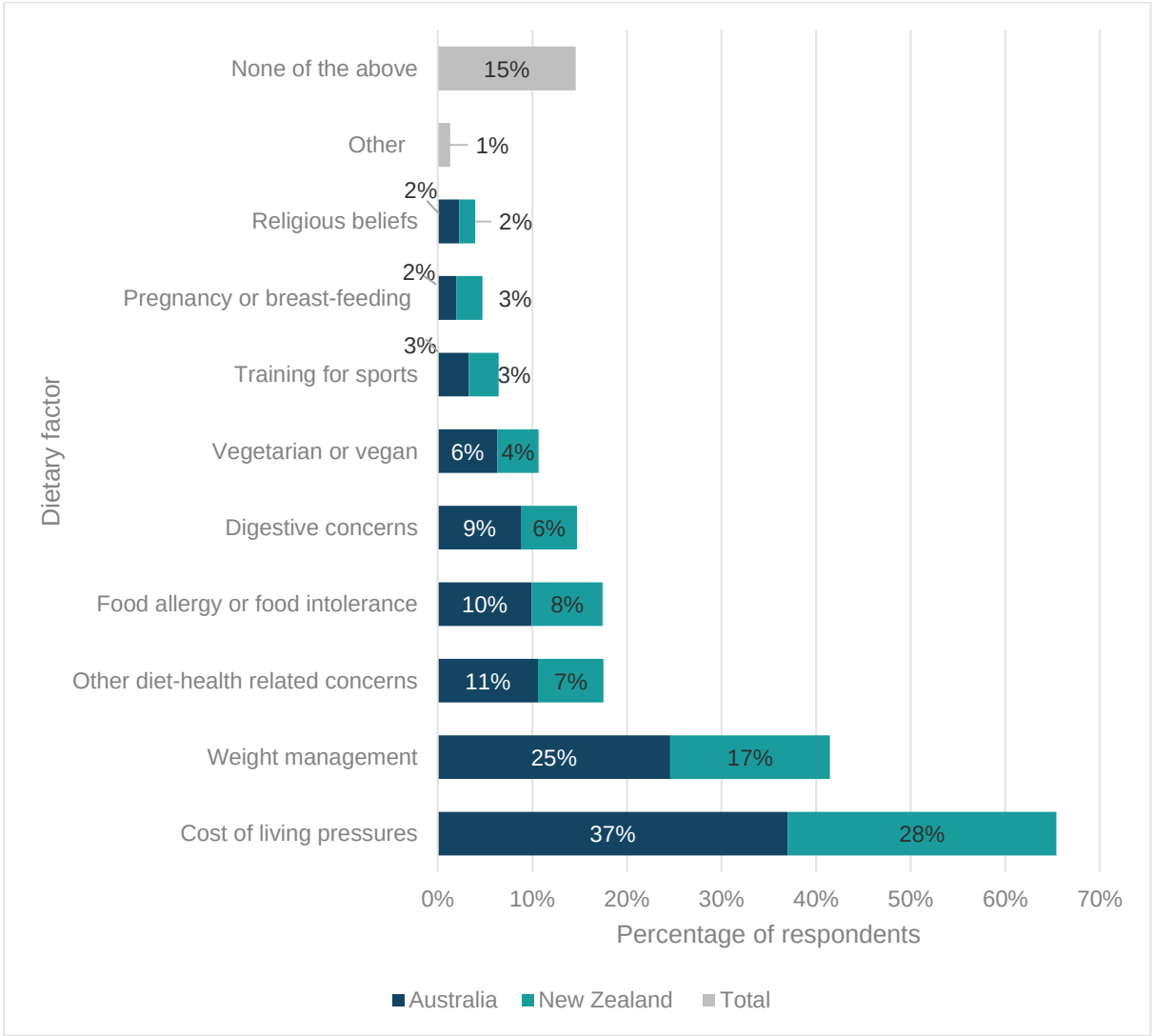
Hierarchical multiple regression was used to test if various factors significantly predicted having a greater level of trust in FSANZ. No demographic factors measured in the CIT (such as age, gender, country, or level of education) were found to significantly predict trust in FSANZ. Rather, respondents who tended to be more trusting of professions and institutions in general were significantly more likely to trust FSANZ. Further details of how this was determined are in Appendix C, with full statistical results available in Table C.2.

Health and dietary behaviours

Dietary influences

Respondents were asked if any of the following factors currently influenced the food choices that they made for them or their household. 85.39% of respondents had at least one dietary factor influencing their food choices.

Figure 4.6. Factors affecting food choice in Australia and New Zealand.



Q: Do any of the following currently affect the food choices you make for you or your household? (Please select all that apply)
Base: All respondents (n = 1,237 Australia, n = 810 New Zealand)

As shown in Figure 4.6, 'Cost of living pressures' was the most frequently selected factor affecting diet, with 65.41% of respondents selecting it. This was followed by 'Looking to lose weight or maintain a healthy weight' (41.48%), 'Other diet-related health concerns' (17.54%) and a food allergy or intolerance (17.44%). The least selected dietary factor was 'Religious beliefs that affect food choices (3.96%). Responses from those selecting 'Other' included organic and locally sourced foods, nutrition or following a diet, medical factors, taste, choosing foods to help performance at work, sensory issues, freshness, living with children, country of origin, and the number of additives in a food.

Table 4.3 shows the percentage of respondents who selected each type of dietary factor for each country, and for the total sample. These factors were split into medical-related dietary factors and lifestyle-related dietary factors for subsequent analysis, as classified in Table 4.3, with cost-of-living pressures considered separately.

Table 4.3. Proportion of respondents who selected each factor as an influence on their dietary choices.

	Australia		New Zealand		Total	
	N	%	N	%	N	%
Dietary Factor						
Cost of living pressures	757	61.20	582	71.85	1339	65.41
Medical-related Dietary Factors						
Food allergy or food intolerance	203	16.41	154	19.01	357	17.44
Digestive concerns such as coeliac disease, irritable bowel syndrome, etc.	181	14.63	120	14.81	301	14.70
Diet-related health concerns, such as diabetes, heart disease, high blood pressure	217	17.54	142	17.53	359	17.54
Pregnancy or breast-feeding	40	3.23	57	7.04	97	4.74
Lifestyle-related Dietary Factors						
Watching my weight/others' weight generally	503	40.66	346	42.72	849	41.48
Vegetarian or vegan	129	10.43	89	10.99	218	10.65
Religious/ethical beliefs that affect food choices	47	3.80	34	4.20	81	3.96
Training for sports that affects food choices	67	5.42	65	8.02	132	6.45
Other	19	1.54	8	0.99	27	1.32
None of the above	205	10.01	94	4.59	299	14.61

* As respondents could select multiple dietary factors, percentages may not add up to 100.

A chi-square test found that country was a significant predictor of the type of dietary factors that respondents tended to select ($\chi^2(11) = 60.11$, $p < 0.001$, Cramer's $V = 0.17$). Specifically, New Zealanders were significantly more likely to select the following dietary factors compared to Australian respondents: 'Cost of living pressures' (71.85% vs 61.20%), 'Pregnant or breastfeeding' (7.04% vs 3.23%), and/or 'Training for sports' (8.02% vs 5.42%). Respondents from Australia were significantly more likely to select 'None of the above' (16.57%) compared to New Zealand responses (11.60%).

Factors predicting cost of living pressures affecting diet

A binomial logistic regression was conducted to determine whether various factors significantly predicted selecting 'cost of living pressures' as affecting food choices. People were significantly (all $p < .001$) more likely to select 'cost of living pressures' if they:

- Were aged 18-34 years (vs 55+ years)
- Identified as female
- Were not tertiary educated
- Had a higher equivalised household income
- Lived in New Zealand
- Had a child < 15 years in the household
- Did not have Australian/New Zealand or European background

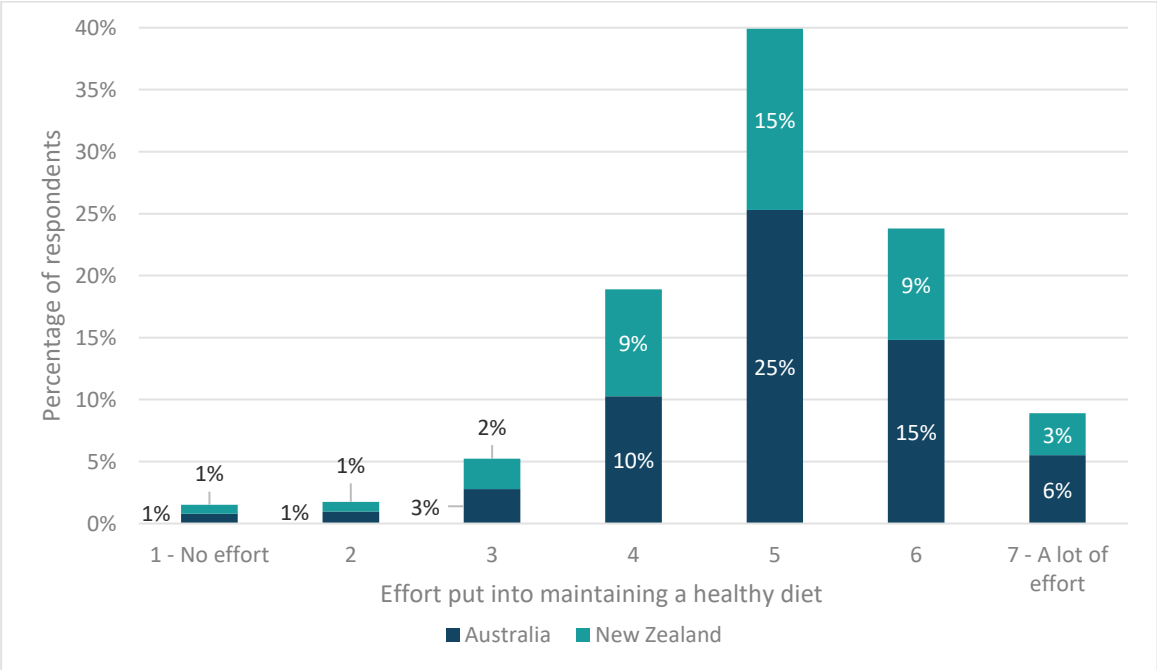
The full details and statistical results of the binomial logistic regression analysis are available in Table D.2 in 0.

Health consciousness

Respondents were asked to rate how much effort they generally put into maintaining a healthy diet for themselves and/or their household, referred to as 'health consciousness'. Responses were on a scale from 1 to 7, where 1 = "No effort" and 7 = "A lot of effort".

As shown in Figure 4.7, most respondents (72.56%) generally reported putting effort into maintaining a healthy diet (i.e., selected a rating above the midpoint, between 5 and 7). Only 8.50% of respondents rated their level of health consciousness below the midpoint (selected a rating of 1-3), and 18.90% at the midpoint (selected 4). The mean rating was 5.01 (SD = 1.18), with a mean of 5.07 in Australia (SD = 1.15) and 4.92 in New Zealand (SD = 1.23).

Figure 4.7. Level of effort put into maintaining a healthy diet.



Q: How much effort do you generally put into maintaining a healthy diet for you and / or your household? (1 = "No effort" and 7 = "A lot of effort")
Base: All respondents (n = 1,237 Australia, n = 810 New Zealand)

Factors predicting level of health consciousness

A simultaneous multiple linear regression was conducted to determine whether any of the demographic, behavioural, or attitudinal factors that were measured in this survey predicted having a higher level of health consciousness.

Our analysis found that consumers who had a higher level of health consciousness were significantly more likely (all *p*-values < 0.05) to:

- Be older
- Have tertiary-level education
- Sharing shopping responsibility (rather than doing the majority of the shopping)
- Live in Australia (rather than in New Zealand)
- Have a higher level of confidence in the food supply; or
- Select a medical- or lifestyle-related factor as currently affecting food choices

The strongest predictors of level of health consciousness were selecting a lifestyle-related factor as currently affecting food choices and age (being older).

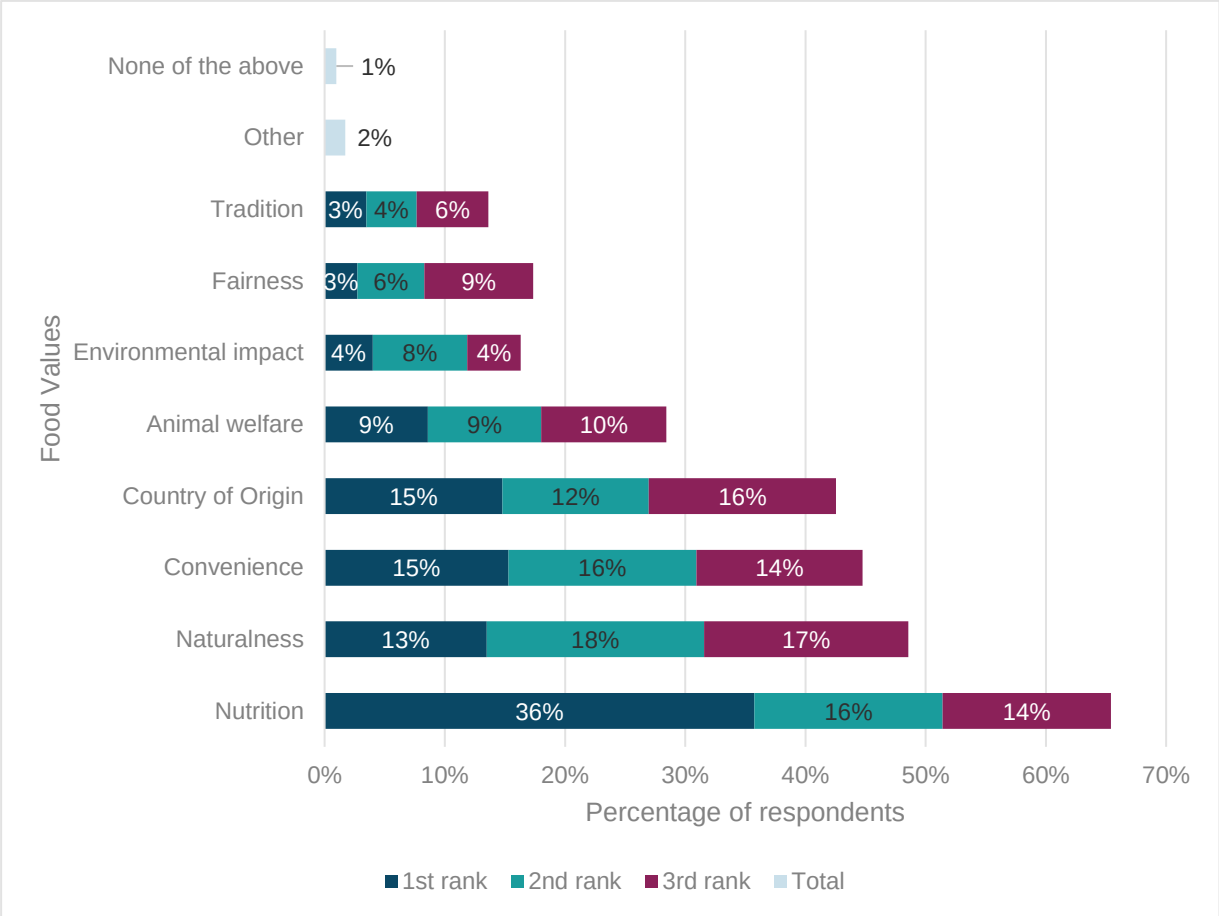
Further details of how the regression was conducted is provided in Appendix C, with the full statistical results of the simultaneous regression analysis (including beta and p-values for each association and adjusted R^2 for the model) available in Table C.3.

Food values

Respondents were asked “excluding taste and price, what is most important to you out of the following when choosing which foods to buy?” Respondents were required to rank their top three food values or attributes, where 1 = most important, 2 = second most important, and 3 = third most important. Taste and price were excluded as existing literature suggests that these are consistently important factors (Drewnowski and Monsiviais 2020; European Food Safety Authority, 2022; International Food Information Council, 2022; Ward et al. 2012). Therefore the purpose of this survey question was to determine what other values may be important to consumers.

As shown in Figure 4.8 below, nutrition was the most frequently selected food value, with 74.55% of respondents selecting it in their top three. This was followed by naturalness (48.56%), and convenience (44.75%). The least selected food value was tradition (13.63%). Responses from those selecting ‘Other’ included freshness and quality, dietary requirements, shelf-life, healthiness, size, and likability by children. Some participants also provided ‘taste’ and ‘price’ as ‘Other’ food values, despite being asked to exclude these factors.

Figure 4.8. Top three ranked food values.



Q: Excluding taste and price, what is most important to you out of the following when choosing which foods to buy? (1 = "Most important", 2 = "Second most important" and 3 = "Third most important")
Base: All respondents (n = 1,237 Australia, n = 810 New Zealand)

Factors associated with top three food values

Chi-square analyses and Fisher's exact tests (as appropriate) were used to investigate whether a range of respondents' attributes were significantly associated with the likelihood of selecting particular food values in their 'top three'. The results are summarised below, with full statistical details available in Appendix E.

Nutrition:

People were significantly more likely (all *p*-values < .05) to select nutrition as a top food value if they:

- Were tertiary-educated (vs non-tertiary educated)
- Were born outside of Australia and New Zealand in a non-English speaking country (vs being born in Australia or New Zealand)
- Had a high equivalised household income (vs low equivalised household income)[6]
- Shared responsibility for the food shopping (vs doing the majority of the shopping)

[6] While equivalised household income was entered as a continuous variable for all regression analyses, it was coded as a categorical variable here because Chi Square analysis requires that all variables be categorical.

- Identified a medical-related factor as affecting their food choices (vs not having one)
- Identified a lifestyle-related factor as affecting their food choices (vs not having one)
- Had a high level of health consciousness (vs medium or low level)

Age, gender, country, cultural background, food industry experience, having a child under 15 years of age in the household, and level of confidence in the food supply were not significant predictors of likelihood to select nutrition ($p > .05$).

Naturalness:

People were significantly more likely (all $p < .05$) to select naturalness as a top food value if they:

- Were aged 55+ years (vs 18-34 years)
- Identified as female (vs male)
- Were born outside of Australia and New Zealand, either in another English-speaking country and in a non-English speaking country (vs born in Australia or New Zealand)
- Had no food industry experience (vs had food industry experience)
- Identified a medical-related factor as affecting their food choices (vs not having one)
- Had a low level of confidence in the food supply (vs medium or high level)
- Had a high level of health consciousness (vs medium or low level)

Education, country, cultural background, equivalised household income, shopping responsibility, lifestyle-related dietary factors, having a child under 15 years of age in the household were not significant predictors of likelihood to select naturalness ($p > .05$).

Convenience:

People were significantly more likely (all $p < .05$) to select convenience as a top food value if they:

- Were aged 18-34 years (vs 55+ years)
- Had a medium equivalised household income (vs low equivalised household income)
- Did not identify a medical-related factor as affecting their food choices (vs identifying one)
- Had a high level of confidence in the food supply (vs low level)
- Had a low or medium level of health consciousness (vs high level)

Gender, education, country, birth country, cultural background, shopping responsibility, food industry experience, lifestyle-related dietary factors, having a child under 15 years of age in the household were not significant predictors of likelihood to select convenience (all $p > .05$).

Country of origin:

People were significantly more likely (all $p < .05$) to select country of origin as a top food value if they:

- Were aged 55+ years (vs 18-34 years or 35-54 years)
- Were not tertiary-educated (vs tertiary educated)

- Live in Australia (vs live in New Zealand)
- Had some Australian/New Zealand or European background (vs not having any)
- Did not select a lifestyle-related factor as affecting food choices (vs selecting one)
- Did not have a child under 15 years of age in the household (vs having one)

In addition, people were significantly less likely (all $p < .05$) to select country of origin as a top food value if they:

- Were born outside of Australia and New Zealand in a non-English speaking country (vs being born in Australia or New Zealand, or being born in another English-speaking country)
- Had a medium or high level of health consciousness (vs low level)

Gender, equivalised household income, shopping responsibility, food industry experience, medical-related dietary factors, and level of confidence in the food supply were not significant predictors of likelihood to select country of origin (all $p > .05$).

Animal welfare:

People were significantly more likely (all $p < .05$) to select animal welfare as a top food value if they:

- Identified as female (vs male)
- Were not tertiary-educated (vs tertiary-educated)
- Live in Australia (vs New Zealand)
- Were born in Australia or New Zealand (vs born outside Australia or New Zealand in a non-English speaking country)
- Had an Australian/New Zealand or European background (vs did not have one)
- Did the majority of the food shopping (vs a minority of the food shopping).

Age, equivalised household income, food industry experience, medical-related dietary factors, lifestyle-related dietary factors, having a child under 15 years of age in the household, level of confidence in the food supply, and level of health consciousness were not significant predictors of likelihood to select animal welfare (all $p > .05$).

Environmental impact:

People were significantly more likely (all $p < .05$) to select environmental impact as a top food value if they:

- Were aged 18-34 years (vs 55+ years)
- Were tertiary-educated (vs not tertiary-educated)
- Live in Australia (vs New Zealand)
- Had a child under 15 years of age in the household (vs not having one)

In addition, people were significantly less likely (all $p < .05$) to select environmental impact as a top three food value if they had a low level of health consciousness.

Gender, birth country, cultural background, equivalised household income, shopping responsibility, food industry experience, medical-related dietary factors, lifestyle-related

dietary factors, level of confidence in the food supply were not significant predictors of likelihood to select environmental impact (all $p > .05$).

Fairness:

People were significantly more likely (all $p < .05$) to select fairness as a top food value if they:

- Identified as male (vs female)
- Had food industry experience (vs not having food industry experience).

Age, education, country, birth country, cultural background, equivalised household income, shopping responsibility, medical-related dietary factors, lifestyle-related dietary factors, having a child under 15 years of age in the household, level of confidence in the food supply, and level of health consciousness were not significant predictors of likelihood to select fairness (all $p > .05$).

Tradition:

People were significantly more likely (all $p < .05$) to select tradition as a top three food value if they:

- Identified as male (vs female)
- Were born outside of Australia and New Zealand in a non-English speaking country (vs born outside of Australia and New Zealand in another English-speaking country)
- Had no Australian/New Zealand or European background (vs having one)
- Had a low level of health consciousness (vs high level)

Age, education, country, equivalised household income, shopping responsibility, food industry experience, medical-related dietary factors, lifestyle-related dietary factors, having a child under 15 years of age in the household, level of confidence in the food supply were not significant predictors of likelihood to select tradition (all $p > .05$).

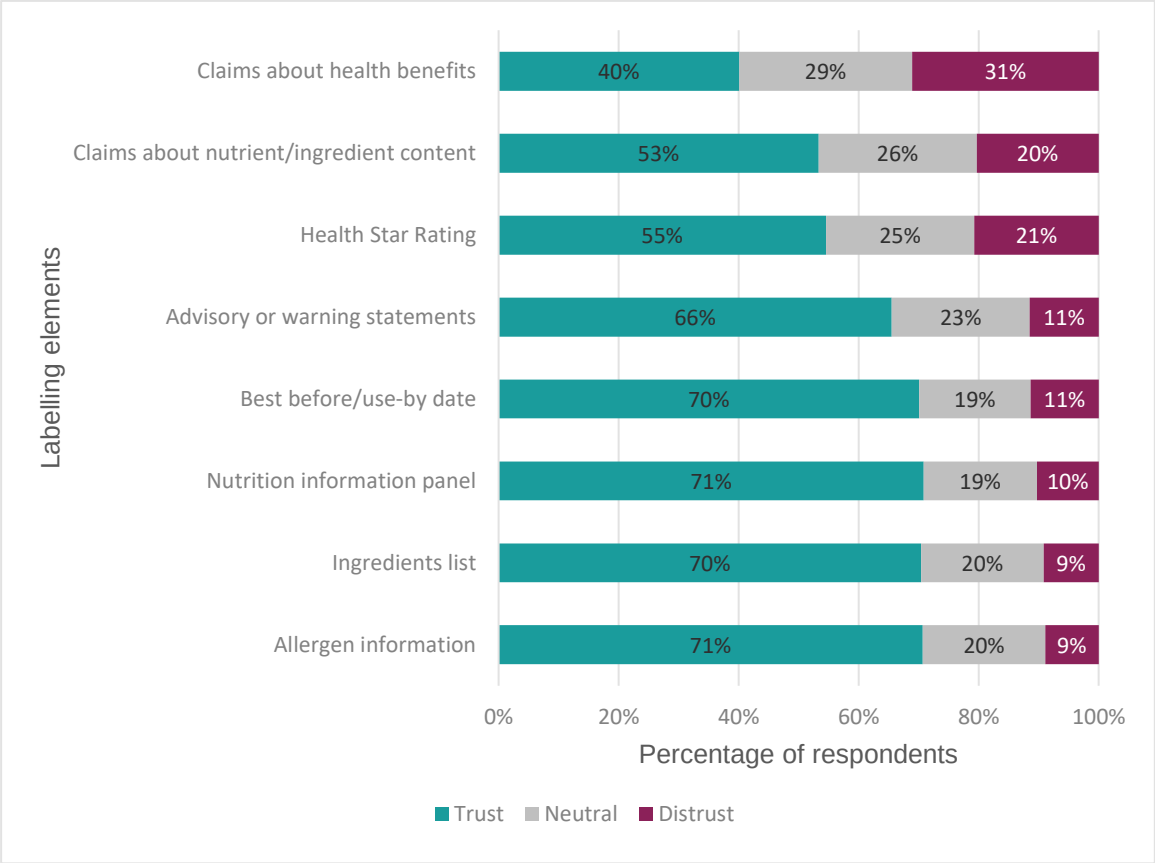
Trust, use, and understanding of food labelling

Trust in labelling elements

Respondents were asked to rate how much they trust a range of labelling elements, even if they don't use them. Responses were on a scale from 1 to 7, where 1 = "Cannot trust at all" and 7 = "Can trust completely". Respondents were shown a visual example of each labelling element (see Appendix A). The labelling elements tested included all FSANZ-regulated labelling elements (which extend across a broad range of foods), as well as the Health Star Rating.

As shown in Figure 4.9, 'Allergen information', 'Ingredient lists' and 'Best before/use by dates' and the 'Nutrition information panel' were the most trusted labelling elements (generally trusted by approximately 70% of respondents). The least trusted labelling elements were 'Claims about health benefits' (only trusted by 40.11% of respondents), 'Claims about nutrition/ingredient content' (trusted by 53.35% of respondents) and the Health Star Rating (trusted by 54.57% of respondents).

Figure 4.9. Trust in various labelling elements.



Q: How much do you feel you can trust the following information on packaged foods and drink? (1 = "Cannot trust at all" and 7 = " Can trust completely")
Base: All respondents (n = 1237 Australia, n = 810 New Zealand)

A repeated measures ANOVA confirmed that level of trust significantly differed across the different labelling elements ($F(5.04, 10300.71) = 293.67$, $p < 0.001$). Follow-up t-tests between each descending mean[7] (using sequential Bonferroni corrected-alphas) showed that all pairwise comparisons were significantly different ($p < 0.001$), except for between the ingredients list and best before/use by dates ($p = 0.658$), between best before/use-by dates and the NIP ($p = 0.403$), between the NIP and advisory/warning statements ($p > 0.013$), and between the Health Star Rating and claims about nutrient/ingredient content ($p = 0.758$).

Table 4.4 shows the group mean trust ratings and standard deviations for each country, and for the total sample.

[7] A total of 7 comparisons were made. These were comparisons between each descending mean (see Table 4.4): allergen information vs. ingredients lists; ingredients list vs. best before/use-by date; best before/use-by date vs. NIP; NIP vs. advisory/warning statements; advisory/warning statements vs. health star rating; health star rating vs. claims about nutrient/ingredient content; claims about nutrient/ingredient content vs. claims about health benefits.

Table 4.4. Means trust ratings and standard deviations (SD) for each labelling element for each country and for the total sample.

Labelling elements	Australia		New Zealand		Total	
	Mean	SD	Mean	SD	Mean	SD
Factor 1						
Allergen information	5.14	1.27	5.15	1.32	5.15	1.29
Ingredients list	5.07	1.27	5.07	1.27	5.07	1.27
Best before/use by date	5.06	1.34	5.04	1.40	5.05	1.36
Nutrition information panel (e.g. amount of energy, carbohydrates, sugar, sodium, or fat)	5.07	1.29	4.97	1.36	5.03	1.32
Advisory or warning statements (e.g., 'contains caffeine', 'not recommended for children')	4.96	1.32	4.98	1.34	4.97	1.32
Average trust in Factor 1 labelling elements	5.06	1.30	5.04	1.34	5.05	1.31
Factor 2						
Health Star Rating	4.59	1.47	4.47	1.48	4.54	1.48
Claims about nutrient or ingredient content (e.g., 'low in sugar', 'reduced fat')	4.57	1.40	4.47	1.43	4.53	1.41
Claims about health benefits (e.g., 'calcium for healthy bones')	4.13	1.49	3.97	1.51	4.06	1.50
Average trust in Factor 2 labelling elements	4.43	1.45	4.30	1.47	4.38	1.46
Average trust in FSANZ-regulated labelling (all except Health Star Rating)	4.86	0.99	4.81	1.01	4.84	1.00
Average trust in all labelling elements	4.82	0.99	4.76	1.00	4.80	1.00

We initially calculated an overall measure of trust in FSANZ-regulated labelling by averaging the trust ratings across the different labelling elements (except for the Health Star Rating, as this is not regulated by FSANZ). Overall, 65.04% of respondents indicated that they trusted FSANZ-regulated labelling information. We also calculated an averaged measure of trust across all labelling elements tested (including the Health Star rating), and found similar results (with 65.87% indicating that they generally trusted labelling).

However, it is important to note that levels of trust in the different labelling elements were significantly different. We conducted a factor analysis on the total sample to determine whether trust in the eight different labelling elements were the same construct, and found that the question measured two different factors. The analysis revealed that trust in claims about health benefits, claims about nutrition/ingredient content and the health star rating (i.e., the labelling elements that had the lowest levels of trust) were conceptually different to trust in the other labelling elements. The different factors are identified in Table 4.4, with the full results of the factor analysis available in Appendix B.

We therefore further computed two different averages for trust in FSANZ-regulated labelling: One combining trust in health and nutrition content claims, and one combining trust in all other labelling elements (except the Health Star Rating, which is not currently FSANZ-regulated). On average, 52.13% of respondents trusted health and nutrition content claims, while 72.25% of respondents trust all other FSANZ-regulated labelling elements.

Factors predicting trust in food labelling

Given the results of the factor analysis above, we ran two separate regressions for trust in FSANZ-regulated labelling: one testing predictors of averaged trust in labelling of health claims and nutrition/ingredient content claims (Factor 2 from Table 4.4, excluding the health star rating), and a second testing predictors of averaged trust in other labelling elements (Factor 1 from Table 4.4). A third regression was also run testing predictors of trust in the health star rating, given that this is not currently regulated by FSANZ (in contrast to all other labelling elements).

An overall finding from the three regressions was that trust in professions/institutions in general strongly predicted trust in labelling. However, trust in different types of food actors strongly predicted trust across the different labelling elements: trust in manufacturers/processers and retailers strongly predicted trust in claims, while trust in government/public food authorities strongly predicted trust in the other FSANZ-regulated elements, and trust in retailers strongly predicted trust in the Health Star Rating.

The key findings for each regression are provided below, with more detailed reporting for each available in Appendix C.

Trust in health claims and nutrition/ingredient content claims

People were significantly more likely (all $p < .05$) to have a greater level of trust in health claims and nutrition/ingredient content claims if they:

- Were not tertiary-educated
- Did not have food industry experience
- Had a child < 15 years of age in the household
- Live in Australia (vs New Zealand)
- Were born outside of Australia and New Zealand in a non-English speaking country (vs being born in Australia or New Zealand)
- Did not have an Australian/New Zealand or European background
- Were more health conscious
- Had a higher level of trust in professionals/institutions in general
- Had a higher level of trust in manufacturers/processors and retailers

The strongest predictors of trust in health claims and nutrition/ingredient content claims were trust in professionals and institutions in general, followed by trust in manufacturers/processors and retailers, not having a tertiary education, and being more health conscious. Full details of the regression analysis are available in Table C.4 in Appendix C.

Trust in other FSANZ-regulated labelling elements

People were significantly more likely (all $p < .05$) to have a greater level of trust in other FSANZ-regulated labelling elements if they:

- Were younger
- Identified as female
- Selected at least one lifestyle-related factor as currently affecting food choices

- Remember a food recall
- Were more health conscious
- Have a higher level of trust in professionals and institutions in general
- Have a higher level of trust in all food system actors.

The strongest predictors of trust in other FSANZ-regulated labelling elements were trust in food scientists, trust in professionals and institutions in general, trust in government/public food authorities, remembering a food recall, and being more health conscious. Full details of the regression analysis are available in Table C.5 in 0 C.

Trust in the Health Star Rating:

People were significantly more likely (all $p < .05$) to have a greater level of trust in the Health Star Rating if they:

- Had a lower equivalent household income
- Were born in Australia or New Zealand (compared to being born outside Australia/New Zealand in an English-speaking country)
- Had a higher level of trust in professionals/institutions in general
- Had a higher level of trust in manufacturers/producers and retailers

The strongest predictors were trust in professionals and institutions in general and trust in retailers. Full details of the regression analysis are available in Table C.6 in Appendix C.

Relative importance of labelling elements

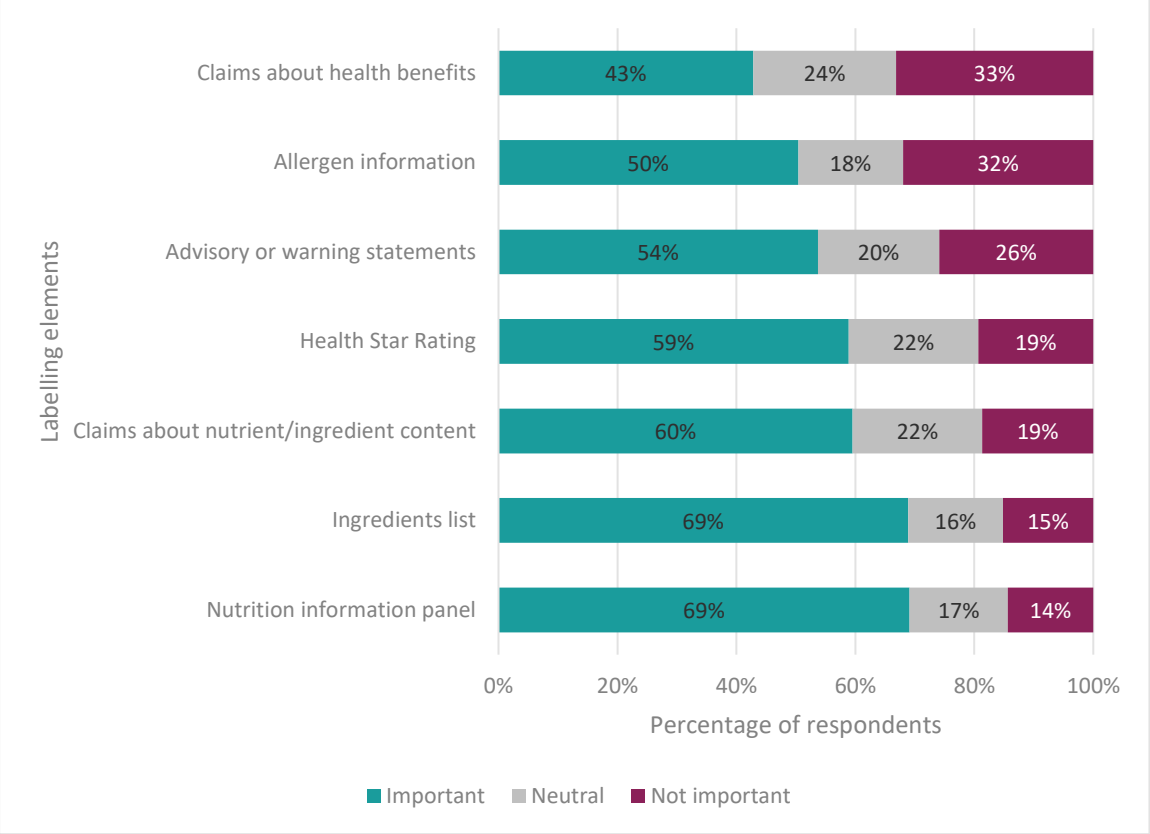
Participants were asked to rate how important a list of labelling elements were to their purchasing decisions when buying packaged food or drink for the first time. Responses were on a scale from 1 to 7, where 1 = “Not important at all”, and 7 = “Extremely important”.

As shown in Figure 4.10 below, the ‘Nutrition Information Panel’ (NIP) and ‘ingredients list’ were the most important labelling elements for consumers (rated as generally important (i.e., above the midpoint) by 69.13% and 68.88% of respondents, respectively). This was followed by ‘claims about nutrient or ingredient content’, and the ‘health star rating’ (rated as generally important by 59.55% and 58.87%, respectively). The least important labelling element was ‘claims about health benefits’ (rated as generally important by 42.84% of respondents).

A repeated measures ANOVA confirmed that mean level of importance significantly differed across the different labelling elements ($F(5.08, 10401.80 = 185.15$, $p < 0.001$). Follow-up t-tests showed that all pairwise comparisons were significantly different ($p < 0.001$), except for between the ‘nutrition information panel’ and ‘ingredients list’ ($p = 0.791$), and between the ‘health star rating’ and ‘claims about nutrient or ingredient content’ ($p = 0.718$).

The group mean ratings and standard deviations for each label element are shown in Table 4.5 below.

Figure 4.10. Importance of food labelling elements for making food choices



Q: Think about when you are making the decision to buy a packaged food or drink for the first time. How important is the following labelling information when deciding what to buy? (1 = "Not important at all" and 7 = "Extremely important")
Base: All respondents (n = 1,237 Australia, n = 810 New Zealand)

Table 4.5. Mean importance ratings (and standard deviations) for food labelling elements

	Mean	SD
Label element		
Ingredients list	5.13	1.64
Nutrition information panel (e.g. amount of energy, carbohydrates, sugar, sodium, or fat)	5.12	1.60
Claims about nutrient or ingredient content (e.g., 'low in sugar', 'reduced fat')	4.71	1.59
Health Star Rating	4.70	1.65
Advisory or warning statements (e.g., 'contains caffeine', 'not recommended for children')	4.51	1.81
Allergen information (e.g. 'Gluten free', 'contains nuts', etc.)	4.31	2.03
Claims about health benefits (e.g. 'Calcium is good for healthy bones')	4.08	1.71

Nutrition information panel (NIP)

Importance of the NIP to food choices

As shown in Figure 4.10 above, the NIP was one of the most important labelling elements for consumers, with 69.13% of respondents indicating the NIP was generally important when deciding what to buy the first time (i.e., rated the NIP above the midpoint of 4 on the importance scale). Only 14.36% of respondents rated the NIP as generally not important (i.e., below the midpoint).

Factors predicting importance of the NIP

Simultaneous multiple linear regression was used to test if various factors significantly predicted the level of importance given to the NIP. People were significantly more likely (all *p*-values < .05) to give a greater level of importance to the NIP if they:

- Identified as female (vs male)
- Did not have a child < 15 years in the household
- Had a greater level of health consciousness
- Selected a medical- or lifestyle-related factor as currently affecting their food choices.
- Selected 'Nutrition' as a top three food value.

The strongest predictors of the level of importance given to the NIP were level of health consciousness, selecting 'Nutrition' as a top three food value, and selecting a lifestyle related factor as currently affecting their food choices.

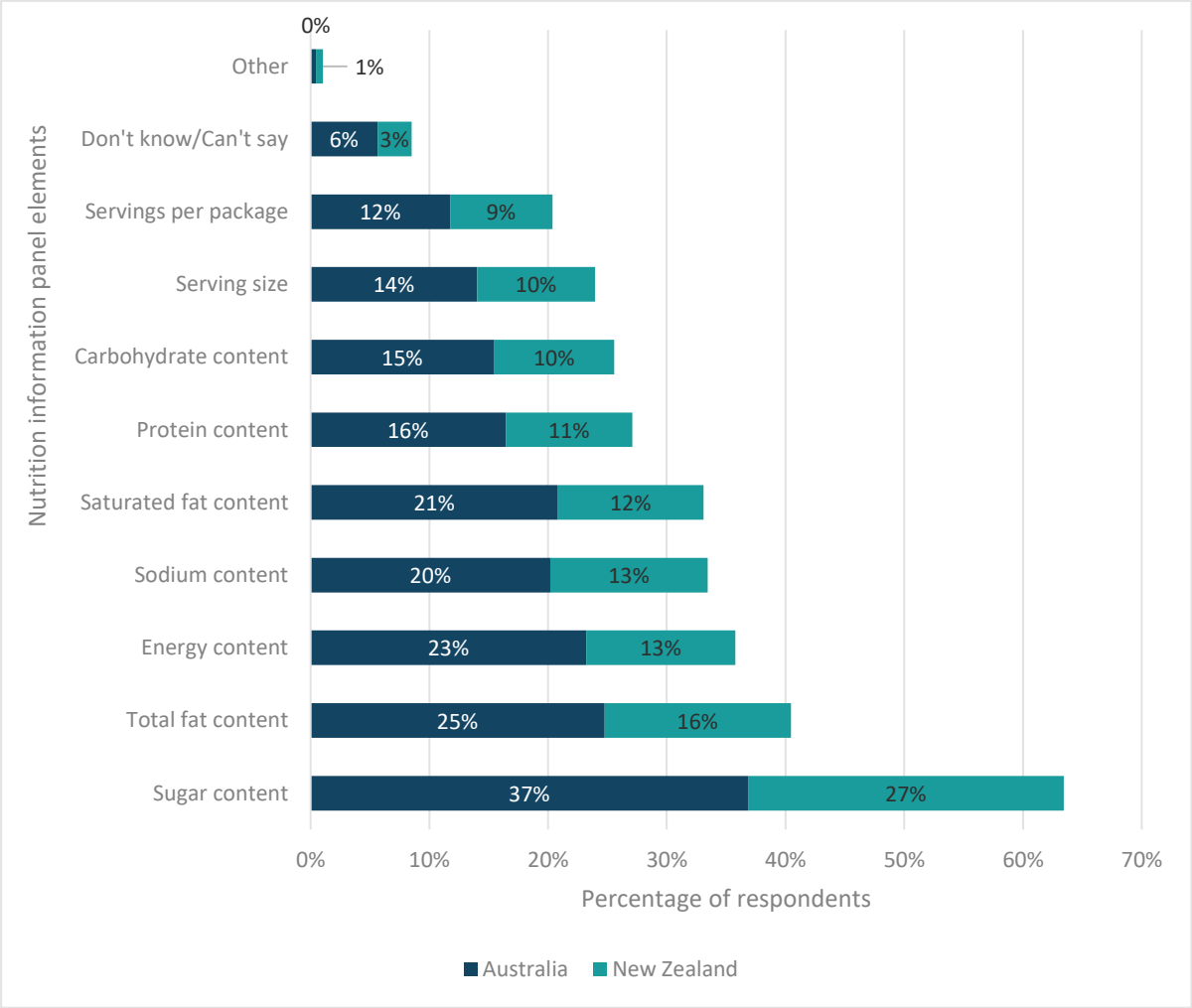
The full statistical results of the simultaneous regression analysis (including beta and p-values for each association and adjusted R^2 for the model) are available in Table C.7 in Appendix C.

Elements within the NIP

Respondents who indicated that the NIP was at least somewhat important (i.e. provided a rating of at least 4 on the scale of importance, n = 1,753) were asked the additional question: "When buying products for the first time, what parts of the NIP do you usually look for?" Respondents could select as many elements as they liked from a list, as shown in Figure 4.11 below.

As shown in Figure 4.11 below, 'Sugar content' was the NIP element most frequently looked for (selected by 63.43% of analysed respondents). This was followed by 'Total fat content' (40.44%), and 'Energy content' (35.77%). The NIP element used the least was 'Servings per package' (20.37%). Responses from those who selected 'Other' included 'trans-fats', 'per 100g information', 'cholesterol', 'ingredient list', 'artificial additives', 'price, 'dairy/wheat', 'fibre', and 'iron'. One respondent also stated 'calories'; it is unclear whether they understood this to be the same as energy content information.

Figure 4.11. Use of NIP elements when buying food products for the first time (n = 1753).



Q: When buying products for the first time, what parts of the Nutrition Information Panel (NIP) do you usually look for? (Please select all that apply)
Base: Respondents who provided a rating of at least 4 on the scale of importance of the NIP (1 = not important at all; 7 = extremely important) (n = 1078 Australia, n = 675 New Zealand)

Ingredients list

Importance of the ingredients list to food choices

As shown in Figure 4.10 above, the ingredients was one of the most important labelling elements for consumers, with 68.88% of respondents indicating the ingredients list was generally important when deciding what to buy the first time (i.e., rated ingredients lists above the midpoint of 4 on the importance scale). Only 15.19% of respondents rated the ingredients list as generally not important (i.e., below the midpoint).

Factors predicting importance of the ingredients list

Simultaneous multiple linear regression was used to test if various factors significantly predicted the level of importance given to the ingredients list. People were significantly more likely (all *p*-values < .05) to give a greater level of importance to the ingredients list if they:

- Identified as female (vs male)
- Had a tertiary-level education

- Had a greater level of health consciousness
- Selected a medical-related factor as currently affecting food choices

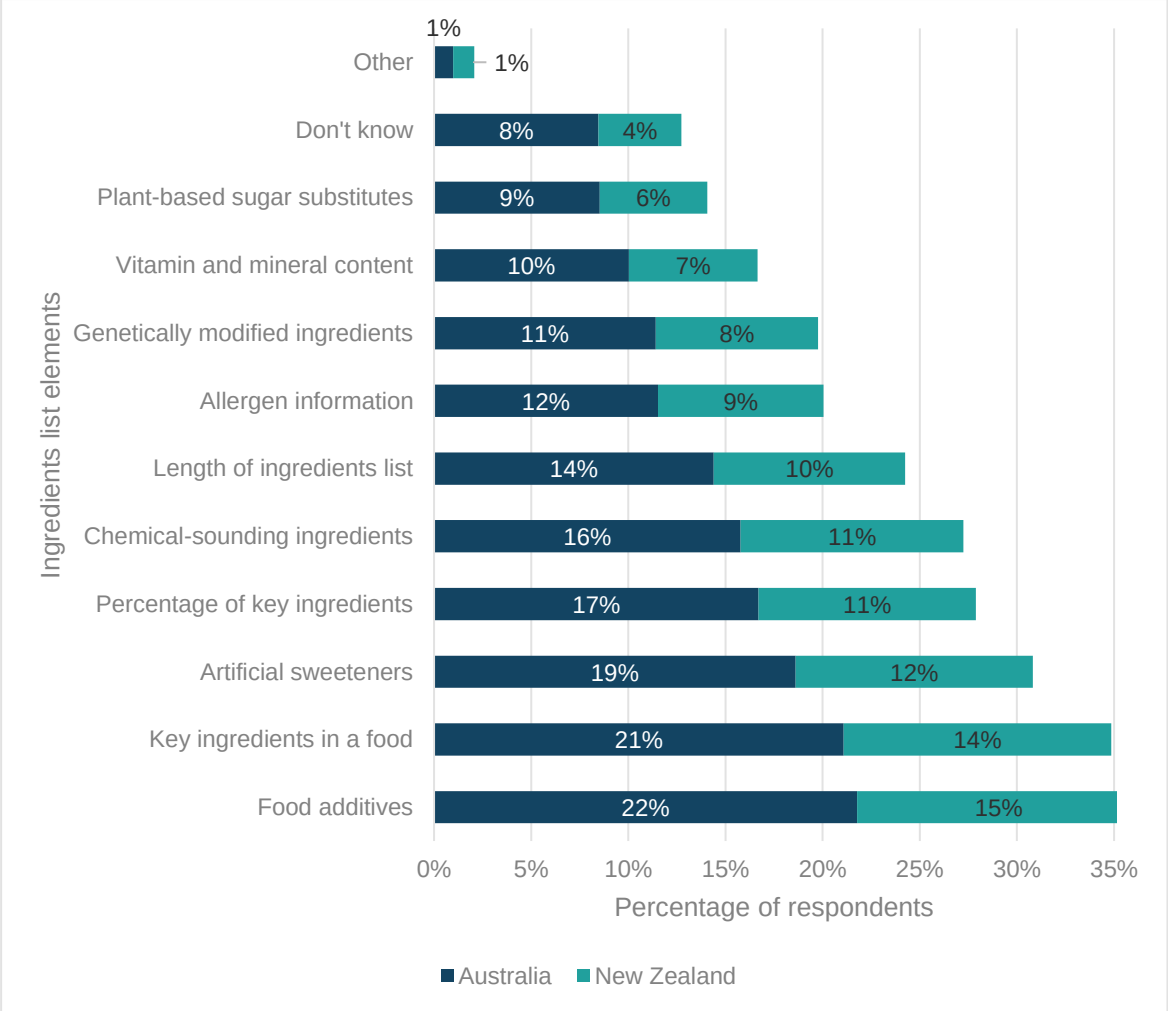
The strongest predictors of importance of the ingredients list were selecting a medical-related factor as currently affecting food choices and having a higher level of health consciousness.

The full statistical results of the simultaneous regression analysis (including beta and *p*-values for each association and adjusted R^2 for the model) are available in Table C.8 in Appendix C.

Elements within the ingredients list

Respondents who indicated that the NIP was at least somewhat important (i.e. provided a rating of at least 4 on the scale of importance, n =1,736) were asked the additional question: "What information do you usually look for in the ingredients list when buying products for the first time?" Respondents could select as many elements as they liked from a list, as shown in Figure 4.12.

Figure 4.12. Ingredients list elements selected by respondents (n = 1,736).



Q: What information do you usually look for in the ingredients list when buying products for the first time? (Please select all that apply)
Base: Respondents who provided a rating of at least 4 on the scale of importance of the ingredients list (1 = not important at all; 7 = extremely important) (n = 1,063 Australia, n = 673 New Zealand)

As shown in Figure 4.12, ‘Food additives’ (selected by 36.35% of analysed respondents) and ‘Key ingredients in a food’ (selected by 34.85% of analysed respondents) were the most frequently selected elements of the ingredients list. This was followed by ‘Artificial sweeteners’ (30.82%). The least selected element of the ingredients list was ‘Plant-based sugar substitutes’ (14.06%). Responses from those who selected ‘Other’ included: meat and animal products, whether the product is vegetarian, plant-based, dairy-free, gluten free or halal appropriate, ‘ingredients with numbers’, sugar, country of origin, type of oil used (e.g. palm oil), caffeine, and ‘hidden vegetable powders that don’t say which vegetables’.

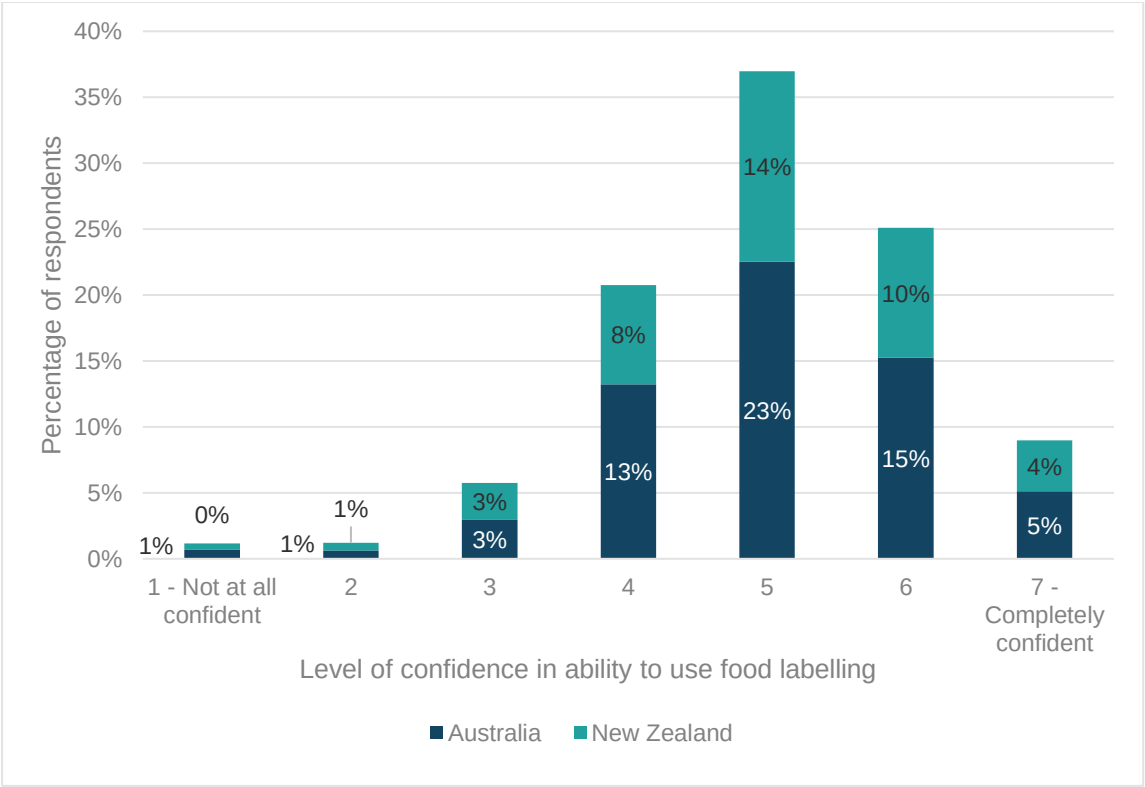
Perceived ability to use food labelling

Respondents were asked to rate their confidence in their ability to make informed choices about foods from the information provided on food labels. Responses were on a scale from 1 to 7, where 1 = “Not at all confident” and 7 = “Completely confident”.

As shown in Figure 4.13, most respondents (71.09%) generally felt confident in their ability to use food labelling to make informed choices (i.e., selected above the midpoint of the scale). Only 8.15% felt that they were generally not confident (i.e., selected a rating below the midpoint), and 20.76% selected a rating at the midpoint.

It is important to note that this question only measured respondents’ *perceived* ability to use food labelling to make informed choices, and does not provide an objective measure of their ability to use food labelling.

Figure 4.13. Perceived ability to use food labelling to make informed choices.



Q: How confident are you in your ability to make informed choices about foods from the information on food labels? (1 = “Not at all confident” and 7 = “Completely confident”)
Base: All respondents (n = 1237 Australia, n = 810 New Zealand)

Factors predicting confidence in ability to use food labelling

Simultaneous multiple linear regression was used to test if various significantly predicted the level of confidence in the ability to use food labelling. People were significantly more likely (all *p*-values < .05) to have a higher level of confidence in their ability to use food labelling to make informed choices if they:

- Were younger
- Had a greater level of health consciousness
- Had a greater level of confidence in the safety of the food supply
- Had an Australian/New Zealand or European background
- Selected a medical- or lifestyle-related factor as currently affecting food choices.

The strongest predictors for confidence in ability to use food labelling to make informed choices were level of health consciousness and confidence in the safety of the food supply.

Full statistical results of the simultaneous regression analysis (including beta and *p*-values for each association and adjusted R^2 for the model) are available in Table C.9 in Appendix C.

Reasons for lack of confidence in ability to use food labelling

Respondents who indicated a lack of confidence in their ability to use food labelling (i.e. selected a rating of 1-4; n = 592) were asked: "What makes it difficult to use food labelling to make informed choices about foods?". Respondents were provided with a list of potential reasons for their lack of confidence and were asked to select all reasons that applied to them, or select 'Other' and input free text.

As shown in Table 4.6, 'I often don't understand what the information on food labels means' was the most frequently selected reason for lack of confidence in ability to use food labelling (selected by 37.84% of respondents). This was followed by 'the information on food labels is too small/illegible to easily read' (36.99%), and 'I'm not sure if I can trust the information on food labels' (36.49%). The least selected reason was 'I can't find the information I need to make food choices that reflect my values' (7.60%). Responses of those selecting 'Other' included not caring about food labelling and labelling not giving the whole picture of a food.

Table 4.6. Reasons for lack of confidence in ability to use food labelling information to make informed choices

	N	%
Reasons		
I often don't understand what the information on food labels means	224	37.84
The information on food labels is too small/illegible to easily read	219	36.99
I'm not sure if I can trust the information on food labels	216	36.49
I don't have enough time to read food labels when I'm shopping	181	30.57
I don't find the information on food labels useful or relevant to me	82	13.85
I can't find the information I need to make food choices that reflect my values	45	7.60
Other (e.g. feeling of deception, not caring)	2	0.34
Can't say/Don't know	56	9.46

* As respondents could select multiple responses, percentages may not add up to 100.

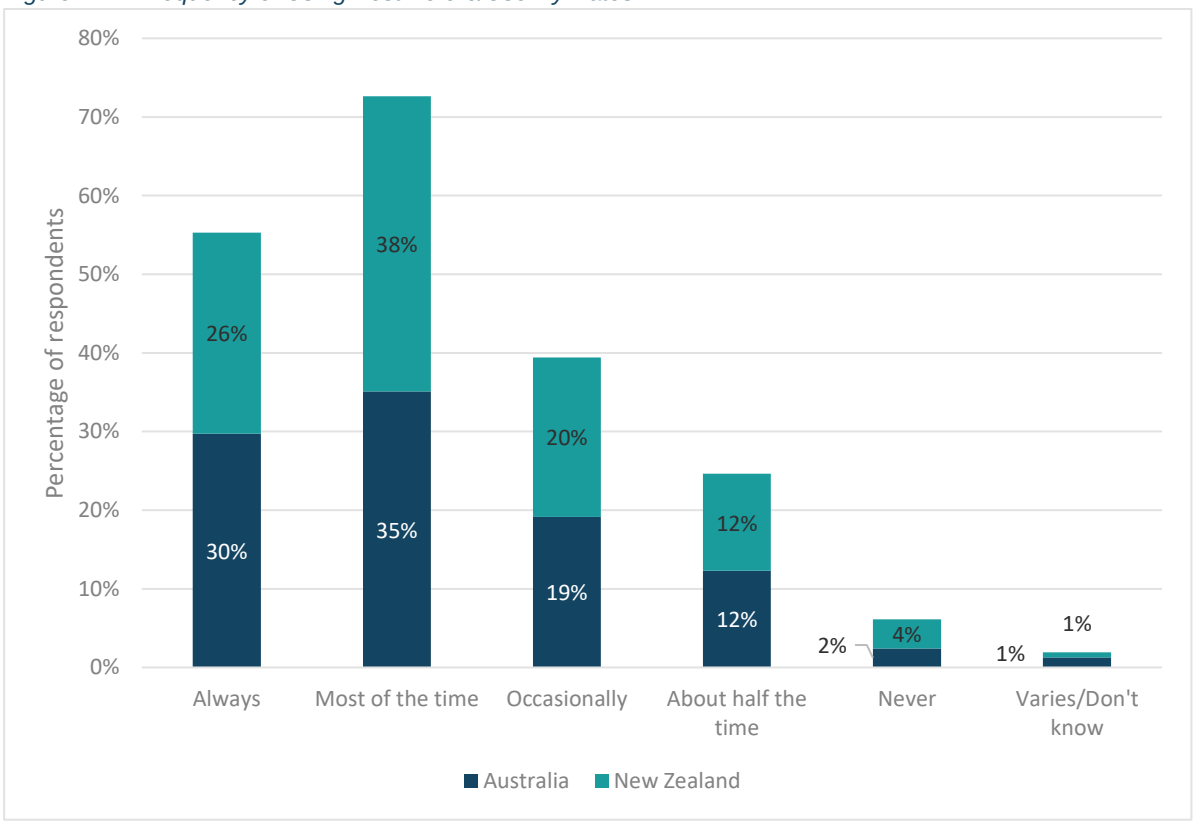
Use and understanding of best before/use-by dates

Use of best before and use-by dates

All respondents were asked how often, if at all, they looked at best before or use-by dates when they are about to cook, prepare, or consume packaged food. Response options were: Never, Always, Most of the time, About half the time, Occasionally, Never, It varies too much to say/Don't know.

As shown in Figure 4.14, most respondents (64.14%) reported looking at best before/use-by dates 'Most of the time' or 'Always'. 12.31% of respondents said that they looked at them 'About half the time', and 22.52% occasionally or never looked at them. 1.03% indicated that it varies too much to say or they didn't know how often they looked at date marking. A chi-square analysis found no significant differences in frequency of using date marking between people living in Australia vs people living in New Zealand ($p > .05$).

Figure 4.14. Frequency of Using Best Before/Use-By Dates



Q: How often, if at all, do you look at best before or use-by / expiry dates when you are about to cook, prepare or consume packaged food? (Single response)
Base: All respondents (n = 1237 Australia, n = 810 New Zealand)

Understanding of best before and use-by dates

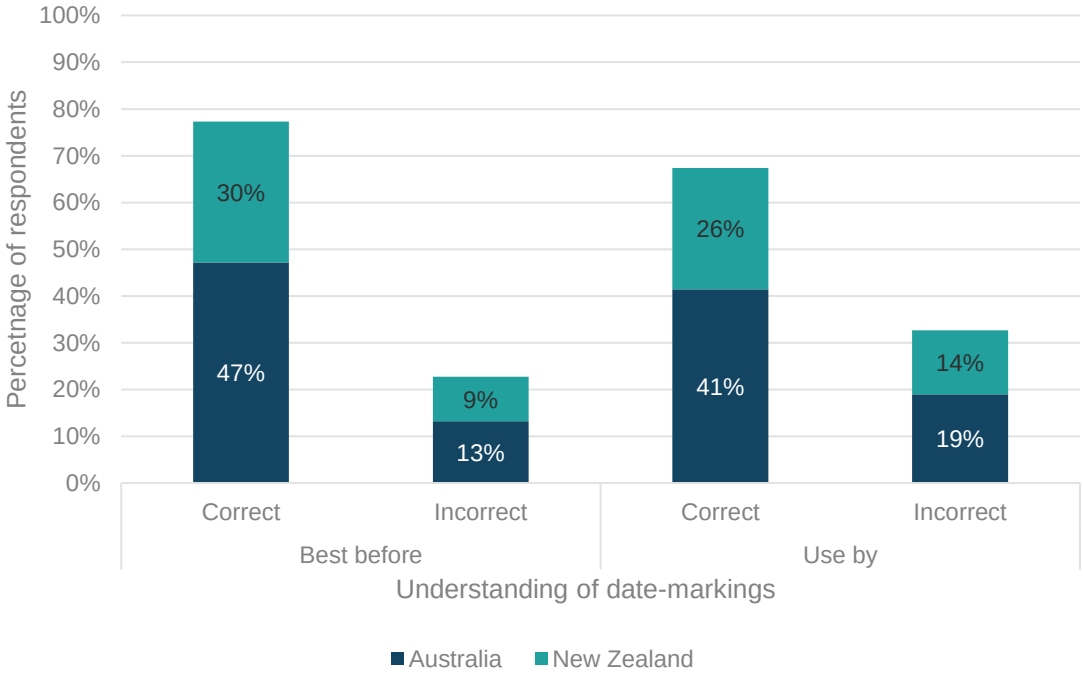
Respondents were then asked what they understood the terms 'best before' and 'use-by' to mean on food or drink labelling. They were provided with three possible descriptions as well as 'Other' and 'Can't say/don't know' and could select multiple options. As shown in Table 4.7 below, either of two descriptions of best before dates were considered correct, whereas only one description of use-by dates was considered correct.

Table 4.7. Correct and incorrect response options for understandings of best before and use-by dates

	Best Before Dates	Use-By Dates
Description		
Food should not be eaten after this date as it may be unsafe.	Incorrect	Correct
Food is still safe to eat after this date as long as it is not damaged, deteriorated, or perished.	Correct	Incorrect
Food is still safe to eat after this date, but the quality may not be as good.	Correct	Incorrect
Can't say/Don't know	Incorrect	Incorrect

As shown in Figure 4.15, 77.28% of respondents selected at least one of the two correct responses for best before dates and no incorrect responses. 67.37% of respondents selected the correct response for use-by dates and no incorrect response.

Figure 4.15. Correct and incorrect understandings of best before and use-by dates.



Q: To the best of your knowledge, what does the term 'best before'/'use-by' mean on food or drink labels? (Please select all that apply)
Base: All respondents (n = 1237 Australia, n = 810 New Zealand)

The percentage of respondents who selected each response option is available in Table 4.8 below.

For best-before dates, 'Other' responses included: taking care when consuming, that it doesn't mean anything, don't use after best before if it is a meat product, and that it doesn't necessarily mean that it is poisonous. For use by dates, 'Other' responses included: depending on the look and taste they may use anyway, and best option would be to throw food away.

Table 4.8. Percentage of respondents selecting different understandings of best before and use-by date marking

	Best before dates (% of respondents)	Use-by dates (% of respondents)
Understandings of date marking		
Food should not be eaten after this date as it may be unsafe.	21.01	70.59
Food is still safe to eat after this date as long as it is not damaged, deteriorated, or perished.	45.97	19.93
Food is still safe to eat after this date, but the quality may not be as good.	53.30	14.90
Other	0.34	0.15
Can't say/Don't know	1.66	1.81

NB: As respondents could select multiple responses, percentages do not add up to 100.

Factors predicting correct vs. incorrect understanding of best before dates

A binomial logistic regression was conducted to determine whether various factors significantly predicted understanding of best before dates. Respondents were categorised as having a 'correct' understanding if they selected at least one of the two correct responses for best before dates and no incorrect responses (as previously shown in Table 4.7). All other respondents were categorised as having an 'incorrect' understanding. People were significantly more likely to *incorrectly* understand best before dates if they:

- Were younger
- Identified as male
- Had a child < 15 years of age in the household
- Did not have an Australian/New Zealand or European background
- Had a lower equivalised household income
- Did the majority of the food shopping themselves (vs sharing the food shopping with someone else).

The full details and statistical results of the binomial logistic regression analysis are available in Table D.3 in Appendix D.

Factors predicting correct vs. incorrect understanding of use-by dates

We performed the same analysis as above to determine whether various factors significantly predicted understanding of use-by dates. Respondents were categorised as having a 'correct' understanding if they selected the correct response for use-by dates and no incorrect responses (as previously shown in Table 4.7). All other respondents were categorised as having an 'incorrect' understanding.

Respondents who identified as male were significantly more likely to *incorrectly* understand use-by dates ($p < 0.001$). There were no other significant predictors.

The full details and statistical results of the binomial logistic regression analysis are available in Table D.4 in Appendix D.

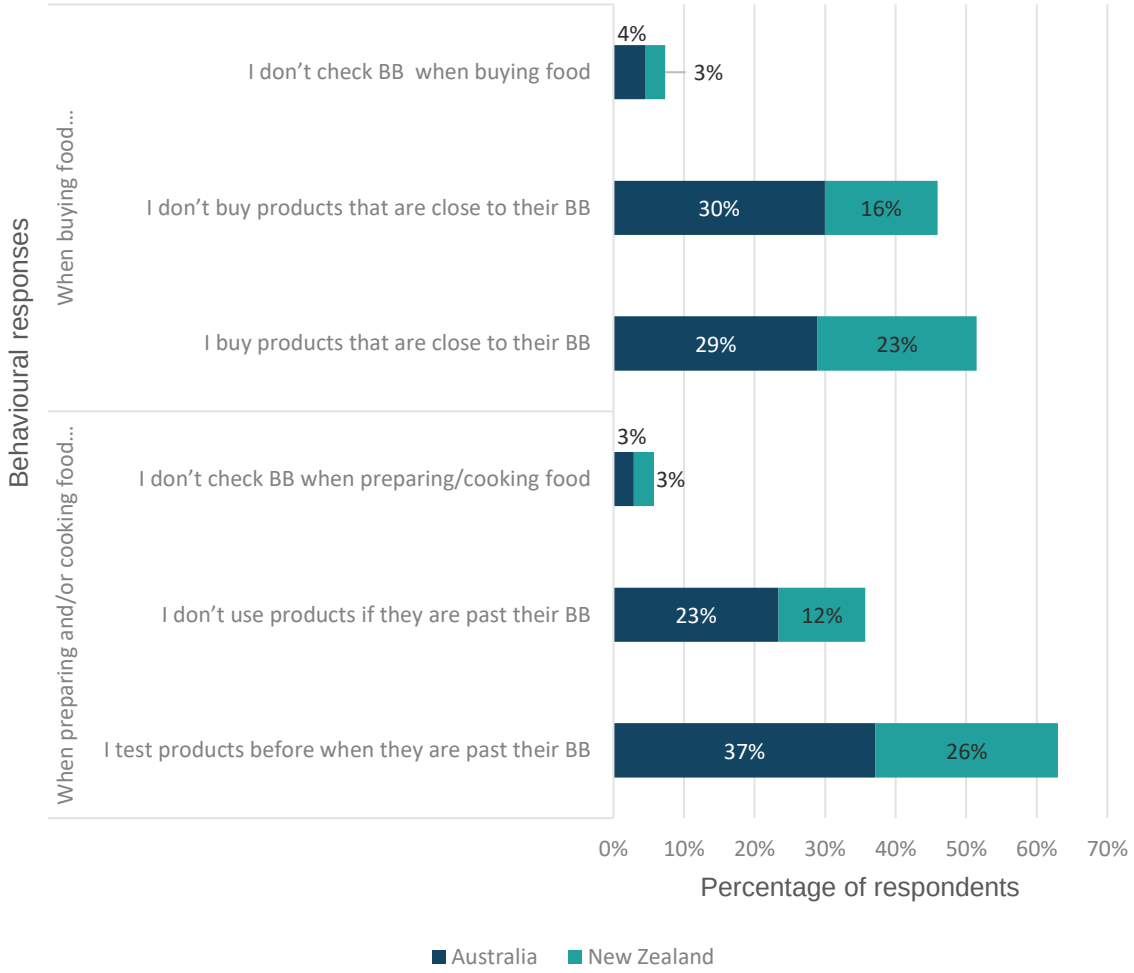
Reported behavioural responses to best before and use-by dates

Respondents who indicated that they use best before/use-by dates at least some of the time (i.e. did not answer 'Never'; N = 1987) were asked how they used best before and use-by dates. Respondents were able to select multiple answers.

As shown in Figure 4.16, the most commonly selected behavioural response to best before dates was 'I test products before I eat them when they are past their best before date' (selected by 60.53% of respondents). This was followed by 'I buy products that are close to their best before date' (49.44%) and 'I don't buy products that are close to their best before date' (41.11%).

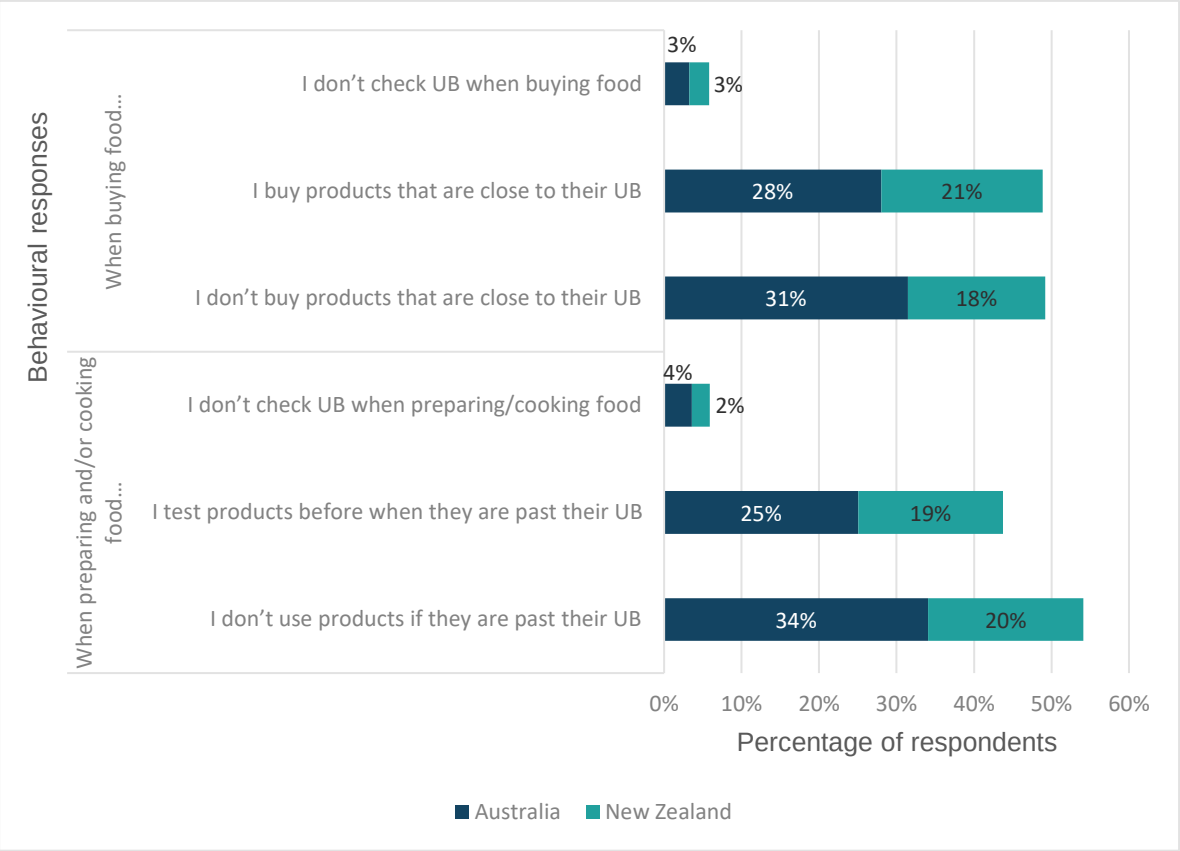
As also shown in Figure 4.17, the most commonly selected behavioural response to use-by dates was 'I don't use products if they are past their use-by date' (selected by 51.98% of respondents). This was followed by 'I don't buy products that are close to their use by date' (47.24%) and 'I buy products that are close to their use-by date' (46.95%).

Figure 4.16. Behaviour responses to best before (BB) dates (n = 1966).



Q: Thinking about best before/use-by dates on packaged food products, how do you use them? (Please select all that apply)
Base: Respondents who indicated that they use date marking at least some of the time (n = 1191 Australia, n = 775 New Zealand)

Figure 4.17. Behaviour responses to use-by (UB) dates (n = 1966).



Q: Thinking about best before/use-by dates on packaged food products, how do you use them? (Please select all that apply)
Base: Respondents who indicated that they use date marking at least some of the time (n = 1191 Australia, n = 775 New Zealand)

Understanding compared to behavioural responses for best before dates

Table 4.9 below shows the proportion of respondents who selected each behavioural response option according to whether they had a correct or incorrect understanding of best before dates.

Table 4.9. Understanding vs behavioural responses for best before dates
Base: Respondents who indicated that they use best before/use-by dates at least some of the time (n = 1996)

	Correct understanding of best before dates		Incorrect understanding of best before dates	
	N	%	N	%
When buying food…				
I buy products that are close to their best before date e.g. if it is at a discount or I will use it quickly.	837	52.9	175	37.6
I don't buy products that are close to their best before date.	647	40.9	256	55.1
I don't check best before dates when buying food.	112	7.1	32	6.9

	Correct understanding of best before dates		Incorrect understanding of best before dates	
	N	%	N	%
When preparing or cooking food…				
I don't use products if they are past their best before date	419	26.5	283	60.9
I test products (e.g. by sniffing or trying a small amount) if they are past their best before date	1091	69.0	148	31.8
I don't check best before dates when preparing/cooking food	80	5.1	33	7.1

* As respondents were able to select multiple responses, percentages may not add up to 100.

A series of chi-square analyses were conducted to investigate whether a correct or incorrect understanding of best before dates was associated with certain behavioural responses.

People who had a *correct* understanding of best before dates were significantly more likely to buy products close to their best before date, test products if they are past their best before date, and check best before dates before preparing food. Conversely, people with an *incorrect* understanding of best before dates were significantly more likely to not buy products close to their best before date, to not use products if they are past their best before date, and to not check best before dates prior to preparing food (all *p*-values < .05). Full statistical results from the chi-square analyses are available in Appendix E.

Nevertheless, as shown in Table 4.9, 26.5% of people who had a correct understanding of best before dates indicated that they do not use products if they are past their best before date, which is inconsistent with their understanding of best before dates.

Understanding compared to behavioural responses for use-by dates

Table 4.10 below shows the proportion of respondents who selected each behavioural response option by whether they had a correct or incorrect understanding of use-by dates.

Table 4.10. Understanding vs behavioural responses for use-by dates
Base: Respondents who indicated that they use best before/use-by dates at least some of the time (n = 1996)

	Correct understanding of use-by dates		Incorrect understanding of use-by dates	
	N	%	N	%
When buying food…				
I buy products that are close to their use-by date e.g. if it is at a discount or I will use it quickly.	636	46.1	325	48.7
I don't buy products that are close to their best before date.	701	50.8	266	39.8
I don't check best before dates when buying food.	61	4.4	53	7.9

	Correct understanding of use-by dates		Incorrect understanding of use-by dates	
	N	%	N	%
When preparing or cooking food…				
I don't use products if they are past their best before date	889	64.5	175	26.2
I test products (e.g. by sniffing or trying a small amount) if they are past their best before date	463	33.6	397	59.4
I don't check best before dates when preparing/cooking food	43	3.1	73	10.9

* As respondents were able to select multiple responses, percentages may not add up to 100.

A series of chi-square analyses were conducted to investigate whether a correct or incorrect understanding of use-by dates was associated with certain behavioural responses to them.

People who had a *correct* understanding of use-by dates were significantly more likely to check use-by dates, not buy products close to their use-by date, not use products past their use-by date, and to not test products if they are past their use-by date. Conversely, people who had an *incorrect* understanding of use-by dates were significantly less likely to check use-by dates while being significantly more likely to test products if they were past their use-by date (all *p*-values < .05). Full statistical results from the chi-square analyses are available in Appendix E.

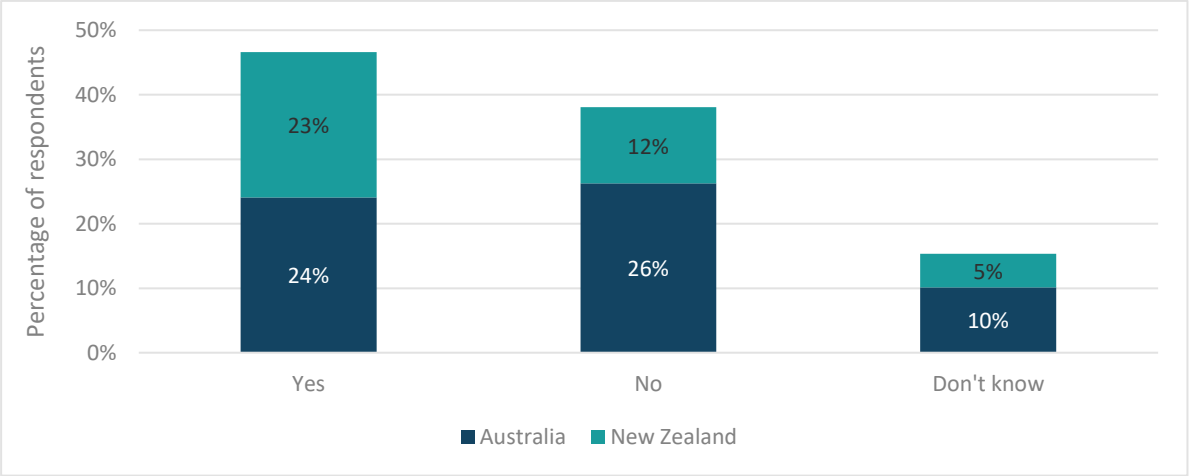
Nevertheless, as shown in Table 4.10, 32.7% of people who had a correct understanding of use-by dates indicated that they would use a product past its use-by date, and 33.6% that they test products (prior to eating) if they are past their use-by date.

Food safety knowledge and concerns

Food recall knowledge

Respondents were asked if they remembered any food recalls happening over the last twelve months. As shown in Figure 4.18, 46.60% of respondents said that they did remember a food recall, 38.06% said they didn't, and 15.34% said they were not sure.

Figure 4.18. Knowledge of food recalls.



Q: Do you remember hearing about any food being recalled in the past 12 months?
Base: All respondents (n = 1237 Australia, n = 810 New Zealand)

Factors associated with knowledge of food recalls

A binomial logistic regression was conducted to determine whether various factors significantly predicted remembering a food recall. People were significantly more likely to remember a food recall if they:

- Were older
- Identified as female
- Lived in New Zealand (as opposed to Australia)
- Shared the food shopping with someone else (vs doing the majority of the shopping themselves)
- Selected pregnancy or breastfeeding as a factor affecting dietary choices
- Were more health conscious
- Knew at least a little about what FSANZ does (vs knowing nothing).

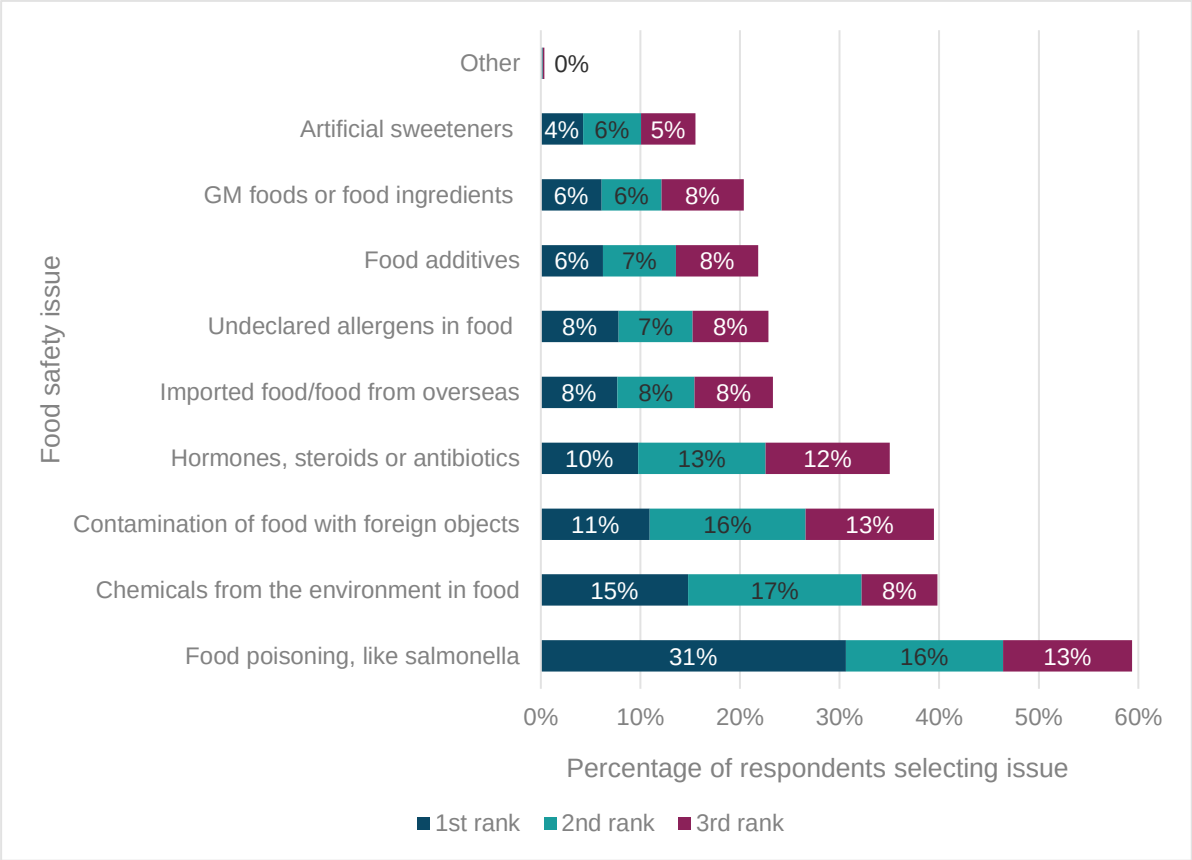
Further details of the binomial logistic regression analysis are available in Appendix D with full statistical result in Table D.5.

Food safety concerns

Respondents were presented with a list of potential food safety issues and asked to rank the top three most important food safety issues today in their opinion.

As shown in Figure 4.19, ‘Food poisoning’ was the most frequently selected issue, with 59.36% of respondents selecting it in their top three. This was followed by ‘Chemicals from the environment in food’ (39.81%), and ‘Contamination of food with foreign objects’ (39.47%). The least selected issue was ‘Artificial sweeteners’ (15.53%). Responses of those selecting ‘Other’ included sugar, spinach contamination, fair trade, Hepatitis A, A1 milk, mRNA concerns, and misleading labelling.

Figure 4.19. Top three ranked food safety issues



Q: In your opinion, what are the most important food safety issues today? (1 = "Most important", 2 = "Second-most important" and 3 = "Third-most important")
Base: All respondents (n = 1237 Australia, n = 810 New Zealand)

Factors associated with top food safety issues

Chi-square tests were conducted to determine whether any demographic factors were associated with selecting particular types of top food safety issues. Significant associations were found for age, gender, education, country, birth country, cultural background, food industry experience, cooking responsibility, household composition, level of confidence in the food supply, level of health consciousness, and remembering a food recall in the last 12 months (all p-values < 0.05). Full details of the statistical analyses are in Appendix E, organised by demographic factor.

Food poisoning

People were significantly more likely to select food poisoning as a top three issue if they:

- Were aged 55+ years (65.99%) compared to people aged 35-54 (59.81%), while those aged 18-34 were the least likely to select this (51.52%)
- Identified as female (62.0%) vs male (56.53%)
- Had some Australian/New Zealand or European background (60.51%) compared with not having any (53.93%)
- Did not live with a child under 15 years of age in the household (61.85%) compared with those who do (53.63%)

- Had a high level of confidence in the safety of the food supply (62.45%) compared to those with a low level of confidence (27.36%)
- Remembered a food recall in the last 12 months (62.79%) compared to those who did not (57.00%).

Education, country of residence, birth country, food industry experience, and health consciousness were not significantly associated with choosing food poisoning.

Chemicals from the environment in food

People were significantly more likely to select chemicals from the environment in food as a top three issue if they:

- Did not live with a child under 15 years of age in the household (52.38%) compared to those who do live with a child (44.64%).

Age, gender, education, country of residence, birth country, cultural background, food industry experience, level of confidence in the safety of the food supply, health consciousness, and awareness of food recalls were not significantly associated with choosing chemicals from the environment in food.

Contamination of food with foreign objects

People were significantly more likely to select contamination of food with foreign objects as a top three issue if they:

- Remembered a food recall in the past 12 months (43.82%) compared to those who did not remember a recall (35.04%).

Age, gender, education, country of residence, birth country, cultural background, household composition, food industry experience, level of confidence in the safety of the food supply, and health consciousness were not significantly associated with choosing contamination of food with foreign objects.

Hormones, steroids or antibiotics

People were significantly more likely to select hormones, steroids or antibiotics as a top three issue if they:

- Identified as female (37.16%) compared to male (32.76%)
- Had a tertiary education (37.97%) compared to not having a tertiary education (32.79%)
- Were born in another English-speaking country (41.59%) compared to being born in Australia or New Zealand (33.20%)
- Did not remember a food recall (37.36%) compared to remembering a recall (32.81%)

Age, country of residence, cultural background, food industry experience, household composition, level of confidence in the safety of the food supply, and health consciousness were not significantly associated with choosing hormones, steroids or antibiotics.

Imported food/food from overseas

People were significantly more likely to select imported food/food from overseas as a top three issue if they:

- Were aged 55+ years (27.93%) compared to people aged 18-34 years (19.30%) and 35-54 years (22.36%).
- Identified as male (25.51%) compared to female (21.17%)
- Did not have a tertiary education (27.11%) compared to those with tertiary education (18.31%)
- Lived in Australia (26.35%) compared to New Zealand (18.63%)
- Were born in Australia/New Zealand (24.94%) compared to people born in non-English-speaking countries (13.62%)
- Had an Australian/New Zealand or European background (24.94%) compared to those who did not (16.49%)

Food industry experience, household composition, level of confidence in the safety of the food supply, health consciousness, and awareness of food recalls were not significantly associated with choosing imported food/food from overseas.

Undeclared allergens in food

People were significantly more likely to select undeclared allergens in food as a top three issue if they:

- Were aged 18-34 years (27.11%) compared to those aged 55+ years (19.83%)
- Lived in Australia (24.49%) compared to New Zealand (20.37%)
- Had food industry experience (26.56%) compared to those who did not (20.87%)

Gender, education, birth country, cultural background, household composition, level of confidence in the safety of the food supply, health consciousness, and awareness of food recalls were not significantly associated with choosing undeclared allergens in food.

Food additives

People were significantly more likely to select food additives as a top three issue if they:

- Had a tertiary education (24.86%) compared to those who did not (19.54%)
- Were born in a non-English speaking country (29.11%) compared to those born in Australia or New Zealand (20.93%)
- Had no Australian/New Zealand or European background (25.65%) compared to those who do (20.97%)
- Lived with a child under 15 years of age in the household (26.34%) compared to those who don’t (19.80%)
- Had a low level of confidence in the safety of the food supply (27.36%) compared to a high level of confidence (20.36%)

- Did not remember a food recall (24.26%) compared to those who do (19.08%)

Age, gender, country of residence, food industry experience, and health consciousness were not significantly associated with choosing food additives.

Genetically modified foods

People were significantly more likely to select genetically modified foods or food ingredients as a top three issue if they:

- Had low (30.07%) or medium (24.63%) levels of confidence in the safety of the food supply, compared to a high level of confidence (17.68%)
- Did not remember a food recall (22.21%) compared to those who do (18.03%)

Age, gender, education, country of residence, birth country, cultural background, food industry experience, household composition, and health consciousness were not significantly associated with choosing genetically modified foods.

Artificial sweeteners

People were significantly more likely to select artificial sweeteners as a top three issue if they:

- Were aged 18-34 years (17.38%) or 35-54 years (17.83%) compared to those aged 55+ years (11.35%)
- Identified as male (17.76%) compared to female (13.45%)
- Had a tertiary level of education (18.42%) compared to those who did not (13.34%)
- Did not have an Australian/New Zealand or European background (19.11%) compared to those who do (14.73%)
- Live with a child under 15 years of age in the household (19.72%) compared to those who do not (13.66%)

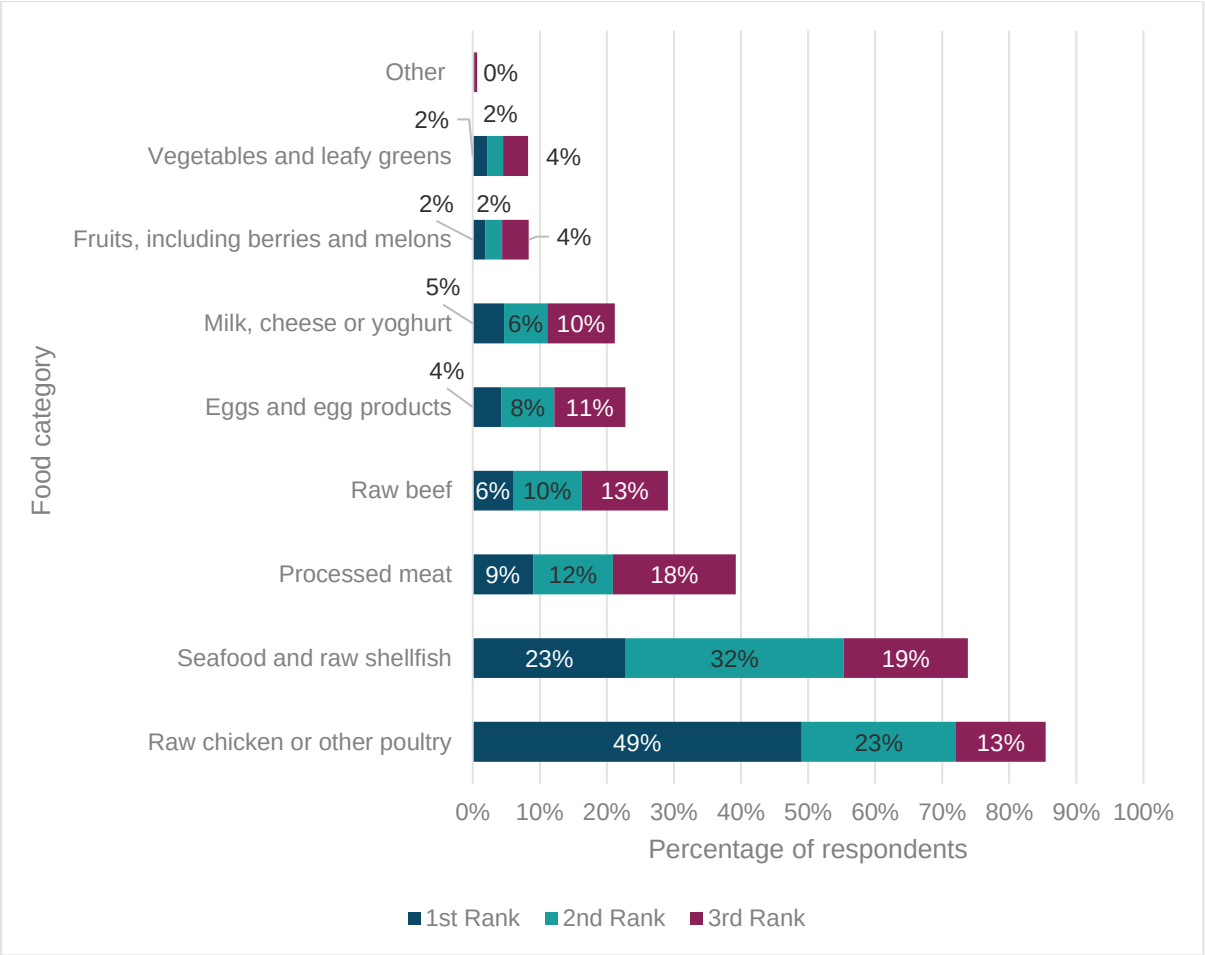
Country of residence, birth country, food industry experience, level of confidence in the safety of the food supply, health consciousness, and awareness of food recalls were not significantly associated with choosing artificial sweeteners.

Food risk perceptions

Respondents were asked to rank the top three categories of foods that, in their opinion, are the most likely to cause illness from a provided list.

As shown in Figure 4.20, ‘Raw chicken or other poultry’ was the most frequently selected food (selected by 85.39% of respondents in their top three). This was followed by ‘Seafood and raw shellfish’ (73.82%), and ‘Processed meat’ (39.23%). The least selected food was ‘Vegetables, sprouts and leafy greens’ (8.26%). Responses from those who selected ‘Other’ included: imported foods, ‘fatty’ foods, how food is handled and improperly cooked, cooked rice, nuts, ready-eat foods and deli salads, and sugar.

Figure 4.20. Foods ranked according to perceived risk of causing foodborne illness.



Q: In your opinion, what are the categories of foods that are the most likely to cause illness? (1 = Most likely to cause illness, 2 = Second-most likely, 3 = Third-most likely)
Base: All respondents (n = 1237 Australia, n = 810 New Zealand)

Factors associated with food risk perceptions

Chi-square tests were conducted to determine whether any demographic factors were associated with selecting particular types of food categories as a top three most likely to cause illness. Significant associations were found for age, gender, education, country, birth country, cultural background, food industry experience, pregnancy or breastfeeding as a dietary factor affecting food choices, and household composition (all *p*-values < 0.05). Full details of the statistical analyses are in Appendix E, organised by demographic factor.

Raw chicken or other poultry

People were significantly more likely to select 'raw chicken or other poultry' as a top three food risk if they:

- Were aged 55+ years (92.57%) or 35-54 years (85.37%) compared to those aged 18-34 years (78.08%)
- Identified as female (88.81%) compared to male (81.63%)
- Had no tertiary level education (88.87%) compared to those who did (80.77%)
- Lived in New Zealand (88.50%) compared to Australia (83.31%)

- Were born in Australia/New Zealand (86.37%) or another English-speaking country (86.42%) compared to being born in a non-English speaking country (77.00%)
- Had some Australian/New Zealand or European background (87.04%) compared to those who did not (77.75%)
- Did not have a child < 15 years in the house (87.72%) compared to those who did (79.97%)

Food industry experience and pregnancy or breastfeeding were not significantly associated with choosing raw chicken or other poultry.

Seafood and raw shellfish

People were significantly more likely to select 'seafood and raw shellfish' as a top three food risk if they:

- Were aged 55+ years (83.70%) or 35-54 years (72.31%) compared to those aged 18-34 years (63.04%)
- Identified as female (76.20%) compared to male (71.33%)
- Had no tertiary level education (76.62%) compared to those who did (70.25%)
- Lived in New Zealand (77.38%) compared to Australia (71.56%)
- Were born outside of Australia/New Zealand in an English-speaking country (80.00%) compared to those born in a non-English speaking country (69.48%)
- Did not have a child < 15 years in the house (75.87%) compared to those who did (69.87%)

Cultural background, food industry experience, and pregnancy or breastfeeding were not significantly associated with choosing seafood and raw shellfish.

Processed meat

People were significantly more likely to select 'processed meat' as a top three food risk if they:

- Were aged 55+ years (46.74%) compared to people aged 18-34 years (32.25%) and 35-54 years (37.52%)
- Identified as female (41.39%) compared to male (36.84%)
- Lived in Australia (42.06%) compared to New Zealand (34.86%)

Education, birth country, cultural background, food industry experience, pregnancy or breastfeeding, and household composition were not significantly associated with choosing processed meat.

Raw beef

People were significantly more likely to select 'raw beef' as a top three food risk if they:

- Lived in Australia (30.96%) compared to New Zealand (26.33%)

- Were born in a non-English speaking country (41.78%) compared to those born in Australia/New Zealand (27.78%) or another English-speaking country (26.04%)
- Had no Australian/New Zealand or European background (34.82%) compared to those with a European background (27.38%)
- Did not have experience in the food industry (31.23%) compared to those who did (24.70%)

Age, gender, education, pregnancy or breastfeeding, and household composition were not significantly associated with choosing raw beef.

Eggs and egg products

People were significantly more likely to select 'eggs and egg products' as a top three food risk if they:

- Were aged 35-54 years (25.44%) compared to those aged 55+ years (19.38%)
- Lived in Australia (25.12%) compared to New Zealand (19.04%)
- Had a child under 15 years in their household (25.55%) compared to those who did not (21.56%)

Gender, education, birth country, cultural background, food industry experience, and pregnancy or breastfeeding were not significantly associated with choosing eggs and egg products.

Milk, cheese or yoghurt

People were significantly more likely to select 'milk, cheese or yoghurt' as a top three food risk if they:

- Were aged 35-54 years (21.46%) or 18-34 years (30.07%) compared to those aged 55+ years (12.50%)
- Identified as male (24.39%) compared to female (18.25%)
- Had a tertiary level of education (23.98%) compared to those who did not (19.07%)
- Were born outside Australia/New Zealand in a non-English speaking country (27.70%) compared to those who were born outside Australia/New Zealand in an English-speaking country (15.47%)
- Did not have an Australian/New Zealand or European background (25.39%) compared to those who did (20.35%)
- Had a child under 15 years in their household (24.61%) compared to those who did not (19.80%)

Country of residence, food industry experience, and pregnancy or breastfeeding were not significantly associated with choosing milk, cheese or yoghurt.

Fruits, including berries or melons

People were significantly more likely to select 'fruits, including berries or melons' as a top three food risk if they:

- Were aged 18-34 years (13.04%) or 35.54 years (9.70%) compared to those aged 55+ years (4.71%)
- Had a tertiary level of education (10.18%) compared to those who did not (6.99%)
- Lived in New Zealand (12.61%) compared to those in Australia (5.59%)
- Had food industry experience (10.36%) compared to those with none (7.35%)
- Identified pregnancy or breastfeeding as affecting their food choices (17.89%) compared to those who did not (8.01%)
- Had a child under 15 years in their household (11.51%) compared to those who did not (7.08%)

Gender, birth country, and cultural background were not significantly associated with choosing fruits, including berries or melons.

Vegetables, sprouts and leafy greens

People were significantly more likely to select 'vegetables and leafy greens' as a top three food risk if they:

- Were aged 18-34 years (13.22%) or 35-54 years (8.43%) compared to those aged 55+ years
- Had a tertiary level education (11.31%) compared to those who did not (5.95%)
- Identified pregnancy or breastfeeding as affecting their food choices (17.89%) compared to those who did not (7.90%)
- Had a child under 15 years in their household (10.73%) compared to those who did not (7.30%)

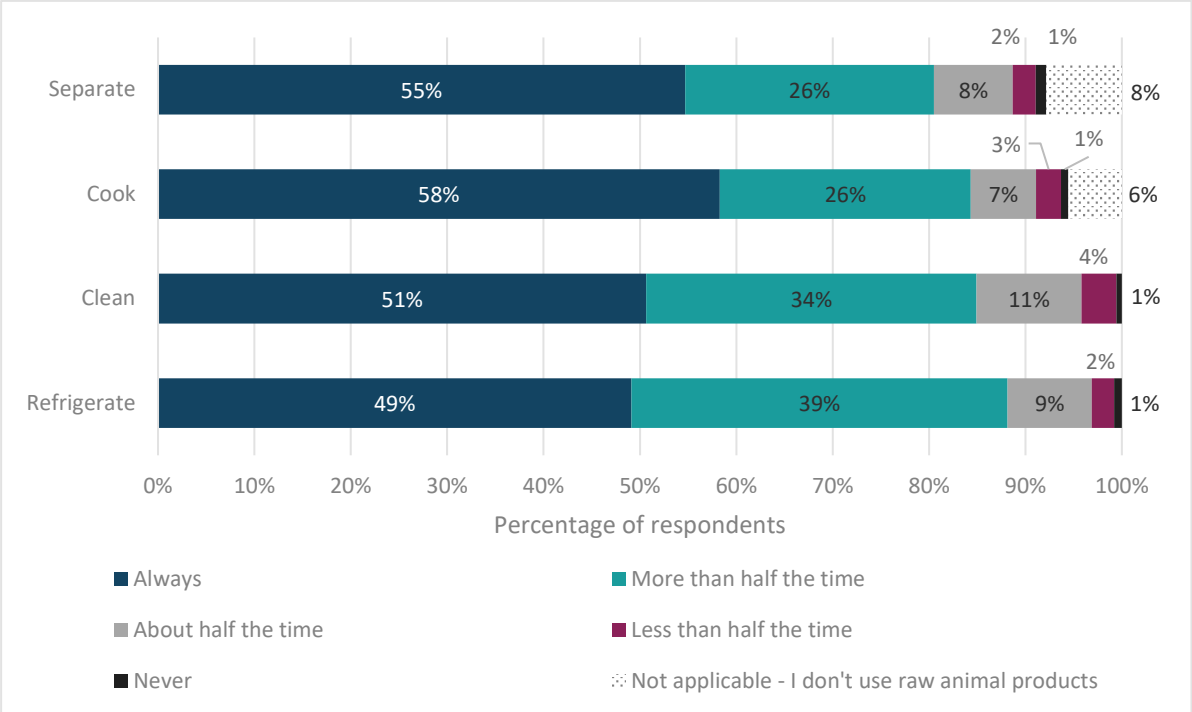
Gender, country of residence, birth country, cultural background, and food industry experience were not significantly associated with choosing vegetables, sprouts and leafy greens.

Food safety behaviours

Respondents who indicated that they had some level of involvement in meal preparation at home (N = 1,889) were asked how often they practised four types of behaviours when preparing food at home. The behaviours were 'Refrigerating leftovers shortly after finishing with them' (Refrigerate), 'Cleaning hands and work surfaces' (Clean), 'Cooking raw animal products thoroughly' (Cook) and 'Keeping raw animal products separate from ready-to-eat foods' (Separate). Responses were on a scale of 1 to 7, where 1 = "Never", 4 = "About half the time", and 7 = "Always". Respondents could also select that the behaviour was not applicable if they don't use raw animal products.

Figure 4.21 shows the percentage of respondents who selected "Always" (7), more than half the time (5-6), "About half the time" (4), less than half the time (2-3) and "Never" (1) for each type of food safety behaviour. As shown in the figure, most respondents (80.52%-88.14%) reported that they did all behaviours at least more than half the time.

Figure 4.21. Reported frequency of respondents' food safety behaviours.



Q: How often do you do the following when preparing food at home? 'Refrigerating leftovers shortly after finishing with them' (Refrigerate), 'Cleaning hands and work surfaces' (Clean), 'Cooking raw animal products thoroughly' (Cook) and 'Keeping raw animal products separate from ready-to-eat foods' (Separate).
Base: Respondents who indicated they had some involvement in meal preparation at home (n = 804 Australia, n = 485 New Zealand)

A repeated measures ANOVA showed that there were significant differences in the reported frequency of the different food safety behaviours ($F(2.96, 5059.48) = 27.42$, $p < 0.001$). Follow-up t-tests (using sequential Bonferroni-corrected alphas) showed that 'Cooking raw animal products thoroughly' and 'Keeping raw animal products separate from ready-to-eat foods' were practiced significantly more often than the other two behaviours (all $p < 0.001$). There were no other statistically significant differences. Note that participants who selected 'Not applicable – I don't use raw animal products' were excluded from this analysis.

The group mean frequency ratings and standard deviations for each food safety behaviour are shown in Table 4.11 below.

Table 4.11. Mean frequency (and standard deviations; SD) of reported food safety behaviours.

	Mean	SD
Food safety behaviour		
Cooking raw animal products thoroughly	6.25	1.2
Keeping raw animal products separate from ready-to-eat foods in the fridge and when preparing foods	6.19	1.25
Refrigerating leftovers shortly after you are finished with them	6.06	1.2
Cleaning hands and work surfaces before, during and after cooking	6.02	1.27

NB: Responses were on a scale of 1 to 7, where 1 = "Never", 4 = "About half the time", and 7 = "Always". Food safety behaviours related to raw animal products exclude respondents who indicated "Not applicable - I don't use raw animal products".

Factors predicting reported frequency of food safety behaviours

Simultaneous multiple linear regressions were conducted to determine whether any of the demographic, behavioural, or attitudinal factors that were measured in this survey predicted a greater reported frequency of each food safety behaviour.

Age, gender, education, and level of health consciousness were found to be significantly associated with reported frequency of food safety behaviours (all *p*-values < .05). Shopping responsibility, household composition, equivalised annual household income, cultural background, lifestyle-related dietary factors and level of confidence in the food supply were not significantly associated with reported frequency of food safety behaviours.

Full details for the regressions summarised below are in Appendix C.

Cooking raw animal products thoroughly

Our analysis found that consumers were likely to report a significantly *lower* frequency of cooking raw animal products thoroughly if they:

- Were older
- Identified as male
- Had a lower level of health consciousness

Keeping raw animal products separate from ready-to-eat foods

Our analysis found that consumers were likely to report a significantly *lower* frequency of keeping raw animal products separate from ready-to-eat foods if they:

- Identified as male

Refrigerating leftovers shortly after you are finished with them

Our analysis found that consumers were likely to report a significantly *lower* frequency of refrigerating leftovers shortly after they are finished if they:

- Were younger
- Identified as male
- Had a lower level of health consciousness

Cleaning hands and work surfaces before, during, and after cooking

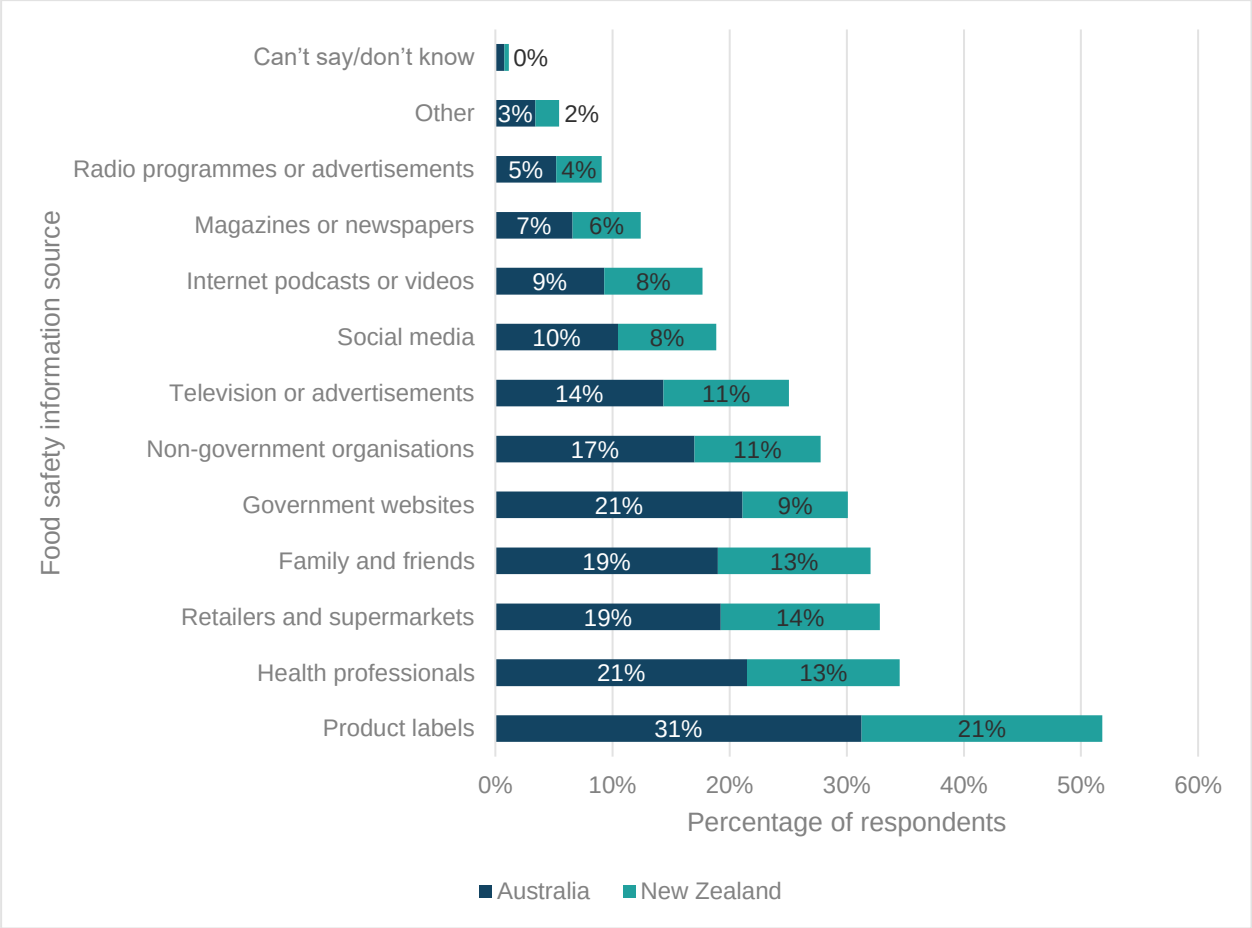
Our analysis found that consumers were likely to report a significantly *lower* frequency of cleaning hands and work surfaces before, during and after cooking if they:

- Were younger
- Identified as male
- Were tertiary educated
- Were born in Australia or New Zealand (compared to being born outside Australia/New Zealand in a non-English speaking country)
- Did not identify a medical-related factor as affecting their food choices

Food safety information sources

Respondents were asked if they were interested in learning more about safely preparing and storing food. Approximately half (53.20%) of respondents indicated that they were interested, 37.03% said they were not, and 9.77% said they did not know. Respondents who selected that they were interested in more food safety information or weren't sure (N = 1,289) were asked to select their preferred sources of food safety information from a provided list.

Figure 4.22. Proportion of respondents selecting preferred food safety information sources (N = 1,289).



Q: What are your preferred sources of information about how to store and prepare food safely? (Please select all that apply)
Base: Respondents who selected that they were interested in more food safety information or weren't sure (n = 804 Australia, n = 485 New Zealand)

As shown in Figure 4.22 above, 'Product labels' was the most frequently selected food safety information source (selected by 51.82% of respondents). This was followed by 'Health professionals' (34.45%) and 'Retailers and supermarkets' (32.74%). The least selected information source was 'Radio programmes or advertisements' (9.08%). Responses from those who selected 'Other' included: Google or the internet in general, the workplace, and email.

New foods and food technologies

The questions in this section were designed to answer current data information needs, and are not intended to be repeated in each iteration of the survey.

Frequency of consumption of plant-based proteins, sugar substitutes, sports foods and hemp-seed foods

Respondents were asked how often, if at all, they personally consumed a range of food products. These products were chosen to address a lack of data available in the 2011-12 Australian National Nutrition and Physical Activity Survey and the 2008-09 New Zealand National Nutrition Survey due to the relative newness of these foods.

Table 4.12. Percentage of participants selecting each consumption frequency for each type of food

	Consumption frequency (%)							
	Every day	**Every few days**	**Every week**	**Every month**	**Every 3 months**	**Every 6-12 months**	**Don't currently consume**	**Don't know**
Foods								
Plant-based meat alternatives (e.g. plant-based burger patties)	1.32	3.57	7.87	10.11	6.89	8.35	58.43	3.47
Plant-based milk alternatives (e.g. soy milk, oat milk, almond milk)	10.55	6.40	10.11	10.21	6.60	6.60	47.63	1.91
Artificial sugar substitutes (e.g. aspartame, sucralose)	4.69	4.69	6.64	4.98	4.35	4.69	65.56	4.40
Plant-based sugar substitutes (e.g. Stevia, Monk fruit)	4.84	4.54	6.45	7.52	4.89	4.69	63.12	3.96
Sports foods (e.g. protein powders, pre-workout drinks, energy gels or gummies, gainers, sports bars, creatine powder)	5.76	8.45	9.53	9.62	6.89	5.23	52.37	2.15
Hemp seed-based foods (e.g. hemp seeds, hemp protein, hemp seed oil)	1.42	2.69	4.93	5.86	5.47	5.72	70.15	3.76

As shown in Table 4.12, the majority of respondents reported that they do not currently consume these foods. The one exception was plant-based milks, where less than half

(47.63%) stated that they do not currently consume these products. Further, just over half of respondents stated that they don't currently consume sports foods (52.37%).

The food products that were most commonly consumed on a daily or weekly basis were: plant-based milks (27.06%), sports foods (23.74%), and artificial sugars (16.02%). The food product that was least commonly consumed on a daily or weekly basis was hemp seed-based foods (9.04%). However, consumption on a daily or weekly basis was reported by a minority of respondents across all food types.

Sports foods

Predictors of sports foods consumption at least every month

A binomial logistic regression was conducted to determine whether various factors significantly predicted consumption of sports foods at least every month. People were significantly (all *p*-values < .05) more likely to indicate that they consume sports foods at least every month if they:

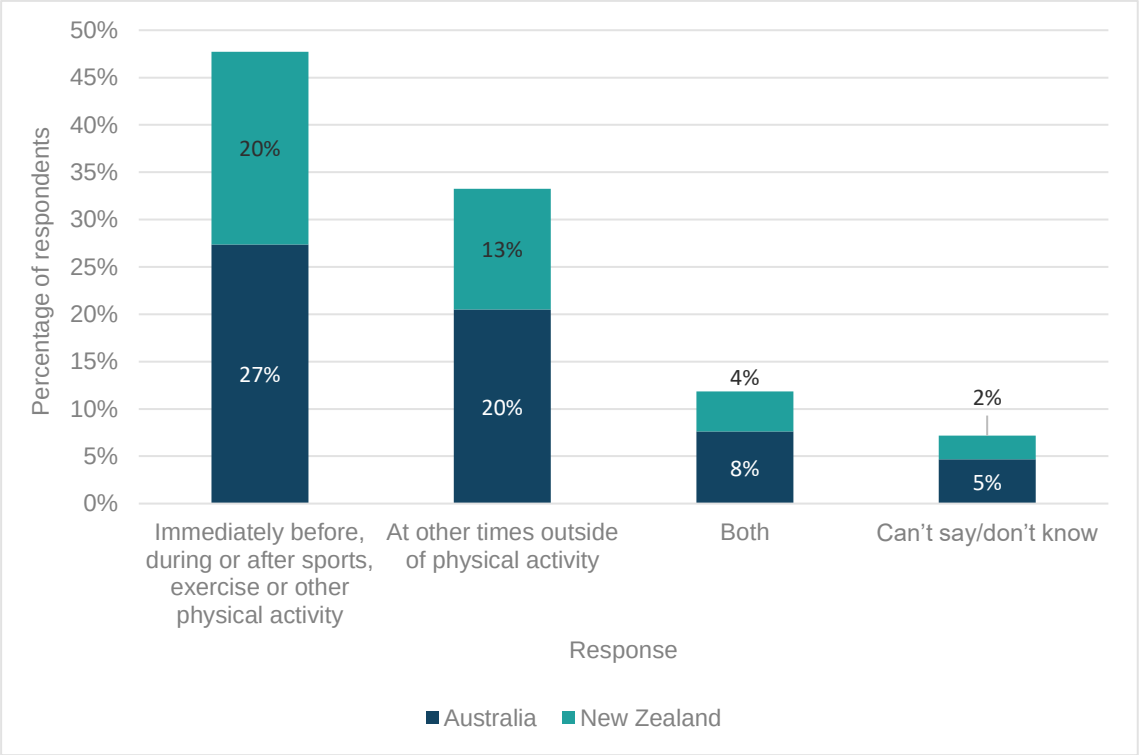
- Were younger
- Identified as male
- Had a higher equivalised household income
- Had a non-European background
- Were more health conscious
- Selected training for sports as a factor currently affecting food choices.

The full statistical results of the binomial logistic regression analysis are available in Table D.6 in Appendix D.

Sports foods and physical activity

Respondents indicating that they consume sports foods at least every month (n = 683; 33.37%) were asked when they typically consume sports foods ("immediately before, during or after sports, exercise or other physical activity", "at other times outside of physical activity", or "can't say/don't know"). Respondents could select more than one answer, unless they selected "don't know". Figure 4.23 shows the percentage of respondents who *only* selected "immediately before, during or after sports, exercise or other physical activity", who *only* selected "at other times outside of physical activity", who selected *both* of these two responses, and who selected "can't say/don't know". As shown in Figure 4.23, less than half of respondents who indicated they regularly consume sports foods (47.73%) said they *only* used sports foods within a physical activity-related context.

Figure 4.23. Reported contexts of consumption for sports foods.



Q: When do you typically consume sports foods? (Please select all that apply)
Base: Respondents indicating that they consume sports foods at least monthly (n = 411 Australia, n = 272 New Zealand)

Predictors of only using sports foods within a physical activity-related context

We performed a binomial logistic regression to determine whether various factors (age, gender, level of education, equivalised household income, country, birth country, having a European background, selecting pregnancy or breastfeeding as a factor affecting dietary choices, level of confidence in the food supply, level of health consciousness) significantly predicted only using sports foods within a physical activity-related context.

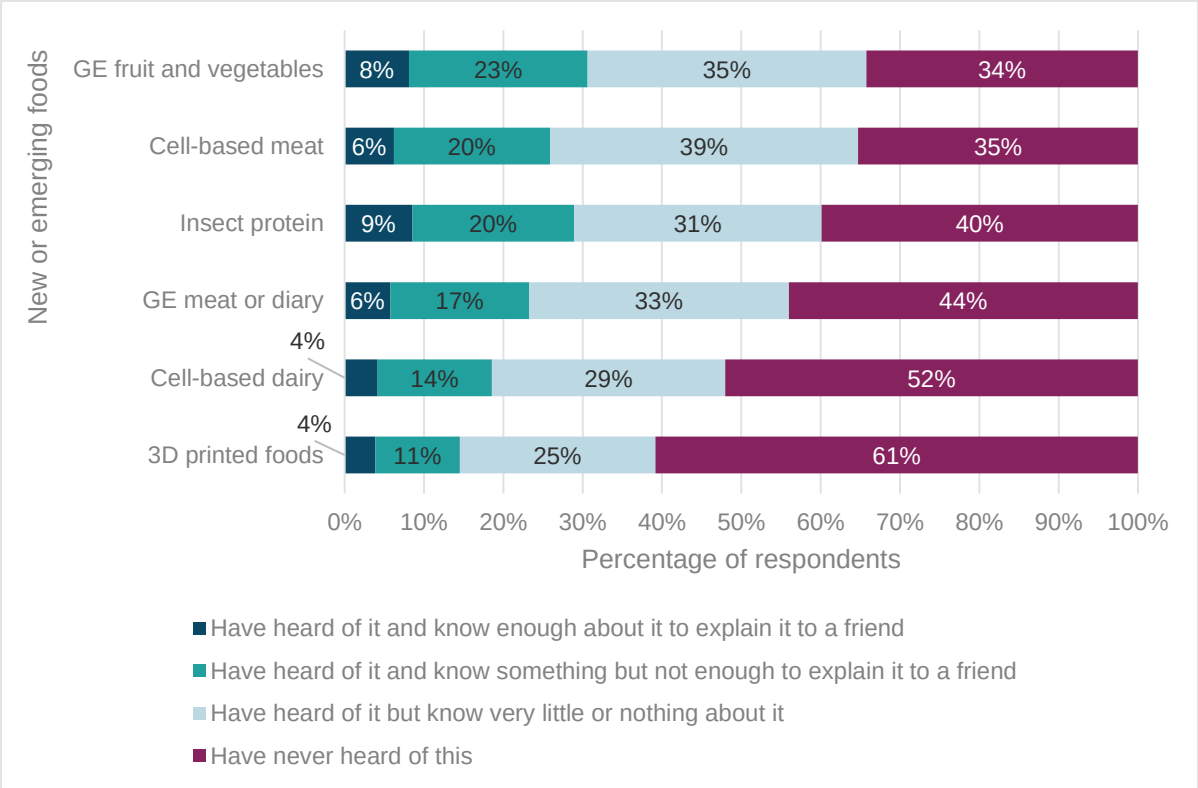
The model was not statistically significant ($\chi^2(11) = 9.64$, $p = 0.563$), indicating that these factors were *not* significant predictors of only using sports foods within a physical activity-related context. The full statistical results of the binomial logistic regression analysis are available in Table D.7 in Appendix D.

Alternative proteins, gene-edited foods and 3D-printed foods

Awareness of alternative proteins, genetically-edited foods and 3D-printed foods

Consumers generally have low levels of awareness of Genetically Edited (GE) fruit and vegetables, GE meat or dairy, cell-based meat, cell-based dairy, insect proteins, and 3D-printed foods. As shown in Figure 4.24, most respondents had either never heard of these foods, or had heard of them but knew very little or nothing about them. Awareness was lowest for 3D printed foods (only 39.18% had at least heard of them), whereas awareness was highest for GE fruit and vegetables (65.75% had at least heard of them). Further, awareness of cell-based meat was higher than awareness of cell-based dairy (64.73% had at least heard of cell-based meat, whereas 47.97% had at least heard of cell-based dairy).

Figure 4.24. Awareness for each new or emerging food and/or food technology.



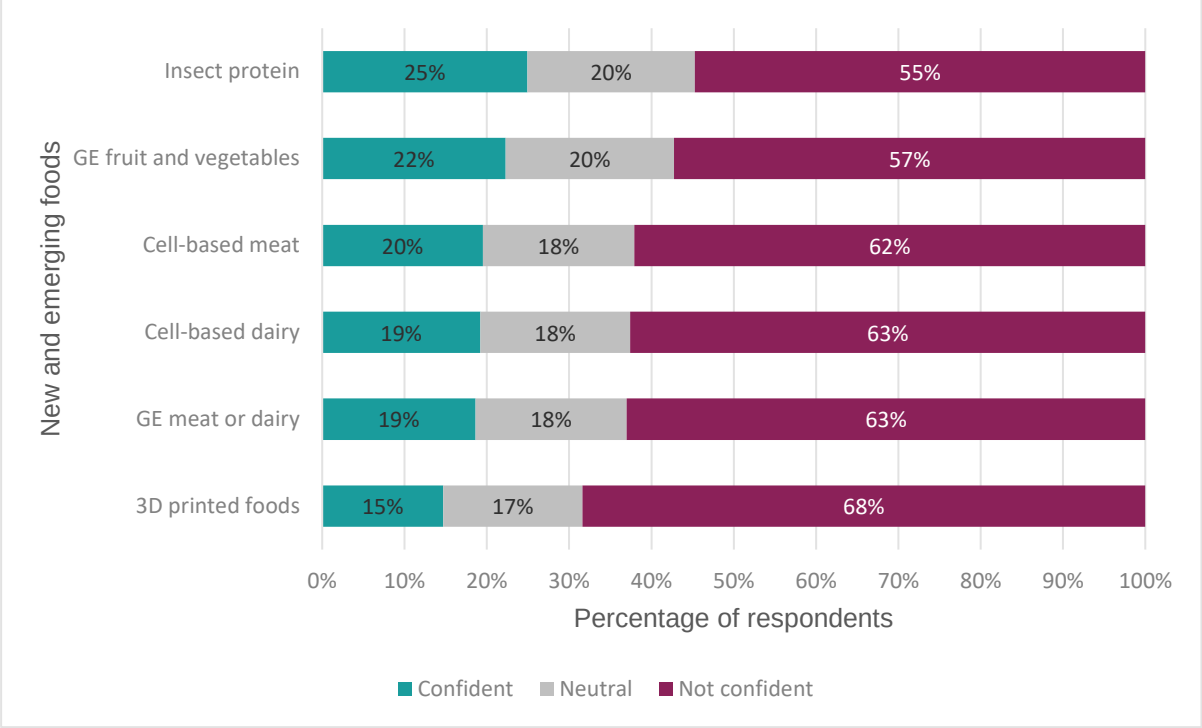
Q: Have you heard of any of the following new or emerging foods? (Single response option)
Base: All respondents (n = 1237 Australia, n = 810 New Zealand)

Confidence in the safety of alternative proteins, genetically-edited foods and 3D-printed foods

Respondents were asked to rate how confident they would be in the safety of these foods if they saw them for sale in Australian or New Zealand shops and supermarkets. Responses were on a scale from 1 to 7, where 1 = “Not at all confident” and 7 = “Completely confident”.

Most consumers indicated they would not be confident in the safety of insect protein, GE fruit and vegetables, cell-based meat, cell-based dairy, GE meat or dairy, or 3D-printed foods. Figure 4.25 shows the percentage of participants who were generally not confident (selected a rating of 1-3), who were neutral (selected a rating of 4), and who were generally confident (selected a rating of 5-7) in the safety of each of these foods.

Figure 4.25. Level of confidence in new and emerging foods or food technologies.



Q: How confident would you be in the safety of the following foods if you saw new or emerging foods for sale in Australian/New Zealand shops and supermarkets? (1 = "Not confident at all" and 7 = Completely confident")
Base: All respondents (n = 1237 Australia, n = 810 New Zealand)

A repeated measures ANOVA confirmed that level of confidence in safety significantly differed among the different types of foods (F (3.82, 7817.05) = 104.27, $p < 0.001$). Follow-up t-tests using a bootstrapping procedure[8] were used to compare particular foods of interest (cell-based meat, cell-based dairy, GE meat and dairy, GE fruit and vegetables; using a sequential Bonferroni-corrected alpha). Confidence in the safety of GE fruit and vegetables was significantly higher (M = 3.09) compared to that of cell-based meat (M = 2.94), cell-based dairy (M = 2.91), and GE meat and dairy (M = 2.89) (all $p < 0.001$). There was no significant difference in confidence in the safety of cell-based meat compared to that of cell-based dairy (p = 0.025; sequential alpha = 0.025). There were also no significant differences between cell-based meat and GE meat and dairy (p = 0.018; sequential alpha = 0.017), or between cell-based dairy and GE meat and dairy (p = 0.318; sequential alpha = 0.05).

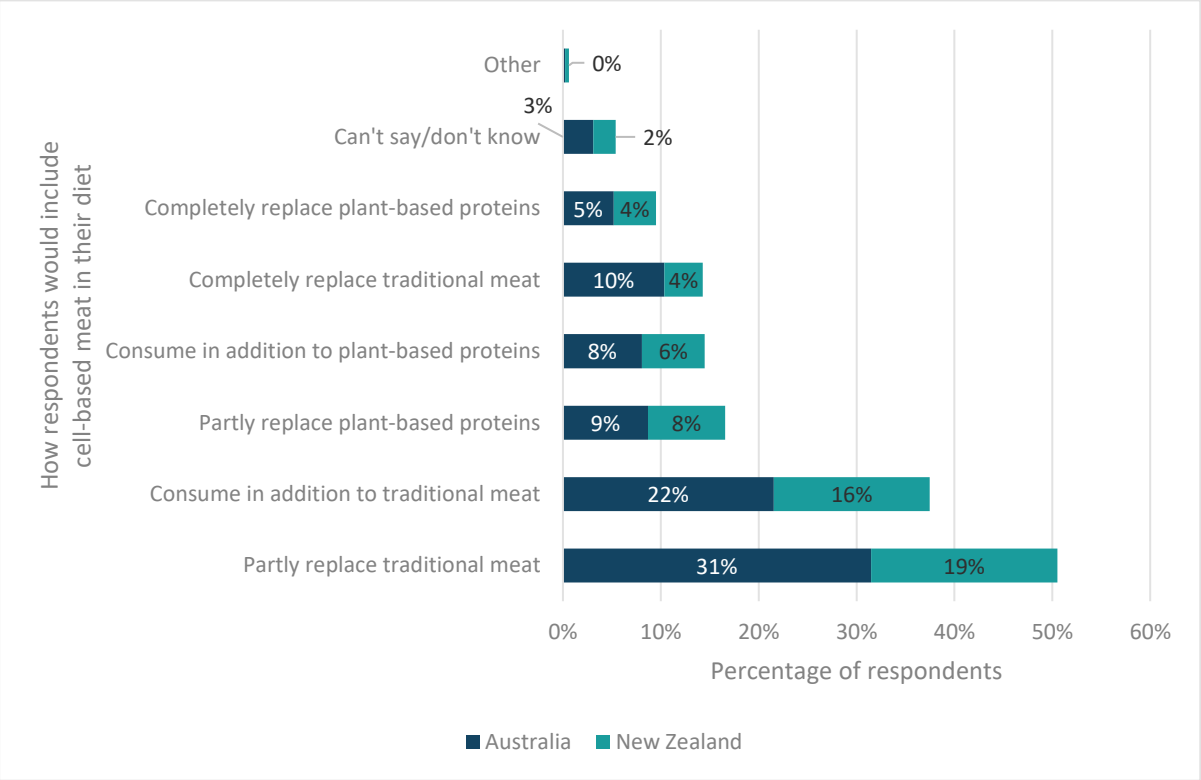
Consumption intentions of cell-based meat

Respondents were asked if they intended to include cell-based meat in their diet (response options: yes, no, or don't know). Only 23.58% of respondents said that they would include cell-based meat in their diet. 28.66% said that they were unsure, and 47.71% said that they would not include cell-based meat in their diet. This indicates that just over half of consumers (52.24%) may be at least open to being persuaded to try it.

[8] A bootstrapping procedure was used for this analysis because the data were highly skewed (see Data Analysis section for further discussion). The bootstrapping procedure was only applied to the follow-up t-tests because SPSS does not provide a bootstrapping option for repeated measures ANOVA tests.

Of those that said they would include cell-based meat in their diet (n = 483), most (50.52%) said that cell-based meat would partly replace traditional meat. Figure 4.26 shows the percentage of participants that selected each response option when asked how they would incorporate cell-based meat into their diet. Note that only participants who previously indicated that they would include cell-based meat in their diet were asked this question, and participants could select more than one response option.

Figure 4.26. Consumption intentions for cell-based meat.



Q: How do you think you would include cell-based meat in your diet? (Please select all that apply)
Base: Respondents who intended to included cell-based meat in their diets (n = 295 Australia, n = 188 New Zealand)

Predictors of cell-based meat consumption

A binomial logistic regression was conducted to determine whether various factors significantly predicted intentions to include cell-based meat in the diet (yes vs. no/don't know). People were significantly (all *p*-values < .05) more likely to indicate that they would include cell-based meat in their diet if they:

- Were younger
- Identified as male
- Reported consuming plant-based meat at least once a month
- Felt that they knew at least something about what cell-based meat is (as opposed to feeling that they knew little or nothing)
- Were more confident in the safety of cell-based meat.

Being vegetarian or vegan was not found to be a significant predictor of intentions to include cell-based meat in their diet. However, it is important to note that very few respondents

reported being vegetarian or vegan (10.3% of the analysed sample). Thus, it is possible that the non-significance of this predictor variable is due to a lack of statistical power.

Further details of the binomial logistic regression analysis are in Appendix D, with full statistical results available in Table D.8.

5. Discussion

This section highlights the key results from each top-level section, as well as how it fits within existing literature.

Survey context

The data collection for the inaugural Consumer Insights Tracker was undertaken in April 2023, during a period in which a range of different factors negatively affected the cost and availability of food. In particular, supply chain disruptions were occurring globally due to the continuing effects of COVID-19 and the war in Ukraine, as well as locally due to a series of natural disasters in both Australia and New Zealand that flooded key food-producing areas. These supply chain disruptions contributed to a substantial increase in the cost of living during the same period. In Australia, the Australian Bureau of Statistics (2023) reported the Consumer Price Index (CPI) indicator rose 6.8% in the twelve months to April 2023, with one of the most significant price rises being food and non-alcoholic beverages (+7.9%). In New Zealand, Stats NZ (2023) reported that CPI rose 6.0% in the twelve months to July 2023, with grocery food increasing by 13.2% and fruit and vegetables increasing by 21.1%.

It is expected that this context would have influenced the survey results.

Trust and confidence

Trust and confidence are essential to the effective functioning of the food system and can have impacts on public health outcomes by influencing consumer behaviours and attitudes (Tonkin et al. 2021). There are many different definitions of trust and it is broadly recognised as a multi-dimensional concept. However, three dimensions that are consistent across a large number of definitions are that trust is: relational, a belief, and future-oriented (Bradbury et al. 2024). That is, trust is a belief about the likelihood that another person or group of people will act in a certain (positive) way in the future. This may be influenced by current or past performance, but, as it is future-oriented, is not a measure of current or past performance in and of itself. The type of trust that is most important for this survey is institutional trust, specifically trust in the collective actors that make up the food system:

> Given the complexity of modern food systems, food transactions are typically operationalised by organisations including primary producers, ingredient suppliers, food manufacturers, regulators and enforcement services, etc. Trust in these actors is referred to as institutional trust… (Kendall et al., 2019: 80)

In this survey, institutional trust was first measured across a number of broader institutions (the school system, the legal system, the media, the Government, the police, the health

system, and scientists) in order to provide a generalised measure of institutional trust for which to control for in subsequent analyses. This allowed us to determine to what extent the level of trust in food actors measured in the survey was explained by general trust in institutions.

Confidence is conceptually distinct from trust, as it measures competence or past performance (Siegrist 2010) and, unlike trust, it can also be applied to inanimate objects, e.g. food (Bradbury et al. 2024). In this survey, confidence in the safety of the food supply and a range of new foods and food technologies was measured. However, as Siegrist notes (2010), trust and confidence can be difficult to distinguish because, where people lack the knowledge to be able to assess their confidence in a particular item, they may substitute their level of trust in the relevant actors.

People generally have confidence in the safety of the food supply, likely because they trust the food actors who make up our food system.

In Australia and New Zealand, the survey found that consumers generally trust that food and drinks sold in shops and supermarkets are safe to eat, with 72.15% rating their level of confidence above the midpoint and a mean score of 5.02 on a 7-point scale where 1 = not at all confident and 7 = completely confident. There were no statistically significant differences between Australia and New Zealand.

This percentage is slightly higher than the findings from two previous surveys conducted by FSANZ: one which asked the same questions around trust and confidence (FSANZ, 2022) and the 2007 Community Attitudes Survey (FSANZ, 2008), which asked a similar question[9] using the same 7-point scale. The 2022 FSANZ survey found that 68% of respondents had a level of confidence above the midpoint, with a mean score of 4.9 out of 7. The 2007 Community Attitude Survey found that 61% of Australians had a level of confidence above the midpoint, with a mean score of 4.77 (SD = 1.39), while 68% of New Zealanders had a level of confidence above the midpoint, with a mean score of 4.99 (SD = 1.40).

A key finding from the regression analysis undertaken for the Consumer Insights Tracker was that demographic factors only weakly predicted level of confidence in the safety of the food supply. Far more important was trust in the actors (farmers and producers, manufacturers and processors, retailers, government/public food authorities, and food-related scientists) that make up our food system. Trust in each individual food actor significantly predicted confidence in the safety of the food supply, but trust in manufacturers and processors was the strongest predictor. Generalised institutional trust was not a significant predictor of confidence in the safety of the food supply. This mirrors the results from the 2022 FSANZ survey.

This finding is in line with Siegrist's (2010) observation that, while trust and confidence are distinct, where people lack the necessary knowledge to assess their level of confidence in a particular item "it can be expected to be highly correlated with trust items because respondents may most likely use the level of trust for answering the confidence [item]". In this

[9] The question asked in the 2007 FSANZ Community Attitudes Survey was: "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?"

case, the complexity of the food system may make it difficult for consumers to be able to accurately judge the safety of the food supply on its own merits. Thus, they rely upon their level of trust in the food actors that make up the food system.

Nevertheless, the findings of the regression analysis suggest that confidence in the safety of the food supply and trust in food system actors were likely two distinct conceptual constructs in the Consumer Insights Tracker. While trust in food system actors was an important predictor of confidence in the safety of the food supply, the two measures were not so highly correlated as to suggest that they were measuring the same construct. Additionally, as previously mentioned, trust in some types of food system actors, specifically manufacturers and processors, was a much stronger predictor of confidence in the safety of the food supply compared to trust in other food system actors (e.g. farmers and producers). This suggests that there may be a level of nuance to consumers' understanding of how different actors contribute to the safety of the food supply, such that they differentiate between the different roles the different actors play.

All food actors were trusted by a majority of respondents. The most trusted food actors were farmers and producers (trusted by 83% of respondents), followed by food scientists (71%), government/public food authorities (63%), retailers (62%), and manufacturers and processors (57%).

FSANZ is generally trusted by those who know something about what it does, reflecting high levels of trust in professions and institutions broadly in Australia and New Zealand.

Trust was also measured in FSANZ specifically. First, the level of awareness of FSANZ was determined across a four-point scale. Of those who indicated that they knew at least something about what FSANZ does, most (79%) indicated that they trust FSANZ across three different measures:

- FSANZ bases its decisions on scientific evidence
- FSANZ acts in the best interests of food safety and the food regulatory system
- I trust FSANZ to do what is right.

The scores across these three measures were averaged to create an overall index of trust in FSANZ, with a total mean score of 5.31 on a 7-point scale where 1 = do not trust at all and 7 = trust completely. There were no statistically significant differences between Australia and New Zealand.

The key finding from the regression analysis was that no demographic factors were found to significantly predict trust in FSANZ. Instead, respondents who tended to be more trusting of professions and institutions in general were significantly more likely to trust FSANZ.

Health and dietary behaviours

The survey asked a range of questions around health and dietary behaviours in order to gain an understanding of the factors that are currently influencing people's food choices.

Cost of living pressures are a key factor affecting people's food choices today, particularly for women, New Zealanders, and those with children.

Cost of living pressures was the most frequently selected factor affecting people's food choices, with 65.41% choosing this, reflecting the rising price of food in the period during which data collection was undertaken (as discussed in the 'Survey context' section above).

This finding is supported by the Foodbank's recent Hunger Report, which collected data during July 2023 (Ipsos 2023). The report found that cost of living was rated as the most important issue Australians were concerned about over the last year (compared to, for example, healthcare, the economy, COVID-19, or climate change), including for 63% of food insecure households. Cost of living was the most common reason for food insecurity in 2023, with the majority of food-insecure households (69%) naming increased food and grocery costs as contributing to their food insecurity. Nearly all food-insecure households (94%) reported cutting back on food and groceries to cope with the higher cost of living.

The regression analysis undertaken for the Consumer Insights Tracker found that respondents who were younger, identified as female, were not tertiary educated, lived in New Zealand, had a child <15 in the household, did not have an Australian/New Zealand or European background and/or had a higher equivalised household income were more likely to select 'cost of living pressures' as a factor affecting their food choices.

It is, on the face of it, surprising that people with a higher equivalised household income were significantly more likely to select 'cost of living pressures' as affecting food choices. One possible explanation for this finding is that, while relatively high inflation rates affected all households during the data collection period for this survey, lower income households, on average, saw a greater increase in their incomes after tax and a slightly lower increase in housing costs relative to higher income households during this time (Beckers et al. 2024). In addition, people with higher equivalised household incomes may have been particularly sensitive to the increased cost of living, mainly due to a contrast effect if they previously did not concern themselves with these issues. Conversely, cost of living pressures may have always been a front-of-mind issue for people with lower equivalised household incomes.

A substantial proportion of people identified a food allergy or intolerance as affecting their dietary choices.

17% of respondents reported that food allergy or food intolerance influenced their dietary choices. This is consistent with the findings from the most recent Australian Health Survey that looked at food and nutrient consumption (2011-12), which found that 17% of Australians aged 2 years or over reported avoiding a food type due to allergy or intolerance (Australian Bureau of Statistics 2014). However, as the question in the Consumer Insights Tracker combined both food allergy and intolerance, its prevalence is substantially higher than the estimated prevalence of food allergy alone, which is 2-4% in Australia and New Zealand (Australasian Society of Clinical Immunology and Allergy 2023). Future iterations of the survey will address this limitation by separating out food allergy and food intolerance.

People report being generally health conscious in their food choices, and tend to value nutrition more than other food attributes, excluding taste and price.

Nearly three-quarters of respondents (72.56%) reported that they put effort into maintaining a healthy diet. Additionally, nutrition was both the most selected food value (selected in the top three by 66% of respondents) and the most commonly first-rated food value (selected as #1 by 36% of respondents), in a list that excluded taste and price. Taste and price were excluded as existing literature suggests that these are consistently the most important factors affecting food choice (Drewnowski and Monsiviais 2020; European Food Safety Authority, 2022; International Food Information Council, 2022; Ward et al. 2012). Therefore the purpose of this survey question was to determine what other values may be important to consumers.

This result placed nutrition above convenience (selected in the top three by 45% of respondents, and as #1 by 15%), and is in line with a series of surveys undertaken in the United States of America, which found that consumers have consistently reported prioritising 'healthfulness' slightly above convenience in their food purchasing decisions (see trend data in International Food Information Council, 2023, page 18).

This finding is also congruent with the substantial proportion (41%) of respondents who selected 'watching my weight/others' weight generally' as affecting their food choices, and the three most important labelling elements (Nutrition Information Panel, ingredients list, and claims about nutrient/ingredient content), which all concern nutrition content.

Trust and use of food labelling

Food labelling is intended to enable consumers to make informed choices about the food they purchase and consume, including its nutritional value. Given the vital role that food plays in determining health, and the currently high rates of non-communicable disease mortality in Australia (GBD 2019 Australia Collaborators, 2023) and New Zealand (Bullen et al., 2015), it is important to understand the extent to which consumers trust and use different food labelling elements.

Nutrition information was the most important labelling elements for consumers, with most consumers feeling confident in their ability to make informed choices.

Consumers rated labelling elements that provide nutrition information (the NIP, ingredients list, nutrient/ingredient content claims and Health Star Rating) as the most important for making food choices, with the NIP and ingredients list rated as the most important. This is in line with the finding, outlined above, that people are generally health conscious in their food choices and value nutrition over other food attributes.

Most consumers also felt confident in their ability to make informed choices using the information provided on food labels, with 71% of respondents indicating a level of confidence above the midpoint. However, it is important to note that self-reported use and understanding of food labelling may not accurately capture actual use and understanding. Studies that have examined objective use and understanding of food labelling and compared it to self-reported use and understanding have found there is a large difference, with actual use and understanding appearing quite limited compared to self-reported use and understanding (Burton et al., 1994; Cowburn & Stockley, 2005; Jacoby et al., 1977; Ni Mhurchu and Gorton

2007; Roberto & Khandpur, 2014). Nevertheless, it appears that people value and use on-label nutrition information to make decisions about food.

Consumers tended to trust back-of-pack labelling information more than front-of-pack, with trust in different food actors predicting levels of trust in each.

The survey asked consumers to rate their level of trust in eight different labelling elements. A factor analysis found that the eight different measures may be grouped into two separate conceptual constructs (or 'factors'):

1. Trust in the nutrition information panel, ingredients list, allergen information, best before/use-by dates and advisory or warning statements.

2. Trust in health claims and nutrient/ingredient claims and the Health Star Rating (HSR).

As the HSR is not currently regulated by FSANZ, unlike the other labelling elements tested, we considered the second group of labelling elements without the HSR.

The first group of labelling elements were trusted by nearly three-quarters of respondents (72.25%) and had a mean level of trust of 5.05 (out of 7), while the second group (without the HSR) was trusted by just over half of respondents (52.13%) and had a mean level of trust of 4.29.

The two distinct groupings suggests that consumers perceive a conceptual difference in the nature of these labelling elements. The first group of labelling elements tend to be back-of-pack and may been seen to represent a neutral, scientific analysis of the contents of the package. Whereas the second group of labelling elements are often front-of-pack and may be seen to be more interpretative and positively-valenced.

Regression analyses found that trust in different types of food actors predicted trust in on-label claims, the HSR, and other FSANZ-regulated labelling elements. People who trusted food manufacturers and processors and retailers were more likely to trust health and nutrition/ingredient content claims , while people who trusted retailers were more likely to trust the HSR. Those who trusted food scientists and government/public food authorities were more likely to trust the other FSANZ-regulated labelling elements like the nutrition information panel and ingredients list.

These findings are in line with recent qualitative and quantitative studies of Australian and/or New Zealand consumers that found consumers tended to regard nutrition content claims and health claims as marketing or advertising not regulated by government and therefore not legitimate sources of information (Hughes et al. 2023, Stuthridge et al. 2022, Thompson et al. 2024). In contrast, the nutrition information panel and ingredients list are perceived to be regulated and, as such, are more trusted (Tonkin et al. 2016, Talati et al. 2016).

These two distinct conceptual constructs of food labelling can also interact: consumers often report assessing the veracity of content claims by checking the back of the pack for the NIP and ingredients list, which were seen as reliable and regulated sources of information about the product's content (Hughes et al. 2023, Stuthridge et al. 2022, Thompson et al. 2024). However, Talati et al.'s (2016) systematic review of the combined effect of front-of-pack nutrition labels and health claims on consumers' evaluations of food products found that

results were mixed in this regard, with some studies finding that health claims can reduce the likelihood of consumers reading the NIP, even when they report being sceptical of the claim.

There is a disconnect between the level of importance consumers give nutrition/ingredient content claims and the HSR, and their level of trust in them.

The survey found that the most important labelling elements for making food choices were not always the most trusted. The four most important labelling elements for making food choices were the NIP, ingredients list, claims about nutrient/ingredient content, and Health Star Rating[10]. The NIP and ingredients list were both the most important and among the most trusted, however nutrient/ingredient content claims and the HSR were among the *least* trusted labelling elements.

As discussed above, the relatively low level of trust in nutrient/ingredient content claims and the HSR may reflect a belief that these labelling elements are not sufficiently regulated by government while their relative level of importance may relate to consumers' desire for accessible, easy to understand nutrition information. Existing research suggests numerical nutrition information, such as can be found on the NIP, can be difficult for consumers to use (Burton, et al. 1994, Campos et al. 2011, Cowburn and Stockley 2005, Roberto and Khandpur 2014).

Sugar content was the most referred to part of the Nutrition Information Panel (NIP) when buying packaged food or drink for the first time.

The survey asked consumers who had indicated that the NIP was important when making food choices what parts of the NIP they looked for. Sugar was chosen by a clear majority (64%) of respondents, with every other nutrient chosen by less than half (total fat content was the next highest at 41%).

These findings are in line with the findings of a consumer label survey conducted by FSANZ (2015), which found that sugar was the most looked at element on the NIP (by 62% of Australians and 57% of New Zealanders). They also reflect a study undertaken in Australia (de Vlieger et al, 2017) that asked 115 young adults (aged 18-36 years) to sort a range of snacks according to their nutritiousness, and mention what criteria they were basing their decisions on while sorting the snacks. While sorting, 90% of participants (n = 103) mentioned 'sugar' as a criterion for their evaluation, and it was the strongest negative predictor of nutritiousness ratings, followed by fat content. Being 'low in sugar' was also a key component of participants' definitions of nutritiousness, selected by 35.7% of participants, and sugar was the most commonly mentioned macronutrient. It is also broadly consistent with findings from a survey undertaken in the United States of America, which found that 'low in sugar' was the second-most common definition of a healthy food (after 'fresh') and that 72% of respondents were trying to limit or avoid sugars in their diet (International Food Information Council, 2023).

[10] As noted in the results section for 'Relative importance of labelling elements' (page 37), there were no statistical differences in the level of importance between the NIP and the ingredients list, or between claims about nutrient/ingredient content and the Health Star Rating.

In contrast to the nutrition information panel, the elements that were most referred to in the ingredients list were much more varied. However, it is important to note that there were no options relating to specifically to sugar in the question about the ingredients list. This will be addressed in a future iteration of the survey.

Up to a third of consumers do not understand date-marking, and a further third understand but report behaviour inconsistent with their understanding.

While most respondents correctly identified the meaning of best-before dates (77%) and use-by dates (67%), a substantial minority (up to a third) expressed an incorrect understanding. Being male was a significant predictor of having an incorrect understanding of both best-before dates and use-by dates, while not having an Australian/New Zealand or European background was also a significant predictor of not understanding best-before dates.

Among those who had a correct understanding of date marking, there was a substantial minority who reported behaviour inconsistent with their understanding. Specifically, 27% of people who had a correct understanding of best before dates reported that they would throw food out after it's best before date without trying it, and 33% of people who had a correct understanding of use-by dates reported that they would use a product after its use-by date.

It is not possible to determine from this survey the reason that some people's reported behaviour is inconsistent with their correct understanding of date-marking.

Food safety knowledge and concerns

Foodborne illness was consumers' key food safety concern, however there appears to be a gap in consumers' knowledge of foods that present the greatest risk of foodborne illness.

When asked to identify their top three food safety issues from a provided list, foodborne illness was not only the most commonly selected (59%) but also, by a large margin, the most commonly selected #1 food safety issue (31%). Next highest was chemicals from the environment in food (selected by 40% of respondents, with 15% selecting it as their #1 issue).

However, when asked to identify the top 3 categories of foods that are most likely to cause foodborne illness, there was evidence of some consumer knowledge gaps. Although raw chicken and seafood were correctly identified as a high risk food by a majority of consumers (by 85% and 74% of respondents, respectively), eggs were relatively infrequently selected (by 23% of respondents), despite being the most common cause of salmonellosis and one of the most common sources of foodborne illness overall (OzFoodNet Working Group, 2022, p.28). This suggests that consumers may under-estimate the relative level of risk that eggs pose. Nevertheless, it is notable that household members of those who were most at risk – children aged less than five years – were more likely to select this as a top food safety issue.

Although these results are informative, there was a limitation in the way this question was asked that necessitates some caution in their interpretation. By requiring respondents to rank their top three food safety risks, there was no way to ascertain how consumers regarded the relative degree of risk of foods outside of their selected top three. That is, consumers may have regarded eggs to be a risky food – but identified other foods as riskier. This limitation

will be addressed in future iterations of the survey, which will substitute an absolute measure of risk for the current ranking format.

Consumers were significantly more likely to engage in food safety behaviours that concern raw animal products than general food safety/hygiene behaviours.

Overall, consumers reported relatively high levels of engagement with the four food safety behaviours that were measured. It is acknowledged that the survey measured self-reported behaviours, rather than actual behaviours, which may differ. Nevertheless, the measures were sensitive enough to detect that consumers were significantly more likely to report engaging in the two that concerned raw animal products (cooking raw animal products thoroughly and keeping raw animal products separate from ready-to-eat foods) than those which were more general (refrigerating leftovers within two hours and cleaning hands and work surfaces). This suggests that consumers may perceive a greater level of risk to be associated with raw animal products than other categories of foods and is broadly congruent with consumers' ranking of raw meat as the top food safety risks (along with processed meat).

Older consumers were less likely to report engagement with the raw animal food safety behaviours, which is incongruent with the finding that older consumers were more likely to identify raw chicken and seafood as high risk foods. In comparison, younger consumers were less likely to report engagement with the more general food safety behaviours.

Men were less likely to report engagement with all of the food safety behaviours measured. This aligns with the finding that women were more likely to identify raw chicken, seafood and processed meat as high risk foods. In comparison, men were more likely to identify dairy as a high risk food category.

Product labels were the preferred source of information on how to store and prepare food safely.

Of those who indicated they would like more information about how to store and prepare food safely, product labels were the preferred source for slightly more than half (52%). After product labels, there was far more variability, with all other responses chosen by less than half of respondents. However, the responses that were most selected focused on professions or institutions in which consumers may trust – such as health professionals, retailers and supermarkets, and government – as well as personally trusted relationships among family and friends. In contrast, more generic information channels – such as social media, television, magazines, and internet podcasts or videos – were substantially less selected. This is suggestive of the importance of trust in the communication of food safety information to consumers.

New foods and food technologies

This section was designed to obtain data about consumers' awareness, confidence, and/or consumption of foods and food technologies that were either not available or not prevalent at the time of the most recent national nutrition surveys in Australia and New Zealand. Foods or food technologies covered in this iteration of the survey included: sports foods, plant-based meat alternatives, plant-based milk alternatives, artificial sugar substitutes, plant-based sugar

substitutes, hemp seed-based foods, gene-edited fruits, vegetables, meat, and dairy, cell-based meat and dairy, insect protein, and 3D-printed foods.

Some sports food consumers may be using sports foods in a manner that is inconsistent with their intended purpose.

Sports foods are products that are specifically formulated to assist sports people to achieve specific nutritional or performance goals (Section 1.1.2—2 of the Food Standards Code). Around one-third of respondents indicated that they consume sports foods at least every month. However, of these, less than half (47.73%) reported *only* using sports foods within a physical activity-related context.

This finding is broadly consistent with previous research, which found that in the general population both sedentary and physically active participants consumed sports foods (Colmar Brunton, 2010). However, FSANZ (2013) found that approximately 60% of consumers *last* consumed sports foods within an exercise-related context (FSANZ, 2013). This higher percentage of consumers identified in the FSANZ (2013) survey could be due to the fact that this was calculated as a proportion of respondents who had reported sports foods consumption within the past 4 weeks (rather than as a proportion of respondents who had reported consumption on a *regular* monthly basis, as in the CIT), and only asked about their *last* use of a sports food (whereas the CIT asked about all contexts in which sports foods were consumed). It is possible that some respondents in the 2013 FSANZ survey consumed sports foods when both exercising and not exercising, which was not captured in the reported percentage. In addition, the CIT provides more recent data than the FSANZ (2013) data where a larger range of sports foods may now be available on the market.

While not all sports foods are intended to be consumed immediately around physical activity, this finding nevertheless suggests that a proportion of sports foods consumers may be using them in a manner that is inconsistent with their intended purpose. This issue will be further investigated in a future iteration of the survey.

Most consumers would not be confident in the safety of new foods and food technologies, especially those that deal with meat or dairy. However, slightly more than half of consumers may be open to trying cell-based meat.

A majority of consumers indicated that they would not be confident in the safety of each of the new foods and technologies tested in the survey if they saw them for sale in the supermarket. However, consumers had a significantly higher level of confidence in gene-edited fruit and vegetables than they had in any of the technologies that concern meat and dairy (that is, cell-based meat, cell-based dairy, and gene-edited meat and dairy). This is similar to the finding, in research previously undertaken or commissioned by FSANZ (Ankeny and Harms 2021, Grant et al. 2021, FSANZ 2022), that consumers have a substantially higher level of acceptance for the use of genetic modification or new breeding techniques in crops rather than in animals.

In line with these findings, only 24% of respondents said that they would include cell-based meat in their diet. However, a further 29% were unsure, perhaps indicating that slightly more than half of consumers may be open to being convinced. Of those who said that they would include cell-based meat in their diet, half said that they would partly replace traditional meat (51%) followed by consuming it in addition to traditional meat (37%).

Strengths and Limitations

The purpose of the current study was to obtain a nationally representative measure of consumer attitudes, understandings, and trust in food labelling and the food regulation system within the general population of Australia and New Zealand to inform FSANZ's risk analysis and performance reporting. The study was designed to be repeated annually in order to allow for the generation of trend data around trust and confidence, as well as functioning as a vehicle for one-off questions to meet short-term data needs. The current study has met these requirements, and shows consistency with other surveys that asked similar questions. However, as with any online survey, there are a number of associated limitations.

The sample was nationally representative by the interlocked quotas of age, gender and location. There was a good spread of different levels of education and household income. However there was evidence of an under-sampling of people with an education of 'High school or below' in Australia and 'Vocational/Trade Qualification' in New Zealand, and an over-sampling of all other categories compared to the most recent censuses (2021 in Australia, 2018 in New Zealand). There was also evidence of an under-sampling, in Australia, of household incomes below $25,000 and above $265,000, and an over-sampling of all other categories. No equivalent New Zealand comparison is available. The survey slightly oversampled Aboriginal and Torres Strait Islanders in Australia (4.93%) and Māori in New Zealand (17.90%). However, as this resulted in a relatively small number of participants within these groups, and these latter quotas were not interlocked with those of age, gender, location, education, or household income, it was not possible to undertake a sub-group analysis that would be representative of these populations.

The non-response rate of potential survey respondents is unknown. Although the final sample was nationally representative by age, gender, and location, it is possible that non-respondents of the survey had common factors that made them less likely to participate. Additionally, members of an online panel may have certain characteristics that differ from the broader population.

The cross-sectional survey design means that all analyses are correlational, and thus cannot infer causation. Although the statistical models used to analyse the data provide a degree of predictive power, these models are limited in that they were only able to control for variables that were measured in the survey. For example, it is not possible to definitively conclude that having a high level of trust in food actors *causes* people to have a high level of confidence in the safety of the food supply, as there may be a third variable that influences both levels of trust and levels of confidence that was not measured in the current study. Chi-square analyses are particularly limited in their predictive power, as they cannot control for other factors that were measured and therefore should be viewed as exploratory. Nonetheless, the current study provides valuable insights into consumers' current perceptions and attitudes towards food labelling and the food regulation system.

Where questions inquired about people's behaviours, it was behavioural *intentions* rather than actual behaviours that were measured. Although behavioural intentions are a predictor of actual behaviour, meta-analyses have found that they only account for between 26 to 36% of the variance in behaviour (McEachan et al. 2011), leaving an 'intention-behaviour gap'. This means that the prospective behavioural intentions reported, such as the consumption of

cell-based meat, may not reflect their actual future behaviour. Furthermore, results from this iteration of the Consumer Insights Tracker only represent a single snapshot in time. Consumers' consumption intentions regarding cell-based meat could change as they become more familiar with the product.

As with all surveys based on self-report, there is also the risk of self-presentational or social desirability bias. This is when respondents may report an attitude or opinion contrary to the one they actually hold in order to uphold their self-image, either in their own eyes or that of others. Some of the questions in the survey may be particularly susceptible to this type of bias, such as how often people engage in food safety behaviours and the level of effort they put into maintaining a healthy diet. In addition, there are possible inaccuracies in people's ability to recall their past behaviour in these areas. Nevertheless, this is an inherent limitation of any self-report questionnaire, and therefore some level of these biases is unavoidable.

6. References

Ankeny, R. and Harms, R. (2021). *Focus groups on consumers' responses to the use of New Breeding Techniques (NBTs) in food production*. FSANZ website. Accessed 4 April 2024.

Australasian Society of Clinical Immunology and Allergens. (2023). *Food Allergy – Fast Facts*. ASCIA Website. Accessed 20 March 2024.

Australian Bureau of Statistics. (2014). *Australian Health Survey: Nutrition First Results – Foods and Nutrients*. ABS website. Accessed 14 March 2024.

Australian Bureau of Statistics. (2021). 2021 Census – Counting dwellings, place of enumeration by HIED Equivalised Total Household Income (weekly). TableBuilder - Dataset: Census of Population and Housing, 2021. Accessed 5 January 2023.

Australian Bureau of Statistics. (2023). *Monthly Consumer Price Index Indicator: April 2023*, ABS website. Accessed 5 March 2024.

Beckers, B., Clarke, A., Gao, A., James, M., and Morgan, R. (2024). Developments in Income and Consumption Across Household Groups. *Bulletin January 2024*. Reserve Bank of Australia. Accessed 23 April 2024.

Bradbury, I., Taylor, O., Etienne, J., McEntaggart, K. (2024). *Scientific literature review on measuring institutional trust in the domain of food regulation, food safety and public health nutrition.* EFSA supporting publication 2024:e220301. 106 pp. DOI: https://doi.org/10.2903/sp.efsa.2024.e220301

Bullen, C., Beaglehole, R., Daube, M., Devlin, G., Hughes, S., and Swinburn, B. (2015). Targets and actions for non-communicable disease prevention and control in New Zealand, *New Zealand Medical Journal, 128*(1427), 55-60.

Burton, S., Biswas, A., & Netemeyer, R. (1994). Effects of alternative nutrition label formats and nutrition reference information on consumer perceptions, comprehension, and product evaluations. *Journal of Public Policy & Marketing*, *13*(1), 36-47. DOI: 10.1177/074391569401300103

Campos, S., Doxey, J., and Hammond, D. (2011). Nutrition labels on pre-packaged foods: A systematic review. *Public Health Nutrition*, *14*(8), 1496-1506. DOI: 10.1017/S1368980010003290

Colmar Bruton. (2010). Consumer research investigating the use of formulated supplementary sports foods. FSANZ Website. Accessed 5 April 2024.

Cowburn, G., and Stockley, L. (2005). Consumer understanding and use of nutrition labelling: a systematic review. Public Health Nutrition, 8(1), 21-28. DOI: 10.1079/PHN2004666

De Vlieger, NM., Collins, C., and Bucher, T. (2017). What is a nutritious snack? Level of processing and macronutrient content influences young adults' perceptions, *Appetite 114*, 55-63. DOI: 10.1016/j.appet.2017.03.021

Drewnowski, A. and Monsivais, P. (2020). 'Chapter 10 – Taste, cost, convenience, and food choices' in Marriott, B.P., Birt, D.F., Stallings, V.A., and Yates, A.A. (eds.) *Present Knowledge in Nutrition (Eleventh Edition): Volume 2: Clinical and Applied Topics in Nutrition*, pp.185-200. DOI: 10.1016/B978-0-12-818460-8.00010-1

European Food Safety Authority. (2022). *Special Eurobarometer Wave EB97.2 – Food safety in the EU*. Report. DOI: https://doi.org./10.2805/729388.

Field, A. (2018). *Discovering statistics using SPSS – 5th edition*. London: Sage Publications.

Food Standards Australia New Zealand. (2008). *Consumer Attitudes Survey 2007: A benchmark survey of consumer's attitudes to food issues.* FSANZ website. Accessed 5 March 2024.

Food Standards Australia New Zealand (FSANZ). (2013). Sports food consumption in Australia and New Zealand. FSANZ website. Accessed 5 April 2024.

Food Standards Australia New Zealand. (2022). *P1055 – Consumer Survey Report: Consumers' perceptions of and attitudes towards genetically modified foods*. FSANZ website. Accessed 5 March 2024.

GBD 2019 Australia Collaborators. (2023). The burden and trend of diseases and their risk factors in Australia, 1990-2019: a systematic analysis for the Global Burden of Disease Study 2019, *Lancet Public Health*, *8*(8), e585-e599. DOI: 10.1016/S2468-2667(23)00123-8

Grant, W.J, Bray, H., Harms, R., Ankeny, R.A, and Leach, J. (2021). *Consumer responses to the use of NBTs in the production of food: A systematic literature review.* FSANZ website. Accessed 4 April 2024.

Hughes, J., McMahon, A., Houston, L., and Neale, E. (2023). Perceptions, use and perceived value of nutrition and health claims among Australian consumers: a cross-sectional survey, *British Food Journal, 125*(9), 3175-3198. DOI: 10.1108/BFJ-11-2021-1221

International Food Information Council. (2023). *2023 Food and Health Survey*. Report. 23 May 2023.

Ipsos. (2023). *Foodbank Hunger Report 2023: National Key Findings Report.* 25 September 2023. Report. Accessed 5 March 2024.

Jacoby, J., Chestnut, R. W., & Silberman, W. (1977). Consumer use and comprehension of nutrition information. *Journal of Consumer Research*, *4*(2), 119-128. DOI: 10.1086/208687

Kendall, H., Clark, B., Rhymer, C., Kuznesof, S. , Hajslova, J., Tomaniova, M., Brereton, P., and Frewer, L. (2019). A systematic review of consumer perceptions of food fraud and authenticity: A European perspective. *Trends in Food Science & Technology, 94,* 79-90. DOI: 10.1016/j.tifs.2019.10.005

McEachan, R.R.C, Conner, M., Taylor, N.J., and Lawton, R.J. (2011). Prospective prediction of health-related behaviours with the Theory of Planned Behaviour: a meta-analysis, *Health Psychology Review*, *5*(2), 97-144. DOI: 10.1080/17437199.2010.521684

Malek, L. and Umberger, W.J. (2021) *Australian consumers' responses to food safety incidents and outbreaks*. Unpublished report. Centre for Global Food and Resources, School of Economics and Public Policy, The University of Adelaide.

Ni Mhurchu, C. and Gorton, D. (2007). Nutrition labels and claims in New Zealand and Australia: a review of use and understanding, *Australian and New Zealand Journal of Public Health, 31*(2),105-112.

Roberto, C.A., and Khandpur, N. (2014). Improving the design of nutrition labels to promote healthier food choices and reasonable portion size. *International journal of obesity, 38 Suppl 1*, S25-S33. DOI: 10.1038/ijo.2014.86I

Siegrist, M. (2010). Trust and confidence: The difficulties in distinguishing the two concepts in research, *Risk Analysis 30*(7),1022-1024. DOI: 10.1111/j.1539-6924.2010.01454.x

Stats NZ. (2023). *Consumers Price Index: June 2023 Quarter*. Stats NZ website. Accessed 14 March 2024.

Stuthridge, L. Alexander, D., Stubbe, M., Eme, P. and Smith, C. (2022). "It's all just marketing", a qualitative analysis of consumer perceptions and understandings of

nutrition content and health claims in New Zealand, *International Journal of Environmental Research and Public Health, 19*, 3510. DOI: 10.3390/ijerph19063510

Thompson, B., McMahon, A.T., Watson, W.L., Riesenberg, D., Hughes, C., and Neale, E.P. (2024). Consumer perceptions of nutrient content claims in Australia: A qualitative study, *Journal of Human Nutrition and Dietetics*, *37*(1), 168-181. DOI: 10.1111/jhn.13241

Talati, Z., Pettigrew, S., Hughes, C., Dixon, H., Kelly, B., Ball, K., and Miller, C. (2016). The combined effect of front-of-pack nutrition labels and health claims on consumers' evaluation of food products, *Food Quality and Preference*, *53*, 57-65. DOI: 10.1016/j.foodqual.2016.05.016

Tonkin, E., Webb, T., Coveney, J., Meyer, S.B., and Wilson, A.M. (2016). Consumer trust in the Australian food system – the everyday erosive impact of food labelling, *Appetite, 103*, 118-127. DOI: 10.1016/j.appet.2016.04.004

Ward, P.R., Mamerow, L., Henderson, J., Taylor, A.W., Meyer, S.B. and Coveney, J. (2012). The social determinants of food purchasing practices: Who chooses price-before-health, taste-before-price or organic foods in Australia?, *Food and Nutrition Sciences*, 3(4), 18488. DOI: 10.4236/fns.2012.34066

7. Appendices

Appendix A. Final survey instrument

Overview

Food is a vital part of all of our lives. To ensure (Australia/New Zealand) has a safe and reliable food supply, it is important to understand how people think and behave in relation to food and drinks. This survey will ask about your eating habits, how you use food labels, your knowledge of food safety and new food technologies, and how much you trust the food system.

The survey will take around 20 mins to complete. You can close and restart the survey from where you left off at any time.

Your answers will contribute to the development of policies or regulations that aim to achieve positive health outcomes and support thriving food, beverage and hospitality sectors in (Australia/New Zealand). Thank you for your participation.

Section 1: Demographics

#	Module	Variable [Variable Name]	Question, Response Options [Code]
1	Demographics (Core)	Age	What is your age? [Numeric input]
2	Demographics (Core)	Gender	How do you identify? • Male [1] • Female [2] • Nonbinary [3] • Another term (Please specify) [4] [Free text field] • Prefer not to say [98] [Single response option]
3	Demographics (Core)	Postcode [Postcode and Postcode_NZ]	What is the postcode of your main place of residence? • [Four-digit free text]
4	Demographics (Core)	Education	What is the highest level of formal education you have **completed**? • High school or below [1] • Vocational/trade qualification [2] • Undergraduate degree [3] • Postgraduate degree [4] [Single response option]
5a	Demographics (Core)	Cultural Background [BackgroundAU]	[Show only to people residing in Australia]

#	Module	Variable [Variable Name]	Question, Response Options [Code]
			How would you describe your **cultural background**? (Please select all that apply) ▪ Aboriginal and/or Torres Strait Islander [1] ▪ English [2] ▪ Irish [3] ▪ Scottish [4] ▪ Chinese [5] ▪ Italian [6] ▪ German [7] ▪ Indian [8] ▪ Greek [9] ▪ Dutch [10] ▪ Australian [11] ▪ Other (please specify): [FREE TEXT] [12] ▪ Prefer not to say [EXCLUSIVE] [98] Examples of 'Other (please specify)' are: Spanish, Vietnamese, Hmong, Welsh, Kurdish, Lebanese. [Multiple responses possible]
5b	Demographics (Core)	Cultural Background [BackgroundNZ]	[Show only to people residing in New Zealand] How would you describe your **cultural background**? (Please select all that apply) ▪ New Zealand European [1] ▪ Māori [2] ▪ Pacific Islander [3] ▪ Chinese [4] ▪ Indian [5] ▪ Other (please specify): [FREE TEXT] [6] ▪ Prefer not to say [EXCLUSIVE][98] Examples of 'Other (please specify)' are: Filipino, Korean, Dutch, Australian, and Middle Eastern. [Multiple responses possible]
6	Demographics (Core)	Number and Ages of People in Household [HHPeople]	How many people live in your household, <u>including you</u>? If you have a shared care arrangement, please include the maximum number of people who live in your household, including yourself. • Adults (18+) [Enter number] [HHPeople_1] • Children aged 0 to 4 years [Enter number] [HHPeople_2] • Children aged 5 to 14 years [Enter number] [HHPeople_3] • Adolescents aged 15 to 17 years [HHPeople_4] [Default: 0]

#	Module	Variable [Variable Name]	Question, Response Options [Code]
7	Demographics (Core)	Household Income [HHIncome]	Which one of the following categories best describes your household's total annual income (before tax)? Please include the income of everyone in your household. If you don't know the exact amount, then please take your best guess. • Under $25,000 • $25,000 - $35,000 • $35,001 - $45,000 • $45,001 - $55,000 • $55,001 - $65,000 • $65,001 - $75,000 • $75,001 - $85,000 • $85,001 - $105,000 • $105,001 - $115,000 • $115,001 - $125,000 • $125,001 - $145,000 • $145,001 - $165,000 • $165,001 - $185,000 • $185,001 - $205,000 • $205,001 - $225,000 • $225,001 - $245,000 • $245,001 - $265,000 • $265,001 - $285,000 • Above $285,000 • Prefer not to say [98] [Single response option]

Section 2: Trust and Confidence

The next section asks about **your level of trust and/or confidence** in a range of institutions or professions. When answering these questions, please think about the institutions or professions in (Australia/New Zealand).

Even if you have had very little or no contact with these institutions or professions, please base your answer on your general impression of them.

#	Module	Variable [Variable Name]	Question, Response Options [Code]
8	Trust and Confidence (Core)	Institutional Trust [TrustInstitution]	How much do you personally **trust** the following institutions or professions in [Australia/New Zealand]? Even if you have had very little or no contact with these institutions or professions, please base your answer on your **general impression** of them.

			• The school system [TRUSTSCHOOL] • The legal system [TRUSTLEGAL] • The media [TRUSTMEDIA] • The Federal Government (Federal in AUS only) [TRUSTGOV] • The police [TRUSTPOLICE] • The health system [TRUSTHEALTH] • Scientists [TRUSTSCIENTIST] [Matrix: 7 point scale for each organisation/institution where 1= "Not at all", 7= "Completely"]
9	Trust and Confidence (Core)	Confidence in Food Supply [FoodConfidence]	How **confident** are you that all food (including drinks) sold in Australian/New Zealand shops and supermarkets is **safe to eat**? [1 = "Not at all confident", 7 = "Completely confident"]
10	Trust and Confidence (Core)	Trust in Food Supply Chains [TrustSupply]	How much do you **trust** the following people or groups **to do their part** to ensure that all food (including drinks) sold in Australian/New Zealand shops and supermarkets is **safe to eat**? • Farmers and producers [TrustFarmers] • Manufacturers and processors (e.g. factories and production plants) [TrustManuf] • Retailers (e.g. supermarket chains, small grocers, etc) [TrustRetail] • Government/public food authorities [TrustFoodGov] • Food scientists [TrustFoodSci] [Matrix: 1 ="Do not trust at all", 7 = "Trust completely"]
11	Trust and Confidence (Core)	FSANZ Awareness [FSANZAware]	How much, if anything, do you know about Food Standards Australia New Zealand, also known as FSANZ? • I have never heard of FSANZ before [0] • I have heard of FSANZ before but know nothing about what it does [1] • I know a little about FSANZ and what it does [2] • I know a lot about FSANZ and what it does [3] [Single response option]
12	Trust and Confidence (Core)	Trust in FSANZ	Only asked to people who have heard of FSANZ and know something about what it does [Codes 2 or 3 in FSANZAware] How much do you agree or disagree with the following statements:

			(In these statements, FSANZ means Food Standards Australia New Zealand) • **[FSANZRight]** I trust FSANZ to do what is right. • **[FSANZBest]** FSANZ acts in the best interest of food safety and the food regulatory system. • **[FSANZScience]** FSANZ bases its decisions on the best available scientific evidence. [Matrix: 1 = 'Strongly disagree" – 7 = 'Strongly agree"]

Section 3: Health and Dietary Behaviours

The next section asks about your food choices and the things that influence them. There are no right or wrong answers, we are interested in learning more about how you make decisions around food. Please answer about the food choices you make for you and your household.

#	Module	Variable [Variable Name]	Question, Response Options [Code]
13	Health and Dietary Behaviours (Core)	Values influencing food purchases [FoodValues]	Excluding taste and price, what is **most important** to you out of the following when **choosing which foods to buy**? Please rank up to three answers (1 = Most important, 2 = Second-most important, 3 = Third-most important) • **Naturalness** (extent to which food is unprocessed or produced without modern technologies) [FOODVALUES_1] • **Convenience** (ease with which food is cooked and/or consumed) [FOODVALUES_2] • **Nutrition** (amount and type of fat, protein, vitamins, etc.) [FOODVALUES_3] • **Tradition** (following cultural or familial culinary practices) [FOODVALUES_4] • **Origin** (where the food was grown or produced) [FOODVALUES_5] • **Fairness** (the extent to which all parties involved in the production of the food equally benefit) [FOODVALUES_6] • **Animal welfare** (the extent to which animals involved in

			the production of food are treated well) [FOODVALUES_7] • **Environmental impact** (effect of food production, distribution or consumption on the environment) [FOODVALUES_8] • Other (Please specify) [FREE TEXT] [FOODVALUES_9] • None of the above [EXCLUSIVE] [FV0] [Rank up to 3; randomise order of responses, except 'Other', 'It depends on the food' and 'None of the above']
14	Health and Dietary Behaviours (Core)	Dietary Influences [DietFactors]	Do any of the following **currently affect the food choices** you make **for you or your household**? Please select all that apply. ▪ Food allergy or food intolerance [DIETFACTORS_1] ▪ Digestive concerns such as coeliac disease, irritable bowel syndrome, etc. [DIETFACTORS_2] ▪ Other diet-related health concerns such as diabetes, heart disease, high blood pressure, etc. [DIETFACTORS_3] ▪ Pregnancy or breast feeding [DIETFACTORS_4] ▪ Looking to lose weight and/or maintain a healthy weight [DIETFACTORS_5] ▪ Vegetarian or vegan [DIETFACTORS_6] ▪ Religious beliefs that affect food choices [DIETFACTORS_7] ▪ Training for sports that affects food choices [DIETFACTORS_8] ▪ Cost of living pressures [DIETFACTORS_9] ▪ Other things about you or your household that affect food choices (Please specify) [FREE TEXT] [DIETFACTORS_10] ▪ None of the above. [EXCLUSIVE] [DF0] [Multiple responses possible, randomise response order except for 'Other' and 'None of the above'.]
15	Health and Dietary Behaviours (Core)	Health Consciousness [HealthConsc]	How much **effort** do you generally put into maintaining a **healthy diet** for you and/or your household? [Scale: 1 = "No effort", 7 = "A lot of effort"]
16	New food technologies (Supplementary)	Awareness of new foods and technologies [AwareNew]	Have you **heard of** any of the following new or emerging foods? • Insect protein (that is, protein made from insects) [AwareNew_1]

			• Cell-based meat (that is, meat produced from animal cells, sometimes referred to as 'lab-grown meat') [AwareNew_2] • Cell- based dairy (that is, dairy produced from animal cells, sometimes referred to as 'lab-grown dairy') [AwareNew_3] • Gene edited fruit or vegetables (that is, fruit or vegetables from plants that have had very precise changes made to their DNA in order to produce desirable traits) [AwareNew_4] • Gene edited meat or dairy (that is, meat or dairy from animals that have had very precise changes made to their DNA in order to produce desirable traits) [AwareNew_5] • 3D printed foods (that is, food created by using a printer to layer edible materials to form a 3D object or shape)[AwareNew_6] [Matrix: 0 = I have never heard of this before today, 1 = I have heard of it, but know very little or nothing about it, 2 = I have heard of it and know something about it but not enough to explain it to a friend, 3 = I have heard of it and know enough about it that I could explain it to a friend]
17	New food technologies (Supplementary)	Trust in new food and food technologies [TrustNew]	Thank you, now we would like to know how **confident** you would be in the **safety** of the following foods if you saw them for sale in Australian/New Zealand shops and supermarkets? Even if you have never heard of these foods before today, please base your answer on how you would react if you saw it for sale in your local shops or supermarket in [Australia/New Zealand]. • Insect protein (that is, protein made from insects) [TrustNew_1] • Cell-based meat (that is, meat produced from animal cells, sometimes referred to as 'lab-grown meat') [TrustNew_2] • Cell-based dairy (that is, dairy produced from animal cells, sometimes referred to as 'lab-grown dairy') [TrustNew_3] • Gene edited fruit or vegetables (that is, fruit or vegetables from plants that have had specific changes made to their DNA in order to produce desirable traits) [TrustNew_4] • Gene edited meat or dairy (that is, meat or dairy from animals that have had specific changes made to their DNA in order to produce desirable traits) [TrustNew_5]

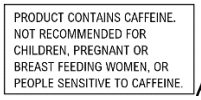
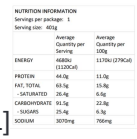
			• 3D printed foods (that is, food created by using a printer to layer edible materials to form a 3D object or shape) [Trust_6] [Matrix: 1 “Not confident at all”, 7 = “Completely confident”]
18	New food technologies (Supplementary)	Cell-cultured meat consumption intentions part A [CellMeatA]	Assuming you liked the taste and the product was a similar price to meat and/or meat alternatives, do you think you would include cell-based meat in your diet? Cell-based meat is meat produced from animal cells, sometimes referred to as ‘lab-grown meat’ • Yes [1] • No [0] • Can’t say / don’t know [98]
19	New food technologies (Supplementary)	Cell-cultured meat consumption intentions, part B [CELLMEAT_1-7]	[Ask those who answered Yes [code 1] to CellMeatA] How do you think you would include cell-based meat in your diet? (Please select all that apply) **Note:** Traditional meat refers to farm-raised beef, chicken, or pork, and plant-based proteins refers to plant-based meat alternatives (e.g. vegan ‘mince’ or ‘sausage’), tofu, and/or lentils etc. • Completely replace traditional meat [CELLMEAT_1] • Partly replace traditional meat [CELLMEAT_2] • Consume in addition to traditional meat [CELLMEAT_3] • Completely replace plant-based proteins [CELLMEAT_4] • Partly replace plant-based proteins [CELLMEAT_5] • Consume in addition to plant-based proteins [CM6] • Other (Please specify) [CELLMEAT_7] • Can’t say/don’t know [CELLMEAT_98] [EXCLUSIVE] [Multiple response options possible]
20	New Foods	Food Frequency for New Foods [FoodFreq_1-6]	**How often, if at all,** do you **personally consume** the following food products? • Plant-based meat alternatives (e.g. plant-based burger patties) [FoodFreq_1] • Plant-based milk alternatives (e.g. soy milk, oat milk, almond milk) [FoodFreq_2] • Plant-based sugar substitutes (e.g. Stevia, Monk fruit) [FoodFreq_3] • Artificial sugar substitutes (e.g. aspartame, sucralose) [FoodFreq_4]

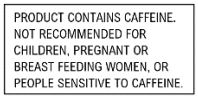
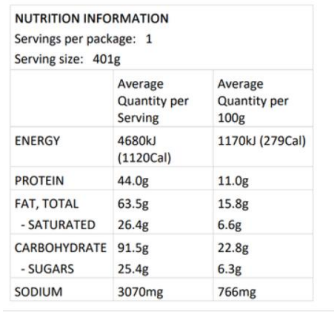
			• Sports foods (e.g. protein powders, pre-workout drinks, energy gels or gummies, gainers, sports bars, creatine powder). Sports foods do NOT include electrolyte drinks, energy drinks, tablets/capsules, or general foods like meat, fruit or veg. [FoodFreq_5] • Hemp seed-based foods (e.g. hemp seeds, hemp protein, hemp seed oil) [FoodFreq_6] [Matrix: Every day, Every few days, Every week, Every month, Every 3 months, Every 6+ months, Don't currently consume, Don't Know]
21	Sports Foods (Supplementary)	Sports Foods Consumption [SportsFoods]	[To anyone who answered that they consume sports foods every day, every few days, every week, or every month] When do you typically consume **sports foods**? Sports foods are things like protein powders, pre-workout drinks, energy gels or gummies, gainers, sports bars, and creatine powder. They do not include electrolyte drinks, energy drinks, tablets/capsules, or general foods like meat, fruit, or veg. (Please select all that apply) • Immediately before, during, or after sport, exercise or other physical activity [SPORTSFOODS_1] • At other times outside of physical activity [SPORTSFOODS_2] • Can't say/don't know [SPORTSFOODS_98] [EXCLUSIVE]

Section 4: Food Labelling

The next section is about how or if you use food labelling to make choices about food. When answering these questions, please think about what you look for on food labels when buying packaged food or drink for the first time.

#	Module	Variable [Variable Name]	Question, Response Options [Code]
22	Food Labelling (Core)	Importance of Labelling Elements [LABELIMPORT_1-7]	Think about when you are making the decision to buy a packaged food or drink **for the first time**. How **important** is the following labelling information when **deciding what to buy**?  • [LabelImport_1] Nutrition information panel (e.g. amount of energy, carbohydrates, sugar, sodium, or fat)

			• [LabelImport_2]  Ingredients list • [LabelImport_3] **Contains: egg, almond, milk, wheat, gluten, sesame.** **May be present: peanut.** Allergen information • [LabelImport_4]  Health Star Rating • [LabelImport_5]  Advisory or warning statements (e.g., 'contains caffeine', 'not recommended for children') • [LabelImport_6]  Claims about health benefits (e.g., 'calcium is good for healthy bones') • [LabelImport_7]  Claims about nutrient or ingredient content (e.g., 'low in sugar', 'reduced fat') [Matrix from 1 = Not important at all, to 7 = Extremely important]
23	Food Labelling (Core)	Trust in labelling elements [LETrust1-8]	In this question, we are interested in how much you feel you can **trust** different labelling information, **even if you don't use it** to make decisions about food purchases. With that in mind, how much do you feel you can **trust** the following information on packaged foods and drink? • [LETrust_1]  Nutrition information panel (e.g. amount of energy, carbohydrates, sugar, sodium, or fat) • [LETRUST_2]  Ingredients list • [LETRUST_3] **Contains: egg, almond, milk, wheat, gluten, sesame.** **May be present: peanut.** Allergen information

			• [LETRUST_4]  Health Star Rating • [LETRUST_5]  Advisory or warning statements (e.g., 'contains caffeine', 'not recommended for children') • [LETRUST_6]  Claims about health benefits (e.g., 'calcium is good for healthy bones') • [LETRUST_7]  Claims about nutrient or ingredient content (e.g., 'low in sugar', 'reduced fat') • [LETRUST_8]  Best before/use by date [Matrix: 1-7 scale, where 1 = 'Cannot trust at all' and 7 = 'Can trust completely']
24	Food Labelling (Core)	NIP Elements [NIPElem]	[Only ask those who answered 3-7 in LE1 (i.e. that the NIP has an importance of 3-7)] When buying products for the **first time**, what parts of the Nutrition Information Panel (NIP) do you usually look for? (Please select all that apply)  NUTRITION INFORMATION Servings per package: 1 Serving size: 401g Average Quantity per Serving / Average Quantity per 100g ENERGY 4680kJ (1120Cal) / 1170kJ (279Cal) PROTEIN 44.0g / 11.0g FAT, TOTAL 63.5g / 15.8g - SATURATED 26.4g / 6.6g CARBOHYDRATE 91.5g / 22.8g - SUGARS 25.4g / 6.3g SODIUM 3070mg / 766mg • Energy content (kilojoules, calories) [NIPELEM_1] • Protein content [NIPELEM_2] • Total fat content [NIPELEM_3] • Saturated fat content [NIPELEM_4] • Carbohydrate (carb) content [NIPELEM_5] • Sugar content [NIPELEM_6] • Sodium content [NIPELEM_7] • Serving size [NIPELEM_8] • Servings per package [NIPELEM_9]

			• Other (Please specify) [FREE TEXT] [NIPELEM_10] • Don't know/can't say [EXCLUSIVE] [NIPELEM_98] [Multiple selections possible]
25	Food Labelling (Core)	Ingredients Elements [IngrElem]	[Ask people who answered 3-7 to LE2 (i.e. those who answered 3-7 on importance of the Ingredients List in decision-making)] What information do you usually look for in the ingredients list when buying products for the first time? (Please select all that apply)  • Food additives, like colours, flavourings, or preservatives [INGRELEM_1] • Allergen information [INGRELEM_2] • Key ingredients in a food (i.e. first one or two ingredients listed) [INGRELEM_3] • Percentage of ingredients in a food [INGRELEM_4] • Length of ingredients list [INGRELEM_5] • Genetically modified (GM) ingredients [INGRELEM_6] • Artificial sweeteners (e.g. aspartame, sucralose, saccharin) [INGRELEM_7] • Plant-based sugar substitutes (e.g. Stevia, Monk fruit) [INGRELEM_8] • Chemical-sounding ingredients [INGRELEM_9] • Vitamin and mineral content [INGRELEM_10] • Other (Please specify) [FREE TEXT] [INGRELEM_11] • Don't know/can't say [EXCLUSIVE] [INGRELEM_98] [Randomise order, except for 'Don't know/can't say']
26	Food Labelling (Core)	Ability to use food labelling [LabelAbility]	How **confident** are you in your **ability to make informed choices** about foods from the **information on food labels**? [1-7 scale, where 1 = "Not at all confident" and 7 = "Completely confident"]
27	Food Labelling (Core)	Difficulties with labelling [LabelDiff]	[Ask those who answered 1-4 in LabelAbility] What makes it difficult to use food labelling to make informed choices about foods? (Please select all that apply)

			• I often don't understand what the information on food labels means [LABELDIFF_1] • The information on food labels is too small/illegible to easily read [LABELDIFF_2] • I'm not sure if I can trust the information on food labels [LABELDIFF_3] • I can't find the information I need to make food choices that reflect my values [LABELDIFF_4] • I don't find the information on food labels useful or relevant to me [LABELDIFF_5] • I don't have enough time to read food labels when I'm shopping [LABELDIFF_6] • Other (Please specify) [FREE TEXT] [LABELDIFF_7] • Can't say/don't know[EXCLUSIVE] [LABELDIFF_98] [Multiple response options, randomise order except 'Other' and 'Can't say/don't know'.]

Subsection 4a: Best before and use by dates

The next section asks specifically about how you use and understand best before and use-by dates on pre-packaged foods and drinks.

28	Food Labelling – Best Before Submodule (Supplementary)	Best Before and Use By Dates [DMFreq]	How often, if at all, do you look at best before or use-by/expiry dates when you are about to cook, prepare or consume packaged food? • Always [4] • Most of the time [3] • About half the time [2] • Occasionally [1] • Never [0] • It varies too much to say / Don't know [98] [Single response option]
29	Food Labelling – Best Before Submodule (Supplementary)	Best Before Dates Understanding [UnderstandBestBefore]	To the best of your knowledge, what does the term **'best before'** mean on food or drink labels? (Please select all that apply) • Food should not be eaten after this date as it may be unsafe [BB1] • Food is still safe to eat after this date as long as it is not damaged, deteriorated or perished [BB2] • Food is still safe to eat after this date, but the quality may not be as good [BB3]

			• Other (Please specify) [FREE TEXT] [BB6] • Can't say/don't know [BB98] [EXCLUSIVE] [Multiple response options]
30	Food Labelling – Best Before Submodule (Supplementary)	Use By Dates Understanding [UnderstandUseBy]	To the best of your knowledge, what does the term **'use-by'** mean on food or drink labels? (Please select all that apply) • Food should not be eaten after this date as it may be unsafe [UB1] • Food is still safe to eat after this date as long as it is not damaged, deteriorated or perished [UB2] • Food is still safe to eat after this date, but the quality may not be as good [UB3] • Other (Please specify) [FREE TEXT] [UB6] • Can't say/don't know [UB98] [EXCLUSIVE] [Multiple response options]
31	Food Labelling – Best Before Submodule (Supplementary)	Behaviour Best Before Dates [BehaviourBestBefore]	[Ask those who did not answer 0 or 98 in [DateMarks]] Thinking about **best before dates** on packaged food products, how do you use them? (Please select all that apply) **When buying food…** ▪ I buy products that are close to their best before date e.g. if it is at a discount or I will use it quickly. [BBUse1] ▪ I don't buy products that are close to their best before date. [BBUse2] ▪ I don't check best before dates when buying food. [EXCLUSIVE] [Buse97] **When preparing or cooking food…** ▪ I don't use products if they are past their best before date [DMUse3] ▪ I test products (e.g. by sniffing or trying a small amount) if they are past their best before date [DMUse4] ▪ I don't check best before dates when preparing/cooking food. [EXCLUSIVE] [DMUse98] [Multiple responses possible, except for those marked exclusive]

32	Food Labelling – Best Before Submodule (Supplementary)	Behaviour Use By Dates [BehaviourUseBy]	[Ask those who did not answer 0 or 98 in [DateMarks]] Now thinking about **use-by/expiry dates** on packaged food products, how do you use them? (Please select all that apply) **When buying food…** ▪ I buy products that are close to their use-by date e.g. if it is at a discount or I will use it quickly.. [BBUse1] ▪ I don't buy products that are close to their use-by date. [BBUse2] ▪ I don't check use-by dates when buying food. [EXCLUSIVE] [Buse97] **When preparing or cooking food…** ▪ I don't use products if they are past their use-by date. [DMUse3] ▪ I test products (e.g. by sniffing or trying a small amount) if they are past their use-by date [DMUse4] ▪ I don't check use-by dates when preparing/cooking food. [EXCLUSIVE] [DMUse98] [Multiple responses possible, except for those marked exclusive]

Section 5: Food Safety

Thank you for your time so far! This last section asks you questions about your perceptions of food safety when preparing food in the home and whether you would like to receive food safety information.

#	Module	Variable [Variable Name]	Question, Response Options [Code]
33	Food safety knowledge and concerns (Core)	Responsibility for Cooking [CookMeals]	Which of these statements best describes who is responsible for preparing and cooking meals in your household? • I do the majority of preparing and cooking meals [1] • I share the preparing and cooking of meals with someone else [2] • Someone else does the majority of preparing and cooking meals for my household [0]
34	Food safety knowledge and concerns (Core)	Food safety behaviours [FoodSafety]	[Ask those who answered 1 or 2 to [CookMeals]] How often do you do the following when preparing food at home? • Clean hands and work surfaces before, during, and after cooking [FS1]

			• Keep raw animal products (e.g. meat, eggs, and seafood) separate from ready-to-eat foods (e.g. fruit, vegetables, and cooked foods) in the fridge and when preparing foods. [FS2; include option Not applicable – I don't use raw animal products] • Cook raw animal products (e.g. meat, eggs, and seafood) thoroughly. Please consider instances where thorough cooking is not required for the dish (e.g. do not select always if you prepare raw egg smoothies, rare steak, runny eggs, or use raw fish in sushi. [FS3; include option Not applicable – I don't use raw animal products] • Refrigerate leftovers shortly after you are finished with them (within 2 hours) [FS4] [Matrix: 1 = Never, 4 = About half the time, 7 = Always; or 'Not applicable – I don't use raw animal products']
35	Food safety knowledge and concerns (Core)	Recalls [Recall]	Do you remember hearing about any food being recalled in the past 12 months? (A food recall is when an unsafe food product is removed from distribution, sale, and consumption) • Yes [1] • No [0] • Can't say/don't know [98]
36	Food safety knowledge and concerns (Core)	Food Safety Issues [SafetyIssues]	In your opinion, what are the **top three** most important FOOD SAFETY issues today? Please rank up to three food safety issues. 1 = Most important food safety issue, 2= Second-most important, 3 = Third most important • Food poisoning (i.e. from microbes like *Salmonella*) • Undeclared allergens in food • Chemicals from the environment in food, like toxic metals from pollution or pesticides/pesticide residues • Hormones, steroids and/or antibiotics in farm animal products • Artificial sweeteners, like aspartame, saccharine, and sucralose • Food additives, like colour or preservatives • Genetically modified foods • Imported food/food from overseas • Contamination of food with foreign objects (e.g., glass, needles) • Other (Please specify) [Free text] • None of the above [EXCLUSIVE]

			[Rank up to three, randomise order of responses except for Other and None of the above]
37	Food safety knowledge and concerns (Core)	Food risk perceptions [FR]	In your opinion, what are the ~~top 3~~ categories of foods that are the most likely to cause illness? Please rank **up to three** in order of how likely they are to cause illness. 1 = Most likely to cause illness, 2 = Second-most likely, 3 = Third-most likely ▪ Eggs and egg products; [FR1] ▪ Raw beef; [FR2] ▪ Raw chicken or other poultry; [FR3] ▪ Processed meat, such as ham, salami, or sausages; [FR4] ▪ Milk, cheese, or yoghurt [FR5] ▪ Vegetables, sprouts and leafy greens; [FR6] ▪ Seafood and raw shellfish; [FR7] ▪ Fruits, including berries and melons; [FR8~~9~~] ▪ Other (Please specify) [FREE TEXT] [FR11] [Rank up to 3, randomise order of responses except for Other]
38	Food safety knowledge and concerns (Core)	Food Safety Information Desire [FSInfowant]	Would you like to know more about how to store and prepare food safely? • Yes [1] • No [0] • Can't say/don't know [98]
39	Food safety knowledge and concerns (Core)	Food Safety Information Source [FSInfo]	[Ask those who answered yes [1] or don't know [98] to [FSInfowant]] What are your preferred sources of information about how to store and prepare food safely? (Please select all that apply) ▪ Family and friends [FSInfo1] ▪ Social media, such as Twitter, Facebook, or TikTok [FSInfo2] ▪ Podcasts, YouTube, or blogs [FSInfo3] ▪ Health professionals, such as doctors or dietitians [FSInfo4] ▪ Magazines or newspapers, either online or in print [FSInfo5] ▪ Television, including programmes or advertisements [FSInfo6] ▪ Radio, including programmes or advertisements [FSInfo7] ▪ Government websites [FSInfo8] ▪ Retailers and supermarkets [FSInfo9] ▪ Product labels [FSInfo10]

			▪ Non-government organisations, such as the Food Safety Information Council [FSInfo11] ▪ Other [FREE TEXT] [FSInfo12] ▪ Can't say/don't know [EXCLUSIVE] [FSInfo98] [Multiple responses possible; randomise response options except 13, 14]

Section 6: Demographics Part B

Finally, could you please let us know a couple more things about you:

40	Demographics (Core)	Country of Birth [BirthCountry]	Which of the following best describes **where you were born**? (If you were born in a country with multiple official languages, please select the option that best describes your everyday experience.) • In Australia/New Zealand [1] • Outside of Australia/New Zealand in a primarily English-speaking country [2] • Outside of Australia/New Zealand in a primarily non-English-speaking country [3] • Prefer not to say [98] [Single response option]
41	Demographics (Core)	Main household shopper [Shopper]	How much of the **food shopping** do you have **responsibility for** in your household? • I do all or the majority of the food shopping for my household [2] • I share the food shopping with someone else [1] • Someone else does all or the majority of food shopping for my household [0] [Single response option]
42	Demographics (Core)	Food Industry Experience [FoodIndustry]	Do you, or have you ever, worked in any of the following food related sectors? (Please select all that apply). ▪ Food primary production (e.g. farming) [FI1] ▪ Food manufacturing or processing (e.g. factories and production plants) [FI2] ▪ Food logistics (e.g. transporting food to supermarkets or other retail outlets) [FI3] ▪ Food retailing (e.g. supermarket chains, small grocers, deli etc) [FI4] ▪ Food service (e.g. restaurant, café) [FI5] ▪ Food delivery (e.g. Uber Eats) [FI6] ▪ Government/public food authorities [FI7] ▪ Food-related consumer advocacy groups [FI8]

			▪ Other (Please specify) [FI9] ▪ I have not worked in food-related employment [FI0] [EXCLUSIVE] [Multiple response options possible]

Closing:

Food Standards Australia New Zealand would like to thank you for your participation in this survey. Should you be interested in the results, please keep an eye on our website in the second half of 2023, or sign up to receive Food Standards News to be notified when the results are released.

Appendix B. Factor Analyses

For all factor analyses, the Kaiser-Meyer-Olkin measure of sampling adequacy ranged from 0.82 to 0.91 (above the minimum criterion of 0.5; Field, 2018), and Bartlett's test of sphericity was significant (all $p < .001$), suggesting reasonable factorability.

Generalised trust index

An unrotated principle components analysis found that trust in all seven institutions (the school system, the legal system, the media, the federal government, the police, the health system, scientists) loaded onto one factor, suggesting that these seven measures only measure one construct. This is demonstrated by the fact that only one factor had eigenvalues over Kaiser's criterion of 1 (Field, 2018; all other eigen values ranged from 0.35 to 0.74). All types of institutions loaded strongly onto this one factor. The factor loading matrix, eigen value and % of variance explained for this one factor are presented in Table B.1 below.

Table B.1. Summary of Factor Analysis results for Generalized trust index (n = 2,047)

Institution	Factor Loadings for one factor
The school system	0.78
The legal system	0.83
The media	0.72
The Federal Government	0.83
The police	0.75
The health system	0.76
Scientists	0.68
Eigenvalue	**4.07**
% of variance	**58.12**

Trust in food labelling index

A principle components analysis using a direct oblimin rotation indicated that trust in 5 types of labelling information loaded strongly onto one factor (nutrition information panel, ingredients list, allergen information, advisory or warning statements, best before/use by dates). These labelling elements tend to be back-of-pack. Whereas trust in 3 types of labelling information loaded strongly onto a second factor (health star rating, claims about health benefits, claims about nutrient or ingredient content), which tend to be front-of-pack. This is further supported by the fact that two factors had eigenvalues over Kaiser's criterion of 1 (Field, 2018; all other eigen values ranged from x to x). The factor loading matrix, eigenvalues and % of variance explained for the two factors are presented in Table B.2 below.

Table B.2. Summary of Factor Analysis results for Trust in food labelling index (n = 2,047)

	Factor Loadings	
Labelling information	**Back-of-pack Information**	**Front-of-pack Information**
Nutrition information panel	0.87	-
Ingredients list	0.89	-
Allergen information	0.89	-
Health star rating	-	0.83
Advisory or warning statements	0.75	-
Claims about health benefits	-	0.94
Claims about nutrient or ingredient content	-	0.78
Best before/use by dates	0.52	-
Eigenvalues	**4.28**	**1.23**
% of variance	**53.46**	**15.38**

Note: Factor loadings <0.2 are suppressed.

Appendix C. Hierarchical and simultaneous linear regressions

Confidence in the safety of the food supply

A hierarchical multiple regression was conducted in four stages with level of confidence in the safety of the food supply as the dependent variable.

Previous research has shown that age, gender and level of education are significant predictors of level of confidence in the safety of the food supply (Malek & Umberger, 2021). Thus, age, gender, and education were entered at stage 1. Shopping responsibility, food industry experience, having a child under 15 years of age in the household, equivalised household income, country, birth country, having a European background, selecting a medical- or lifestyle-related factor as currently affecting food choices, and knowledge of a food recall were entered at stage 2. Average trust in professionals and institutions more broadly (i.e., the generalised trust index) was entered at stage 3, and trust in different food system actors (farmers and producers, manufacturers and processors, retailers, government/public food authorities, and food-related scientists) was entered at stage 4[11].

All four models were found to be significant based on the ANOVA tests (all *p*-values < 0.001). The addition of variables significantly improved each model (i.e., all changes in the R^2 values were significant; all *p*-values < 0.05), except for Model 2 (*p* = 0.050). Models 1 and 2 (where trust measures had not yet been added to the models), only explained 2.2 and 2.6% of the variance in confidence in the safety of the food supply, respectively. After adding the generalised trust index to the model (Model 3), the amount of variance explained substantially increased to 22.4%. Finally, after adding trust in food system actors to the model (Model 4), the amount of variance explained further increased to 45.5% and the generalised trust index became non-significant. Interpretation of the results (regarding which measures significantly predicted level of confidence in the safety of the food supply) are based on the final model (Model 4).

The full statistical results of the hierarchical regression analysis (including standardised beta values and p-values for each association and adjusted R^2 for each model) are available in Table C.1.

[11] The results of the regression analysis suggest that confidence in the safety of the food supply chain and trust in food system actors are likely measuring two different constructs. It was therefore appropriate to include both measures in the regression model. Evidence to support this argument is that: i) trust in some types of food system actors (manufacturers and processors) were much stronger predictors of confidence in the safety of the food supply compared to trust in other food system actors (e.g., farmers and producers), indicating that trust in food system actors in general is not measuring the same construct as confidence in the food supply, and ii) correlation coefficients between levels of confidence in the food supply chain and trust in the various food system actors ranged from 0.41-0.59. If these questions were measuring the same construct, these correlations would be expected to be much greater.

Table C.1. Hierarchical multiple regression testing various predictors of level of confidence in the safety of the food supply.

	β	*t*	*p*	Adjusted R^2
Model 1			<0.001*	.022
Age	.014	.618	.536	
Gender (male vs female)	-.118	-5.170	<.001	
Education (non-tertiary vs tertiary)	.098	4.191	<.001	
Model 2			.050*	.026
Age	-.008	-.305	.760	
Gender (male vs female)	-.119	-5.037	<.001	
Education (non-tertiary vs tertiary)	.097	3.804	<.001	
Shopping responsibility (does majority of the food shopping vs does minority of the food shopping)	.010	.445	.656	
Shopping responsibility (does majority of the food shopping vs sharing the food shopping)	-.029	-1.214	.225	
Food industry experience (no experience vs. at least some experience)	-.011	-.457	.648	
Household composition (no child <15 years vs. at least one child <15 years)	-.030	-1.214	.225	
Equivalised annual household income	.022	.875	.382	
Country (Australia vs NZ)	.009	.392	.695	
Birth country (AU/NZ vs other English-speaking)	.010	.422	.673	
Birth country (AU/NZ vs non-English-speaking)	.002	.084	.933	
European background (No AU/NZ/European background vs AU/NZ/European background)	.046	1.736	.083	
Medical-related dietary factors affecting food choices (do not have any vs. has at least one)	-.063	-2.660	.008	
Lifestyle-related dietary factors affecting food choices (do not have any vs. has at least one)	-.021	-.861	.389	
Remembering a food recall (can remember a food recall vs. can't remember a food recall)	.049	2.051	.040	
Model 3			<.001*	.224
Age	-.044	-1.883	.060	
Gender (male vs female)	-.069	-3.236	.001	
Education (non-tertiary vs tertiary)	.046	2.001	.046	
Shopping responsibility (does majority of the food shopping vs does minority of the food shopping)	.005	.248	.804	
Shopping responsibility (does majority of the food shopping vs sharing the food shopping)	-.019	-.889	.374	

	β	*t*	*p*	Adjusted R^2
Food industry experience (no experience vs. at least some experience)	-.008	-.369	.712	
Household composition (no child <15 years vs. at least one child <15 years)	-.045	-2.077	.038	
Equivalised annual household income	.023	1.048	.295	
Country (Australia vs NZ)	.034	1.612	.107	
Birth country (AU/NZ vs other English-speaking)	.027	1.262	.207	
Birth country (AU/NZ vs non-English-speaking)	-.024	-1.013	.311	
European background (No AU/NZ/European background vs AU/NZ/European background)	.050	2.093	.037	
Medical-related dietary factors affecting food choices (do not have any vs. has at least one)	-.061	-2.896	.004	
Lifestyle-related dietary factors affecting food choices (do not have any vs. has at least one)	-.038	-1.782	.075	
Remembering a food recall (can remember a food recall vs. can't remember a food recall)	.029	1.355	.175	
Level of trust in professions and institutions	.453	21.858	<.001	
Model 4			<.001	.445
Age	-.059	-2.998	.003	
Gender (male vs female)	-.046	-2.564	.010	
Education (non-tertiary vs tertiary)	.060	3.131	.002	
Shopping responsibility (does majority of the food shopping vs does minority of the food shopping)	.018	1.040	.299	
Shopping responsibility (does majority of the food shopping vs sharing the food shopping)	-.011	-.596	.551	
Food industry experience (no experience vs. at least some experience)	-.025	-1.371	.171	
Household composition (no child <15 years vs. at least one child <15 years)	-.022	-1.221	.222	
Equivalised annual household income	.029	1.586	.113	
Country (Australia vs NZ)	.013	.742	.458	
Birth country (AU/NZ vs other English-speaking)	.023	1.286	.199	
Birth country (AU/NZ vs non-English-speaking)	-.020	-1.009	.313	
European background (No AU/NZ or European background vs some)	.026	1.308	.191	
Medical-related dietary factors affecting food choices (do not have any vs. has at least one)	-.053	-3.005	.003	
Lifestyle-related dietary factors affecting food choices (do not have any vs. has at least one)	-.032	-1.783	.075	

	β	*t*	*p*	Adjusted R^2
Remembering a food recall (can remember a food recall vs. can't remember a food recall)	-.002	-.085	.932	
Level of trust in professions and institutions	.036	1.502	.133	
Level of trust in farmers and producers	.072	3.442	<.001	
Level of trust in manufacturers and processors	.279	10.462	<.001	
Level of trust in retailers	.137	5.142	<.001	
Level of trust in government/public food authorities	.124	4.351	<.001	
Level of trust in food scientists	.159	6.429	<.001	

* These p values tested for significant changes in R^2 values. Note: All models were significant based on the ANOVA tests ($p < 0.001$).

Level of trust in FSANZ

A two-stage hierarchical multiple regression was conducted with level of trust in FSANZ as the dependent variable. Age, gender, education, shopping responsibility, food industry experience, having a child under 15 years of age in the household, equivalised household income, country, birth country, health consciousness, having a European background, selecting a medical- or lifestyle-related factor as currently affecting food choices, and knowledge of a food recall were entered as predictor variables at stage 1. Average trust in professionals and institutions more broadly (i.e., the generalised trust index) was entered as a predictor variable at stage 2.

Both models were significant based on the ANOVA tests (*p*-values < 0.05). The addition of variables significantly improved each model (i.e., all changes in the R^2 values were significant; *p*-values < 0.05). Based on Model 1 (where generalised trust had not yet been added to the model), having a lower household income and being more health conscious were significantly associated with having a greater level of trust in FSANZ (*p*-values < 0.05). However, Model 1 only accounted for 2.8% of the variance in levels of trust in FSANZ. After controlling for trust in institutions and professions more broadly (Model 2), household income and level of health consciousness became non-significant (*p*-values > 0.05), with the only significant predictor being broader trust in professions and institutions ($p < 0.001$). The amount of variance accounted for by the model also substantially increased from 2.8% to 33.4% (adjusted $R^2 = 0.334$).

The full statistical results of the hierarchical regression analysis (including standardised beta values and p-values for each association and adjusted R^2 for each model) are available in Table C.2 below.

Table C.2. Hierarchical multiple regression testing various predictors of level of trust in FSANZ.

	β	*t*	*p*	Adjusted R^2
Model 1			**.016***	**.028**
Age	.028	.536	.592	

	β	*t*	*p*	Adjusted R^2
Gender (male vs. female)	-.054	-1.172	.242	
Education (non-tertiary vs. tertiary)	.053	1.073	.284	
Shopping responsibility (does majority of the food shopping vs does minority of the food shopping)	-.009	-.188	.851	
Shopping responsibility (does majority of the food shopping vs sharing the food shopping)	-.008	-.182	.856	
Food industry experience (no experience vs. at least some experience)	-.025	-.545	.586	
Household composition (no child <15 years vs. at least one child <15 years)	-.028	-.572	.568	
Equivalised annual household income	-.131	-2.744	.006	
Birth country (AU/NZ vs. other English-speaking)	-.017	-.384	.701	
Birth country (AU/NZ vs. non-English-speaking)	.081	1.522	.129	
Level of health consciousness	.151	3.168	.002	
European background (No AU/NZ or European background vs some)	.041	.782	.435	
Medical-related dietary factors affecting food choices (do not have any vs. has at least one)	-.019	-.412	.681	
Lifestyle-related dietary factors affecting food choices (do not have any vs. has at least one)	.010	.222	.824	
Remembering a food recall (can remember a food recall vs. can't remember a food recall)	.058	1.220	.223	
Model 2			**<.001***	**.334**
Age	.045	1.042	.298	
Gender (male vs. female)	.060	1.522	.129	
Education (non-tertiary vs. tertiary)	-.022	-.535	.593	
Shopping responsibility (does majority of the food shopping vs does minority of the food shopping)	-.006	-.166	.868	
Shopping responsibility (does majority of the food shopping vs sharing the food shopping)	.047	1.206	.228	
Food industry experience (no experience vs. at least some experience)	-.013	-.344	.731	
Household composition (no child <15 years vs. at least one child <15 years)	-.033	-.837	.403	
Equivalised annual household income	-.071	-1.776	.076	
Birth country (AU/NZ vs. other English-speaking)	.030	.791	.429	
Birth country (AU/NZ vs. non-English-speaking)	.021	.468	.640	
Level of health consciousness	.061	1.536	.125	

	β	*t*	*p*	Adjusted R^2
European background (No AU/NZ/European background vs AU/NZ/European background)	.037	.838	.402	
Medical-related dietary factors affecting food choices (do not have any vs. has at least one)	-.042	-1.113	.266	
Lifestyle-related dietary factors affecting food choices (do not have any vs. has at least one)	.015	.401	.689	
Remembering a food recall (can remember a food recall vs. can't remember a food recall)	.044	1.133	.258	
Level of trust in professions and institutions	.581	14.903	<.001	

* The p-value tested for significant changes in R^2 value. Note: The model was significant based on the ANOVA test ($p < 0.05$).

Health consciousness

Simultaneous linear regression was used to test if various factors (gender, age, education, shopping responsibility, having a child under 15 years of age in the household, equivalised household income, country, birth country, level of confidence in the safety of the food supply, having a European background, selecting a medical- or lifestyle-related factor as currently affecting food choices) significantly predicted the level of health consciousness. The model was statistically significant, $F(14, 1871) = 15.60$, $p < 0.001$), and accounted for 9.8% of variance in the sample (adjusted $R^2 = 0.098$).

Table C.3. Simultaneous multiple regression testing various predictors of level of health consciousness.

	β	*t*	*p*	Adjusted R^2
Model			<.001*	.098
Age	.176	7.205	<.001	
Gender (male vs. female)	.016	.682	.495	
Education (non-tertiary vs. tertiary)	.082	3.327	<.001	
Shopping responsibility (does majority of the food shopping vs does minority of the food shopping)	-.005	-.216	.829	
Shopping responsibility (does majority of the food shopping vs sharing the food shopping)	-.079	-3.463	<.001	
Household composition (no child <15 years vs. at least one child <15 years)	-.014	-.606	.545	
Equivalised annual household income	.042	1.780	.075	
Country (Australia vs New Zealand)	-.058	-2.605	.009	
Birth country (AU/NZ vs. other English speaking country)	.022	.959	.338	
Birth country (AU/NZ vs. non-English speaking country)	.040	1.594	.111	
European background (No AU/NZ or European background vs some)	.046	1.808	.071	

Medical-related dietary factors affecting food choices (do not have any vs. has at least one)	.094	4.174	<.001	
Lifestyle-related dietary factors affecting food choices (do not have any vs. has at least one)	.169	7.401	<.001	
Level of confidence in the food supply	.099	4.452	<.001	

* The p-value tested for significant changes in R^2 value. Note: The model was significant based on the ANOVA test ($p < 0.001$).

Trust in food labelling

Three separate regressions for trust in food labelling. One testing predictors of averaged trust in labelling of health claims and nutrition/ingredient content claims, a second testing predictors of averaged trust in other FSANZ-regulated labelling elements, and a third testing predictors of trust in the Health Star Rating, given that this is not currently regulated by FSANZ (in contrast to all other labelling elements).

For each of the three regressions, we conducted a three-stage hierarchical multiple regression. Age, gender, level of education, shopping responsibility, food industry experience, having a child under 15 years of age in the household, equivalised household income, country, birth country, having a European background, selecting a medical- or lifestyle-related factor as currently affecting food choices, knowledge of a food recall and level of health consciousness were entered at stage 1. Average trust in professionals and institutions more broadly (i.e., the generalised trust index) was entered at stage 2, and trust in different food system actors (farmers and producers, manufacturers and processors, retailers, government/public food authorities, and food-related scientists) was entered at stage 3. For each regression, all three models were found to be significant based on the ANOVA tests (all *p*-values < 0.001). The addition of variables significantly improved each model (i.e., all changes in the R^2 values were significant; all *p*-values < 0.001).

Trust in health claims and nutrition/ingredient content claims

Model 1 (where broader trust measures had not yet been added to the model), only explained 5.3% of the variance in trust in on-label claims. After controlling for average trust in professionals and institutions more broadly (Model 2), the amount of variance explained substantially increased to 16.4%. Finally, after controlling for trust in food system actors (Model 3), the amount of variance explained further increased to 20.0%.

Based on the final model, not having a tertiary education, not having any food industry experience, having a child in the household, being Australian (rather than a New Zealander), being born outside of Australia and New Zealand in a non-English speaking country (rather than in Australia or New Zealand), having a non-European background, being more health conscious, having a higher level of trust in professionals/institutions more broadly, and having a higher level of trust in manufacturers/producers and retailers were significantly associated with having a higher level of trust in on-label claims (p-values > 0.05).

The strongest predictors were trust in professionals and institutions more broadly ($\beta = 0.20$, $p < 0.001$), followed by trust in manufacturers/processers ($\beta = 0.15$) and retailers ($\beta = 0.11$), not having a tertiary education ($\beta = -0.12$) and being more health conscious ($\beta = 0.10$) (all other β values < 0.10).

Levels of trust in other food system actors (farmers and producers, government/public food authorities, scientists) were not significant predictors of level of trust in on-label claims (p values < 0.05).

Full statistical details are available in Table C.4.

Table C.4. Hierarchical multiple regression testing various predictors of level of trust in health claims and nutrition/ingredient content claims.

	β	*t*	*p*	Adjusted R^2
Model 1			<.001*	.053
Age	.001	.031	.975	
Gender (male vs. female)	-.061	-2.604	.009	
Education (non-tertiary vs. tertiary)	-.089	-3.522	<.001	
Shopping responsibility (does majority of the food shopping vs does minority of the food shopping)	-.007	-.304	.761	
Shopping responsibility (does majority of the food shopping vs sharing the food shopping)	-.005	-.202	.840	
Food industry experience (no experience vs. at least some experience)	-.061	-2.584	.010	
Household composition (no child <15 years vs. at least one child <15 years)	.055	2.272	.023	
Equivalised annual household income	-.039	-1.621	.105	
Country (Australia vs New Zealand)	-.051	-2.208	.027	
Birth country (AU/NZ vs. other English-speaking)	-.033	-1.415	.157	
Birth country (AU/NZ vs. non-English-speaking)	.076	2.940	.003	
European background (No AU/NZ/European background vs AU/NZ/European background)	-.076	-2.894	.004	
Medical-related dietary factors affecting food choices (do not have any vs. has at least one)	.020	.869	.385	
Lifestyle-related dietary factors affecting food choices (do not have any vs. has at least one)	.026	1.078	.281	
Remembering a food recall (can remember a food recall vs. can't remember a food recall)	.011	.450	.653	
Level of health consciousness	.162	6.843	<.001	
Model 2			<.001*	.164
Age	-.017	-.710	.478	
Gender (male vs. female)	-.023	-1.028	.304	
Education (non-tertiary vs. tertiary)	-.123	-5.169	<.001	
Shopping responsibility (does majority of the food shopping vs does minority of the food shopping)	-.011	-.507	.612	

Shopping responsibility (does majority of the food shopping vs sharing the food shopping)	-.002	-.086	.932	
Food industry experience (no experience vs. at least some experience)	-.059	-2.653	.008	
Household composition (no child <15 years vs. at least one child <15 years)	.042	1.840	.066	
Equivalised annual household income	-.036	-1.575	.115	
Country (Australia vs New Zealand)	-.037	-1.668	.095	
Birth country (AU/NZ vs. other English-speaking)	-.019	-.866	.386	
Birth country (AU/NZ vs. non-English-speaking)	.059	2.413	.016	
European background (No AU/NZ or European background vs some)	-.071	-2.870	.004	
Medical-related dietary factors affecting food choices (do not have any vs. has at least one)	.026	1.174	.241	
Lifestyle-related dietary factors affecting food choices (do not have any vs. has at least one)	.021	.948	.343	
Remembering a food recall (can remember a food recall vs. can't remember a food recall)	.000	.018	.986	
Level of health consciousness	.108	4.785	<.001	
Level of trust in professionals and institutions	.344	15.783	<.001	
Model 3			<.001*	.200
Age	-.021	-.888	.375	
Gender (male vs. female)	-.011	-.523	.601	
Education (non-tertiary vs. tertiary)	-.115	-4.895	<.001	
Shopping responsibility (does majority of the food shopping vs does minority of the food shopping)	-.005	-.250	.803	
Shopping responsibility (does majority of the food shopping vs sharing the food shopping)	.002	.073	.942	
Food industry experience (no experience vs. at least some experience)	-.065	-2.995	.003	
Household composition (no child <15 years vs. at least one child <15 years)	.047	2.134	.033	
Equivalised annual household income	-.030	-1.351	.177	
Country (Australia vs New Zealand)	-.047	-2.174	.030	
Birth country (AU/NZ vs. other English-speaking)	-.020	-.952	.341	
Birth country (AU/NZ vs. non-English-speaking)	.059	2.481	.013	
European background (No AU/NZ or European background vs some)	-.074	-3.048	.002	
Medical-related dietary factors affecting food choices (do not have any vs. has at least one)	.031	1.450	.147	

Lifestyle-related dietary factors affecting food choices (do not have any vs. has at least one)	.027	1.226	.220	
Remembering a food recall (can remember a food recall vs. can't remember a food recall)	-.008	-.356	.722	
Level of health consciousness	.099	4.508	<.001	
Level of trust in professionals and institutions	.203	6.992	<.001	
Trust in farmers and producers	-.004	-.147	.883	
Trust in manufacturers and processors	.146	4.502	<.001	
Trust in retailers	.107	3.315	<.001	
Trust in government/public food authorities	.000	-.012	.990	
Trust in food scientists	.018	.597	.551	

* The p-value tested for significant changes in R^2 value. Note: The model was significant based on the ANOVA test ($p < 0.001$).

Trust in other FSANZ-regulated labelling elements

Model 1 (where broader trust measures had not yet been added to the models), explained 6.4% of the variance in trust in other FSANZ-regulated labelling elements. After controlling for average trust in professionals and institutions more broadly (Model 2), the amount of variance explained increased to 20.7%. Finally, after controlling for trust in food system actors (Model 3), the amount of variance explained further increased to 28.8%.

Based on the final model, being younger, female, selecting at least one lifestyle-related factor as currently affecting food choices (i.e., looking to lose weight and/or maintain a healthy weight, vegetarian or vegan, religious beliefs that affect food choices, training for sports), remembering a food recall, being more health conscious, having a higher level of trust in professionals/institutions more broadly, and having a higher level of trust in all types of food system actors were significantly associated with having a higher level of trust in other FSANZ-regulated labelling elements (*p*-values > 0.05). This finding differs for that of on-label claims, where only trust in manufacturers/processors and retailers were associated with higher levels of trust in on-label claims.

The strongest predictors of trust in other FSANZ-regulated labelling elements were trust in food scientists (β = 0.15), trust in professionals and institutions more broadly (β = 0.13), trust in government/public food authorities (β = 0.10), remembering a food recall (β = 0.10), and being more health conscious (β = 0.10) (all other β values < 0.10).

Full statistical details are available in Table C.5.

Table C.5. Hierarchical multiple regression testing various predictors of level of trust in other FSANZ-regulated labelling elements.

	β	*t*	*p*	Adjusted R^2
Model 1			<.001*	.064
Age	-.060	-2.342	.019	
Gender (male vs. female)	-.004	-.157	.875	
Education (non-tertiary vs. tertiary)	.031	1.214	.225	
Shopping responsibility (does majority of the food shopping vs does minority of the food shopping)	.033	1.479	.139	
Shopping responsibility (does majority of the food shopping vs sharing the food shopping)	.014	.599	.549	
Food industry experience (no experience vs. at least some experience)	-.002	-.079	.937	
Household composition (no child <15 years vs. at least one child <15 years)	-.027	-1.150	.250	
Equivalised annual household income	.022	.896	.370	
Country (Australia vs New Zealand)	-.016	-.687	.492	
Birth country (AU/NZ vs. other English-speaking)	-.031	-1.331	.183	
Birth country (AU/NZ vs. non-English-speaking)	.048	1.870	.062	
European background (No AU/NZ/European background vs AU/NZ/European background)	.048	1.846	.065	
Medical-related dietary factors affecting food choices (do not have any vs. has at least one)	.010	.421	.674	
Lifestyle-related dietary factors affecting food choices (do not have any vs. has at least one)	.056	2.344	.019	
Remembering a food recall (can remember a food recall vs. can't remember a food recall)	.129	5.488	<.001	
Level of health consciousness	.174	7.391	<.001	
Model 2			<.001*	.207
Age	-.081	-3.407	<.001	
Gender (male vs. female)	.040	1.841	.066	
Education (non-tertiary vs. tertiary)	-.008	-.359	.719	
Shopping responsibility (does majority of the food shopping vs does minority of the food shopping)	.029	1.393	.164	
Shopping responsibility (does majority of the food shopping vs sharing the food shopping)	.017	.802	.423	
Food industry experience (no experience vs. at least some experience)	.001	.028	.978	
Household composition (no child <15 years vs. at least one child <15 years)	-.042	-1.919	.055	

Equivalised annual household income	.026	1.149	.251	
Country (Australia vs New Zealand)	.001	.046	.964	
Birth country (AU/NZ vs. other English-speaking)	-.015	-.701	.484	
Birth country (AU/NZ vs. non-English-speaking)	.029	1.200	.230	
European background (No AU/NZ or European background vs some)	.054	2.249	.025	
Medical-related dietary factors affecting food choices (do not have any vs. has at least one)	.016	.748	.455	
Lifestyle-related dietary factors affecting food choices (do not have any vs. has at least one)	.051	2.315	.021	
Remembering a food recall (can remember a food recall vs. can't remember a food recall)	.117	5.423	<.001	
Level of health consciousness	.112	5.127	<.001	
Level of trust in professionals and institutions	.390	18.379	<.001	
Model 3			<.001*	.288
Age	-.087	-3.869	<.001	
Gender (male vs. female)	.048	2.354	.019	
Education (non-tertiary vs. tertiary)	-.002	-.093	.926	
Shopping responsibility (does majority of the food shopping vs does minority of the food shopping)	.036	1.805	.071	
Shopping responsibility (does majority of the food shopping vs sharing the food shopping)	.018	.869	.385	
Food industry experience (no experience vs. at least some experience)	-.009	-.449	.653	
Household composition (no child <15 years vs. at least one child <15 years)	-.024	-1.143	.253	
Equivalised annual household income	.027	1.261	.207	
Country (Australia vs New Zealand)	-.005	-.230	.818	
Birth country (AU/NZ vs. other English-speaking)	-.015	-.732	.464	
Birth country (AU/NZ vs. non-English-speaking)	.033	1.480	.139	
European background (No AU/NZ or European background vs some)	.034	1.486	.138	
Medical-related dietary factors affecting food choices (do not have any vs. has at least one)	.021	1.024	.306	
Lifestyle-related dietary factors affecting food choices (do not have any vs. has at least one)	.053	2.556	.011	
Remembering a food recall (can remember a food recall vs. can't remember a food recall)	.096	4.664	<.001	
Level of health consciousness	.100	4.798	<.001	

Level of trust in professionals and institutions	.130	4.748	<.001	
Trust in farmers and producers	.094	3.897	<.001	
Trust in manufacturers and processors	.060	1.974	.049	
Trust in retailers	.077	2.538	.011	
Trust in government/public food authorities	.103	3.177	.002	
Trust in food scientists	.151	5.343	<.001	

* The p-value tested for significant changes in R^2 value. Note: The model was significant based on the ANOVA test ($p < 0.001$).

Trust in the Health Star Rating

Model 1 (where broader trust measures had not yet been added to the models), only explained 2.4% of the variance in trust in claims. After controlling for average trust in professionals and institutions more broadly (Model 2), the amount of variance explained increased to 12.5%. Finally, after controlling for trust in food system actors (Model 3), the amount of variance explained further increased to 15.7%. Note that the amount of variance explained by these models is smaller than for the regressions on trust in FSANZ-regulated labelling (15.7% vs 20.0%-28.8%).

Based on the final model, having a lower equivalent household income, being born in Australia/New Zealand (compared to being born in outside Australia/New Zealand in an English-speaking country, having a higher level of trust in professionals/institutions more broadly, and having a higher level of trust in manufacturers/producers and retailers were significantly associated with having a higher level of trust in the health star rating (*p*-values > 0.05).

The strongest predictors were trust in professionals and institutions more broadly (β = 0.20) and trust in retailers (β = 0.13) (all other β values < 0.10).

Full statistical details are available in Table C.6.

Table C.6. Hierarchical multiple regression testing various predictors of level of trust the Health Star Rating.

	β	*t*	*p*	Adjusted R^2
Model 1			<.001*	.024
Age	-.005	-.204	.838	
Gender (male vs. female)	-.043	-1.813	.070	
Education (non-tertiary vs. tertiary)	-.020	-.779	.436	
Shopping responsibility (does majority of the food shopping vs does minority of the food shopping)	.001	.062	.951	
Shopping responsibility (does majority of the food shopping vs sharing the food shopping)	-.029	-1.227	.220	
Food industry experience (no experience vs. at least some experience)	-.031	-1.287	.198	

Household composition (no child <15 years vs. at least one child <15 years)	-.017	-.703	.482	
Equivalised annual household income	-.068	-2.769	.006	
Country (Australia vs New Zealand)	-.028	-1.195	.232	
Birth country (AU/NZ vs. other English-speaking)	-.066	-2.783	.005	
Birth country (AU/NZ vs. non-English-speaking)	.059	2.217	.027	
European background (No AU/NZ or European background vs some)	-.036	-1.345	.179	
Medical-related dietary factors affecting food choices (do not have any vs. has at least one)	.002	.088	.929	
Lifestyle-related dietary factors affecting food choices (do not have any vs. has at least one)	.033	1.367	.172	
Remembering a food recall (can remember a food recall vs. can't remember a food recall)	.010	.418	.676	
Level of health consciousness	.107	4.442	<.001	
Model 2			<.001*	.125
Age	-.023	-.910	.363	
Gender (male vs. female)	-.007	-.290	.772	
Education (non-tertiary vs. tertiary)	-.053	-2.163	.031	
Shopping responsibility (does majority of the food shopping vs does minority of the food shopping)	-.002	-.107	.915	
Shopping responsibility (does majority of the food shopping vs sharing the food shopping)	-.026	-1.176	.240	
Food industry experience (no experience vs. at least some experience)	-.029	-1.268	.205	
Household composition (no child <15 years vs. at least one child <15 years)	-.030	-1.281	.200	
Equivalised annual household income	-.065	-2.784	.005	
Country (Australia vs New Zealand)	-.014	-.625	.532	
Birth country (AU/NZ vs. other English-speaking)	-.052	-2.340	.019	
Birth country (AU/NZ vs. non-English-speaking)	.042	1.674	.094	
European background (No AU/NZ or European background vs some)	-.031	-1.226	.221	
Medical-related dietary factors affecting food choices (do not have any vs. has at least one)	.007	.326	.744	
Lifestyle-related dietary factors affecting food choices (do not have any vs. has at least one)	.029	1.258	.208	
Remembering a food recall (can remember a food recall vs. can't remember a food recall)	.000	.011	.992	
Level of health consciousness	.055	2.383	.017	

Level of trust in professionals and institutions	.329	14.760	<.001	
Model 3			<.001*	.157
Age	-.027	-1.090	.276	
Gender (male vs. female)	.002	.083	.934	
Education (non-tertiary vs. tertiary)	-.043	-1.804	.071	
Shopping responsibility (does majority of the food shopping vs does minority of the food shopping)	.002	.111	.912	
Shopping responsibility (does majority of the food shopping vs sharing the food shopping)	-.025	-1.126	.260	
Food industry experience (no experience vs. at least some experience)	-.035	-1.557	.120	
Household composition (no child <15 years vs. at least one child <15 years)	-.023	-.996	.319	
Equivalised annual household income	-.060	-2.607	.009	
Country (Australia vs New Zealand)	-.018	-.823	.411	
Birth country (AU/NZ vs. other English-speaking)	-.052	-2.364	.018	
Birth country (AU/NZ vs. non-English-speaking)	.044	1.782	.075	
European background (No AU/NZ or European background vs some)	-.036	-1.440	.150	
Medical-related dietary factors affecting food choices (do not have any vs. has at least one)	.012	.558	.577	
Lifestyle-related dietary factors affecting food choices (do not have any vs. has at least one)	.036	1.569	.117	
Remembering a food recall (can remember a food recall vs. can't remember a food recall)	-.010	-.436	.663	
Level of health consciousness	.044	1.951	.051	
Level of trust in professionals and institutions	.200	6.680	<.001	
Trust in farmers and producers	.044	1.678	.093	
Trust in manufacturers and processors	.083	2.498	.013	
Trust in retailers	.128	3.845	<.001	
Trust in government/public food authorities	-.016	-.440	.660	
Trust in food scientists	.025	.803	.422	

* The p-value tested for significant changes in R^2 value. Note: The model was significant based on the ANOVA test ($p < 0.001$).

Importance of the Nutrition Information Panel (NIP)

Simultaneous linear regression was used to test if various factors (gender, age, education, shopping responsibility, having a child under 15 years of age in the household, equivalised household income, country, birth country, health consciousness, level of confidence in the safety of the food supply, having a European background, selecting a medical- or lifestyle-related factor as currently affecting food choices, and selecting 'Nutrition' as a top food value) significantly predicted the level of importance given to the NIP. The model was statistically significant ($F(15, 1897) = 22.33$, $p < 0.001$), and accounted for 14.3% of variance in the sample (adjusted $R^2 = 0.143$).

Being female, not having a child in the household, having a greater level of health consciousness, and selecting a medical- or lifestyle-related factor as currently affecting food choices were significantly associated with a higher level of importance given to the NIP (p-values < 0.05). The full statistical results are available in Table C.7.

Table C.7. Simultaneous multiple regression testing various predictors of the level of importance given to the nutrition information panel.

	β	*t*	*p*	Adjusted R^2
Model			<0.001*	.143
Age	-.014	-.600	.549	
Gender (male vs. female)	.069	3.127	.002	
Education (non-tertiary vs. tertiary)	.009	.371	.711	
Shopping responsibility (does majority of the food shopping vs does minority of the food shopping)	-.012	-.541	.589	
Shopping responsibility (does majority of the food shopping vs sharing the food shopping)	-.011	-.486	.627	
Household composition (no child <15 years vs. at least one child <15 years)	-.046	-2.039	.042	
Equivalised annual household income	.018	.779	.436	
Country	-.028	-1.323	.186	
Birth country (AU/NZ vs. other English speaking country)	.014	.633	.527	
Birth country (AU/NZ vs. non-English speaking country)	.023	1.038	.299	
Level of health consciousness	.281	12.526	<.001	
European background (No AU/NZ or European background vs some)	.014	.641	.522	
Medical-related dietary factors affecting food choices (do not have any vs. has at least one)	.085	3.888	<.001	
Lifestyle-related dietary factors affecting food choices (do not have any vs. has at least one)	.090	3.976	<.001	
Selected 'Nutrition' as a top three food value	.099	4.556	<.001	

* The p-value tested for significant changes in R^2 value. Note: The model was significant based on the ANOVA test ($p < 0.001$).

Importance of the ingredients list

Simultaneous linear regression was used to test if various factors (gender, age, education, shopping responsibility, having a child under 15 years of age in the household, equivalised household income, country, birth country, health consciousness, level of confidence in the safety of the food supply, having a European background, selecting a medical- or lifestyle-related factor as currently affecting food choices) significantly predicted the level of importance given to the ingredients list. The model was statistically significant ($F(15, 1897) = 14.20$, $p < 0.001$), and accounted for 9.4% of variance in the sample (adjusted $R^2 = 0.094$).

Being female, having a tertiary-level education, having a greater level of health consciousness, and selecting a medical-related factor as currently affecting food choices were significantly associated with rating the ingredients list as more important (p-values < 0.05). The full statistical results are available in Table C.8.

Table C.8. Simultaneous multiple regression testing various predictors of the level of importance given to the ingredients list.

	β	*t*	*p*	Adjusted R^2
Model			<.001*	.094
Age	-.021	-.863	.388	
Gender (male vs. female)	.049	2.142	.032	
Education (non-tertiary vs. tertiary)	.048	1.981	.048	
Shopping responsibility (does majority of the food shopping vs does minority of the food shopping)	-.034	-1.524	.128	
Shopping responsibility (does majority of the food shopping vs sharing the food shopping)	-.034	-1.510	.131	
Household composition (no child <15 years vs. at least one child <15 years)	-.025	-1.075	.282	
Equivalised annual household income	.028	1.191	.234	
Country	-.008	-.379	.704	
Birth country (AU/NZ vs. other English speaking country)	.006	.271	.787	
Birth country (AU/NZ vs. non-English speaking country)	.022	.979	.327	
Level of health consciousness	.250	10.833	<.001	
European background (No AU/NZ or European background vs some)	.000	.001	.999	
Medical-related dietary factors affecting food choices (do not have any vs. has at least one)	.113	5.039	<.001	
Lifestyle-related dietary factors affecting food choices (do not have any vs. has at least one)	.006	.280	.780	
Selected ‘Nutrition’ as a top three food value	.015	.669	.503	

* The p-value tested for significant changes in R^2 value. Note: The model was significant based on the ANOVA test ($p < 0.001$).

Perceived ability to use food labelling

Simultaneous linear regression was used to test if various factors (gender, age, education, shopping responsibility, having a child under 15 years of age in the household, equivalised household income, country, birth country, health consciousness, level of confidence in the safety of the food supply, having a European background, selecting a medical- or lifestyle-related factor as currently affecting food choices) significantly predicted the level of confidence in the ability to use food labelling.

The model was statistically significant ($F(15, 1870) = 29.07$, $p < 0.001$) and accounted for 18.3% of variance in the sample (adjusted $R^2 = 0.183$).

Being younger, having a greater level of health consciousness, a greater level of confidence in the safety of the food supply, a European background, and selecting a medical- or lifestyle-related factor as currently affecting food choices were significantly associated with having a greater level of confidence in ability to use food labelling to make informed choices (p-values < 0.05).

The full statistical results of the simultaneous regression analysis (including standardised beta values and p-values for each association and adjusted R^2 for the model) are available in Table C.9.

Table C.9. Simultaneous multiple regression testing various predictors of level of confidence in the ability to use food labelling.

	β	*t*	*p*	Adjusted R^2
Model			<.001*	.183
Age	-.051	-2.149	.032	
Gender (male vs. female)	-.035	-1.616	.106	
Education (non-tertiary vs. tertiary)	-.014	-.614	.539	
Shopping responsibility (does majority of the food shopping vs does minority of the food shopping)	.003	.133	.894	
Shopping responsibility (does majority of the food shopping vs sharing the food shopping)	-.016	-.756	.450	
Household composition (no child <15 years vs. at least one child <15 years)	.006	.275	.783	
Equivalised annual household income	-.003	-.138	.891	
Country	.013	.588	.557	
Birth country (AU/NZ vs. other English speaking country)	.003	.146	.884	
Birth country (AU/NZ vs. non-English speaking country)	-.009	-.393	.694	
Level of health consciousness	.316	14.361	<.001	
European background (No AU/NZ or European background vs some)	.057	2.325	.020	
Medical-related dietary factors affecting food choices (do not have any vs. has at least one)	.075	3.489	<.001	

Lifestyle-related dietary factors affecting food choices (do not have any vs. has at least one)	.080	3.617	<.001	
Level of confidence in the food supply	.217	10.186	<.001	

* The p-value tested for significant changes in R^2 value. Note: The model was significant based on the ANOVA test ($p < 0.001$).

Frequency of food safety behaviours

Simultaneous linear regression was used to test if various factors (gender, age, education, shopping responsibility, having a child under 15 years of age in the household, equivalised household income, country, birth country, health consciousness, level of confidence in the safety of the food supply, having a European background, selecting a medical- or lifestyle-related factor as currently affecting food choices) significantly predicted a range of food safety behaviours (cooking raw animal products thoroughly, keeping raw animal products separate from ready-to-eat foods, refrigerating leftovers shortly after they are finished with them, and cleaning hands and work surfaces before, during, and after cooking).

Cooking raw animal products thoroughly

The model was statistically significant ($F(15, 1754) = 2.939$, $p < 0.001$) and accounted for 1.6% of variance in the sample (adjusted $R^2 = 0.16$).

Being older, identifying as male, and having a lower level of health consciousness were significantly associated with having a lower level of reported frequency of this food safety behaviour.

The full statistical results of the simultaneous regression analysis (including standardised beta values and *p*-values for each association and adjusted R^2 for the model) are available in Table C.10.

Table C.10. Simultaneous multiple regression testing various predictors of frequency of cooking raw animal products thoroughly

	β	*t*	*p*	Adjusted R^2
Model			<.001*	.016
Age	-.052	-1.966	.049	
Gender (male vs. female)	.059	2.400	.017	
Education (non-tertiary vs. tertiary)	-.038	-1.440	.150	
Shopping responsibility (does majority of the food shopping vs does minority of the food shopping)	-.019	-.806	.420	
Shopping responsibility (does majority of the food shopping vs sharing the food shopping)	-.024	-1.001	.317	
Household composition (no child <15 years vs. at least one child <15 years)	-.015	-.602	.547	
Equivalised annual household income	-.043	-1.699	.089	
Country	.044	1.735	.083	
Birth country (AU/NZ vs. other English speaking country)	.041	1.717	.086	

Birth country (AU/NZ vs. non-English speaking country)	.022	.907	.364	
Level of health consciousness	.078	3.139	.002	
European background (No AU/NZ or European background vs some)	.033	1.404	.161	
Medical-related dietary factors affecting food choices (do not have any vs. has at least one)	.010	.425	.671	
Lifestyle-related dietary factors affecting food choices (do not have any vs. has at least one)	.044	1.751	.080	
Level of confidence in the food supply	.034	1.429	.153	

* The p-value tested for significant changes in R^2 value. Note: The model was significant based on the ANOVA test ($p < 0.001$).

Keeping raw animal products separate from ready-to-eat foods

The model was statistically significant ($F(15, 1754) = 2.216$, $p = .005$) and accounted for 1.0% of variance in the sample (adjusted $R^2 = 0.10$).

Identifying as male was significantly associated with having a lower level of reported frequency of this food safety behaviour.

The full statistical results of the simultaneous regression analysis (including standardised beta values and *p*-values for each association and adjusted R^2 for the model) are available in Table C.11.

Table C.11. Simultaneous multiple regression testing various predictors of frequency of keeping raw animal products separate from ready-to-eat foods

	β	*t*	*p*	Adjusted R^2
Model			.005*	.010
Age	-.010	-.367	.714	
Gender (male vs. female)	.081	3.271	.001	
Education (non-tertiary vs. tertiary)	-.032	-1.201	.230	
Shopping responsibility (does majority of the food shopping vs does minority of the food shopping)	-.044	-1.825	.068	
Shopping responsibility (does majority of the food shopping vs sharing the food shopping)	-.004	-.180	.857	
Household composition (no child <15 years vs. at least one child <15 years)	-.005	-.211	.833	
Equivalised annual household income	-.030	-1.183	.237	
Country	.050	1.936	.053	
Birth country (AU/NZ vs. other English speaking country)	.039	1.624	.105	
Birth country (AU/NZ vs. non-English speaking country)	.009	.382	.703	
Level of health consciousness	.040	1.615	.107	

European background (No AU/NZ or European background vs some)	.016	.663	.507	
Medical-related dietary factors affecting food choices (do not have any vs. has at least one)	-.035	-1.424	.155	
Lifestyle-related dietary factors affecting food choices (do not have any vs. has at least one)	.032	1.280	.201	
Level of confidence in the food supply	.019	.772	.440	

* The p-value tested for significant changes in R^2 value. Note: The model was significant based on the ANOVA test (p = .005).

Refrigerating leftovers shortly after you are finished with them

The model was statistically significant (F(15, 1754) = 8.453, p = <.001) and accounted for 5.9% of variance in the sample (adjusted R^2 = 0.59).

Being younger, identifying as male, and having a lower level of health consciousness was significantly associated with having a lower level of reported frequency of this food safety behaviour.

The full statistical results of the simultaneous regression analysis (including standardised beta values and p-values for each association and adjusted R^2 for the model) are available in Table C.12

Table C.12. Simultaneous multiple regression testing various predictors of reported frequency of refrigerating leftovers shortly after you are finished with them

	β	*t*	*p*	Adjusted R^2
Model			<.001*	.059
Age	.167	6.492	<.001	
Gender (male vs. female)	.098	4.085	<.001	
Education (non-tertiary vs. tertiary)	-.047	-1.801	.072	
Shopping responsibility (does majority of the food shopping vs does minority of the food shopping)	.012	.526	.599	
Shopping responsibility (does majority of the food shopping vs sharing the food shopping)	-.005	-.225	.822	
Household composition (no child <15 years vs. at least one child <15 years)	.010	.406	.685	
Equivalised annual household income	-.028	-1.131	.258	
Country	.025	1.017	.309	
Birth country (AU/NZ vs. other English speaking country)	-.007	-.284	.777	
Birth country (AU/NZ vs. non-English speaking country)	-.037	-1.544	.123	
Level of health consciousness	.100	4.105	<.001	
European background (No AU/NZ or European background vs some)	.018	.772	.440	

Medical-related dietary factors affecting food choices (do not have any vs. has at least one)	.014	.591	.555	
Lifestyle-related dietary factors affecting food choices (do not have any vs. has at least one)	-.030	-1.213	.225	
Level of confidence in the food supply	.044	1.870	.062	

* The p-value tested for significant changes in R^2 value. Note: The model was significant based on the ANOVA test (p = .005).

Cleaning hands and work surfaces before, during, and after cooking

The model was statistically significant (F(15, 1754) = 8.519, p = <.001) and accounted for 6.0% of variance in the sample (adjusted R^2 = 0.60).

Being younger, identifying as male, being tertiary-educated, being born in Australia or New Zealand (compared to being born outside Australia/New Zealand in a non-English speaking country), and not identifying a medical-related factor as affecting their food choices was significantly associated with having a lower level of reported frequency of this food safety behaviour.

The full statistical results of the simultaneous regression analysis (including standardised beta values and p-values for each association and adjusted R^2 for the model) are available in Table C.13.

Table C.13. Simultaneous multiple regression testing various predictors of reported frequency of cleaning hands and work surfaces before, during, and after cooking

	β	*t*	*p*	Adjusted R^2
Model			<.001*	0.60
Age	.100	3.876	<.001	
Gender (male vs. female)	.088	3.644	<.001	
Education (non-tertiary vs. tertiary)	-.070	-2.689	.007	
Shopping responsibility (does majority of the food shopping vs does minority of the food shopping)	-.041	-1.739	.082	
Shopping responsibility (does majority of the food shopping vs sharing the food shopping)	-.014	-.610	.542	
Household composition (no child <15 years vs. at least one child <15 years)	.016	.659	.510	
Equivalised annual household income	.037	1.485	.138	
Country	.007	.262	.793	
Birth country (AU/NZ vs. other English speaking country)	.040	1.697	.090	
Birth country (AU/NZ vs. non-English speaking country)	.070	2.920	.004	
Level of health consciousness	.157	6.454	<.001	
European background (No AU/NZ or European background vs some)	.001	.048	.961	

Medical-related dietary factors affecting food choices (do not have any vs. has at least one)	.069	2.908	.004	
Lifestyle-related dietary factors affecting food choices (do not have any vs. has at least one)	-.024	-.980	.327	
Level of confidence in the food supply	.041	1.750	.080	

* The p-value tested for significant changes in R^2 value. Note: The model was significant based on the ANOVA test (p = .005).

Appendix D. Binomial logistic regressions

Knowledge of what FSANZ does

Binomial logistic regression was used to test if various factors (age, gender, education, shopping responsibility, food industry experience, having a child under 15 years of age in the household, equivalised household income, country, birth country, health consciousness, selecting a medical- or lifestyle-related factor as currently affecting food choices, remembering a food recall) significantly predicted whether respondents knew at least a little about what FSANZ does (i.e., respondents who selected that they knew a little or a lot about what FSANZ does vs. those who selected that they had either never heard of FSANZ or had heard of FSANZ but didn't know what it does).

The model was statistically significant ($\chi^2(15) = 119.74$, $p < 0.001$). The model explained 9.0% of the variance in reported knowledge of FSANZ (Nagelkerke $R^2 = 0.090$) and correctly classified 74.2% of cases. Full statistical results are in Table D.1.

Table D.1. Binomial logistic regression testing various predictors of knowledge of what FSANZ does

Model ($\chi^2(15) = 119.74$, $p < 0.001$, $R^2 = 0.090$)	B	Wald	p	Exp(B)
No knowledge of FSANZ vs At least a little				
Age	.003	.622	.430	1.003
Gender (male vs. female)	-.390	11.820	<.001	.677
Education (non-tertiary vs. tertiary)	.439	13.188	<.001	1.550
Shopping responsibility		1.884	.390	
Shopping responsibility (does majority of food shopping vs does minority of food shopping)	-.168	1.808	.179	.845
Shopping responsibility (does majority of food shopping vs shares the food shopping)	-.151	.181	.670	.860
Food industry experience (no experience vs. some experience)	.355	8.439	.004	1.398
Household composition (no child < 15 years vs. at least one child < 15 years)	.166	1.831	.176	1.181
Equivalised annual household income	.000	.902	.342	1.000
Birth country		2.563	.278	
Birth country (AU/NZ vs. other English speaking)	-.186	.166	1.260	
Birth country (AU/NZ vs. non-English speaking)	-.239	1.661	.197	.788
Country (Australia vs. New Zealand)	.222	3.906	.048	1.249
Level of health consciousness	.202	15.279	<.001	1.224
Medical-related dietary factors affecting food choices (do not have any vs. has at least one)	.123	1.187	.276	1.131

Model ($\chi^2(15) = 119.74$, $p < 0.001$, $R^2 = 0.090$)	B	Wald	p	Exp(B)
Lifestyle-related dietary factors affecting food choices (do not have any vs. has at least one)	.261	5.174	.023	1.298
Food recall (doesn't remember vs. remembers)	.514	20.535	<.001	1.672

Selecting 'cost of living pressures' as a factor affecting food choices

We performed a binomial logistic regression to determine whether various factors (age, gender, level of education, country, birth country, having a European background, having a child under 15 years of age in the household) significantly predicted selecting 'cost of living pressures' as a factor affecting food choices. Equivalised household income was excluded from the variables tested because it

The model was statistically significant ($\chi^2(8) = 86.90$, $p < 0.001$), explained 5.9% of the variance in the sample (Nagelkerke R^2 = .059) and correctly classified 66.1% of cases.

Respondents who were younger, identified as female, were non-tertiary educated, lived in New Zealand, had a child < 15 years in the household and had no Australian/New Zealand or European background were significantly more likely to select 'cost of living pressures' as affecting food choices (all *p*-values < .05).

The full statistical results of the binomial logistic regression analysis are available in Table D.2.

Table D.2. Binomial logistic regression testing various predictors of selecting 'cost of living pressures' as affecting food choices

	B	Wald	p	Exp(B)
Not selecting vs selecting 'cost of living pressures' ($\chi^2(8) = 86.90$, $p < 0.001$, Nagelkerke $R^2 = 0.059$)				
Age	-.010	11.267	<.001	.990
Gender (male vs. female)	.483	25.044	<.001	1.620
Education (non-tertiary vs. tertiary)	-.235	5.237	.022	.790
Equivalised household income	.000	36.319	<.001	1.000
Country (Australia vs. New Zealand)	.430	18.013	<.001	1.537
Household composition (no child < 15 years vs. at least one child < 15 years)	.253	5.027	.025	1.288
AU/NZ or European background (none vs. some)	-.334	4.950	.026	.716
Birth country		2.207	.332	
Birth country (AU/NZ vs. other English speaking)	-.209	2.098	.148	.812
Birth country (AU/NZ vs. non-English speaking)	.009	.003	.960	1.009

Understanding of best before dates

We performed a binomial logistic regression to determine whether various factors (age, gender, level of education, equivalised household income, country, birth country, having a European background, having a child under 15 years of age in the household, shopping responsibility, cooking responsibility, food industry experience) significantly predicted understanding of best before dates.

The model was statistically significant ($\chi^2(14) = 99.27$, $p < 0.001$), explained 7.9% of the variance in understanding of best before dates (Nagelkerke $R^2 = 0.079$) and correctly classified 77.7% of cases.

Respondents who were younger, identified as male, had a child in the household, did not have an Australian/New Zealand or European background, had a lower equivalised household income, and who did the majority of the shopping themselves (vs sharing it with someone else) were significantly more likely to misunderstand best before dates (all p-values < 0.05).

The full statistical results of the binomial logistic regression analysis are available in Table D.3.

Table D.3. Binomial logistic regression testing various predictors of selecting a correct understanding of best-before dates

	B	Wald	p	Exp(B)
Incorrect vs correct understanding of best-before dates ($\chi^2(14) = 99.27$, $p < 0.001$, Nagelkerke $R^2 = 0.079$)				
Age	.017	17.947	<.001	1.017
Gender (male vs. female)	.328	7.669	.006	1.388
Education (non-tertiary vs. tertiary)	.121	.866	.352	1.128
Country (Australia vs. New Zealand)	-.004	.001	.974	.996
Household composition (no child < 15 years vs. at least one child < 15 years)	-.481	15.209	<.001	.618
Equivalised annual household income	.000	8.294	.004	1.000
AU/NZ or European background (none vs. some)	.381	5.678	0.17	1.464
Birth country		.552	.759	
Birth country (AU/NZ vs. other English speaking)	0.54	.085	.771	1.055
Birth country (AU/NZ vs. non-English speaking)	-.125	.369	.543	.883
Shopping responsibility		11.891	.003	
Shopping responsibility (does majority of food shopping vs does minority of food shopping)	.035	.007	.934	1.035
Shopping responsibility (does majority of food shopping vs shares the food shopping)	.604	10.832	<.001	1.829

	B	Wald	p	Exp(B)
Food industry experience (no experience vs. some experience)	.155	1.612	.204	1.168
Cooking responsibility		.123	.941	
Cooking responsibility (cooks majority of meals vs cooks minority of meals)	.086	.084	.772	1.090
Cooking responsibility (cooks majority of meals vs shares the meal cooking)	.053	.088	.767	1.054

Understanding of use-by dates

We performed a binomial logistic regression to determine whether various factors (age, gender, level of education, equivalised household income, country, birth country, having a European background, having a child under 15 years of age in the household, shopping responsibility, cooking responsibility, food industry experience) significantly predicted understanding of use-by dates.

The model was statistically significant ($\chi^2(14) = 34.57$, $p = 0.002$), explained 2.5% of the variance in understanding of use-by dates (Nagelkerke $R^2 = 0.025$) and correctly classified 67.6% of cases.

Respondents who identified as male were significantly less likely to understand use-by dates ($p < 0.001$). There were no other significant predictors. The full statistical results of the binomial logistic regression analysis are available in Table D.4.

Table D.4. Binomial logistic regression testing various predictors of selecting a correct understanding of best-before dates

	B	Wald	p	Exp(B)
Incorrect vs correct understanding of use-by dates ($\chi^2(14) = 34.57$, $p = .002$, Nagelkerke $R^2 = 0.025$)				
Age	-.003	1.047	.306	.997
Gender (male vs. female)	.472	20.773	<.001	1.603
Education (non-tertiary vs. tertiary)	-.171	2.334	.127	.843
Country (Australia vs. New Zealand)	-.145	1.935	.164	.865
Household composition (no child < 15 years vs. at least one child < 15 years)	-.026	.050	.822	.975
Equivalised annual household income	.000	2.437	.119	1.000
AU/NZ or European background (none vs. some)	.131	.801	.371	1.140
Birth country		.230	.892	
Birth country (AU/NZ vs. other English speaking)	-.059	.155	.693	.942
Birth country (AU/NZ vs. non-English speaking)	.035	.035	.852	1.035

	B	Wald	p	Exp(B)
Shopping responsibility		.331	.848	
Shopping responsibility (does majority of food shopping vs does minority of food shopping)	-.208	.323	.570	.812
Shopping responsibility (does majority of food shopping vs shares the food shopping)	-.041	.072	.789	.960
Food industry experience (no experience vs. some experience)	-.172	2.654	.103	.842
Cooking responsibility		5.156	.076	
Cooking responsibility (cooks majority of meals vs cooks minority of meals)	.567	5.035	.025	1.763
Cooking responsibility (cooks majority of meals vs shares the meal cooking)	.095	.389	.533	1.099

Knowledge of food recalls

We performed a binomial logistic regression to determine whether various factors (age, gender, level of education, equivalised household income, country, birth country, having a European background, having a child under 15 years of age in the household, shopping responsibility, cooking responsibility, selecting pregnancy or breastfeeding as a factor affecting dietary choices, level of confidence in the food supply, level of health consciousness, awareness of FSANZ) significantly predicted remembering a food recall. The model was statistically significant ($\chi^2(17) = 170.69$, $p < 0.001$). The model explained 11.6% of the variance in remembering a food recall (Nagelkerke $R^2 = 0.116$) and correctly classified 61.6% of cases.

Respondents who were older, identified as female, were New Zealanders (as opposed to Australians), shared the food shopping with someone else (as opposed to doing the majority of the shopping themselves), selected pregnancy or breastfeeding as a factor affecting dietary choices, were more health conscious, and knew at least a little about what FSANZ does (as opposed to knowing nothing about what FSANZ does) were significantly more likely to remember a food recall (p-values < 0.05).

The full statistical results of the binomial logistic regression analysis are available in Table D.5.

Table D.5. Binomial logistic regression testing various predictors of remembering a food recall

	B	Wald	p	Exp(B)
Not remembering vs remembering a food recall ($\chi^2(14) = 170.69$, $p = <.001$, Nagelkerke $R^2 = .116$)				
Age	.009	8.223	.004	1.009
Gender (male vs. female)	.440	18.644	<.001	1.553
Education (non-tertiary vs. tertiary)	.185	2.831	.092	1.203

	B	Wald	p	Exp(B)
Country (Australia vs. New Zealand)	.707	48.236	<.001	2.028
Household composition (no child < 15 years vs. at least one child < 15 years)	.178	2.485	.115	1.195
Equivalised annual household income	.000	.716	.397	1.000
AU/NZ or European background (none vs. some)	.240	2.724	.099	1.271
Birth country		2.571	.277	
Birth country (AU/NZ vs. other English speaking)	-.178	1.463	.226	.837
Birth country (AU/NZ vs. non-English speaking)	-.235	1.614	.204	.791
Shopping responsibility		12.411	.002	
Shopping responsibility (does majority of food shopping vs does minority of food shopping)	-.684	3.405	.065	.505
Shopping responsibility (does majority of food shopping vs shares the food shopping)	.340	5.190	.023	1.404
Cooking responsibility		1.888	.389	
Cooking responsibility (cooks majority of meals vs cooks minority of meals)	.259	1.208	.272	1.296
Cooking responsibility (cooks majority of meals vs shares the meal cooking)	-.039	.069	.792	.961
Pregnant or breast-feeding (no vs. yes)	.679	7.733	.005	1.972
Level of confidence in the food supply	.031	.830	.362	1.031
Level of health consciousness	.194	19.359	<.001	1.215
FSANZ awareness (know nothing of what FSANZ does vs know at least a little)	.586	27.467	<.001	1.796

Sports foods

Predictors of sports foods consumption at least every month

We performed a binomial logistic regression to determine whether various factors (age, gender, level of education, equivalised household income, country, birth country, having a European background, selecting pregnancy or breastfeeding as a factor currently affecting food choices, selecting training for sports as a factor currently affecting food choices, level of confidence in the food supply, level of health consciousness) significantly predicted consumption of sports foods at least every month. The model was statistically significant ($\chi2(11) = 478.80$, $p < 0.001$). The model explained 31% of the variance in reported sports foods consumption (Nagelkerke $R^2 = 0.31$) and correctly classified 74.6% of cases.

Respondents who were younger, male, had a higher equivalised household income, had a non-European background, were more health conscious, and selected training for sports as a factor currently affecting food choices were significantly more likely to report consuming sports foods at least every month (p-values < 0.05). The full statistical results of the binomial logistic regression analysis are available in Table D.6

Table D.6. Binomial logistic regression testing various predictors of consuming sports foods at least monthly

	B	Wald	p	Exp(B)
Consuming sports foods at least every month ($\chi^2(12) = 478.80$, $p = <.001$, Nagelkerke $R^2 = .310$)				
Age	-.062	230.95	<.001	.939
Gender (male vs. female)	-.555	23.74	<.001	.574
Education (non-tertiary vs. tertiary)	-.104	.703	.402	.902
Country (Australia vs. New Zealand)	-.118	1.024	.312	.888
Equivalised annual household income	.000	4.087	.043	1.000
AU/NZ or European background (none vs. some)	-.317	3.917	.048	.728
Birth country		3.910	.142	
Birth country (AU/NZ vs. other English speaking)	-1.68	.874	.350	.845
Birth country (AU/NZ vs. non-English speaking)	-.397	3.594	.058	.673
Pregnant or breast-feeding (no vs. yes)	.389	2.621	.105	1.475
Training for sports (no vs. yes)	1.37	35.01	<.001	3.93
Level of health consciousness	.331	41.148	<.001	1.392

Predictors of only using sports foods within a physical activity-related context

We performed a binomial logistic regression to determine whether various factors (age, gender, level of education, equivalised household income, country, birth country, having a European background, selecting pregnancy or breastfeeding as a factor affecting dietary choices, level of confidence in the food supply, level of health consciousness) significantly predicted only using sports foods within a physical activity-related context.

The model was not statistically significant ($\chi^2(11) = 9.64$, $p = 0.563$), indicating that these factors were *not* significant predictors of only using sports foods within a physical activity-related context.

The full statistical results of the binomial logistic regression analysis are available in Table D.7.

Table D.7. Binomial logistic regression testing various predictors of only using sports foods within a physical-activity related context

	B	Wald	p	Exp(B)
Only using sports foods within a physical-activity related context ($\chi^2(11) = 9.64$, $p = 0.563$)				
Age	.008	.862	.353	1.008
Gender (male vs. female)	-.116	.305	.581	.891
Education (non-tertiary vs. tertiary)	.304	1.774	.183	1.355
Country (Australia vs. New Zealand)	.184	.709	.400	1.202
Equivalised annual household income	.000	.001	.974	1.000
AU/NZ or European background (none vs. some)	-.340	1.277	.258	.712
Birth country		.176	.916	
Birth country (AU/NZ vs. other English speaking)	-.139	.168	.682	.870
Birth country (AU/NZ vs. non-English speaking)	-.065	.024	.876	.937
Pregnant or breast-feeding (no vs. yes)	.354	.686	.408	1.425
Level of confidence in food supply	.024	.100	.752	1.024
Level of health consciousness	.129	1.817	.178	1.138

Predictors of cell-based meat consumption

We performed a binomial logistic regression to determine whether various factors (selecting vegetarian/vegan as a dietary factor that currently affects food choices, consumption of plant-based meat alternatives at least once per month, awareness of cell-based meat, confidence in the safety of cell-based meat, age, gender, level of education, equivalised household income, country, birth country, having a European background) significantly predicted intentions to include cell-based meat in the diet (yes vs. no/don't know).

The model was statistically significant ($\chi^2(12) = 540.72$, $p < 0.001$). The model explained 37% of the variance in consumption intentions (Nagelkerke $R^2 = 0.37$) and correctly classified 81.6 % of cases.

Respondents who were younger, identified as male, reported consuming plant-based meat at least every month, felt that they knew at least something about what cell-based meat is (as opposed to feeling that they knew little or nothing), and were more confident in the safety of cell-based meat were more likely to report that they would include cell-based meat in their diets (p-values < 0.05).

It is important to note that there were very few respondents who reported being vegetarian or vegan (10.3% of the analysed sample), thus, it is possible that the non-significance of this predictor variable is due to a lack of statistical power.

The full statistical results of the binomial logistic regression analysis are available in Table D.8 below.

Table D.8. Binomial logistic regression testing various predictors of intentions to include cell-based meat in diet

	B	Wald	p	Exp(B)
Intentions to include cell-based meat in their diet ($\chi^2(12) = 540.72$, $p < 0.001$)				
Age	-.021	24.324	<.001	.980
Gender (male vs. female)	-.590	20.254	<.001	.554
Education (non-tertiary vs. tertiary)	.158	1.294	.255	1.171
Country (Australia vs. New Zealand)	.097	.537	.464	1.102
Equivalised annual household income	.000	.022	.882	1.000
AU/NZ or European background (none vs. some)	.303	2.465	.116	1.353
Birth country		3.769	.152	
Birth country (AU/NZ vs. other English speaking)	.101	.252	.615	1.106
Birth country (AU/NZ vs. non-English speaking)	.448	3.759	.053	1.565
Selecting vegetarian/vegan as a dietary factor that currently affects food choices (no vs. yes)	-.021	.011	.918	.979
Consumption of plant-based meats at least one per month (no vs. yes)	.794	27.378	<.001	2.212
Awareness of cell-based meat (know little or nothing vs. know at least something)	.301	4.660	.031	1.352
Confidence in the safety of cell-based meat	.626	200.851	<.001	1.870

Appendix E. Chi-square analyses

Top food values

Age ($\chi^2(20) = 245.99$, $p = 0.000$, Cramer's $V = 0.25$):

- People aged 18-34 years were significantly less likely to select 'Naturalness' (40.99%) as a top food value compared to people aged 35-54 years and 55+ years (49.79% and 54.12%, respectively).
- This age group were also significantly less likely to select 'Origin' (28.07%) compared to people aged 35-54 years (39.37%) and 55+ years, with those aged 55+ years significantly most likely to select this as a top food value (59.04%).
- People aged 18-34 years were significantly more likely to select 'Convenience' (54.86%) as a top food value compared to people aged 35-54 years (47.33%) and 55+ years, with those aged 55+ years significantly least likely to select this as a top food value (32.85%).
- People aged 18-34 years were also significantly more likely to select 'Environmental impact' (25.68%) as a top food value compared to people aged 55+ years (18.81%).

Gender ($\chi^2(10) = 47.18$, $p < 0.001$, Cramer's $V = 0.15$):

- Respondents who identified as female were significantly more likely to select 'Naturalness' (51.18%) and 'Animal welfare' (31.89%) as a top food value compared to those identifying as male (45.61% and 24.59%, respectively).
- Males were significantly more likely to select 'Tradition' (15.61%) and 'Fairness' (20.71%) as a top food value compared to females (11.85% and 14.30%, respectively).

Education ($\chi^2(10) = 52.98$, $p < 0.001$, Cramer's $V = 0.16$):

- Respondents with tertiary level education were significantly more likely to select 'Nutrition' (77.60%) and 'Environmental impact' (25.34%) as a top food value compared to those with no tertiary level education (72.30% and 19.07%, respectively).
- Respondents without tertiary level education were significantly more likely to select 'Origin' (45.47%) and 'Animal welfare' (31.15%) as a top food value compared to respondents with tertiary level education (38.80% and 24.77%, respectively).

Country ($\chi^2(10) = 29.98$, $p < 0.001$, Cramer's $V = 0.12$):

- Respondents from Australia were significantly more likely to select 'Environment impact' (23.34%), 'Origin' (44.49%) or 'Animal welfare' (30.23%) as a top food value compared to respondents from New Zealand (19.41%, 39.68%, and 25.59%, respectively).
- Respondents from New Zealand were significantly more likely to select 'None of the above' (1.85%) compared to Australian respondents (0.41%).

Birth country ($\chi^2(20) = 72.38$, $p < 0.001$, Cramer's $V = 0.13$):

- Respondents born in either Australia or New Zealand were significantly less likely to select 'Naturalness' (46.38%) as a top food value compared to respondents born in other English speaking countries or a non-English speaking country (54.72% and 56.34%, respectively).
- Respondents born in either Australia or New Zealand were significantly more likely to select 'Convenience' (46.25%) compared to respondents born in other English speaking countries (38.11%), and 'Country of origin' (43.54%) compared to people born in non-English speaking countries.
- People from non-English speaking countries were significantly less likely to select 'Animal welfare' (17.84%) as a top food value compared to people born in Australia and New Zealand and those born in other English speaking countries (31.32% and 29.59%, respectively).
- People born in non-English speaking countries were significantly more likely to select 'Nutrition' (81.69%) as a top food value compared to those born in Australia and New Zealand (73.32%), and 'Tradition' (22.54%) compared to people born in Australia and New Zealand and those born in other English speaking countries (13.31% and 8.68%, respectively).

Cultural background ($\chi^2(10) = 63.44$, $p < 0.001$, Cramer's $V = 0.18$):

- Respondents from European backgrounds were significantly more likely to select 'Origin' (43.83%) and 'Animal welfare' (31.11%) as a top food value compared to respondents not from a European background (38.22% and 17.02%, respectively).
- Respondents who weren't from a European background were significantly more likely to select 'Tradition' (21.20%) as a top food value compared to people from a European background (12.04%).

Shopping responsibility ($\chi^2(20) = 46.19$, $p < 0.001$, Cramer's $V = 0.11$):

- Respondents who share food shopping responsibilities with someone else were significantly more likely to select 'Nutrition' (79.83%) as a top food value compared to respondents who do the majority of the shopping (72.04%).
- There were no significant differences between those who don't do the shopping compared to those who do the majority or some of the shopping.

Food industry experience ($\chi^2(10) = 22.64$, $p = 0.012$, Cramer's $V = 0.11$):

- Respondents who had food industry experience were significantly more likely select 'Fairness' (20.05%) as a top food value compared to those respondents without food industry experience (15.73%).
- Respondents without food industry experience were significantly more likely to select 'Naturalness' (50.67%) as a top food value compared to those with food industry experience (45.15%).

Household composition ($\chi^2(10) = 28.83$, $p = 0.001$, Cramer's $V = 0.12$):

- Respondents who have a child under 15 in their household were significantly more likely to select 'Environmental impact' (25.71%) compared to people who do not live with a child (19.87%).
- Respondents who were not living with a child were significantly more likely to select 'Origin' (44.87%) compared to people who do live with at least one child (38.17%).

Level of confidence in the food supply ($\chi^2(20) = 32.70$, $p = 0.036$, Cramer's $V = 0.09$):

- People who reported a low level of confidence in the food supply were significantly more likely to select 'Naturalness' (56.42%) as a top food value compared to people with medium level of confidence in the food supply (46.64%).
- People who reported a low level of confidence were significantly less likely to select 'Convenience' (35.81%) as a top food value compared to people with medium and high level of confidence in the food supply (46.27% and 46.15%, respectively).

Health Consciousness ($\chi^2(20) = 257.03$, $p = 0.000$, Cramer's $V = 0.25$):

- Respondents who indicated having low health consciousness were significantly more likely to select 'Convenience' (70.93%) as a top food value compared to people who indicated having a medium (55.00%) and high health consciousness (38.88%).
- People who indicated that they have high health consciousness were also significantly less likely to select 'Convenience' (38.88%) than people with a medium health consciousness (55.00%).
- Respondents who indicated having high health consciousness were significantly more likely to select 'Nutrition' (78.10%) as a top food value compared to people who indicated having a medium (70.53%) and low health consciousness (52.91%).
- People indicating a high health consciousness were also significantly more likely to select 'Naturalness' (53.00%) as a top food value compared to people with low and medium health consciousness (33.72% and 38.42%, respectively).
- People indicating a high health consciousness were also significantly more likely to select 'Origin' (45.02%) compared to people with medium health consciousness (34.21%).
- People with a high health consciousness were significantly less likely to select 'None of the above' (0.41%) compared to those with low and medium health consciousness (3.49% and 1.84%, respectively).
- People with a low health consciousness were significantly less likely to select 'Environmental impact' (13.95%) compared to people with a medium and high health consciousness (23.16% and 22.24%, respectively).
- People with a low health consciousness were significantly more likely to select 'Tradition' (20.93%) as a top food value compared to people with high health consciousness (12.41%).
- People with a low health consciousness were also significantly more likely to select 'Other' (4.65%) compared to those with medium and high health consciousness (1.84% and 0.41%, respectively). A summary of 'Other' responses are listed above.

Equivalised Household Income ($\chi^2(20) = 42.82$, $p = 0.002$, Cramer's $V = 0.11$):

- Respondents who earn a high income were significantly more likely to select 'Nutrition' (42.37%) as a top food value compared to respondents who earn both a low and medium income (30.99% and 36.95%, respectively).

Medical-related dietary factors ($\chi^2(10) = 33.86$, $p < 0.001$, Cramer's $V = 0.13$):

- People who selected at least one medical factor as influencing their food choices were significantly more likely to select 'Nutrition' (40.00%) as a top food value compared to those who did not select a medical dietary factor (33.09%).
- People who selected at least one medical factor as influencing their food choices were significantly less likely to select 'Convenience' (11.77%) as a top food value, compared to those who did not select a medical dietary factor (17.50%).

Lifestyle-related dietary factors ($\chi^2(10) = 78.91$, $p < 0.001$, Cramer's $V = 0.20$):

- People who selected at least one lifestyle-related factor as influencing their food choices were significantly more likely to select 'Nutrition' (42.02%) as a top food value compared to those who did not select a lifestyle-related factor (29.20%).
- People who did not select a lifestyle-related factor were significantly more likely to select 'Convenience' (17.40%), 'Origin' (17.50%), and 'None of the above' (1.50%) as a top food value compared to those that selected at least one lifestyle-related factor (13.28%, 12.23%, and 0.48%, respectively).

Understanding compared to behavioural responses for best before dates

A series of chi-square analyses were conducted to investigate whether a correct or incorrect understanding of best before dates was associated with certain behavioural responses to them.

- People who had a correct understanding of best before dates were significantly more likely to select that they bought products close to their best before date compared to people who had an incorrect understanding ($\chi2(2) = 34.95$, p = <.001, Cramer's V = .131).
- People who had a correct understanding of best dates were significantly more likely to select that they test products before eating them when they are past their best before date ($\chi2(2) = 209.21$, p = <.001, Cramer's V = .320).
- People who had a correct understanding of best before dates were significantly more likely to select that they don't check best before dates when preparing food compared to people who had an incorrect understanding ($\chi2(2) = 8.69$, p = .013, Cramer's V = .065).
- People who had a correct understanding of best before dates were significantly less likely to select that they don't buy products close to their best-before date compared to people who had an incorrect understanding ($\chi2(2) = 40.48$, p = <.001, Cramer's V = .141).
- People who had a correct understanding of best before dates were significantly less likely to select that they don't use products if they are past their best-before date

compared to people who had an incorrect understanding (χ2(2) = 207.70, p = <.001, Cramer's V = .319).

Understanding compared to behavioural responses to use-by dates

A series of chi-square analyses were conducted to investigate whether a correct or incorrect understanding of use-by dates was associated with certain behavioural responses to them.

- People who had a correct understanding of use-by dates were significantly more likely to select that they do not buy products close to their use-by date compared ot people who had an incorrect understanding (χ2(2) = 30.426, p = <.001, Cramer's V = .122).
- People who had a correct understanding of use-by dates were significantly more likely to select that they do not use products past their use-by date compared to people with an incorrect understanding (χ2(2) = 264.15, p = <.001, Cramer's V = .359)
- People who had a correct understanding of use-by dates were significantly less likely to select that they bought products close to their use-by date, compared to people who had an incorrect understanding (χ2(2) = 17.51, p = <.001, Cramer's V = .092).
- People who had a correct understanding of use-by dates were significantly less likely to select that they do not check use-by dates when buying food compared to people who had an incorrect understanding (χ2(2) = 25.99, p = <.001, Cramer's V = .113)
- People who had a correct understanding of use-by dates were significantly less likely to select that they test products before eating when they are past their use-by date compared to people who had an incorrect understanding (χ2(2) = 156.77, p = <.001, Cramer's V = .277)
- People who had a correct understanding of use-by dates were significantly less likely to select that they do not check use-by dates before preparing food compared to people who had an incorrect understanding (χ2(2) = 68.37, p = <.001, Cramer's V = .183)

Factors associated with top food safety issues

Chi-square tests were conducted to determine whether any demographic factors were associated with selecting particular types of food categories as a top three most likely to cause illness. Significant associations were found for age, gender, education, country, birth country, cultural background, foWod industry experience, pregnancy or breastfeeding as a dietary factor affecting food choices, and household composition.

Age ($\chi^2(22) = 76.33$, $p < 0.001$, Cramer's $V = 0.14$):

- Respondents aged 55+ years were significantly more likely to select 'Imported food/food from overseas' (27.93%) as a safety issue compared to people aged 18-34 years (19.30%) and 35-54 years (22.36%).

- Respondents aged 55+ years were also significantly more likely to select 'Food poisoning' (65.99%) as a top food safety issue compared to people aged 35-54 years (59.81%), while those aged 18-34 years the least likely to select this (51.52%).

- People aged 55+ years were significantly less likely to select 'Artificial sweeteners' (11.35%) as a safety issue compared to people aged 18-34 years (17.38%) and 35-54 years (17.83%).
- People aged 18-34 years were significantly more likely to select 'Undeclared allergens' (27.11%) as a safety issue compared to those aged 55+ years (19.83%).

Gender ($\chi^2(11) = 27.78$, $p = 0.003$, Cramer's $V = 0.12$):

- Respondents who identified as female were significantly more likely to select 'Food poisoning' (61.99%) or 'Hormones, steroids and/or antibiotics' (37.16%) as a top food safety issue compared to respondents identifying as male (56.53% and 32.76%, respectively).
- Males were significantly more likely to select 'Artificial sweeteners' (17.76%) or 'Imported food/food from overseas' (25.51%) as a top food safety issue compared to females (13.45% and 21.17%, respectively).

Education ($\chi^2(11) = 57.57$, $p < 0.001$, Cramer's $V = 0.17$):

- Respondents with tertiary education were significantly more likely to select 'Hormones, steroids and/or antibiotics' (37.97%), 'Artificial sweeteners' (18.42%), or 'Food additives' (24.86%) as a top food safety issue compared to respondents without tertiary education (32.79%, 13.34% and 19.54%, respectively).
- People without tertiary education were significantly more likely to select 'Imported food/food from overseas' (27.11%) as a top safety issue compared to those with tertiary education (18.31%).

Country ($\chi^2(11) = 33.08$, $p < 0.001$, Cramer's $V = 0.13$):

- Australian respondents were significantly more likely to select 'Imported food/food from overseas' (26.35%) or 'Undeclared allergens' (24.49%) as a top safety issue compared to New Zealand respondents (18.64% and 20.37%, respectively).
- Respondents from New Zealand were significantly more likely to select 'None of the above' (2.35%) compared to Australian respondents (1.13%).

Birth country ($\chi^2(22) = 57.39$, $p < 0.001$, Cramer's $V = 0.12$):

- Respondents born in Australia and New Zealand were significantly less likely to select 'Hormones, steroids and/or antibiotics' (33.20%) compared to respondents born in another English speaking country (41.59%).
- Respondents born in Australia and New Zealand were significantly more likely to select 'Imported food/food from overseas' (24.94%) compared to people born in non-English speaking countries (13.62%).
- People born in non-English speaking countries were significantly more likely to select 'Food additives' (29.11%) compared to people born in Australia and New Zealand (20.93%).

Cultural background ($\chi^2(22) = 33.61$, $p < 0.001$, Cramer's $V = 0.13$):

- Respondents from a European background were significantly less likely to select 'Food additives' (20.97%) or 'Artificial sweeteners' (14.73%) as a top food safety issue compared to respondents from other cultural backgrounds (25.65% and 19.11%, respectively).
- Respondents from a European background were significantly more likely to select 'Imported food/food from overseas' (24.94%) or 'Food poisoning' (60.51%) as a top food safety issue compared to people from other cultural backgrounds (16.49% and 53.93%, respectively).
- Respondents who were not from a European background were significantly more likely to select 'None of the above' (2.88%) compared to those who were (1.34%).

Food industry experience ($\chi^2(22) = 24.08$, $p = 0.012$, Cramer's $V = 0.11$):

- Respondents with previous experience in the food industry were significantly more likely to select 'Undeclared allergens' (26.56%) as a top food safety issue compared to respondents who indicated they did not have food industry experience (20.87%).

Household composition ($\chi^2(11) = 55.80$, $p < 0.001$, Cramer's $V = 0.17$):

- Respondents that do not live with a child under 15 in the household were significantly more likely to select 'Food poisoning' (61.85%) and 'Chemicals from the environment in food' (52.38%) as a top food safety issue compared to respondents who do live with a child (53.63% and 44.64%, respectively).
- Respondents that do live with a child under 15 in the household were significantly more likely to select 'Artificial sweeteners' (19.72%) and 'Food additives' (26.34%) as a top food safety issue compared to respondents that don't live with a child (13.66% and 19.80%, respectively).

Level of confidence in the safety of the food supply ($\chi^2(22) = 75.97$, $p < 0.001$, Cramer's $V = 0.14$):

- Respondents that had a high level of confidence in the safety of the food supply were significantly more likely to select 'Food poisoning' (62.45%) as a top food safety issue compared to people with low and medium levels of confidence (50.34% and 51.87%, respectively).
- People with a high level of confidence were significantly less likely to select 'Food additives' (20.36%) compared to people with a low level of confidence (27.36%), and 'Genetically modified food' (17.68%) as a top food safety issue compared to both respondents with low and medium levels of confidence (30.07% and 24.63%, respectively).

Health consciousness ($\chi^2(22) = 35.72$, $p = 0.033$, Cramer's $V = 0.09$):

- Respondents who had a high level of health consciousness were significantly less likely to select 'None of the above' (0.95%) compared to those with low and medium levels of health consciousness (4.65% and 2.89%, respectively).

Awareness of food recalls ($\chi^2(11) = 52.11$, $p < 0.001$, Cramer's $V = 0.17$):

- Respondents who were aware of a food recall in the past 12 months were significantly more likely to select 'Contamination of food with foreign objects' (43.82%) or 'Food poisoning' (62.79%) as a top food safety concern compared to those who could not remember a recall (35.04% and 57.00%, respectively).
- Respondents who did not remember a food recall were significantly more likely to choose 'Hormones, steroids, and/or antibiotics' (37.36%), 'Food additives' (24.26%) 'Genetically modified foods' (22.21%) and 'None of the above (2.31%) as a food safety issue compared to respondents who remembered a recall (32.81%, 19.08%, 18.03%, and 0.94%, respectively).

Factors associated with food risk perceptions

Chi-square tests were conducted to determine whether any demographic factors were associated with selecting particular types of food categories as a top three most likely to cause illness. Significant associations were found for age, gender, education, country, birth country, cultural background, food industry experience, pregnancy or breastfeeding as a dietary factor affecting food choices, and household composition.

Age ($\chi^2(18) = 237.23$, $p = 0.000$, Cramer's $V = 0.24$):

- Respondents aged 55+ years were significantly less likely to select 'Eggs and egg products' (19.38%) as a top food risk compared to respondents aged 35-54 years (25.44%), and less likely to select 'Fruits, including berries and melons' (4.71%) as a perceived risky food compared to people aged 18-34 years and 35-54 years (13.04% and 9.70%, respectively).
- Respondents aged 18-34 years were significantly less likely to select 'Raw chicken and other poultry' (78.08%) or 'Seafood and raw shellfish' (63.04%) as a top food risk compared to people aged 35-54 years (85.37% and 72.81%), and people aged 55+, who were significantly most likely to select these as a perceived risk (92.57% and 83.70%).
- Respondents aged 55+ years were less likely to select 'Milk, cheese, or yoghurt' (12.50%) or 'Vegetables, sprouts and leafy greens' (5.25%), compared to respondents aged 35-54 years (21.46% and 8.43%) and aged 18-34 years, of which were significantly most likely to select these as a perceived risky food (30.07% and 13.22%).
- People aged 55+ were significantly more likely to select 'Processed meat' (46.74%) as a perceived food risk compared to people aged 18-34 years and aged 35-54 years (32.25% and 37.52%, respectively).

Gender ($\chi^2(9) = 54.67$, $p < 0.001$, Cramer's $V = 0.16$):

- Respondents who identified as female were significantly more likely to select 'Raw chicken and other poultry' (88.81%), 'Seafoods and raw shellfish' (76.20%) or 'Processed meat' (41.39%) as a perceived food risk compared to people identifying as male (81.63%, 71.33%, and 36.84%, respectively).

- Male respondents were more likely to select 'Milk, cheese, or yoghurt' (24.39%) as a perceived food risk compared to females (18.25%).

Education ($\chi^2(9) = 70.99$, $p < 0.001$, Cramer's $V = 0.19$):

- Respondents with tertiary education were more likely to select 'Milk, cheese and yoghurt' (23.98%), 'Vegetables, sprouts and leafy greens' (11.31%), and 'Fruits, including berries and melons' (10.18%) as a perceived food risk compared to respondents who have no tertiary level education (19.07%, 5.95%, and 6.99%, respectively).
- Respondents with no tertiary level education were significantly more likely to select 'Raw chicken and other poultry' (88.87%) or 'Seafoods and raw shellfish' (76.62%) as a perceived food risk compared to respondents with tertiary level education (80.77% and 70.25%, respectively).

Country ($\chi^2(9) = 84.18$, $p < 0.001$, Cramer's $V = 0.20$):

- Australian respondents were significantly more likely to select 'Eggs and egg products' (25.12%), 'Raw beef' (30.96%), or 'Processed meat' (42.06%) as a perceived food risk compared to respondents from New Zealand (19.04%, 26.33% and 34.86%, respectively).
- New Zealanders were significantly more likely to select 'Raw chicken and other poultry products' (88.50%), 'Seafoods and raw shellfish' (77.38%) and 'Fruits, including berries and melons' (12.61%) as a perceived food risk compared to Australians (83.31%, 71.56% and 5.59%, respectively).

Birth country ($\chi^2(18) = 64.18$, $p < 0.001$, Cramer's $V = 0.13$):

- Respondents from non-English speaking countries were significantly more likely to select 'Raw beef' (41.78%) as a perceived food risk compared to respondents from Australia and New Zealand (27.78%) and other English-speaking countries (26.04%), and were significantly more likely to select 'Milk, cheese, or yoghurt' (27.70%) compared to respondents from other English-speaking countries (15.47%).
- Respondents from non-English speaking countries were also significantly less likely to select 'Raw chicken and other poultry' (77.00%) compared to respondents born in Australia and New Zealand and other English-speaking countries (86.37% and 86.42%, respectively).
- Respondents from other English-speaking countries were significantly more likely to select 'Seafoods and raw shellfish' (80.00%) as a perceived food risk compared to people from non-English speaking countries (69.48%).

Cultural background ($\chi^2(9) = 42.78$, $p < 0.001$, Cramer's $V = 0.15$):

- Respondents from a European background were significantly more likely to select 'Raw chicken and other poultry' (87.04%) as a perceived food risk compared to respondents with a non-European background (77.75%).

- Respondents with a non-European background were significantly more likely to select 'Raw beef' (34.82%) or 'Milk, cheese, or yoghurt' (25.39%) as a perceived food risk compared to people from a European background (27.38% and 20.35%, respectively).

Food industry experience ($\chi^2(9) = 31.22$, $p < 0.001$, Cramer's $V = 0.12$):

- Respondents who did not have experience in the food industry were significantly more likely to select 'Raw beef' (31.23%) as a perceived food risk compared to respondents with food industry experience (24.70%).
- Respondents with industry experience were significantly more likely to select 'Fruits, including berries and melons' (10.36%) as a perceived food risk compared to respondents with no industry experience (7.35%).

Pregnant or breastfeeding ($\chi^2(9) = 29.61$, $p < 0.001$, Cramer's $V = 0.12$):

- Respondents who indicated that being pregnant or breastfeeding affected their dietary choices were significantly more likely to select 'Vegetables, sprouts and leafy greens' (17. 89%), and 'Fruits, including berries and melons' (17.89%) as a perceived food risk compared to respondents that did not select this as a dietary factor (7.90% and 8.01%, respectively).

Household composition ($\chi^2(9) = 56.12$, $p < 0.001$, Cramer's $V = 0.17$):

- Respondents who had a child under 15 years in their household were significantly more likely to select 'Eggs and egg products' (25.55%), 'Milk, cheese, or yoghurt' (24.61%), 'Vegetables, sprouts and leafy greens' (10.73%) or 'Fruits, including berries and melons' (11.51%) as a perceived food risk compared to respondents not living with children (21.46%, 19.80%, 7.30% and 7.08%, respectively).
- Respondents who were not living with children were significantly more likely to select 'Raw chicken and other poultry' (87.72%) or 'Seafoods and raw shellfish' (75.87%) compared to respondents living with children in their households (79.97% and 69.87%, respectively).