

**FOOD LABELLING ISSUES:**  
**Quantitative Research with Consumers**  
**EVALUATION REPORT SERIES NO. 4**

**FOOD STANDARDS AUSTRALIA NEW ZEALAND**  
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# FOOD LABELLING ISSUES: QUANTITATIVE RESEARCH WITH CONSUMERS

Report to



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## **EXECUTIVE SUMMARY**

The current joint *Australian New Zealand Food Standards Code* (the Code) was agreed in November 2000 (gazetted in December 2000) and was implemented by the food industry over a two-year transition period, ending in December 2002<sup>1</sup>. One of the principal objectives behind the development of new food standards is to ensure that labels are easy to interpret and that they deliver information that is easy to understand and use, thereby enabling consumers to make informed choices about the foods they purchase.

This quantitative research with consumers was conducted at the time of transition from the old to the new Code in order to provide baseline indicators of consumer attitudes towards labelling, awareness and use of different labelling elements, beliefs about the clarity and trustworthiness of labels, and which label elements consumers find difficult to interpret.

It is intended that the baseline data will be used by Food Standards Australia New Zealand (FSANZ) as a benchmark to evaluate the impact of implementing new regulatory measures on consumers. The study supports one of six activities identified in the FSANZ 2001-2003 Evaluation Strategy<sup>2</sup>. The baseline study followed two stages of qualitative research; the “Qualitative Research with Stakeholders: Food Labelling Issues” Report<sup>3</sup>, and the “Food Labelling Issues: Qualitative Research with Consumers” Report<sup>4</sup>, conducted by NFO Donovan Research in 2001-2002.

FSANZ subsequently commissioned NFO Donovan Research to undertake a quantitative baseline study in Australia and New Zealand between August and September 2002. The study was conducted via 1940 door-to-door interviews in metropolitan cities in both countries. The questionnaire and stimulus materials for fifteen label elements included in the study were developed based on input from the qualitative research, pre-testing and two in-field pilot tests with interviewer debrief discussions.

Both unprompted and prompted awareness were measured. Unprompted awareness measures the respondent's ability to recall a food labelling element, it provides an indication of what elements are more ‘top of mind’ than others. However, for this study, it is not the best way to measure awareness of specific label elements, particularly given the number of different elements included in the study, that some elements are much newer than others, and that some elements are similar or related to each other. It was known from the qualitative research that some consumers described quite incorrectly the features of particular elements, and others use one label element name and mean another (e.g., nutrient claim versus NIP; ingredients list versus allergen declaration).

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<sup>1</sup> *Food Standards Australia New Zealand (FSANZ) 2002. The Australia New Zealand Food Standards Code, Anstat, Melbourne 2002.*

<sup>2</sup> *Australia New Zealand Food Authority (ANZFA) 2002. ANZFA Evaluation Strategy 2001 – 2003, ANZFA May 2002.*

<sup>3</sup> *Australia New Zealand Food Authority (ANZFA) 2002. Qualitative research with stakeholders: food labelling issues, NFO Donovan Research report to ANZFA, April 2002*

<sup>4</sup> *Australia New Zealand Food Authority (ANZFA) 2001. Food labelling issues, NFO Donovan Research report to ANZFA, December 2001.*

For these reasons prompted awareness (measured using label illustrations) is a more realistic and accurate measure of awareness. Therefore throughout this study, we refer to and report in more detail on prompted measures of awareness.

In order to maximise the usefulness of the survey data, results are documented under several reports:

- a summary of key findings is provided in this document, with the addition of an interpretive discussion of the more complex aspects of the survey – the label interpretation questions, and the segmentation analysis;
- detailed results are provided in graph format in a user-friendly interactive PowerPoint presentation, structured so that readers can easily find their way to and from the data they are most interested in;
- result data tables;
- a methodology report - together with a copy of all survey materials; and
- a pilot report.

The results of this study confirm the qualitative research findings that different consumers report to use labels for different reasons and in different ways and that some use many more label elements than others. For example, date marks were used more regularly for perishable foods (e.g., dairy) and allergen declarations were relied upon more for baked products such as biscuits, and dairy foods. The study focussed on consumers' awareness and use of specific food label elements in making food choices rather than assessing the influence of price or brand. Interestingly, consumers reported unprompted awareness of six label elements (ingredients, list, nutrition information panel or NIP, date mark, country of origin, percentage labels and nutrient claims) to be more 'top of the mind' than weight, brand and/or price.

The research indicates that there is a relatively high level of prompted awareness of most label elements, with health claims, novel foods and irradiated labels having the lowest prompted awareness. The most widely used label elements were the date mark, ingredients list and NIP with over two thirds or more consumers reporting their use, and the least used were the genetically modified organism (GMO) declaration, health claim, allergen declaration, novel and irradiated food declarations. However, with the exception of health claims, these latter set of label elements are only mandatory on food labels of products containing these ingredients and in some cases reflect new labelling provisions in the Code, therefore, awareness and use might be expected to be lower than for other label elements.

Prompted awareness and use of nine of the fifteen elements differed between Australia and New Zealand consumers in the study, with New Zealanders reporting higher awareness and use for the NIP, advisory statements, warning statements, GMO declarations, preparation and storage instructions, and novel food declarations. Respondents from New Zealand also reported higher awareness of the ingredients list, however Australian respondents reported higher awareness of nutrient claims, and a greater proportion reported using the country of origin label element than consumers in New Zealand.

Consumers reported using, on average, five label elements, with a range from one to fourteen elements out of a total of 15 label elements that were assessed. Across all label elements there were two key reasons reported for label non-use; disinterest in labels and habit or previous positive experiences with foods, rendering the use of a labels unnecessary.

Endorsements and date marks were rated by consumers as the most clear and easy to understand. The GMO declaration and the country of origin labels were deemed the least clear and easy to understand. Endorsements and date marks were also rated as the most trustworthy. The greatest proportion of *I'm not sure whether I trust it or not* responses, was in regard to the GMO declaration, followed by the ingredient list, novel foods and NIPs.

The survey results demonstrate that most consumers do not have any trouble in reading and interpreting NIPs on a single product, however they struggle to carry out product comparisons using this nutrient information. When comparing the merits of two products consumers tend to focus on one nutrient only, and their evaluative thinking is dominated by fat levels. When given a choice, many consumers choose a product slightly lower in fat over one where the difference in another nutrient, such as sodium or salt, is greater in value. The results suggest that consumers are confused as to the relative value of nutrient composition. It should be noted that these conclusions are speculative and dedicated research should be conducted to truly understand NIP interpretation.

Consumers in this research had difficulty with the interpretation of nutrient claims with approximately half misunderstanding the meaning of the nutrient claims that were assessed in this study. Given these consumers' responses it is likely that many would make poor food choices as a result of their misinterpretation of nutrient claims.

One quarter of respondents were aware when shown an example of an ingredients list that the ingredients are presented in descending order of quantity. The qualitative research previously undertaken with consumers indicated that once aware of this, many consumers find this information useful. Similarly, the quantitative results indicated that most consumers (71%) have no trouble correctly interpreting percentage ingredient labels, once they are aware of them.

A 'may contain nuts' allergen statement was least likely to be considered very useful by consumers who purchase food for allergen sufferers, compared to the total sample, over half of whom considered it very useful.

Although nearly all consumers were aware of date marks when prompted, just under half the consumers surveyed did not understand the actual information given in the date mark, for example the "use by" date mark, considering it to be 'only a guide' and that it was quite safe to eat food products after the use by date had expired.

Segmentation analysis of label users produced six segments of label users, however there were no major differences in demographic characteristics between consumers that use many label elements, compared to those that use very few.

These findings could form the basis for a mass population approach for future information and education strategies for health professionals and other stakeholders interested in education activities. This approach is likely to be most cost-effective, and a broad-brushed approach to the dissemination of information and education would be of benefit to all segments of label users.

This research provides in-depth information on consumers' awareness, knowledge and use of food labels, as well as their capacity to interpret label information appropriately and make food choices that meet their needs. The results suggest that many consumers are confused about how to use the information from some label elements, particularly those with nutrition information, and that they have varied levels of capacity to use them appropriately and successfully. The findings suggest that if consumers are to use information on more label elements (or label information more often), then they need to be enabled to do so, possible ways in which this could occur include via information, education and practice.



## 1 NEEDS AND ATTITUDES TOWARDS FOOD LABELLING

A total of 1940 interviews were achieved (1259 in Australia and 681 in New Zealand) obtaining a representative sample of each population. The refusal rate for the interview was 16%, which is extremely low for a door-to-door study (the refusal rate is usually around 40%). Therefore the survey samples are more likely to be representative of the populations surveyed.

The interview began by asking respondents a number of questions about any special health needs that influence their food choices, and their attitudes towards buying healthy foods and using food labels. These questions were asked in order to provide additional cross-variables for data analysis (in addition to demographic variables), in order to make conclusions about different ‘types’ or segments of consumers, where they differed to the sample population.

In this section we report on the results for each question, and detail how the results were further collapsed for use as cross-variables.

### 1.1. Special needs

Question 1 was used to establish whether respondents, or any members of their family, have any special needs that make them more careful about choosing food products.

Forty one percent of respondents said they had *no special needs*. One in five respondents (21%) reported having *health concerns such as high blood pressure or cholesterol*. Eighteen percent reported having *general health* needs, and 11% reported having *asthma*. In total, 12% of respondents mentioned having food allergies, of which 4% were specific to nuts.

The results from this question have been used to create subgroups for cross analysis. The subgroups created are either:

1. Presence of special needs
  - Have a special need
  - No special need
2. Type of special need
  - Allergies / asthma (food allergy to nuts, seafood, fish, milk, gluten, eggs, soybeans)
  - Medical condition (diabetes, heart disease, health concerns such as high blood pressure or cholesterol, digestive concerns such as coeliac disease, Irritable Bowel Syndrome)
  - Weight loss
  - All other needs (pregnancy and breast feeding, vegetarian/vegan, religious/ethical beliefs, training for sports, general health, migraine)

The proportional breakdown of these results are reported at Presentation Slide 14.

## 1.2. Health consciousness

Respondents were read a series of statements about buying food and were asked to indicate which one best describes how they felt about buying food for their household.

A high proportion of consumers indicated some level of commitment to choosing healthy foods. Forty three percent of respondents reported that they **regularly** choose the 'healthy' alternative, such as low fat, no added sugar, low salt etc., even if it costs more. Around one third (34%) of all respondents reported that they **sometimes** choose healthy or nutritious foods, depending on cost and convenience. Twelve percent of respondents reported that they **always** choose the 'healthy' alternative, even if it costs more. Eight percent of respondents reported that they **usually** don't worry about the health or nutritional value of the foods that they choose while 3% of respondents reported being **not at all** concerned about the health or nutritional value of the foods that they choose.

Respondents from **New Zealand** were significantly<sup>5</sup> more likely than those from Australia to report that they **regularly** choose the 'healthy' alternative (45% versus 39%). Respondents with special needs were significantly more likely than those without special needs to report that they **regularly** choose the 'healthy' alternative (50% versus 33%). It is worth noting that New Zealand interviewers suggested that recent public nutrition campaigns in New Zealand, and increased media discussion about GMO issues by political parties around the national election held just weeks before the survey could account for the greater reported commitment to buying healthy foods by consumers in New Zealand.

Likelihood to **regularly** choose the 'healthy' alternative also differed significantly between **gender** (females 46%, versus males 37%), and age (45-64: 51% versus 18-24: 21%, 25-44: 42%, and 65+ 46%).

This question provided an indication of **health consciousness** used later for subgroup comparison and segmentation analysis. This may reflect the impact of public health nutrition campaigns and the increased availability of healthy alternatives over the last decade. Respondents who *regularly* or *always* choose the healthy alternative were classified as 'highly' health conscious' Respondents who *usually* don't worry about the health of nutritional value of the foods that they choose or *sometimes* like to choose healthy or nutritious foods, depending on cost and convenience were classified as 'moderately' health conscious. Respondents who were *not at all* concerned about the health or nutritional value of the foods that they choose were classified at 'not at all' health conscious'

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<sup>5</sup> A statistically significant difference at the 95% confidence level.

### 1.3. Specific consumer attitudes towards labelling

Respondents were asked to rate how strongly they agreed or disagreed with a number of statements relating to their attitudes about selecting food products.

Responses are shown in Table 1.3 below.

**Table 1.3: Specific consumer attitudes towards labelling**

Statement	Strongly agree (%)	Tend to agree (%)	Neither agree nor disagree (%)	Tend to disagree (%)	Strongly disagree (%)
<b>BASE: 1940</b>					
I've always been able to find any information I need on a food or drink label	7	37	15	32	9
When I read the labels on food products, I just focus on one or two key things	15	49	15	16	5
Generally speaking, it's easy to understand and use the information on food labels	10	43	17	23	7
I find some information on food labels really useful or important	23	54	15	6	1
It's hard to tell which parts of the label are advertising and which are standard information manufacturers have to put on	12	35	21	26	5
I don't have enough time to read food labels when I'm shopping, even if I wanted to	7	24	18	36	15
I'm very interested in food label information	32	37	17	10	4

Note percentages may not add to 100% as don't know responses are not shown

A number of significant differences were observed between subgroups such as health consciousness, country, and special needs. These are reported in the PowerPoint presentation (slides 15-34) and the data tables.

Individual responses to the attitudinal questions have also been used in the segmentation analysis reported at section 4, and PowerPoint slides 150-172.



## 2 AWARENESS OF LABEL ELEMENTS

Both unprompted and prompted awareness were measured. Unprompted awareness measures the respondent's ability to recall a food labelling element, it provides an indication of what elements are more 'top of mind' than others and is to some extent a 'memory test'. It is not however the best way to measure awareness of specific label elements, particularly given the number of different elements included in the study, that some elements are much newer than others, and that some elements are similar or related to each other. It was known from the qualitative research that some consumers describe incorrectly the features of particular elements, and others use one label element name and mean another (e.g. nutrition claim versus NIP; ingredients list versus allergen declaration).

For these reasons prompted awareness is a more realistic and accurate measure than unprompted awareness. Prompted awareness measures recognition - a more appropriate mental task, and thus a more accurate measure of 'true awareness'. Therefore throughout this study, we refer to and report in more detail on prompted measures of awareness. The PowerPoint presentation slides provide further detail on statistical differences between demographic subgroups for prompted awareness.

### 2.1. Unprompted awareness

In assessing unprompted awareness of label elements and label information, respondents were asked: *firstly, thinking about all of the different types of food products available to buy, can you tell me what kinds of information can be found on packaged food and drink products?*

At this stage in the interview no label information had been shown to respondents. Responses are shown in Table 2.1 over the page. Multiple responses were possible.

*Table 2.1: Unprompted awareness of label information*

Label element (exact mentions)	Unprompted awareness %
<b>BASE: 1940</b>	
<b>Ingredients list</b>	<b>49</b>
<b>NIP</b>	<b>40</b>
<b>Date Mark</b>	<b>25</b>
Country of origin	17
Fat	17
Additives	14
Weight	14
Percentage (%) label	14
Brand	13
Nutrient claim	10
Sugar	9
Price	9
Manufacturer	8
Preparation / storage instructions	7
Endorsements	6
Warning statement	4
Allergen declaration	4
Health claim	4
Advisory statement	3
GMO declaration	3
Novel food	< 1
Irradiated food	< 1

Label element (other non-exact mentions)	Unprompted awareness %
Specific nutrients (other than fat, sugar)	21
Other product information	8
Specific nutrient claim	6
Specific ingredients	8
All other mentions	11

By far the most frequently reported elements were the *ingredients list* and the *NIP*. One quarter of all respondents reported unprompted awareness of the *date mark*. Beyond this, unprompted awareness of other elements was relatively low with less than 6% reporting awareness of *endorsements*, *warning statements*, *allergen declaration*, *health claims*, *advisory statements*, *GMO* and *novel foods*. Interestingly six of the label elements in this study (*ingredients list*, *NIP*, *date mark*, *country of origin*, *percentage label* and *nutrient claim*) were more top of mind (unprompted awareness), than weight, brand and/or price information.

## 2.2. Prompted awareness

In order to gain a measure of recognition (prompted awareness) of label elements, respondents were shown a series of pictures depicting label elements and were asked: *These pictures show 16 different types of information found on labels. Which of these do you recognise?* Responses are shown in Table 2.2 below.

*Table 2.2: Prompted awareness of label elements*

Label element	Prompted awareness %
<b>BASE: 1940</b>	
Date Mark	93
Ingredients list	89
NIP	86
Country of origin	80
Nutrient claim	70
Preparation / storage instructions	65
Percentage (%) label	62
Warning statement	60
Advisory statement	59
Allergen declaration	43
Endorsements	42
GMO declaration	33
Health claim	24
Novel food	12
Irradiated food	6

Prompted awareness for all elements was significantly higher than unprompted awareness. As has been the case in other consumer labelling studies *date marks* were the most recognised labelling element, with 93% of respondents saying they recognised it<sup>6</sup>. The *ingredients list*, *NIP*, and *country of origin* were also widely recognised. *GMO declaration*, *health claims*, *irradiated food* and *novel food* label elements were the least recognised.

A fictitious endorsement; ‘Friendly Production Processes’ was included in the final set of picture cards used to measure prompted awareness (card 16). This was included to provide a measure of the validity of respondents’ recall and recognition of the legitimate endorsements, and more generally recognition of all other elements.

Only 2% of respondents reported recognising the fictitious endorsement, which strengthens our confidence in the validity of recall results for all other elements, and the overall study per se.

A number of significant differences amongst demographic sub-groups were observed in prompted awareness. These varied between label elements, and are summarised below:

- Age (allergen declaration, % label, nutrient claim, advisory statement, warning statement, GMO, preparation & storage instructions);
- Gender (NIP, allergen declaration, nutrient claim, warning statement);
- Education (allergen declaration, advisory statement, country of origin);
- Income (advisory statement, country of origin);
- Country (ingredients list, NIP, nutrient claim, advisory statement, warning statement, GMO, preparation & storage instructions, novel foods);
- Children (NIP, advisory statement, warning statement, GMO);
- Special health needs (NIP, allergen declaration, % label, nutrient claim, warning statement, GMO);
- Health consciousness (% label, nutrient claim, advisory statement, warning declaration).

These differences are reported in detail in the PowerPoint presentation (slides 39-40) and the data tables.

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<sup>6</sup> Australia New Zealand Food Authority (ANZFA) 1996. *National consumer survey on food labelling*, ANZFA. Johnston G & Hodges | 1995. *Label Gazing – main household shoppers’ perceptions of food labelling information*, Ministry of Health, New Zealand, December 1995.

### 3 USE OF LABEL ELEMENTS

#### 3.1. Label elements used

Respondents were asked a number of questions regarding their use of the 15 label elements. Firstly, respondents were asked which of the elements they used even if just occasionally. Results are shown in Table 3.1a below.

*Table 3.1a: Label elements used*

Label element	Use (%)
<b>BASE: 1940</b>	
Date Mark	85
Ingredients list	66
NIP	66
Country of origin	49
Preparation / storage instructions	45
Endorsements	39
Nutrient claim	37
Percentage (%) label	32
Warning statement	22
Advisory statement	22
GMO declaration	16
Health claim	14
Allergen declaration	13
Novel food	9
Irradiated food	3

As detailed in the above table, the three elements recording the highest levels of use were *date mark* (85%), *ingredients list* (66%) and *NIP* (66%). Almost half of all respondents reported using the *country of origin* (49%) and *preparation / storage instructions* (45%). The least used elements were *GMO declaration* (16%), *health claim* (14%), *allergen declaration* (13%), *novel food* (9%), and *irradiated food declaration* (3%). However it should be noted that, with the exception of health claims, these latter set of label elements are only mandatory on food labels of products containing these ingredients and in some cases reflect new labelling provisions in the Code. Therefore, awareness and use might be expected to be lower than for other label elements.

Respondents who used more than three elements were subsequently asked to indicate the three elements they use the most (respondents who indicated they use three or less elements were recorded by the interviewer as 'use most' for this question). Results are shown in Table 3.1b over the page.

*Table 3.1b: Label elements used most*

Label element	Use most %
<b>BASE: 1940</b>	
Date Mark	68
NIP	52
Ingredients list	49
Country of origin	19
Endorsements	17
Preparation / storage instructions	16
Nutrient claim	14
Percentage (%) label	13
Warning statement	6
Allergen declaration	5
GMO declaration	4
Health claim	4
Advisory statement	3
Novel food	2
Irradiated food	<1%

The spread of label elements used ‘most’ was much narrower than the spread of label elements used at all. *Date mark* was the element most frequently reported as being used the most (68%). This was followed by the *NIP* (52%) and *ingredients list* (49%). Less than one in five respondents reported using any of the other elements the most.

Again, a number of significant differences amongst demographic sub-groups were observed in prompted awareness. These varied between label elements, and are summarised below:

- Age (ingredients list, NIP, % label, nutrient claim, country of origin, GMO);
- Gender (ingredients list, NIP, allergen declaration, nutrient claim, warning statement, preparation & storage instructions);
- Education (ingredients list, GMO);
- Income (ingredients list);
- Country (NIP, nutrient claim, advisory statement, warning statement, country of origin, GMO, preparation & storage instructions, novel foods);
- Children (ingredients list, NIP, advisory statement, warning statement);
- Age of children (NIP); and
- Special health needs (ingredients list, NIP, allergen declaration, nutrient claim).

These differences are reported in detail in the PowerPoint presentation (slides 39-40) and the data tables.

## 3.2. Nature of label element use

A series of four questions were then asked about the respondent's perceptions and behaviour regarding the label elements they use. This included the frequency of label use, how clear the label is perceived to be, trustworthiness of various label elements and reasons for not using label elements. Respondents were asked all four questions, in sequence, for up to three label elements they used most as well as any other core element they used. (Core elements are *ingredient list*; *NIP*; *allergen declaration*; *percentage label*; *nutrient claim*; and *date mark*.)

### 3.2.1. Food categories

The qualitative research that preceded this study<sup>7</sup> provided insights into the nature of label use and particularly how product categories influence use. In order to give respondents a product context in which they referenced their responses, respondents were asked a preliminary question requiring them to name, from a randomly scattered list of 12 food categories, the foods for which they use each label element.

These results provide quantitative confirmation of the qualitative research findings which indicated that label elements are used quite differently for different products. For example, date marks are used more regularly for perishable foods (eg, dairy) and allergen declarations were relied upon more for baked products such as biscuits, and dairy foods. Results for core elements are summarised in Table 3.2.1 over the page (that is the top 3 products used for each of the core elements). Full results are found in the data tables.

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<sup>7</sup>Australia New Zealand Food Authority (ANZFA) 2001. *Food labelling issues, NFO Donovan Research report to ANZFA, December 2001.*

**Table 3.2.1: Food categories for which label elements are used most**

Label element	Use most
Ingredients list ( <i>Base = 1292</i> )	<ul style="list-style-type: none"> <li>• Breakfast Cereals (62%)</li> <li>• Oils, butter, margarine, dairy spreads and other fats (53%)</li> <li>• Canned foods (52%)</li> </ul>
NIP ( <i>Base = 1285</i> )	<ul style="list-style-type: none"> <li>• Breakfast Cereals (65%)</li> <li>• Dairy products (56%)</li> <li>• Oils, butter, margarine, dairy spreads and other fats (56%)</li> </ul>
Date mark ( <i>Base = 1656</i> )	<ul style="list-style-type: none"> <li>• Dairy products (85%)</li> <li>• Oils, butter, margarine, dairy spreads and other fats (54%)</li> <li>• Breads (51%)</li> </ul>
Percentage label ( <i>Base = 624</i> )	<ul style="list-style-type: none"> <li>• Oils, butter, margarine, dairy spreads and other fats (56%)</li> <li>• Dairy products (56%)</li> <li>• Breakfast Cereals (38%)</li> </ul>
Nutrient claim ( <i>Base = 726</i> )	<ul style="list-style-type: none"> <li>• Breakfast Cereals (58%)</li> <li>• Dairy products (47%)</li> <li>• Oils, butter, margarine, dairy spreads and other fats (45%)</li> </ul>
Allergen declaration ( <i>Base = 251</i> )	<ul style="list-style-type: none"> <li>• Sweet biscuits / cakes / confectionery (46%)</li> <li>• Savoury biscuits &amp; snacks (40%)</li> <li>• Dairy products (39%)</li> </ul>



### 3.2.2. Frequency of label use

The food type first mentioned in the previous question (3.2.1) was used to answer the following question: *When buying (nominated food type) how often do you look at....(name of a label element ).* Notable results are summarised in Table 3.2.2 below.

**Table 3.2.2: Frequency of label use**

	Frequency of label element use (%)			
	Only occasionally	Most of the time when I buy	Every time I buy that product	When I buy for the first time
Ingredients list ( <i>Base = 1277</i> )	18	32	20	31
NIP ( <i>Base = 1276</i> )	20	31	19	30
Date mark ( <i>Base = 1639</i> )	8	24	67	1
Country of origin ( <i>Base = 378</i> )	14	34	32	20
Percentage label ( <i>Base = 613</i> )	24	32	18	26
Nutrient claim ( <i>Base = 725</i> )	22	33	17	28
Prep & storage instructions ( <i>Base = 324</i> )	26	35	20	20
Endorsements ( <i>Base = 338</i> )	21	34	29	16
Warning statement ( <i>Base = 119</i> )	18	32	40	11
Allergen declaration ( <i>Base = 235</i> )	20	28	30	23
Advisory statement ( <i>Base=70</i> )	27	27	22	24
Health claim ( <i>Base = 71</i> )	16	35	28	21
GMO declaration ( <i>Base = 80</i> )	10	29	45	16%

*Note – Base sizes for novel food and irradiated food too small to report results.*

Date marks, warning statements, GMO declarations and allergen declarations are all used most regularly, with a higher proportion of those responding to use of each label element indicating they use these elements every time that they buy the product in question. Ingredient, nutrient and nutritional information is used most (but not all) of the time, or when buying products for the first time (changing brands, trying new products),

### 3.2.3. Label element clarity

Respondents were asked to rate clarity of label elements that they use using the following scale: very clear, fairly clear and not very clear. *Endorsements* have the highest proportion of *very clear responses* (55%), followed by date marks (44%). *Very clear responses* for all other label elements ranged from 20% - 36%. *GMO declaration* had the highest proportion of *not very clear responses* (29%) followed by *country of origin* labels (16%).

The main reasons provided by respondents as to why labelling elements were not clear enough were:

- the use of scientific language (ingredient list and allergen declaration);
- vague or confusing terms (NIP and nutrient claim);
- incomplete / not enough detail (NIP, percentage labelling, nutrient claim); and
- cannot find it / hidden (date mark only).

### 3.2.4. Trustworthiness of a label element

Finally, respondents were asked: *How much do you feel you can trust the information given on the (label element)?* Responses used the following scale:

- *I trust what it says;*
- *I'm pretty sure I trust what it says; and*
- *I'm not sure whether to trust it or not.*

*Date marks and endorsements* received the highest proportion of *I trust what it says* responses (53%), followed by preparation and storage instructions (50%).

The greatest proportion of *I'm not sure whether I trust it or not* responses, was in regard to the *GMO declaration* (27%), followed by the *ingredient list* (17%), *novel foods* (16%) and *NIPs* (15%).

Those consumers who did respond *I'm not sure whether I trust it or not* were asked an open-ended question *what is it about [element] that makes you doubt how trustworthy it is?* Main reasons reported by those asked this question (for any element used) are summarised below:

- *Companies lie on labels* (4% of NIP users, 4% of nutrient claim users, 3% of ingredient list users, 3% of % label users);
- *Too vague , it doesn't tell you what you want* (6% ingredients list users, 2% NIP users)
- *Negative previous experience* (<1% date mark users);
- *Suspicious of imported products/foreign language* (4% of country of origin users);
- *I'm naturally suspicious* (3% of NIP users, 3% of % label users, 2% of ingredient list users); and
- *I don't trust big business* (2% NIP users, 2% advisory statement users).

### 3.2.5. Reasons for non-use of label elements

An open ended question about the non-use of label elements was asked of respondents who reported recognising an element but not using it when making a purchasing decision. Across all label elements (with varying respondent base sizes) there were two key reasons for label non-use:

- **Disinterest in labels** – consumers who reported that they are not interested / can't be bothered reading the label / the label element in question was not relevant, not useful and has no benefit. This was more prevalent in younger age groups (18-24 year olds), and those with lower education and no special needs.
- **Habit / positive experiences** – consumers who have bought the same product for years and not had a problem with it (this may cause disinterest in using labels).

## 4 LABEL INTERPRETATION

Respondents were asked a number of questions (questions 9-20) to measure their ability to use and interpret label information.

### 4.1. Interpretation of combined nutrition information

In Question 9 all respondents were shown a picture of the nutrition information for a tub of yoghurt (see PowerPoint slide 55) and asked which pieces of information they would use when considering buying it for themselves or their family. The picture depicted an NIP (including serve information which is an integral part of the NIP) and an ingredients list (which included a percentage label. Up to three mentions of information were recorded (ie, this was a multiple response question).

The majority (75%) of responses indicated use of information provided on the **NIP**.

The key pieces of NIP information reported to have been used were<sup>8</sup> :

*Sugar: 42% (n=606)*

*Total fat: 40% (n=576)*

*Fat (unspecified): 27% (n=395)*

*Energy: 25% (n=358)*

*Sodium: 21% (n=306)*

*Protein: 17% (=251)*

*Carbohydrate: 11% (n=163)*

*Saturated fat: 11% (n=155)*

*Both Total & Saturated fat: 8% (n=120)*

*Serving size: 4% (n=61)*

*Serving per package: 2% (n=35)*

It is notable that most responses were related to the amount of fat in the product. Four percent (4%) of mentions related to serve information.

#### **Ingredients List**

Ten percent (10%) of mentions related to information present in the ingredients list. The primary responses were<sup>1</sup>:

*Ingredients: 63% (n=121)*

*Strawberries / fruit content: 29% (n=44)*

*Sugar: 23% (n=34)*

<sup>8</sup> Note: Percentages cannot be added as this was a multiple response question.

## 4.2. NIP Interpretation

Questions 10-12 involved three short exercises that tested respondents' ability to analyse and interpret the NIP. Each exercise asked respondents to use a mock-up label card to answer three questions:

1. *Which of these foods do you think would be a wiser choice for a healthy diet?*
2. *Which column of information did you mostly use to make your decision?*
3. *Which nutrients did you mostly use to make your decision?*

At the third question respondents were probed fully by the interviewer so that full rather than single response answers were captured (eg, If a respondent used fat and sugar in their decision making).

In order to contain the interview duration, and avoid respondent fatigue respondents were only asked to do two of the three exercises. Question 10 (snack foods) was asked of all respondents, questions 11 (cracker biscuits) and 12 (chicken soup) were each rotated between respondents so that half of the total sample answered each question. The reader is referred to the PowerPoint Report for a copy of the stimulus materials and graphed results (Slides 60-70).

It should be noted that questions related to the order in which nutrients are listed in the NIP were not included in this study. However, the qualitative research reported that one of the reasons some consumers found NIPs confusing to use was the lack of consistency between products regarding the various nutrients that were listed, and the varying order in which they were listed by different manufacturers.

### **NIP Exercise – Snack foods**

Respondents were shown two NIPs side by side (Product A and B) and asked: *Which of these foods do you think would be a wiser choice for a healthy diet?* The correct response was Product B which was significantly lower in sugar (12.2g/100 versus 30.2g/100g).

Thirty five percent of respondents chose the correct product, while 39% selected the alternative product. A further 13% responded that it was too hard to choose and 8% reported that the two products were equal.

When respondents were asked *Which column of information did you mostly use to make your decision?* just over half (54%) of respondents reported using the *average quantity per serving* column. Thirty percent of all respondents selected reported the *average quantity per 100g* column. A smaller proportion (15%) reported using both columns. Either column could have been used (as serve sizes were the same for both products) but the fact that over half chose to use the *per serve* column gains significance in the context of the results in the next two exercises, whilst serve sizes varied between products.

Respondents were asked: *which nutrients did you mostly use to make your decision*. Whilst 48% reported using sugars (the appropriate nutrient to make their decision) the majority (64%) referred to total fat. Of those who did refer to sugar in their interpretation (48%), only half (56%) made the appropriate product selection. One quarter of those who referred to sugar (24% of 48%) selected the higher sugar product. The rest said it was hard to choose because Product A is better in one way, Product B is better in another (13%), or they didn't know (<1%).

**Summary:**

In this exercise, it appears that the majority of respondents did not consider the product's overall nutritional value but concentrated on one nutrient. They did not demonstrate an ability to correctly interpret the NIP. As many respondents who answered correctly (35%) answered incorrectly (39%).

When considered in isolation of the remaining exercises, these results indicate that consumers are confused about how to carry out product comparisons in order to make healthier choices. This confusion appears to relate to determining the relative value of nutrient composition (ie, what nutrient value(s) should carry more consideration in product selection). Given that two thirds of respondents referred to fat values, it could be hypothesised that a substantial proportion of respondents were led by popular perceptions about the importance of choosing 'low fat', even when their final product choice was only 0.1g lower in fat (which is an insignificant difference but may not have been recognised as such) compared to the alternative that was 18% lower in sugar.

**NIP Exercise – Cracker Biscuits**

The first NIP exercise was then replicated with NIPs for either cracker biscuits or chicken soup. In the exercise for cracker biscuits the healthier product (Product A) was determined by the substantially lower amount of salt, compared to Product B.

In contrast to the first exercise, the majority (73%) of respondents chose the correct product when asked to select the healthier choice. Only 14% selected the incorrect product. A small proportion (4%) reported that the two products were both the same. Nine percent (9%) reported it was hard to choose / did not know.

In this exercise, the *average serving per 100 grams* column should have been used in the interpretation as serve sizes differ between product A and B. Only one third of respondents (31%) used the per 100g column in their decision making, however of those, three quarters made the correct product selection. Fifty five percent of respondents reported (inappropriately) using the *average quantity per serving* column, however a similar proportion (78%) still made the correct product selection. A small proportion (13%) reported they used *both columns* to make their decision.

Respondents were then asked *Which nutrients did you mostly use to make your decision?* While they should have based their decision on sodium content as both products have similar levels of all other nutrients, only 35% of respondents used sodium in their decision making. Two thirds (65%) used total fat and 38% reported using sugars. The majority of respondents who looked at sodium made the correct product selection - of those 82% correctly selected Product A.

Of concern however is that the majority of respondents who made the correct product selection (A) based their decision on total fat and/or sugars (not sodium), both of which were only marginally lower in Product A than Product B, compared to the almost 45% differential in sodium content. Again, although differences in fat and sugar content were substantially less than that for sodium, some consumers appear to have made a choice based on the levels of these nutrients. This would indicate that people are making an assessment based on their own interpretation of what is most important or of most concern.

### **NIP Exercise – Chicken Soup**

The key difference between the two product NIPs in this exercise was the substantially lower amount of fat (total and saturated) and energy in Product B. The majority of respondents made the right product selection for a healthier choice, 66% answered correctly (versus 22% who selected the alternative product, 7% reported one was better in one way, while the other was better in another, 2% who stated that the two NIPs were the same and 5% reported they don't know or found it hard to choose).

Either the *per 100g* or the *per serve* column could have been used in interpreting the NIPs, as serve sizes were the same for both products. Preference for each column was evenly divided; 54% reported using the *per serving* column to reach the decision, and 53% reported the *per 100g* column and 13% reported using both.

When asked what nutrients they used to make their decision, 68% reported *total fat*, 34% stated *sugars*, 33% reported *energy*, 31% reported *saturated fat*, and 22% reported using *sodium*. Once again, reference to fat exceeded all other nutrients, although use of energy values was higher than in other exercises where energy content was the same for both products. The majority of respondents who looked at total fat made the correct product selection (79%), as did those looking at energy (59%). However, nearly one third of those who used energy in their decision making (30%) still incorrectly selected Product A.

### **Summary**

The proportion of ‘correct’ (ie, healthier) product selections in the second/third exercise were much higher than in the first. There are at least two reasons that could account for this, both of which have implications for education strategies as well as any review of labelling effectiveness:

- Firstly, it could be that the second exercise undertaken by each respondent (cracker biscuits or chicken soup) was easier, although this is not likely. The cracker biscuits exercise involved assessing differences of the same magnitude, for only one nutrient (all other nutrients being of similar value between products), although interpretation was much easier if respondents used the per 100g column instead of the per serve column. The chicken soup exercise could be argued as easier again, because the NIPs differed on two nutrients, fat and energy (both in the same direction) – ie, the ‘weight of evidence’ may have made interpretation easier.
- Second, it could be that a ‘familiarity’ or ‘learning’ effect was at play, ie, respondents became better at interpreting the NIP having practised the task in the first exercise. If such an effect did occur, this could also suggest that respondents don’t in fact need much practice to become better at interpreting NIPs, particularly when ‘learning’ under a structured, but fairly simplistic exercise.

### **NIP Exercise – Frozen Dinner**

For this exercise, respondents were shown NIPs for a frozen dinner and asked 2 different questions that tested their label literacy (ie, ability to find and report nutrient values) for different serve sizes (ie, no comparison of nutrients).

Respondents were firstly shown a single NIP and asked *how much saturated fat do you think there is in the whole packet?* Two thirds (65%) correctly reported the fat information; a further 12% looked at the wrong fat values.

Respondents were then shown another two NIPs of frozen dinners, and asked: *Which dinner would you give the most...* and were asked to reply for *energy, sodium, total fat* and *saturated fat*. Seventy seven percent of respondents achieved 4 correct responses.



**Summary/conclusions about NIP interpretation**

- Use of the *per serve* column appears to be either an intuitive or habitual preference, which in the case of product comparison, can lead to the wrong conclusions about what is the healthiest choice. The qualitative research that preceded this study adds weight to this conclusion – consumers did not then, nor do they in this study, appear to understand that the per 100g column is most useful for product comparison when serving sizes differ;
- Fat dominates all thinking – it appears that even when two products differ markedly in a nutrient other than fat, there is a significant proportion of consumers who will be led by the ‘fat is bad, above all else’ theory. This group of consumers, it is hypothesised, will select a product that is only marginally lower in fat (e.g., 0.1g) over one that is substantially lower in another nutrient (e.g., sodium). The consumers in this study at least, do not appear to have any sense of the relative balance of nutrient values that should guide their selection. [This conclusion does not of course take into account the fact that there will be some consumers who, because of special needs, will select products arbitrarily on the basis of one nutrient only].
- Consumers in this study do not appear to have any major trouble in reading and interpreting NIPs for a single product (their difficulty lies in product comparison – see dot point one). Furthermore, it could be concluded that some consumers learn fast when the learning is facilitated, such as it was in this study. Participation in the task itself could well have been an educational process – some interviewers reported anecdotally that when they asked the subsequent questions requiring respondents to explain how product selection was made (which column,? which nutrient?) some respondents at that point realised they had made the wrong selection.

It should be noted that these conclusions are speculative, and dedicated research should be conducted to truly understand NIP interpretation.

Again for reasons of containing interview duration and respondent fatigue, respondents were asked only a selection of the remaining interpretation questions. Through even rotation in two batches of questions, half the sample was asked either questions 15-18 or 19-20.

### 4.3. Interpretation of the ingredient list

In question 15a respondents were firstly asked whether they knew if the ingredients are presented in any particular order. Almost half the sample (47%) correctly indicated 'yes', that the ingredients are listed in a particular order (37% said 'no' and 16% didn't know).

Interestingly, two thirds (66%) of those who did think ingredients were listed in a particular order were aware that they are listed in descending order (25% of the total sample). Of the remainder of respondents, 6% stated that the ingredients were listed in ascending order; 9% reported that they did not know, and 19% selected 'other'. There was some concern amongst the researchers that this question would falsely elevate the proportion of respondents who selected either 'descending' or 'ascending' order because respondents would assume that their real choice of response was one of the two. The fact that one fifth of respondents felt that an 'other' response was correct gives confidence that 'true' in the validity of responses to this question.

### 4.4. Interpretation of percentage labels

There were two exercises which aimed to assess the interpretation of percentage labels (questions 16 a and b).

#### Percentage labelling exercise – Strawberry yoghurt

Respondents were shown a picture card with the nutrition label for strawberry yogurt, including an ingredients list featuring a percentage label (strawberries 9%). They were given three possible responses to the question *what does the nine percent mean after the ingredient 'strawberry'?*

Nearly three quarters (71%) provided the correct response - 9% of this product contains strawberries; 18% responded that the ingredient "strawberries" is only 9% strawberries, and the remaining 11% selected 'other' or 'don't know'.

#### Percentage labelling exercise – Fruit juice drink

Respondents were then shown a picture card featuring a different ingredients list and percentage label, for fruit juice drink. When asked: *what percentage of this product would you say comes from fruit?* the majority of respondents (84%) answered correctly, summing the percent given for pineapple and mango puree.

#### **Summary**

Although two fairly simplistic (but common) examples of percentage labels were used in these exercises, the results suggest that most consumers have no trouble correctly interpreting percentage labels. The qualitative research<sup>9</sup> indicated that the biggest challenge in ensuring that consumers use and benefit from percentage labels is making them aware that they exist.

<sup>9</sup> Australia New Zealand Food Authority (ANZFA) 2001. *Food labelling issues, NFO Donovan Research report to ANZFA, December 2001.*

#### 4.5. Interpretation of allergen labels

In question 17 respondents were shown an example of a product (chocolate bar) with an allergen statement, and asked *imagine if you suffered from an allergy when eating nuts, how useful would you find a statement on a snack bar that said ‘may contain traces of nuts’?* From a choice of three responses, over half (53%) of respondents selected *very useful, because I am told when there is even a chance that nuts are present*. Twenty six percent stated it was *not very useful, because it doesn’t say whether nuts are definitely in the product* and the remaining 20% said *quite useful, because it reminds me I may be eating a product containing nuts*.

Of more interest is how those results change when we examine the responses for respondents with special dietary needs. People with special needs were most likely to consider the allergen statement ‘not very useful...’ (29% any special need versus 21% no special need, compared with 26% total sample). Importantly, the results differed more significantly with a respondent’s type of special need with 36% of those with an allergy to nuts and 28% with other allergies not finding it useful

Furthermore, consumers who purchase foods for allergen sufferers – the audience for whom the ‘may contain’ allergen statement is intended - were the least likely of all respondents to find this label to be very useful (42% allergy to nuts and 44% other allergies versus 53% total, these are statistically different results).

#### 4.6. Interpretation of date marks

Respondents were shown an example of a date mark on a package, and asked *Which of these two statements do you think applies to a use-by date?*. Fifty six percent were aware that *it is illegal to sell a food product past its use-by date as the food can be potentially harmful*. However, 44% of respondents responded *the use-by date is only a guide – it is quite safe to eat some food products after the use-by date has expired*.

The fact that just under half of the consumers in this study did not have accurate information about the date mark is of concern given that the date mark is the most widely recognised and most frequently used of all label elements. There are potential public health and safety concerns if a product is consumed after the ‘use by’ date has expired.

#### 4.7. Interpretation of country of origin labels.

In question 19 respondents were shown three types of labels that describe country of origin: a ‘made in...’ label; a ‘product of’... label; (Australian and New Zealand versions used) and a ‘made from Australian/New Zealand ingredients’ label. Respondents were asked to select which product has the most Australian/New Zealand ingredients.

The highest proportion of respondents (60%) correctly selected the ‘product of’ label. Nearly one third (31%) selected the ‘made in’ label, 3% selected the ‘made from Australian/NZ and imported ingredients’ label and 6% stated that they did not know.

Interestingly, significantly more New Zealanders incorrectly selected the ‘made in’ label (37% versus 27% Australians), though this is not surprising given that mandatory country of origin labelling applies only to a few products in New Zealand.

#### 4.8. Interpretation of nutrient claims.

Questions 20a-d measured consumer understanding of nutrient claims. The claims investigated were: “lite”, “no added sugar”, “reduced in salt” and “94% fat free”.

##### ‘Lite’ claim – Strawberry Yoghurt

A picture of a strawberry yoghurt package with the nutrient claim “Lite” was shown to respondents, who were asked to select *which of the following does lite refer to?* (fat, sugar, energy, colour, fruit content, any of the above, don’t know). Multiple responses were allowed. The majority (77%) responded *fat*. A further 19% responded *sugar*, 6% said *energy*, 3% said *colour* and 2% said *fruit content*, 8% said *any of the above* and the same proportion did not know (8%).

Respondents were then asked how confusing they felt the claim was. Most respondents found this labelling element *very confusing* (29%) or *a bit confusing* (45%), however one quarter (25%) reported that it was *not at all confusing*.

When asked about how misleading they thought the term was, 33% stated it was either *very misleading*, 46% said *a bit misleading*, and 20% stated it was *not at all misleading*.

##### ‘No added sugar’ claim – Tinned Peaches

Respondents were shown a picture of a tin of peaches displaying the term ‘no added sugar’. They were subsequently asked: *would you say this term (‘no added sugar’) means this food.....* Responses and results are detailed below:

*Could be either a low, medium or high sugar food:* 38% (correct)

*Contains small amounts of sugar:* 30%

*Contains no sugar:* 28%

*Don’t know / not sure:* 4%

The results show that consumers are confused about what this claim means, with responses evenly distributed between the three response options above. In addition, those consumers who responded ‘don’t know’ were then asked if they were not sure because they found the claim confusing or misleading. Just over half (55%) reported that they found the claim confusing, and one third (35%) reported that they found it misleading.

*‘Reduced in Salt’ – Baked Beans*

After being shown a picture card of a can of baked beans displaying the term ‘reduced in salt’, respondents were asked whether they would ‘say *this food...*’ Responses and results are detailed below:

- Contains less salt compared to similar food labelled ‘low salt’ : 46%*
- Contains the same amount of salt compared to similar food labelled ‘low salt’: 26%*
- Contains more salt compared to similar food labelled ‘low salt’: 11% (correct)*
- Don’t know / not sure: 17%*

The majority of respondents were not able to correctly interpret the ‘reduced in salt’ claim. More importantly, almost half interpreted the claim in a way that would lead them to make a poor choice if they were trying to purchase a low-salt product.

Respondents who indicated that they didn’t know the answer were then asked if they were not sure because the term was confusing, misleading or neither. Sixty five percent said it was because they found the claim confusing and 28% found the claim misleading.

*‘94% fat free claim’ – Rice crackers*

After being shown a picture card of a packet of rice crackers displaying the term ‘94% fat free’, respondents were asked whether they would ‘say *this food is...*’ Responses are detailed below:

- A low fat food: 75%*
- A medium fat food: 16% (correct)*
- A high fat food: 3%*
- Don’t know: 7%*

Three quarters of respondents incorrectly interpreted this term to mean the food was low fat. Of the 7% who didn’t know, 49% stated that this term was confusing, and a similar proportion (48%) reported it was misleading.

**Summary – Nutrient Claims**

These results show clearly there is much confusion, and misinterpretation by consumers regarding nutrient claims such as the claims tested. Not only do many consumers misunderstand the real meaning of these nutrient claims, but given their responses it is likely that they would make poor food choices as a result.

## 5 SEGMENTATION OF CONSUMERS

### Overview of findings – how do the segments differ?

The average number of elements used was five (5), though ranged from one to fourteen. The number of label elements used by consumers increased with stronger motivation and/or capacity (see Appendix 1). Although higher motivation and capacity appear to predict higher use of labels, more research is needed to understand whether this is true for all label elements, or just some and which ones.

Somewhat surprisingly, there were few statistically significant differences between the demographic characteristics of most of the segments. The main differences between the segments, in terms of the motivation, capacity and demographic characteristics are addressed in the PowerPoint slides 150-172 and in Appendix 1.

The lack of major differences in demographic characteristics between the segments also suggests that a mass population approach to information and education strategies is likely to be most cost-effective. There appears to be an argument for targeting males as an audience in their own right (given that males dominate the two lowest using segments, with accompanying low levels of motivation and capacity), however a broad-brushed approach to the dissemination of messages, information and education would be of benefit to all segments.

Some of the capacity factors limiting label use are beyond FSANZ's sphere of influence, for example the amount of time a person has to read labels while shopping. However, in terms of actioning the findings to increase consumer use of some or all of the label elements, the results indicate that increasing a consumers' motivation, without addressing capacity, is not sufficient. If consumers are to use label information more (or more often), then they need to be enabled, via information, education and practice.

It should be noted that the purpose of this study was not to conduct segmentation analysis. Segmentation analysis has been conducted as part of several levels of advanced analysis undertaken by NFO Donovan Research to further interrogate the data for additional insight. The segmentation analysis attempted to identify the number and characteristics of segments relating to use of all of the label elements in the study. However the inclusion of so many elements in the analysis has produced segments which do not differ greatly on a large number of characteristics.

Nonetheless, the segmentation analysis has produced results that could be used to assist FSANZ in developing food standards in the future, and that would be useful in developing education strategies. A worthwhile follow up exercise would be to explore the number and nature of segments within a single label element, for example how do consumers who use the NIP vary, if they vary at all.

## **APPENDIX ONE SEGMENTATION ANALYSIS**

## Why use a segmentation approach?

Segmentation analysis is used to group individuals into segments with like characteristics. Segmentation is a way of examining whether the sample population is homogeneous (ie, basically one single group with similar attitudes and behaviour) or heterogeneous (ie, comprised of several distinct segments, each with different preferences, attitudes etc.).

Traditionally, segmentation analysis involves the disaggregation of consumers by demographic characteristics, such as age, gender, educational qualifications, income etc.. However, when trying to characterise consumers with regards to the number (and also type) of label elements they use, the qualitative research indicated that there were several factors at play, other than demographics. Two key factors were the motivation of the consumer, and the reasons behind their motivation, and a consumer's capacity to use label elements, including their prior experience using labels.

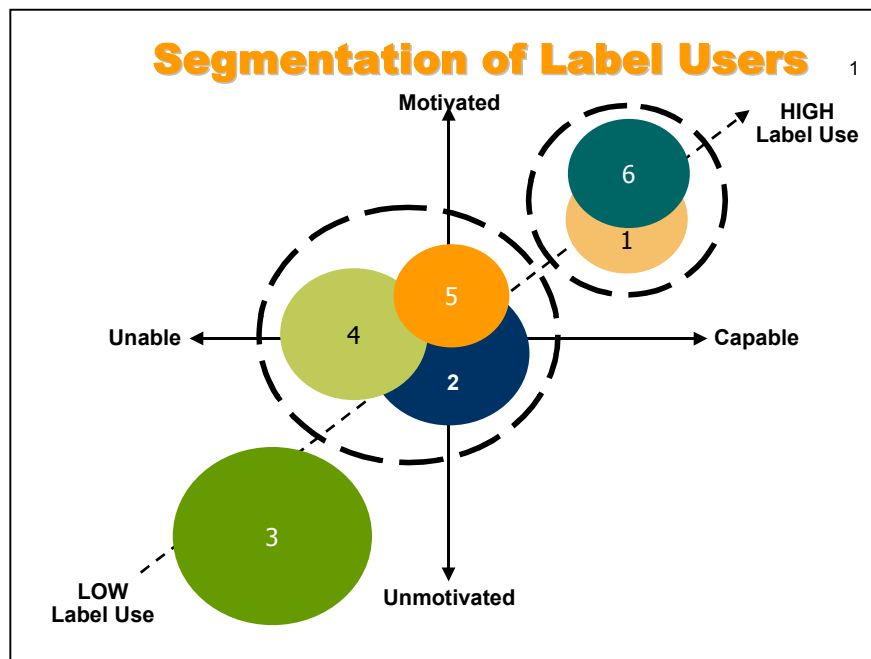
Therefore, the segmentation model (below) is built around these two dimensions. "Motivation" and "capacity" are broad, qualitative terms, which emerged from the qualitative research, and included factors such as:

- Motivation – how health conscious a person is; whether they are selecting foods for a special health need; their interest in food label information; and their perceived importance and usefulness of food label information;
- Capacity - a person's past 'success' in finding food label information; whether they feel they have sufficient time to read labels while shopping; and their perceptions of how clear and trustworthy the label information is.

There were questions in the interview questionnaire that addressed each of these factors. Responses to these questions were compared between each segment, and used by the researcher to qualitatively 'rate' each segment as 'high', 'moderate' or 'low', thus allowing each segment to be placed where they best 'fit' on the model below. Intuitively, it appears that the motivation dimension is stronger than the capacity dimension, however this has not been tested statistically.



**THE SIX SEGMENT PICTURE**



The two segments with the highest motivation and capacity (segments 1 and 6) also use the greatest number of label elements (an average of 7 elements compared to an average of 5 elements for the total sample). These are also the smallest segments in terms of the number of consumers, each comprise 11% of the sample population.

The largest sized segment (segment 3) comprises one third (31%) of the total sample and it includes the lowest users. This segment uses an average of 4 label elements, and is characterised by the lowest motivation and low-moderate capacity.

The remaining three segments (segments 2, 4 and 5) are clustered together, around moderate levels of motivation and capacity. Segments 2 and 4 are relatively large, each comprising almost one fifth of the sample (19% and 17% respectively). Both segments use the average number of label elements (5). Segment 5 is smaller (10%) but uses one more element on average (6 in total) compared to the other segments around it.

The main differences between the segments, in terms of the motivation, capacity and demographic characteristics are summarised over the page, however note that few of these differences are statistically significant. More detail is provided in the PowerPoint slides 150-172.

**Segment 1 – 11%**

- Use 7 elements (highest)
- More couples
- More middle aged
- Higher income
- Strongest interest in label information
- No more success in finding information than others
- Time not a barrier

**Segment 2 – 19%**

- Use 5 elements (average)
- More middle aged
- More couples
- Time not a barrier
- Lower trust of some label elements
- Find label information less clear & easy to understand

**Segment 3 – 31%**

- Use 4 elements (lowest)
- More males
- Younger and older ages
- More singles, fewer children
- Few special needs
- Time is a barrier
- Lower trust of label elements
- Find label information less clear & easy to understand

**Segment 4 – 17%**

- Use 5 elements (average)
- More males
- More couples
- Few special needs
- Lower trust of label elements
- Find label information less clear & easy to understand
- More Australians
- Time not a barrier

**Segment 5 – 10%**

- Use 6 elements (above av.)
- More females
- More couples, more children
- Younger, fewer older aged
- Few special needs
- Trust label elements
- Find label information clear & easy to understand
- Time not a barrier
- More speak other languages

**Segment 6 – 11%**

- Use 7 elements (highest)
- More females
- More couples, more children
- Health conscious
- More special needs
- Trust label elements
- Find label information clear & easy to understand
- Time not a barrier
- Most English speaking

**Implications and food for thought**

Some segments are clearly more male, more dominated by couples with children, or people with special needs. However there appears to also be a complex interplay between the influences of motivation and capacity, in terms of driving the number of labels a consumer uses. Addressing motivation influences, for example targeting people with special needs, those who are most health conscious, or those most interested in label information – without addressing capacity influences – will not necessarily result in increased use.

Indeed, the analysis suggests that some consumers who use the most label elements (segment 1), who are most motivated, are reporting no more success in finding the information that they need than consumers in lower motivated, and lower-use segments. These people appear to be ‘soldiering on’ because their motivational reasons dictate their behaviour. This segment could be vulnerable to reducing their use of label elements if their motivation wanes. Furthermore, it will be difficult to increase label use by consumers in less motivated segments, without addressing the capability issues, particularly those associated with trust, and finding label elements easy to use and understand.