

**TECHNICAL REPORT: CONSUMER RESEARCH ON 'NO ADDED
SUGAR' CLAIMS**

**The effect of a disclaimer on consumer interpretation of the 'no added
sugar' claim**

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Executive Summary

Food Standards Australia New Zealand (FSANZ) commissioned TNS Social Research (TNSSR) to carry out an investigation on consumer understanding of the ‘no added sugar’ claim. The aim of the research was to investigate how the claim of ‘no added sugar’ is interpreted by consumers when used on products that contain natural sugars, and how the disclaimer ‘contains natural sugar’ impacts on this interpretation.

The study was carried out using online survey methodology operated by TNSSR. Members of their online panel aged 18 years and over were emailed a survey on the ‘no added claim’. One thousand and seven respondents from Australia (506) and New Zealand (501) completed the five minute survey. The response rate was 34%. Of the 1007 respondents, 505 were exposed to product stimuli without the disclaimer (control group) and 502 were exposed to product stimuli with the disclaimer ‘contains natural sugar’ (test group). Stimulus mock-ups included a total of six products with low, medium or high natural sugar levels. The low, medium and high sugar categories were arbitrarily determined by FSANZ for the purpose of this study. Respondents could look at nutritional information on the label and the list of ingredients if they chose to do so. Demographic data and information on health consciousness were also collected.

Distributions of demographic data for age, gender, level of education and household income were all similar to corresponding census data for both New Zealand and Australian respondents. Fruit and vegetable consumption of Australian respondents were similar to the reported consumption in the 2004/05 Australian National Health Survey. It was not possible to compare vegetable consumption of the New Zealand respondents with corresponding national data because of the use of different groupings of serves/day, however, for fruit consumption, slightly more respondents said they consumed two or more serves of fruit/day compared with the 2002/03 New Zealand National Health Survey data. Over half of the total respondents (53%) had a medium level of health consciousness, while 28% and 19% of respondents had high and low levels of health consciousness respectively.

There was a high level of awareness amongst respondents in the control group that products with the ‘no added sugar’ claim can contain natural sugar. Seventy percent of respondents in the control group said the low sugar products contained some (low, medium or high) sugar, and 80% of respondents in the control group said the medium and high sugar products contained some (low, medium or high) sugar.

There was a positive but small effect of the presence of the disclaimer ‘contains natural sugar’ on the interpretation of the ‘no added sugar’ claim. For all products, significantly fewer respondents (about 10% less) in the test group thought the products contained no sugar compared with those in the control group. In addition, 2-7% of respondents in the test group made more accurate assessments of sugar level compared with respondents in the control group.

A high percentage of respondents (40-50%) thought that medium and high sugar products either had no sugar or were low in sugar. However this finding may be inflated as some respondents may reserve their use of medium and high sugar for products not included in among the stimuli, for example sweets.

Approximately 60% of all respondents claimed to use the nutrition information panel when assessing the sugar levels of the products. This is much higher than the 33-39% of respondents who were recorded as ‘turning’ over the product to view the list of ingredients and nutrition information panel on the six products. There could be a number of reasons for this discrepancy including the respondents’ misinterpretation of the question and /or respondents desire to give the ‘correct’ answer rather than state their actual use of the nutrition information panel. There was little effect of the presence of the disclaimer on respondent’s decision to ‘turn’ the product over.

In conclusion, the presence of the disclaimer ‘contains natural sugar’ does not result in a major improvement in the interpretation of the ‘no added sugar’ claim. While respondents had a good understanding that products with the ‘no added sugar’ claim may contain naturally occurring sugars many had considerable difficulty in correctly assessing the sugar level of products. The study suggests that an alternative risk management approach is required to minimise consumer misunderstanding of the ‘no added sugar’ claim.

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1. Introduction

1.1 Background

The ‘no added sugar’ claim has been permitted on food products for a number of years under the Code of Practice for Nutrition Claims in Food Labels and in Advertisements (CoPoNC). CoPoNC was developed for the Australian food industry but it is also used voluntarily in New Zealand. As of August 2006, the claim was being used on a range of products including fruit juices, fruit drinks, canned fruit, muesli type bars, frozen fruit, ice cream, peanut butter, yoghurt, vegetable juice, muesli type breakfast cereals, fruit leather, dates, rolled oats, biscuits and fruit spread.

FSANZ has previously carried out research on consumer understanding of the ‘no added sugar’ claim (FSANZ, 2003a). In a quantitative study 1940 door-to door interviews were conducted to explore consumer attitudes, beliefs, interpretation and use of label elements. Of the 934 respondents who completed the closed question in relation to a ‘no added sugar’ claim on canned peaches, 28% said the product contained no sugar, 30% said the product contained small amounts of sugar, 38% said the product could either be a low, medium or high sugar food and 4% were not sure. Results suggested that consumers were confused about what this claim means with responses evenly distributed between the three response options.

In a qualitative study, 10 focus groups of women aged 35-64 yrs who were highly health conscious discussed various nutrient content claims (FSANZ 2003b). The ‘no added’ claim was unequivocally understood to mean that the product had only ‘natural’ sugar with nothing added. It was also widely understood that ‘no added’ claims did not imply that the product had ‘none’ of the nutrient in question, although there was an underlying belief that these products would be ‘low’ in the claimed nutrient. Participants were far less sceptical of ‘no added’ claims than most other claims and the use of the nutrition information panel to verify ‘no added’ claims was therefore less necessary. There were mixed views on the value of the disclaimer ‘contains natural sugar’. ‘Inquirers’¹ and those with special health needs felt the disclaimer was unnecessary while other participants thought the disclaimer was helpful because it removed the ambiguity by clarifying whether the product was free of the nutrient.

In view of the apparent consumer confusion with the ‘no added sugar’ claim that was identified in the previous studies, FSANZ decided to further explore consumer interpretation of the ‘no added sugar’ claim in a dedicated study. The intention was that the results of this study would help inform decision-making on the regulation of the ‘no added sugar’ claim in the new standard on Nutrition, Health and Related Claims.

1.2 Research objectives

The overall aim of the research was to investigate how the claim of ‘no added sugar’ is interpreted by consumers when used on products that contain natural sugars, and how the disclaimer ‘contains natural sugar’ impacts on this interpretation.

¹ ‘Inquirers’ were described as ‘respondents who were interested in the health or nutritional value of the foods they buy. They often question the validity of nutrition content claims and are sufficiently motivated to further assess the nutritional value of the product, usually by using the nutrition information panel or ingredients list.’

The specific objectives of the research were to investigate:

1. **The interpretation of ‘no added sugar’** on products that contain low, medium and high levels of ‘natural sugars’, using a series of mocked-up labels for a range of products.
2. **The impact of the disclaimer ‘contains natural sugar’** on the interpretation of the ‘no added sugar’ claim, on products with low, medium and high levels of natural sugars.
3. **The extent of use and effectiveness of the nutrition information panel** in assisting the interpretation of ‘no added sugar’ claims.
4. **The accuracy of the assessment of sugar levels** in a range of products with the ‘no added sugar’ claim, both with and without the disclaimer.

2. Methodology

2.1 Respondent recruitment

2.1.1 The TNS Social Research (TNSSR) online panel

TNSSR recruit respondents for online surveys via offline and online sources including online banners, opt-in email invitations, online opt-in referrals from partners, rewards for recruiting friends via word of mouth, from existing telephone and face-to-face business via direct invitation, press advertisements, television advertisements and television infomercials. In order to maintain diversity and representativeness of the panel over 50% of the panel are recruited using off-line methods. As of January 2006, TNSSR had a panel size of approximately 500,000 people (including 105,000 in New Zealand) of which over 300,000 people were active (had responded to an email or visited the TNSSR website within the previous three months).

Upon visiting the panel website and becoming a member of the panel, members are obliged to complete a registration form which contains information such as gender, age, household size, income, location by postcode, marital status, education, profession, race / ethnicity and interests and hobbies. This information is then used to ensure that any sample drawn from the panel can be matched to be representative of population figures on key demographics.

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

To ensure the exclusion of ‘research groupies’ and ‘educated respondents’ TNSSR excludes any respondent from the sample who has completed any questionnaire within three months prior to implementation of a survey. In addition, any respondent who has participated in a FSANZ project is permanently excluded from participating in another FSANZ research project.

2.1.2 Study sample

Members of the TNSSR online panel in both New Zealand and Australia were sent an email inviting them to complete the FSANZ survey. All respondents were required to be 18yrs or over. Email invitations were sent to Australian panel members in five waves and New Zealand panel members in four waves. One thousand and seven respondents (506 Australians, 501 New Zealanders) completed the survey giving a response rate of 34%. In addition, a further 6% of the sample population were accounted for as follows: three (0.1%) respondents completed surveys with inappropriate answers; eight (0.3%) respondents were screened from the survey because they were under 18yrs, 85 (2.8%) respondents were screened because of full quotas for location, age and gender, and 84 (2.8%) respondents did not complete the survey. Non-respondents were not sent a subsequent reminder. An analysis of possible non-

response bias was carried out but there were no major differences identified between respondents and non-respondents.

2.2 Study design

Of the 1007 respondents, 505 were exposed to product stimuli without the disclaimer (control group) and 502 were exposed to product stimuli with the disclaimer ‘contains natural sugar’ (test group). Stimulus mock-ups included products with low (vegetable juice, yoghurt), medium (fruit & nut bar, muesli) and high (apple juice, canned peaches in fruit juice) natural sugar levels. FSANZ classified the products as having ‘low’, ‘medium’ and ‘high’ sugar levels for the purpose of this study as follows: ‘low’ - up to 5g sugar/serve, ‘medium’ – approximately 10g sugar/serve and ‘high’ – 20g sugar/serve or higher. These levels are based on the range of sugar levels in products carrying the ‘no added’ claim at the time of the study; however they form an arbitrary scale that was not verified by consumers prior to the study.

For each mocked-up product, the name of the product and the claim ‘no added sugar’ appeared on the front of the package and a real nutrition information panel and list of ingredients were on the ‘back’ of the package (see Appendix A). For the mocked-up labels seen by the test group, the disclaimer ‘contains natural sugar’ also appeared on the front of the package (see Appendix A, vegetable juice for an example of disclaimer). Respondents were able click on a button to ‘turn’ the package over to view the NUTRITION INFORMATION PANEL and/or ingredient list if they wished to. The number of respondents who ‘turned’ over the package was electronically recorded.

2.3 Development of the survey

The survey was developed by TNSSR in conjunction with the FSANZ research team. Products with low, medium and high levels of natural sugar which were carrying the ‘no added sugar’ claim at the time of the study were selected. Nutrition information panels and lists of ingredients were based on actual data for these products. Respondents were asked to assess the sugar level of each of the six products and indicate any information they may have used to make this assessment including aspects of the nutrition information panel. Questions on fruit and vegetable intake and the amount of attention paid to keeping a healthy diet were included to assess overall health consciousness of the respondents. Demographic data including gender, age, and education, number of people in the household and household income were collected. See Appendix B for the survey.

The survey was pilot tested online. A total of 20 surveys were completed and no changes were made to the survey.

The survey was implemented over five days in June 2006 and took approximately 5 minutes for respondents to complete.

2.4 Data Analysis

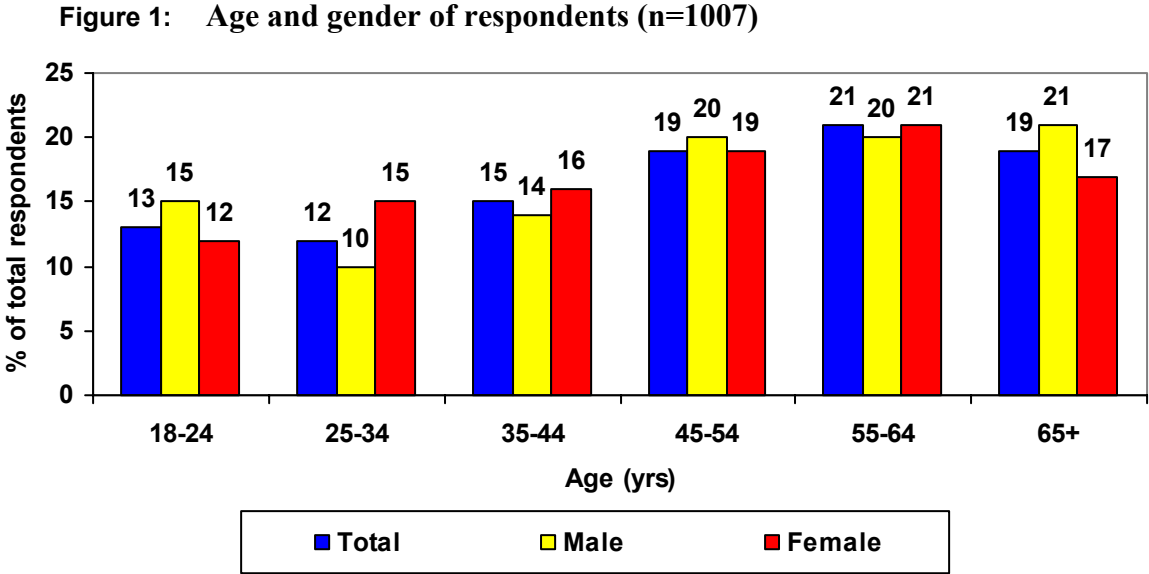
Initially chi-square analyses were performed to determine if there were any significant differences ($p < 0.05$) in the distribution of responses for the assessment of sugar levels between products with and without the disclaimer on the product label.

Where there were significant differences, a z-test for 2 sample proportions was used to test for significant differences between two samples, for example, between a low sugar product with the disclaimer and a low sugar product without the disclaimer. Significant differences are reported at the 95% confidence level.

3. Results and Discussion

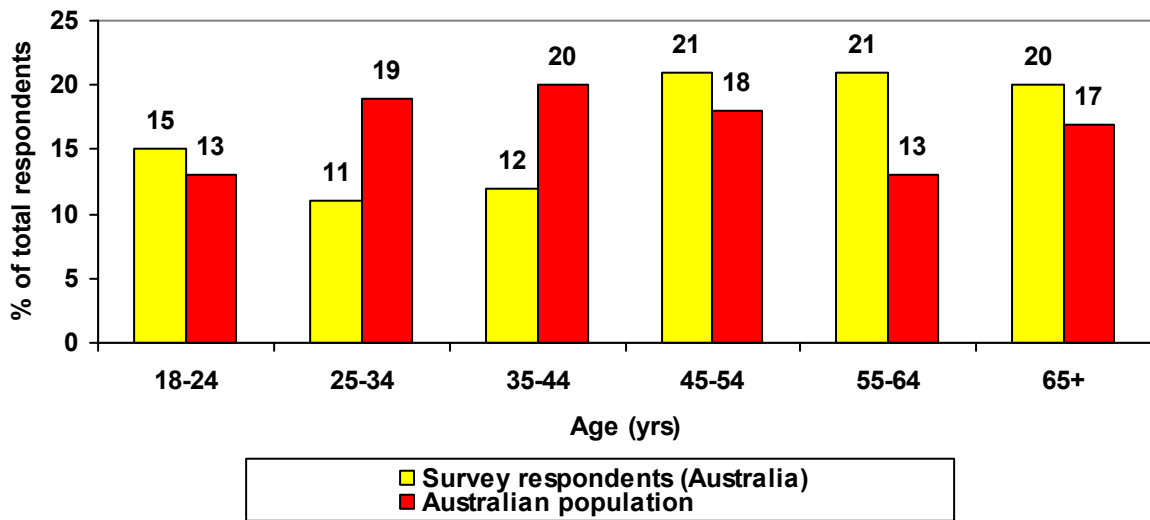
3.1 Demographic data

There were 494 male and 513 female respondents. Forty-five percent of New Zealand respondents were male and 53% of Australian respondents were male. Figure 1 shows the age distribution of respondents, and gender by age-group.



The age distributions of New Zealand and Australian respondents were compared with respective census data. Figure 2 shows the age distribution of Australian respondents compared with the Australian Census data. While the survey population is overall slightly older than the Australian population, these differences were not seen as warranting weighting.

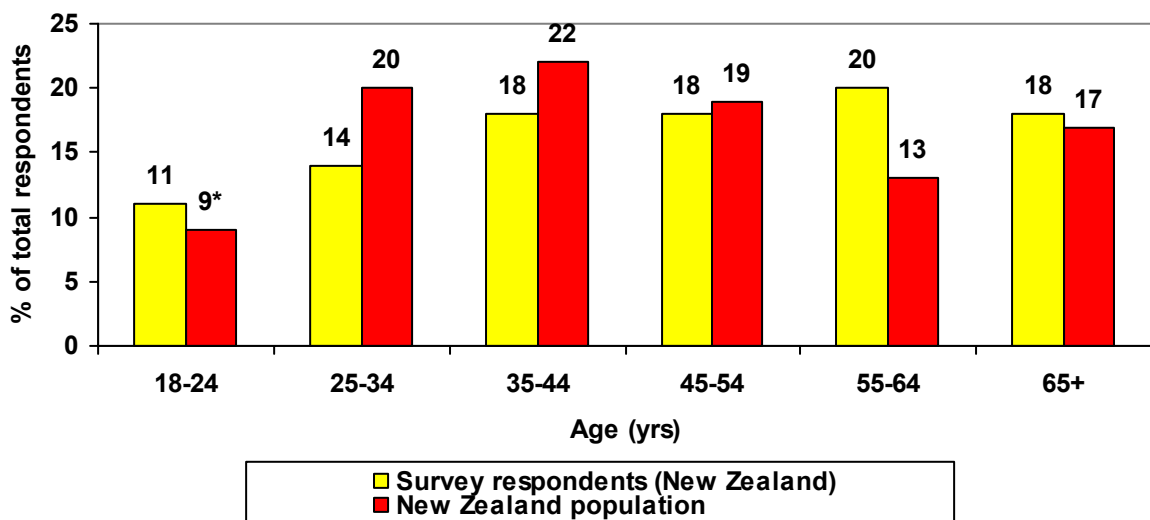
Figure 2: Age distribution for Australian respondents compared with census¹ data (n=506)



¹Source: Australian Census 2001

Similarly, when the age distribution of New Zealand respondents is compared with 2001 census figures for New Zealand, the populations are similar (Figure 3).

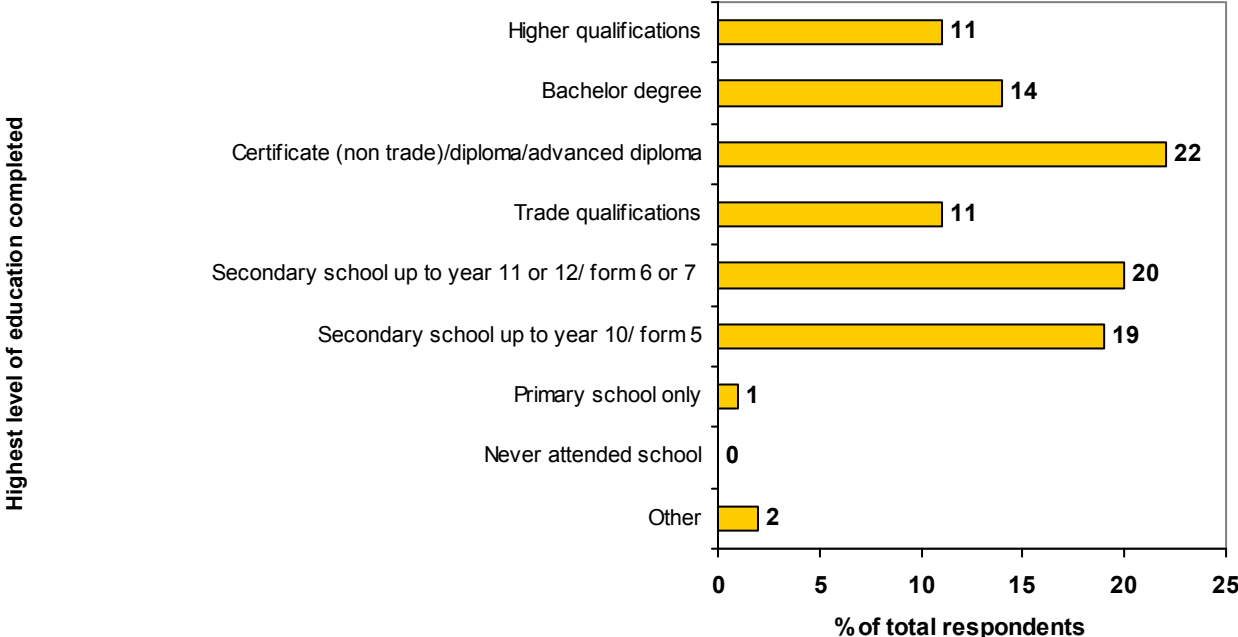
Figure 3: Age distribution for New Zealand respondents compared with census¹ data (n=501)



¹Source: New Zealand Census 2001. * Comparison figure from NZ Census is age grouping 20-24 (excluding those aged 18-19, no separate variable is available for comparison).

Figure 4 shows the level of education for all respondents. Fourteen (1%) respondents chose not to answer this question. The study data were comparable to census data for both New Zealand and Australia.

Figure 4: Education level of Australian and New Zealand respondents (n=993)



Figures 5 and 6 show the distribution of household income for Australian and New Zealand respondents respectively. Australian and New Zealand census data are collected and reported using different household income scales to that used in the survey. However, survey data were compared with available census data and no large differences were evident, apart from the lower representation of those with very low/nil income in the survey. This is expected since these groups usually have a lower participation rate in online surveys.

Figure 5: Household income distribution for Australian respondents (n=506)

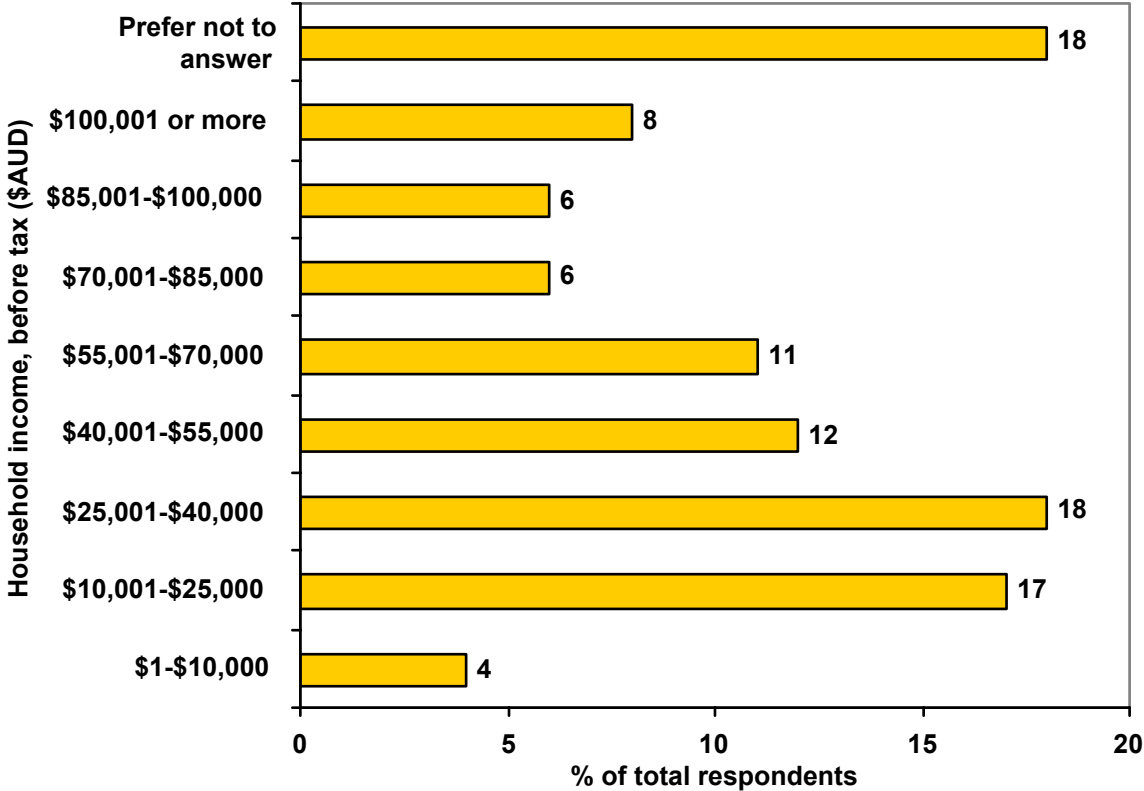
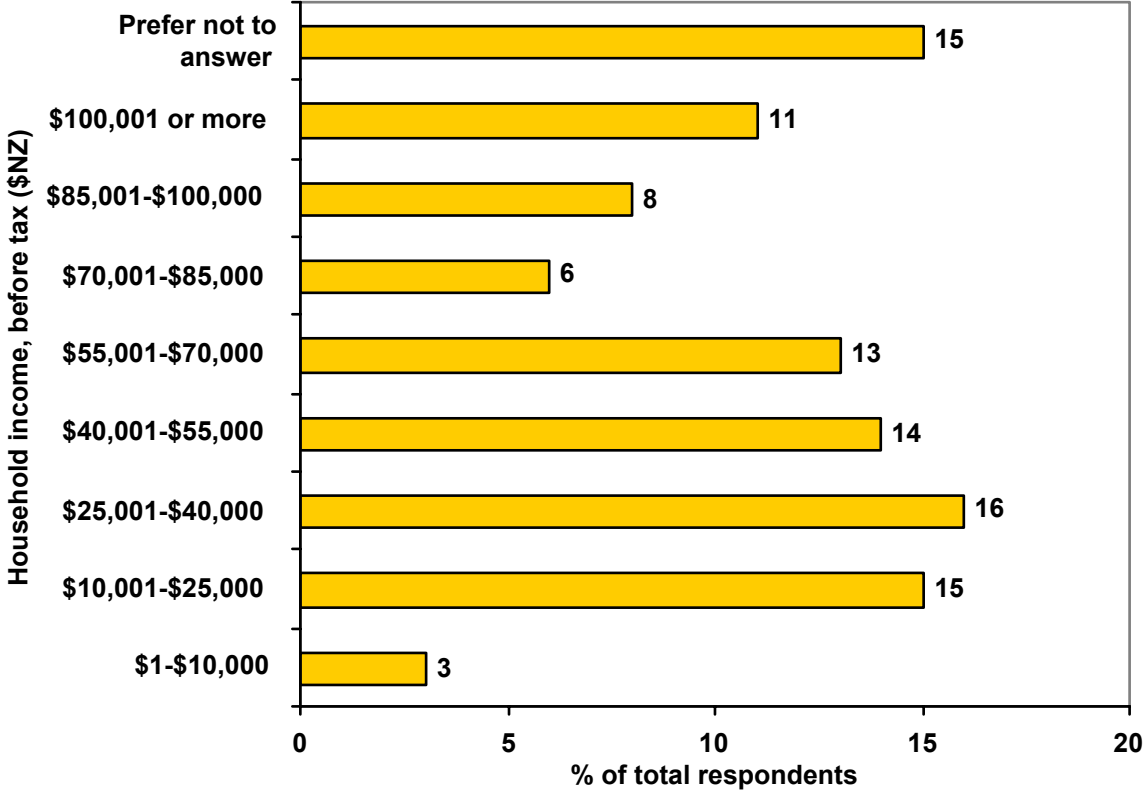


Figure 6: Household income distribution for New Zealand respondents (n=501)



The survey was completed by respondents from a variety of household types. Forty-five percent (449) of households included children. Of the households including children, 37% had children under 5yrs, 40% had children aged 6-12 yrs, and 56% had children aged 12-18 yrs.

Figures 7 and 8 show fruit consumption for Australian and New Zealand respondents respectively.

Figure 7: Fruit consumption for Australian respondents (n=506)

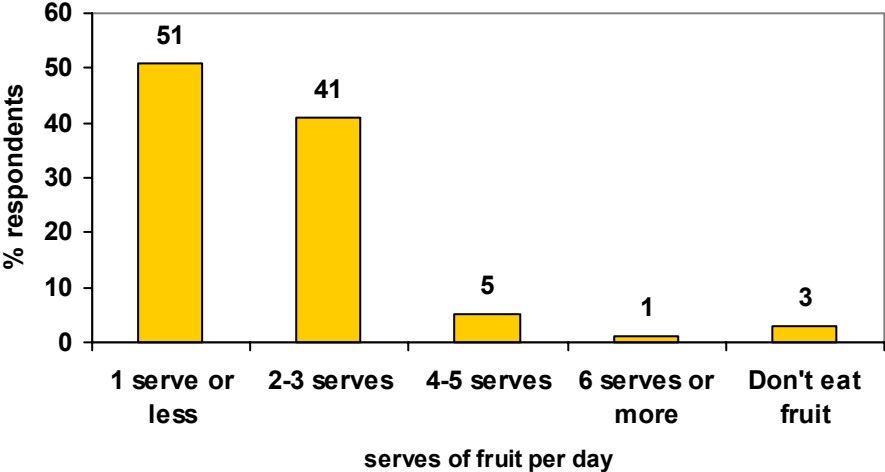
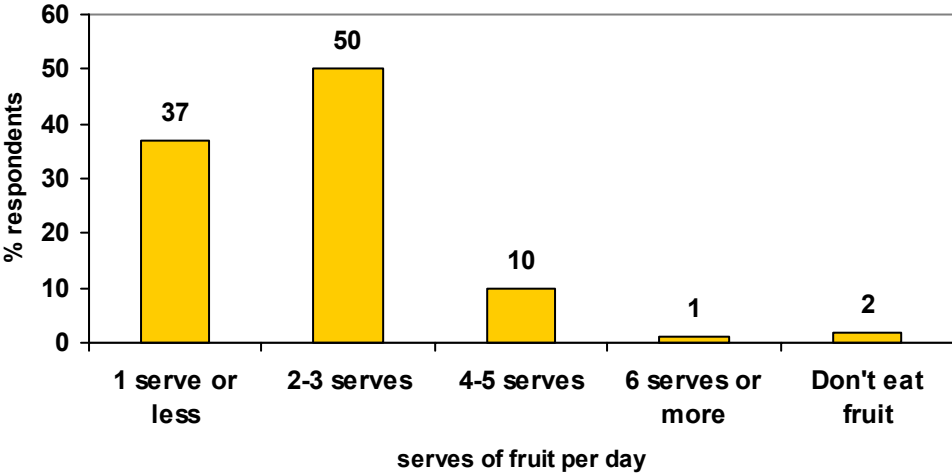


Figure 8: Fruit consumption for New Zealand respondents (n=501)

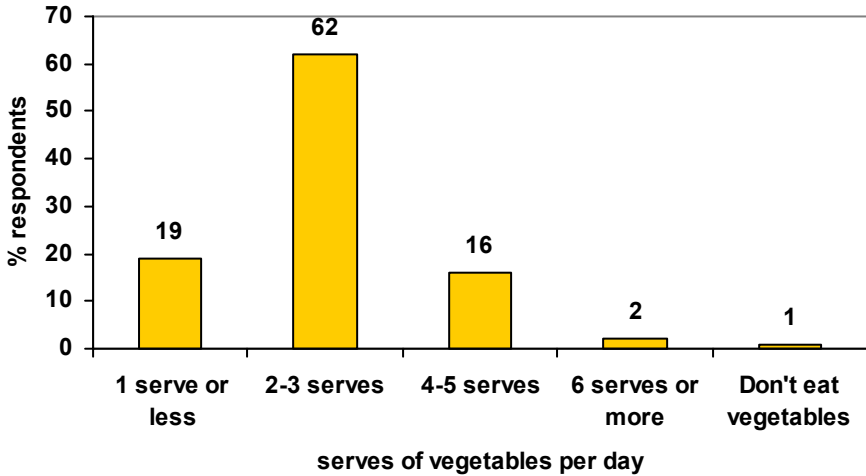


Figures 9 and 10 show vegetable consumption for Australian and New Zealand respondents respectively.

Figure 9: Vegetable consumption for Australian respondents (n=506)



Figure 10: Vegetable consumption for New Zealand respondents (n=501)



Approximately half of the Australian respondents (47%) were meeting their requirements for fruit consumption (two serves per day) but only 17% were meeting their requirements for vegetable consumption (four serves of vegetables per day). This is similar to the 2004/05 Australian National Health Survey, which found 46% of Australians were meeting their fruit requirements and 14% were meeting their vegetable requirement. These data indicate that the study sample was not different to the national population with regards to fruit and vegetable intake.

The New Zealand 2002/03 Health Survey found that 55% of New Zealanders were meeting their fruit requirement of two or more serves per day. In comparison 61% of the study sample was consuming two or more serves per day. Sixty-nine percent of New Zealanders met the vegetable requirement of three or more serves/day according to the 2002/03 Health Survey. The ‘no added sugar’ survey data were collected using different serve/day categories and so direct comparisons with the national data for vegetable intake are not possible. However, the ‘no added sugar’ survey data show a similar trend with 80% of New Zealand respondents eating two or more serves of vegetables per day.

There was a significantly greater proportion of respondents with higher levels of education (e.g. Bachelor Degrees) (17%) meeting the requirement for fruit and vegetable intake (using 2 or more serves of fruit and 4 or more serves of vegetables/day) (NZ and Australian data pooled) than those with lower levels of education (12%).

The survey included respondents with a broad range of levels of health consciousness, with 53% of respondents categorised as having a ‘medium’ level of health consciousness, 28% having a ‘high’ level and 19% having a ‘low’ level. Table 1 shows the level of health consciousness of all respondents, by gender.

Table 1: Level of health consciousness for all respondents, by gender (n=1007)

Amount of attention paid to keeping a healthy diet	Males	Females	TOTAL
Low¹	119 (24%)	74 (14%) ³	193 (19%)
Medium	256 (52%)	278 (54%)	534 (53%)
High²	119 (24%)	161 (31%) ⁴	280 (28%)
TOTAL	494	513	1007

¹ Low = very low attention and low attention

² High = high attention and very high attention

³ Sig. difference between males and females (z score = 3.9, df = 191, p < 0.05)

⁴ Sig. difference between males and females (z score = 2.6, df = 278, p < 0.05)

There were no significant differences between the health consciousness levels of Australians and New Zealanders in the study. Females were significantly more likely to have a ‘high’ level of health consciousness than males and significantly less likely to have a ‘low’ level of health consciousness than males (Table 1).

Relationships between fruit consumption and level of health consciousness (see Tables C1 and C2 in Appendix C) and vegetable consumption and level of health consciousness (Tables C3 and C4) were explored using chi-square analysis. For both fruit and vegetable consumption, New Zealand and Australian respondents with a high level of health consciousness tend to eat more serves of fruit and vegetables per day than those respondents with a low level of health consciousness (p < 0.05). This indicates that the level of health consciousness question used in this study has a positive association with fruit and vegetable consumption.

3.2 Respondent interpretation of the ‘no added sugar’ claim

3.2.1 Impact of the disclaimer on respondent assessment of sugar levels

Table 2 shows respondents’ assessment of the sugar level of the six products, with and without the disclaimer.

Chi-square analysis indicates that there is a significant difference in the overall distribution of sugar assessments between products with and without the disclaimer ($p < 0.05$). This applies to all products.

Using the z-test for two independent samples, significant differences between the proportion of respondents choosing a sugar level for a product with the disclaimer and the proportion of respondents choosing a sugar level for a product without the disclaimer were identified (Table 2). For example, for vegetable juice, significantly fewer respondents who saw the disclaimer thought the product contained no sugar compared with respondents who did not see the disclaimer. In fact for all 6 products, significantly fewer respondents who saw the disclaimer thought the product contained no sugar compared with those who did not see the disclaimer.

There are two important findings that need to be considered in conjunction with this positive impact of the disclaimer on respondent assessment of sugar levels:

- A high percentage of respondents in the control group said the products contained some sugar (low, medium or high levels). For low sugar products, about 70% respondents said the product (without disclaimer) contained sugar and for medium and high sugar products about 80% said the products contained sugar. This demonstrates a good awareness that products in this study with the ‘no added sugar’ claim do contain natural sugars.
- The reduction in the percentage of respondents stating there is no sugar in products (when seeing the disclaimer) compared with no disclaimer, is relatively small. For example, for yoghurt, 14% of respondents in the test group stated the products had no sugar compared with 25% in the control group.

Overall the results suggest that the use of the disclaimer is of no benefit to the majority of consumers in interpreting the ‘no added’ claim. In addition, many respondents appear to have difficulty in correctly assessing the sugar content of a product. A large percentage of respondents in the control group (40-50%) thought that the medium and high sugar products had no or low levels of sugar, however, this finding may be inflated as some respondents may reserve their use of medium and high sugar for products not included among the stimuli.² For instance, consumers may commonly perceive high sugar products to include lollies, ice cream, chocolate, biscuits etc. The products used in the study were chosen to represent the range of products which carried the ‘no added sugar’ claim at the time of the study. Consequently, in terms of the range of sugar content of all products available on the market, those used in the study did not cover this full range and this may have affected respondent

² On combining the data for both products in each category of sugar level, 53% of respondents in the control group assessed the low sugar products correctly, (compared with 55% in the test group) 30% the medium sugar products (compared with 37% in the test group) and only 14% correctly assessed the high sugar products (compared with 20% in the test group). Although these are statistically significant increases, the practical significance of this impact of the disclaimer is very limited.

assessment of sugar level. In any future studies, it may be useful to include some products with higher levels of sugar and also products which do not carry the 'no added sugar' claim in order to investigate the impact (if any) of the presence of the claim on the interpretation of sugar level.

Table 2: Respondents' assessment of sugar levels in products carrying the 'no added sugar' claim, with and without the disclaimer 'contains natural sugar' (n=1007)

Product		Consumer assessment of sugar level in product n (%)					TOTAL
		No Sugar	Low Sugar	Medium Sugar	High Sugar	Don't Know	
Low Sugar							
Vegetable Juice	without disclaimer	147 (29%)	280 (55%)	57 (11%)	9 (2%)	12 (2%)	505
	with disclaimer	86 (17%)	295 (59%)	95 (19%)	17 (3%)	9 (2%)	502
	Z Score	4.52*		3.56*			
Yoghurt	without disclaimer	125 (25%)	252 (50%)	96 (19%)	18 (4%)	14 (3%)	505
	with disclaimer	71 (14%)	260 (52%)	131 (26%)	25 (5%)	15 (3%)	502
	Z Score	4.40*		2.66*			
Medium Sugar							
Fruit & Nut Bar	without disclaimer	87 (17%)	117 (23%)	150 (30%)	141 (28%)	10 (2%)	505
	with disclaimer	45 (9%)	139 (28%)	180 (36%)	130 (26%)	8 (2%)	502
	Z Score	3.77*		2.02*			
Muesli	without disclaimer	96 (19%)	162 (32%)	154 (30%)	81 (16%)	12 (2%)	505
	with disclaimer	45 (9%)	168 (33%)	194 (39%)	89 (17%)	6 (1%)	502
	Z Score	4.57*		3.00*			
High Sugar							
Apple Juice	without disclaimer	88 (17%)	143 (28%)	179 (35%)	83 (16%)	12 (2%)	505
	with disclaimer	40 (8%)	157 (31%)	191 (38%)	108 (22%)	6 (1%)	502
	Z Score	4.32*			2.43*		
Canned Peaches in Fruit Juice	without disclaimer	86 (17%)	158 (31%)	193 (38%)	59 (12%)	9 (2%)	505
	with disclaimer	50 (10%)	166 (33%)	191 (38%)	89 (18%)	6 (1%)	502
	Z Score	3.25*			2.67*		

* Indicates a significant difference between with disclaimer and without disclaimer (df = 1005, p<0.05)

3.2.2 Respondent use of information to help assess sugar levels

The information respondents claimed to use when they assessed the sugar level of the products in the study is presented in Table C5 (Appendix C). Approximately 60% of respondents claimed to use the nutrition information panel when assessing sugar levels of the products, about 45% used the list of ingredients, 35% general knowledge and about 20% said they used claims on the front of the package. Respondents' reported use of information was similar for all products and there were no differences in the reported ways respondents evaluated the claim between the control and the test groups.

Data were also collected on the number of respondents who 'turned over' the product to look at the nutrition information panel and/or the ingredient list. For all products, 33% - 39% of respondents 'turned' the product over (Table C6 in Appendix C) which was substantially less than the percentage who said they used the nutrition information panel to assess sugar levels. Overall, those who 'turned' the product over were significantly more likely to have reported using the nutrition information panel (73%) than those who did not 'turn' the product over (51%). It is likely that some respondents misrepresented their use of the nutrition information panel, perhaps interpreting the question as referring to their general use of the panel and not actual use in this research study. Also, previous studies indicate that in surveys there is often a discrepancy between reported and actual use of nutrition labelling information (European Heart Network, 2003).

When the data for all products were pooled, respondents were significantly less likely to 'turn' products over with a disclaimer (34%) than those without a disclaimer (39%), however, when examining the data for each product, there was only a significant difference for canned peaches. That is, respondents were significantly less likely to 'turn' the canned peaches over with a disclaimer (33%) than canned peaches without a disclaimer (39%). Overall there was little effect of the presence of the disclaimer on respondents' decision to 'turn' the product over.

There were significant differences in the ability of respondents to correctly assess the sugar levels between those who 'turned' over the package and those who did not, for vegetable juice (without disclaimer), yoghurt (without disclaimer), fruit and nut bar (with and without disclaimer) and canned peaches (with disclaimer). However, whether 'turning' the product over increased or decreased the percentage of correct responses varied. For example, for the low sugar vegetable juice (without disclaimer), those who 'turned' over the product were more likely to correctly assess the sugar level as low (66%) compared with those who did not 'turn' over the product (49%). On the other hand, for the fruit and nut bar, those who 'turned' over the product were less likely to correctly assess the sugar level (24% (without disclaimer); 30% (with disclaimer)) compared with those who did not 'turn' over the product (34% (without disclaimer); 39% (with disclaimer)). Clearly, those respondents who did 'turn' over the products were not consistently better at correctly assessing the sugar content of the product. This could be due to a number of reasons including respondents looking at the list of ingredients rather than the nutrition information panel, and/or not being able interpret the numbers in the nutrition information panel when they did look at the panel information or not being aware of the distinction between low, medium and high sugar levels.

3.2.3 Respondent use of information in the nutrition information panel

Tables C7 and C8 (Appendix C) show the information respondents used in the nutrition information panel.

Overall, of those who used the nutrition information panel, more respondents stated they used the per 100g figures than per serve figures which was similar for all products with and without the disclaimer. There were no significant differences between the control and the test groups in the types of information (per serve, per 100g etc) used in the nutrition information panel (Table C7). Over 80% of respondents who used the nutrition information panel said they used the values for sugar. For some products (vegetable juice, yoghurt, fruit & nut bar, apple juice, canned peaches), respondents in the test group who said they used the nutrition information panel to evaluate the claim, were significantly more likely to say they looked at carbohydrates than those in the control group (Table C8). In addition, respondents in the test group were significantly less likely to look at energy levels than respondents in the control group. Possible reasons for these differences are not clear and would require further investigation in future research. However, it should be noted that the high number of pair-wise comparisons made in this study does increase the likelihood of obtaining spurious significant differences.

3.2.4 Relationship between health consciousness and assessment of sugar levels

Results indicated that there was no major association between respondent level of health consciousness and their ability to correctly assess sugar levels. In the test group, there was no relationship between level of health consciousness and respondent ability to correctly assess sugar levels. However, in the control group, those with a medium level of health consciousness were significantly more likely (overall for the six products) to correctly assess sugar levels (35%) compared with those with a low (29%) or high (30%) level of health consciousness. Possible reasons for this small but statistically significant difference are unclear and would require further investigation in another study.

4. Conclusions

The survey population demographic data were similar to corresponding census data for New Zealand and Australia for age, gender, level of education and household income, indicating the study sample was representative of the two countries in terms of these variables.

Fruit consumption of both New Zealand and Australian respondents were similar to national data. Vegetable intake for Australian respondents was similar to national data, but vegetable intake data for New Zealand respondents could not be directly compared to national data.

Fifty-three percent of respondents had a medium level of health consciousness, 28% a high level and 19% a low level of health consciousness. There was a positive association between the level of health consciousness and fruit and vegetable intake of both New Zealand and Australian respondents. There was no relationship between level of health consciousness and respondent ability to correctly assess sugar levels of the products.

Respondents had a high level of awareness that products with the 'no added sugar' claim can contain natural sugar. Seventy percent of respondents in the control group said the low sugar products contained sugar and 80% of respondents in the control group said the medium and high sugar products contained sugar (low, medium or high levels).

There was a positive but small effect of the presence of the disclaimer 'contains natural sugar' on the interpretation of the 'no added sugar' claim. For all products, significantly fewer respondents (about 10% less) in the test group thought the products contained no sugar compared with those in the control group. Correspondingly there were significantly more respondents in the test group who correctly assessed the sugar level compared with respondents in the control group, however the actual increase in correct assessments was small.

Between 40 and 50% of respondents assessed products classified by FSANZ as containing medium and high levels of sugar, to contain either no or low levels of sugar. This finding may be inflated as some respondents may reserve their use of medium and high sugar for products not included among the stimuli such as sweets.

There were differences in respondents' reported and actual use of nutrition labelling information. Approximately 60% of respondents claimed to use the nutrition information panel when assessing the sugar levels of the products which is markedly different from the 33-39% of respondents who were recorded as 'turning' over the product to view the list of ingredients and nutrition information panel on the six products. There was no major effect of the presence of the disclaimer on respondent's decision to 'turn' the product over.

Over 80% of respondents who said they used the nutrition information panel said they looked at values for sugar. Those respondents in the test group were more likely to look at the values for carbohydrate than those on the control group, suggesting that the disclaimer had some impact. Reasons for respondents looking at carbohydrate values rather than sugar, in response to the presence of the disclaimer, are unclear. However, the difference in the format of the sugar values presented in the nutrition information panel in the mocked-up products compared with the standard format normally seen on products may have influenced the results. In addition, it should be noted that the probability of obtaining a significant difference

is increased when a large number of pair-wise comparisons are made, as occurred in this study.

In conclusion, the results do not provide any strong evidence that the disclaimer is of benefit to consumers in interpreting the 'no added sugar' claim. While respondents had a good understanding that products with the 'no added sugar' claim may contain naturally occurring sugars many had considerable difficulty in correctly assessing the sugar level of products. The study suggests that an alternative risk management approach is required to minimise consumer misunderstanding of the 'no added sugar' claim.

References

European Heart Network. 2003 *A systematic review of the research on consumer understanding of nutrition labelling*. Brussels: European Heart Network.

FSANZ. (2003a) *Food labelling issues: quantitative research with consumers*. Evaluation Report Series No. 4. Food Standards Australia New Zealand, Canberra, ACT.

FSANZ. (2003b) *Food labelling issues: qualitative consumer study on nutrient content claims*. Evaluation Report Series No. 5. Food Standards Australia New Zealand, Canberra, ACT.

Appendices

Appendix A – Mocked-up Product Information

Low Sugar Products



Vegetable Juice

NUTRITION INFORMATION		
Serves per package: 4		
Serve size: 250ml		
	Average quantity per Serve	Average quantity per 100 g
Energy	188kJ	75kJ
Protein	2.8g	1.1g
Fat, total	<0.3g	<0.1g
– saturated	<0.3g	<0.1g
Carbohydrate	3.3g	1.3g
– sugars	1.3g	0.5g
Sodium	618mg	247 mg

Ingredients: Vegetable juice (reconstituted tomato juice (84%), carrots (7%), celery (4%)), Blend (1.9%) (beetroot, parsley, lettuce, watercress, spinach), salt, vitamin C, food acid (citric acid), spice extract, natural flavour

Vanilla Yoghurt



No added sugar

Vanilla Yoghurt

NUTRITION INFORMATION

Serves per package: 9

Serve size: 110g

	Average quantity per Serve	Average quantity per 100 g
Energy	183kJ	166kJ
Protein	5.3g	4.8g
Fat, total	<1g	<1g
– saturated	<1g	<1g
Carbohydrate	4.7g	4.3g
– sugars	4.7g	4.3g
Sodium	52.8mg	48mg

Ingredients: Skim milk, milk solids (non-fat), thickeners (1422, 1442), Halal gelatine, vegetable gums (407, 412), live yoghurt culture (incl. *acidophilus bifidus*, *lactobacillus*), flavour

Medium Sugar Products



NUTRITION INFORMATION		
Serves per package: 1		
Serve size: 40g		
	Average quantity per Serve	Average quantity per 100 g
Energy	818kJ	2045kJ
Protein	2.5g	6.2g
Fat, total	11.5g	29.8g
- saturated	2.8g	6.9g
Carbohydrate	20.9g	52.3g
- sugars	12.8g	31.9g
Sodium	38mg	96mg

NUTRITION INFORMATION		
Serves per package: 1		
Serve size: 40g		
	Average quantity per Serve	Average quantity per 100 g
Energy	818kJ	2045kJ
Protein	2.5g	6.2g
Fat, total	11.5g	29.8g
- Saturated	2.8g	6.9g
Carbohydrate	20.9g	52.3g
- Sugars	12.8g	31.9g
Sodium	38mg	96mg

Ingredients: mixed nuts (20%) (almonds, macadamia), mixed fruit pieces (15%) (paw paw, apricot, mango), rice extract, rice cereal, soy beans, vanilla flavour

Muesli

No added sugar



Muesli

NUTRITION INFORMATION

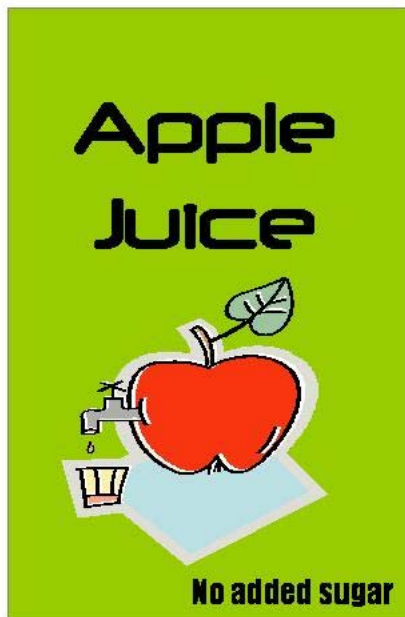
Serves per package: 12

Serve size: 40g


	Average quantity per Serve	Average quantity per 100 g
Energy	503kJ	1257kJ
Protein	3.5g	8.8g
Fat, total	3.8g	9.5g
– saturated	1.0g	2.5g
Carbohydrate	24.2g	60.9g
– sugars	9.5g	23.8g
Sodium	20mg	50mg

Ingredients: Rolled oats (55%), sultanas, rolled rice, barley bran, rice flakes [rice flour, maize flour, maltodextrin (corn), sibi], rice bran flakes [rice flour, rice bran], dried apricot (preservative 220), dried apple, sesame seeds, sunflower seeds

High Sugar Products

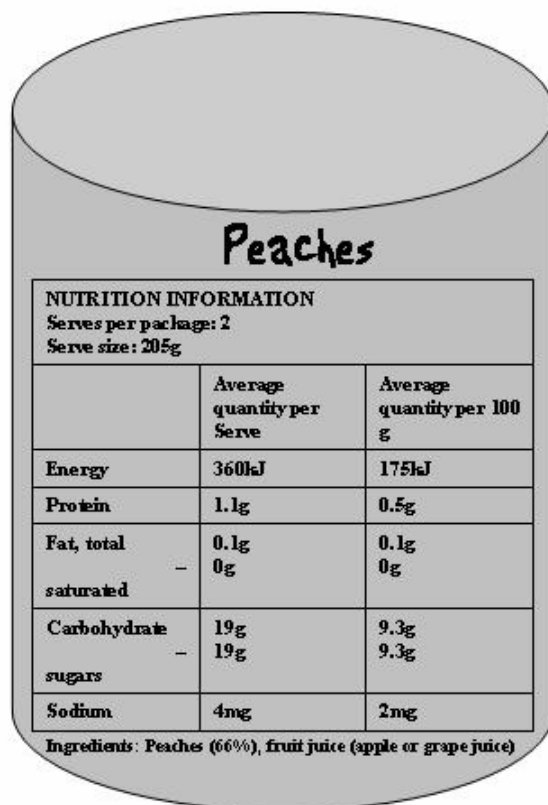
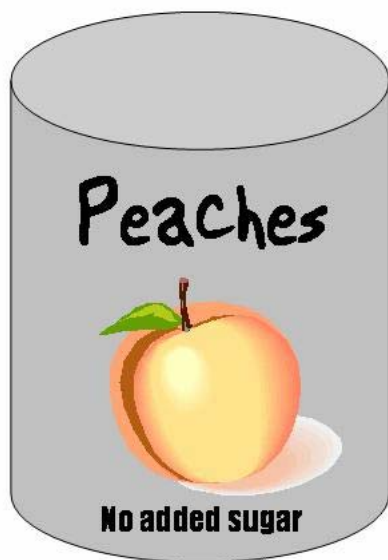


Apple Juice



NUTRITION INFORMATION		
Serves per package: 4		
Serve size: 250ml		
	Average quantity per Serve	Average quantity per 100 g
Energy	455kJ	182kJ
Protein	<1g	<1g
Fat, total	<1g	<1g
saturated	0g	0g
Carbohydrate	26.8g	10.7g
sugars	26.8g	10.7g
Sodium	8mg	3.2mg

Ingredients: Reconstituted apple juice (100%), flavour, vitamin C (ascorbic acid)



Appendix B – ‘No added sugar’ Survey

1. Introduction

Hello from TNS Australia.

Thank you for agreeing to participate in this survey.

Please remember:

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



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

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

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

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

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

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

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

1.1 Screener

Let's start with some questions about you.

S1. Firstly, could you please confirm your gender.

Male	1
Female	2

S2. Could you please confirm your age.

Under 18 years	TERMINATE
18-24	1
25-34	2
35-44	3
45-54	4
55-64	5
65 or over	6

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

[SOFT SCREENER CHECK – Terminate respondents here]

1.1.1. Welcome Page

Congratulations.

You have qualified for the survey. This survey will take you approximately **5** minutes to complete. You will be rewarded <XXX> emailcash points for completing this survey.

Please click the next button to continue.

2. Section A – Interpretation of ‘no added sugar’

You are now going to see a series of different products. **You can turn the product over if you would like to, by [INSERT INSTRUCTIONS FOR TURNING PRODUCT OVER]**

[EACH PRODUCT DISPLAYED AS FRONT VIEW, BUT ALLOWS RESPONDENTS TO ‘TURN PRODUCT OVER’ TO VIEW SIDE/BACK PANEL AND NIP. PLEASE RECORD WHETHER RESPONDENT TURNS PRODUCT OVER]

[ROTATE ORDER A1-A6]

[CONTROL GROUP – SHOW PRODUCTS WITH ‘NO ADDED SUGAR’ CLAIM – PICS A-F]

[TEST GROUP – SHOW PRODUCTS WITH ‘NO ADDED SUGAR’ CLAIM AND ‘CONTAINS NATURAL SUGARS’ STATEMENT – PICS G-L]

A1. What level of sugar would you say this product contains? [ALLOW ONE ONLY]

High	1
Medium	2
Low	3
None	4
Don't know	97

[REPEAT FOR PRODUCTS B-L, AS PER BELOW TABLE]

PRODUCT A – CONTROL VEGETABLE JUICE (1%)	PRODUCT A CLAIM ONLY	CONTAINS LOW LEVEL OF NATURAL SUGARS
PRODUCT B - CONTROL MUESLI (7%)	PRODUCT B CLAIM ONLY	CONTAINS MEDIUM LEVEL OF NATURAL SUGARS
PRODUCT C- CONTROL APPLE JUICE (25%)	PRODUCT C CLAIM ONLY	CONTAINS HIGH LEVEL OF NATURAL SUGARS
PRODUCT D- CONTROL YOGHURT (4%)	PRODUCT D CLAIM ONLY	CONTAINS LOW LEVEL OF NATURAL SUGARS
PRODUCT E- CONTROL FRUIT AND NUT BAR (10%)	PRODUCT E CLAIM ONLY	CONTAINS MEDIUM LEVEL OF NATURAL SUGARS
PRODUCT F- CONTROL CANNED PEACHES (22%)	PRODUCT F CLAIM ONLY	CONTAINS HIGH LEVEL OF NATURAL SUGARS
PRODUCT G– TEST VEGETABLE	PRODUCT G CLAIM AND STATEMENT	CONTAINS LOW LEVEL OF NATURAL SUGARS

JUICE (1%)		
PRODUCT H-TEST MUESLI (7%)	PRODUCT H CLAIM AND STATEMENT	CONTAINS MEDIUM LEVEL OF NATURAL SUGARS
PRODUCT I-TEST APPLE JUICE (25%)	PRODUCT I CLAIM AND STATEMENT	CONTAINS HIGH LEVEL OF NATURAL SUGARS
PRODUCT J-TEST YOGHURT (4%)	PRODUCT J CLAIM AND STATEMENT	CONTAINS LOW LEVEL OF NATURAL SUGARS
PRODUCT K-TEST FRUIT AND NUT BAR (10%)	PRODUCT K CLAIM AND STATEMENT	CONTAINS MEDIUM LEVEL OF NATURAL SUGARS
PRODUCT L-TEST CANNED PEACHES (22%)	PRODUCT L CLAIM AND STATEMENT	CONTAINS HIGH LEVEL OF NATURAL SUGARS

A2. Which of the following information on the product would you use to assess the sugar levels of these products? [ASK FOR ALL PRODUCTS IN ROTATION (EITHER A-F OR G-L)] [ALLOW MULTIPLE RESPONSE]

My general knowledge	1
The list of ingredients	2
Claims on the front of the package	3
The nutrition information panel, which says how much of each of the major nutrients is in the product	4
Pictures on the label	5
Other	6
I don't pay any attention to nutrition and health claims on food labels	9

A3. [IF A2=4 ASK] When using the nutrition information panel, which information did you use? [ASK FOR THREE PRODUCTS ONLY IN ROTATION (EITHER A-F OR G-L)] [ALLOW MULTIPLE RESPONSE]

The "per serve" column	1
The "per 100g" column	2
The serves per package	3
The serving size	4

A4. [IF A2=4 ASK] When using the nutrition information panel, which nutrient/s were you looking at? [ASK FOR THREE PRODUCTS ONLY IN ROTATION (EITHER A-F OR G-L)] [ALLOW MULTIPLE RESPONSE]

Fat	1
Energy	2
Carbohydrates	3

Protein	4
Sodium	5
Sugar	6

3. Section B – Diet and physical exercise

B1. How many serves of vegetables do you **usually** eat **each day**? (a serve = ½ cup cooked vegetables or 1 cup of salad vegetables) **[ALLOW ONE RESPONSE ONLY]**

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

B2. How many serves of fruit do you **usually** eat **each day**? (a serve = 1 medium piece or 2 small pieces of fruit or 1 cup of diced pieces) **[ALLOW ONE RESPONSE ONLY]**

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

B3. How much attention do you pay to keeping a healthy diet?

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

4. Section C – About you

And to finish the survey, some quick questions about you.

Education:

C1. What is your highest level of education?

(Please select one)

Never attended school	1
Primary school only	2
Secondary school up to Form 5/Year 10	3
Secondary school up to Form 6 or 7/Year 11 or 12	4

Trade qualifications	5
Certificate (non-trade)/diploma	6
Bachelor degree	7
Higher qualifications	8
Other	96
Prefer not to answer	98

C2. How many people live in your household, **including yourself**?

	Number in the household
Adults	
Children aged 12-18	
Children aged 6-12	
Children aged 5 or under	

Household Income:

C3. What is your household's annual income before tax? Numbers in brackets are the weekly equivalents.

(Please select one)

Nil income	1
\$1 - \$10,000 (\$1-\$192)	2
\$10,001 - \$25,000 (\$193-\$480)	3
\$25,001 - \$40,000 (\$481-\$769)	4
\$40,001 - \$55,000 (\$770-\$1057)	5
\$55,001 - \$70,000 (\$1058-\$1346)	6
\$70,001 - \$85,000 (\$1347-\$1634)	7
\$85,001 - \$100,000 (\$1635-\$1923)	8
\$100,001 or more (\$1924 or more)	9
Prefer not to answer	98
Don't know	99

Honesty & Feedback

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

Yes	1
No	2

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

Yes	1
No	2

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

Close

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

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

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

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

This survey was conducted on behalf of Food Standards Australia New Zealand.

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

Appendix C - Results

Table C1: Fruit consumption of Australian respondents and level of health consciousness (n= 506)

Level of health consciousness	Fruit consumption of Australian respondents		TOTAL
	Respondents who do not eat fruit or eat 1 serve or less/day (n(%))	Respondents who eat 2 or more serves fruit/day (n(%))	
Low	72 (75%)	24 (25%)	96
Medium	156 (57%)	116 (43%)	272
High	43 (31%)	95 (69%)	138
Total	271 (54%)	235 (46%)	506

Table C2: Fruit consumption of New Zealand respondents and level of health consciousness (n=501)

Level of health consciousness	Fruit consumption of New Zealand respondents		TOTAL
	Respondents who do not eat fruit or eat 1 serve or less/day (n(%))	Respondents who eat 2 or more serves fruit/day (n(%))	
Low	67 (69%)	30 (31%)	97
Medium	106 (41%)	156 (60%)	262
High	22 (16%)	120 (85%)	142
Total	195 (39%)	306 (61%)	501

Table C3: Vegetable consumption of Australian respondents and level of health consciousness (n=506)

Level of health consciousness	Vegetable consumption of Australian respondents			TOTAL
	Respondents who do not eat vegetables or eat 1 serve or less/day (n(%))	Respondents who eat 2 -3 serves vegetables/day (n(%))	Respondents who eat 4 or more serves of vegetables/day (n(%))	
Low	53 (55%)	35 (37%)	8 (8%)	96
Medium	76 (28%)	162 (60%)	34 (13%)	272
High	17 (12%)	74 (54%)	47 (34%)	138
Total	146 (29%)	271 (54%)	89 (18%)	506

Table C4: Vegetable consumption of New Zealand respondents and level of health consciousness (n=501)

Level of health consciousness	Vegetable consumption of New Zealand respondents			TOTAL
	Respondents who do not eat vegetables or eat 1 serve or less/day (n(%))	Respondents who eat 2 -3 serves vegetables/day (n(%))	Respondents who eat 4 or more serves of vegetables/day (n(%))	
Low	43 (44%)	46 (47%)	8 (8%)	97
Medium	42 (16%)	186 (71%)	34 (13%)	262
High	14 (10%)	80 (56%)	48 (34%)	142
Total	99 (20%)	312 (62%)	90 (18%)	501

Table C5: Information used by respondents to assess sugar levels of mocked-up products (n=1007)¹

Product		Information used by respondents to assess sugar levels (n(%))							TOTAL
		General Knowledge	List of Ingredients	Claims on front of package	Nutrition Information Panel	Pictures on label	Other	Don't pay any attention to nutrition claims	
<i>Low Sugar</i>									
Vegetable Juice	without disclaimer	182 (36%)	232 (46%)	104 (21%)	302 (60%)	39 (8%)	4 (1%)	17 (3%)	505
	with disclaimer	184 (37%)	232 (46%)	117 (23%)	293 (58%)	32 (6%)	2 (0.5%)	16 (3%)	502
Yoghurt	without disclaimer	168 (33%)	227 (45%)	108 (21%)	310 (61%)	31 (6%)	6 (1%)	17 (3%)	505
	with disclaimer	173 (34%)	227 (45%)	122 (24%)	295 (59%)	36 (7%)	4 (1%)	15 (3%)	502
<i>Medium Sugar</i>									
Fruit & Nut Bar	without disclaimer	181 (36%)	249 (49%)	95 (19%)	305 (60%)	59 (12%)	9 (2%)	20 (4%)	505
	with disclaimer	183 (36%)	250 (50%)	109 (22%)	288 (57%)	50 (10%)	3 (1%)	16 (3%)	502
Muesli	without disclaimer	175 (35%)	249 (49%)	101 (20%)	313 (62%)	55 (11%)	11 (2%)	12 (2%)	505
	with disclaimer	183 (36%)	236 (47%)	105 (21%)	292 (58%)	51 (10%)	4 (1%)	15 (3%)	502
<i>High Sugar</i>									
Apple Juice	without disclaimer	193 (38%)	218 (43%)	106 (21%)	302 (60%)	34 (7%)	6 (1%)	15 (3%)	505
	with disclaimer	187 (37%)	216 (43%)	116 (23%)	294 (59%)	35 (7%)	4 (1%)	15 (3%)	502
Canned Peaches in Fruit Juice	without disclaimer	185 (37%)	216 (43%)	101 (20%)	297 (59%)	35 (7%)	7 (1%)	17 (3%)	505
	with disclaimer	195 (39%)	217 (43%)	122 (24%)	293 (58%)	33 (7%)	4 (1%)	13 (3%)	502

¹ respondents could choose more than one source of information

Table C6: Respondents who were recorded as ‘turning’ the product over (n= 1007)

Product		Respondents who ‘turned’ the package over (n(%))	Respondents who did not ‘turn’ the package over (n(%))	TOTAL
<i>Low Sugar</i>				
Vegetable Juice	without disclaimer	197 (39%)	308 (61%)	505
	with disclaimer	175 (35%)	327 (65%)	502
Yoghurt	without disclaimer	197 (39%)	308 (61%)	505
	with disclaimer	176 (35%)	326 (65%)	502
<i>Medium Sugar</i>				
Fruit & Nut Bar	without disclaimer	195 (39%)	310 (61%)	505
	with disclaimer	168 (33%)	334 (67%)	502
Muesli	without disclaimer	198 (39%)	307 (61%)	505
	with disclaimer	171 (34%)	331 (66%)	502
<i>High Sugar</i>				
Apple Juice	without disclaimer	191 (38%)	314 (62%)	505
	with disclaimer	177 (35%)	325 (65%)	502
Canned Peaches in Fruit Juice	without disclaimer	197 (39%)	308 (61%)	505
	with disclaimer	165 (33%)	337 (67%)	502

Table C7: Information in the nutrition information panel used by respondents¹

Product		Information in nutrition information panel used to assess sugar levels				TOTAL ²
		Per serve column	Per 100g column	Serves per package	Serving size	
Low Sugar						
Vegetable Juice	without disclaimer	140 (47%)	183 (61%)	74 (25%)	70 (23%)	298
	with disclaimer	141 (48%)	189 (65%)	68 (23%)	65 (22%)	291
Yoghurt	without disclaimer	139 (45%)	193 (63%)	77 (25%)	74 (24%)	306
	with disclaimer	139 (48%)	187 (64%)	73 (25%)	64 (22%)	290
Medium Sugar						
Fruit & Nut Bar	without disclaimer	139 (46%)	187 (62%)	76 (25%)	65 (22%)	301
	with disclaimer	142 (50%)	179 (63%)	66 (23%)	67 (24%)	284
Muesli	without disclaimer	154 (49%)	197 (63%)	75 (24%)	79 (25%)	312
	with disclaimer	148 (51%)	188 (65%)	63 (22%)	68 (23%)	291
High Sugar						
Apple Juice	without disclaimer	141 (47%)	186 (62%)	75 (25%)	73 (24%)	300
	with disclaimer	146 (50%)	187 (64%)	67 (23%)	65 (22%)	292
Canned Peaches in Fruit Juice	without disclaimer	142 (48%)	184 (62%)	72 (24%)	66 (22%)	295
	with disclaimer	145 (50%)	184 (63%)	63 (22%)	71 (24%)	291

¹ respondents could choose more than one type of information

² total number of respondents who said they looked at the nutrition information panel (note that these figures slightly differ from those in Table C5 because 27 respondents did not complete the survey due to a computer error)

Table C8: Respondents' use of energy and nutrients in the nutrition information panel¹

		Energy and nutrients in the nutrition information panel looked at by respondents						
		Fat	Energy	Carbohydrate	Protein	Sodium	Sugar	TOTAL ²
Low Sugar								
Vegetable Juice	without disclaimer	146 (48%)	140 (46%)	154 (51%)	60 (20%)	87 (29%)	260 (86%)	302
	with disclaimer	143 (49%)	124 (42%)	186 (63%)	69 (24%)	85 (29%)	262 (89%)	293
Z-score				3.08*				
Yoghurt	without disclaimer	166 (54%)	141 (45%)	159 (51%)	68 (22%)	82 (26%)	266 (86%)	310
	with disclaimer	171 (58%)	127 (43%)	179 (61%)	75 (25%)	71 (24%)	260 (88%)	293
Z-score				2.08*				
Medium Sugar								
Fruit & Nut Bar	without disclaimer	170 (56%)	145 (48%)	164 (54%)	64 (21%)	87 (29%)	264 (87%)	302
	with disclaimer	156 (54%)	129 (45%)	183 (64%)	66 (23%)	78 (27%)	261 (91%)	288
Z-score				2.28*				
Muesli	without disclaimer	168 (54%)	145 (47%)	170 (55%)	65 (21%)	92 (30%)	268 (86%)	311
	with disclaimer	158 (54%)	130 (45%)	180 (62%)	74 (26%)	78 (27%)	258 (89%)	290
High Sugar								
Apple Juice	without disclaimer	136 (45%)	146 (48%)	155 (51%)	66 (22%)	79 (26%)	267 (88%)	302
	with disclaimer	143 (49%)	124 (42%)	175 (60%)	61 (21%)	74 (25%)	268 (91%)	293
Z-score				2.06*				
Canned Peaches in Fruit Juice	without disclaimer	132 (44%)	141 (47%)	141 (47%)	58 (20%)	77 (26%)	266 (90%)	297
	with disclaimer	139 (47%)	110 (38%)	163 (56%)	59 (20%)	71 (24%)	265 (90%)	293
Z-score			2.44*	1.98*				

¹ respondents could choose more than one energy/nutrient

² number of respondents who said they looked at the nutrition information panel (note that these figures slightly differ from those in Table C5 because five respondents did not complete the survey due to a computer error)

* indicates a significant difference between with disclaimer and without disclaimer (p<0.05)