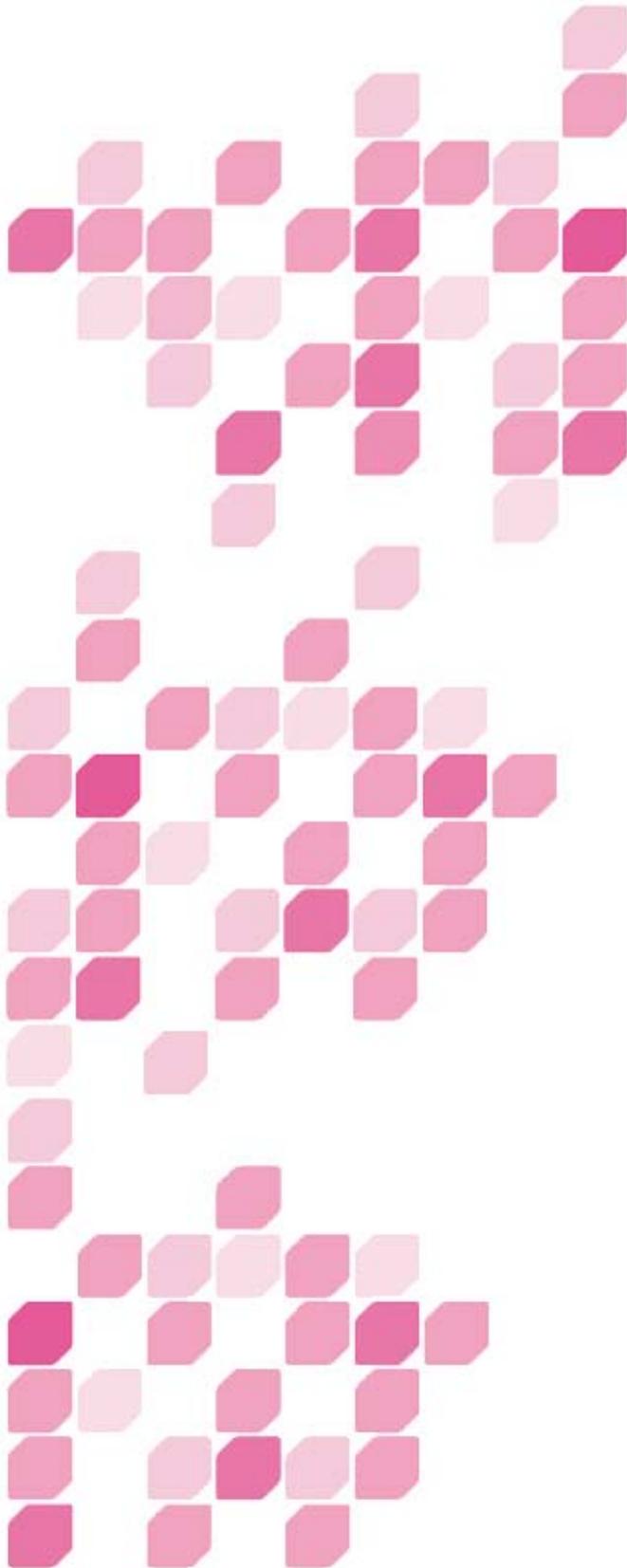# TECHNICAL REPORT: CONSUMER RESEARCH ON PERCENTAGE DAILY INTAKE

Qualitative Research into the Interpretation of %DI and %RDI Labelling

TNS Social Research
1/7 Murray Crescent
Manuka ACT 2603
t   +61 2 6295 2900
f   +61 2 6295 2988
e   canberra@tns-global.com

TNS is a trade mark of Taylor Nelson Sofres Plc

QUALITATIVE RESEARCH INTO THE INTERPRETATION OF %DI AND %RDI LABELLING

A RESEARCH REPORT

DATE: March 2007

FINAL

Prepared for:
FOOD STANDARDS
AUSTRALIA NEW ZEALAND

TNS Social Research
Consultants:
Amarylise Bessey
Donna van Bueren
Barbara Barker
Jason Davis

Job no.   90261

tns social research

Table of contents

<div align="right">Page no.</div>

Executive summary

In June 2006, FSANZ commissioned TNSSR to conduct research to investigate consumers' perceptions and potential use of percentage daily intake (%DI) information to inform decision making about this topic. The research sought to explore consumers' understanding and ability to use %DI and percentage recommended dietary intake (%RDI) information to make product decisions, and consumer ability to use %DI information in the interpretation of nutrition content claims. In addition, views on the format and positioning of %DI information were investigated.

The research was entirely qualitative in nature, consisting of 51 in-depth face-to-face interviews in Australia and New Zealand with consumers across a broad range of experiences.

The research found that the current use of %RDI information is very low, despite medium to high levels of awareness, and consumers' ability to correctly use the information when prompted. This is driven in part by the low level of importance assigned to vitamins and minerals when making food choices.

The perceived difference between %RDI and %DI information is virtually nil, with only the most suspicious of participants questioning the credibility of %DI scores, given they are missing the highly reliable word "recommended". Participants are also confused about the terms "dietary" and "daily" using them interchangeably, even after being educated about the actual terms. Participants did not spontaneously understand a need to differentiate the terms used for labelling for vitamins and minerals and other nutrients.

When exposed to %DI information for the first time, participants needed assistance or multiple attempts before they felt confident in using the information. The ability and willingness to use the information was greatly impacted by the nutrients identified in this information, and their personal relevance to participants.

In most cases, NIP users were savvy enough to look to assess the "trade-off nutrient" relating to the claimed nutrient – for example, checking sugar levels when a low fat claim is made. However, the inclusion of only %DI values for energy and the claimed nutrient causes many problems for the potential uptake of %DI information. Energy is confusing for many participants, with a low level of understanding of how to interpret this information.

The non-inclusion of %DI values for nutrients which are important to consumers erodes both their ability to correctly make interpretations using the information and their willingness to use it. Without education, labelling only energy and the claimed nutrient will severely affect consumers' use of this labelling. Also, if all nutrients are included but energy education is not undertaken, consumers will continue to use nutrients they feel comfortable with, but not energy.

An example of a product label demonstrating a potential use of %DI labelling on the front of packages was shown to participants. This was very well received by participants who liked the inclusion of %DI for all nutrients in the panel, as well as the ability to have everything in large colourful print, on the front of the package.

The inclusion of %DI information where all nutrients are detailed could prove valuable to consumers, as it enables them to make individual product assessments. Having the information on the front of the package has the added advantage of encouraging non-NIP users to look at the information. However it will be vital that all nutrients be labelled, and that education about how to use the information be undertaken.

1. Background and objectives

In June 2006, FSANZ commissioned research to explore consumer understanding and use of the concepts of %RDI (recommended dietary intake) and %DI (daily intake). Currently, inclusion of the %RDI metric in the nutrition information panel (NIP) is required when a claim relating to a vitamin/mineral is made, but otherwise optional. Percentage RDI provides intake values on a per serve or 100g basis as a percentage of recommended intakes for vitamins and/or minerals. This research is designed to explore the potential impact of a new concept, %DI, which provides recommendations of intake for energy and the 'core' nutrients - protein, fat, saturated fat, carbohydrate, total sugars, fibre and sodium.

1.1. Research objectives

The agreed objectives of the research were to explore and report conclusions about:
1. Understanding of the %RDI concept – what it means, and how it is used in the purchase decision, and whether it can be used to indicate future understanding and use of %DI;
2. Understanding of the %DI concept – what it means, and how it might be used in the purchase decision;
3. Consumers' ability to use the %DI information to interpret nutrition content claims and make correct (healthy) choices for single product evaluations;
4. Any points of confusion in having %DI and %RDI information on products;
5. Whether %DI information should be presented for all 'core' nutrients or just nutrients for which a claim is made;
6. Consumer views on the inclusion of %DI information on the front of pack
7. What sorts of educational information consumers need to help them understand and use the %DI, and the potential impact of an educational intervention.

On the basis that consumers have already been exposed to the %RDI information on food labels, the %RDI concept was included in the research. It was considered that current understanding and use of %RDI may indicate potential understanding and use of the similar %DI concept in the future.

1.2 Methodology

1.2.1 Study design

In stage one of the research, a total of 13 interviews were conducted, in Australia only. This initial stage was intended to help design a questionnaire for quantitative measurement of the issues. However, given the complex manner in which participants use %RDI and %DI information, it was decided that instead, a further 38 interviews, in both Australia and New Zealand, be conducted (stage two).

In both stages, research was conducted via in-depth interviews, running approximately 60 minutes each. These were conducted by senior researchers face to face, using discussion guides and label

mock-ups agreed with FSANZ. These guides and stimulus materials are attached in appendixes A and B for stages one and two, respectively. Interviews were audio recorded, and analysis undertaken both from listening to recordings and from researcher notes and observations.

Stage one of the research was focussed on exploring the issue of %DI in the context of knowledge of food labelling, and the potential understanding and use of %DI labelling in making product choices. Stage two of the research included these themes, as well as exploring the interpretation of nutrition content claims presented on mocked-up labels which included different %DI labelling information. It is important to note that each of the products included %DI information only for the claimed nutrient and energy. Stage two of the research also included an example of a product label with %DI information on the front of the pack. This information included %DI and g/serve values for energy, protein, fat, saturated fat, dietary fibre, sodium, carbohydrate and sugars. Percentage RDI and per 100g values for four vitamins/minerals were also included. Information on the interpretation of %DI was included on the back of the package.

This report represents findings from both stages of the research.

1.2.2 Study participants

Participants were recruited using the screener questionnaire which asked if they were the main grocery shopper, their gender, age, and level of health consciousness, whether English was their main language, and whether they were of Aboriginal/Maori origin. All participants in the research were required to be the main or equal household shopper. The recruitment screener used is in Appendix C.

Health consciousness was determined using a question asking about the frequency at which the participant chose healthy food products when purchasing for the household (see Appendix C). Participants who answered "1" or "2" were categorised as "low health consciousness", those who answered "3" were classified as "medium health consciousness" and those who answered "4" or "5" were categorised as "high health consciousness".

In each stage of the research, people from Indigenous and non-English speaking backgrounds were included as they naturally occurred in the population. As research in stage one included only people in Australia, one person from Aboriginal or Torres Strait Islander background, but no people from Maori background, were included. In stage two, eight people from non-English speaking backgrounds (NESB), and six people from Indigenous backgrounds (four from NZ and two from Australia) were included. All participants were proficient enough in English to participate in the interview, but literacy levels varied across all participants. Numeracy and literacy were assessed subjectively during the interview process. Whether or not people normally use the NIP and other labelling information, such as the ingredient list, was also assessed subjectively during the interview. Participants were divided into two groups (capable NIP users and non-capable or less frequent NIP users) for subsequent analysis.

Participants in each stage were recruited by professional recruitment agencies and paid $70 (local currency) to reimburse them for their time and expenses.

Table 1 shows the location, age and level of health consciousness of all the participants included in the research.

Table 1. Location, age and health consciousness level of all participants

Age	18-29 years			30-54 years			55+ years			Total
Level of Health consciousness	**H**	**M**	**L**	**H**	**M**	**L**	**H**	**M**	**L**	
Australia										
STAGE 1	1	3	1	1	2	1	1	2	1	13
STAGE 2	2	3	2	2	3	2	2	3	1	20
New Zealand										
STAGE 2	2	3	1	2	3	1	2	3	1	18
TOTAL STAGE 1 & 2 – Australia & New Zealand										
TOTAL	**5**	**9**	**4**	**5**	**8**	**4**	**5**	**8**	**3**	**51**

The research only included people living in metropolitan areas, and thus is not representative of people in non-metropolitan areas. In addition, participants were only recruited from one city in New Zealand.

Thirty-five participants were female and 16 male.

1.2.3 Data Analysis

The formal process that underlies the analysis and interpretation of qualitative research relies on collaboration of the research team to establish and explore ideas. Senior researchers work to interpret findings in isolation first, before collaborating and brainstorming overall project findings with other team members. The research team discussed the following leading on to the identification of the key themes:
- What was said overall;
- What was not said;
- Verbal and non verbal cues;
- How does each moderator interpret the findings – challenges ideas;
- What is underneath;
- What can we infer;
- Greater context; and
- What the findings mean for the rest of the research.

The synthesis of these separate ideas forms the key analysis themes, and the basis for the reporting framework. Quotations from research participants are used to demonstrate a point or theme.

2. Research findings

2.1. Understanding and reported use of %RDI and %DI

The study explored the awareness, understanding and prior use of %RDI information, and the understanding and interpretation of %DI information, upon exposure for the first time.

2.1.1. Awareness and understanding of % RDI

Understanding and use of %RDI was included in the study to provide a point of comparison between existing, but similar information and the new %DI concept. However, a general finding from this research is that while awareness of %RDI information being available is medium to high, use of %RDI was <u>extremely low</u>.

Participants were asked to look at a box of breakfast cereal and describe the information they noticed, and what information they found useful in making a purchase decision. The brand and type of cereal was selected randomly and rotated among participants. Whilst the majority of participants utilised the NIP in this exercise, no participant spontaneously mentioned %RDI information. When their attention was drawn to the %RDI information by the interviewer, around half of the participants were aware of the %RDI information being included on the NIP, with the remainder unsure as to whether they had seen this information before. When prompted as to the meaning of %RDI, some participants (about half and all regular NIP users) correctly guessed what it stood for, but with most interchanging 'daily' for 'dietary'. The remainder of participants did not know what it meant and most were not willing or sufficiently confident to guess. There were a small number of participants that recognised the term RDI but did not know what it stood for. After prompting, a few of these people reported that the full explanation (Recommended Dietary Intake) sounded familiar but they did not know what it meant.

"Some things on the labels I don't really have much knowledge of. For example, what does RDI stand for? Sometimes they have jargon words, sometimes they have a little definition but you think is that actually an English word."

Most participants were able to interpret food choices based on %RDI information when prompted to do so. For example, a figure of 25% RDI was translated in to needing four serves of the product to meet the daily requirement for the specified nutrient. A small number of participants did have trouble correctly interpreting the information, translating the percentage figures into whole gram amounts, or having trouble understanding what the figures were proportions of – for example, whether they were proportions of a daily requirement, or a proportion of the product contents – (e.g. 10% of the product is Iron).

2.1.2. Self reported use of % RDI

Not surprisingly therefore, no one had used the %RDI information to make a product purchase decision. Participants found it difficult to give a clear explanation for their non-use/awareness of %RDI and it was difficult for them to separate their thinking about the %RDI concept from their perceptions about the importance or priority of vitamins and minerals. Based on this research, it is more likely that vitamins and minerals are very low priority nutrients to most consumers, when compared with nutrients such as fat and sugar, and thus when using the NIP the %RDI information falls 'below the radar'. It remains unclear[1] as to whether the 'radar' can be expanded through a

---

[1] The research was not intended to explore this issue in any depth.

combination of information, education (training) and practice, or whether in reality, most people's capacity to use the NIP quickly and effectively limits them to investigating only 2 or 3 nutrients at any given time. If this is the case, use of %RDI information will in all likelihood remain low because specific vitamins and minerals are of nominal importance to the great majority of consumers when purchasing foods.[2] Most participants reported that %RDI information would be useful for the kind of person that is deficient in a nutrient (such as thiamin) or who might be "chasing iron", rather than 'most people' (like themselves) that were instead trying to manage or lower their intake (as is the case universally for fat and sugar).

"I'm surprised! I never really looked at that specifically – I tend to use supplements to get my vitamins, rather than looking

at it in food, because it's much harder to control daily by saying "how many bowls of Coco Pops did I have?""

2.1.3. Understanding of %DI, and the perceived difference between %RDI and %DI

Understanding %DI
Having been given an explanation of %RDI, many participants were then able to transfer this understanding to the %DI concept. It should be noted that the participants capable of such understanding were almost exclusively capable NIP users, and were thus familiar with nutrient comparison tasks, and were also motivated to evaluate food based on at least one nutrient. In the sample there were a smaller number of non-NIP users, some of which were of NESB, who struggled to understand the %DI concept after a repeated explanation and demonstration by the interviewer. These participants lacked both the English and numeracy skills to assimilate the information, combined with insufficient interest to persevere.

Perceived difference between %DI and %RDI
The interview discussion highlighted the presence of these two similar concepts in the one NIP and inevitably prompted most participants to ask what the difference was between them. It was not obvious to participants, after the discussion and practice tasks using both %RDI and %DI, that the principal difference related to the nutrients (%RDI for vitamins/minerals; %DI for others). Most participants felt that the two concepts were similar, if not the same, and became highly confused when asked to speculate what they thought the difference might be. Some confident and capable NIP users lost their confidence in NIP reading at this point.
When confronted with the two terms on the same package (such as on the product example with %DI and %RDI information on the front of the pack), some participants looked for differences that didn't exist. One conclusion amongst these participants was that %RDI related to how much one should have for good health, and %DI related to how much of the nutrient was in the product (i.e. content rather than intake amount).

However, the above findings not withstanding, it was also evident from the interviews that for many consumers, the subtle difference between %DI and %RDI would not have been apparent and most would not have noticed the difference between the letters DI and RDI had it not been brought to their attention through the exercises of using the concepts consecutively. While many participants felt that the use of two similar terms was confusing, when the context of their normal NIP use is considered

---

[2] This conclusion is based on the 'weight of evidence' obtained in numerous studies conducted by TNSSR for FSANZ, including recent research on Food Type Dietary Supplements and Nutrition, Health and Related Claims.

(usually focus on fat or sugar and ignore vitamins and minerals) then the degree of likely confusion was probably exaggerated.

Interestingly, when given a choice, many participants had a preference for the term 'RDI' (although there is no evidence to suggest that DI would be less acceptable in the absence of RDI). It is suspected that the term RDI has a low level of residual familiarity (not understanding) and the word 'recommended' brings with it associations of trust and confidence, whereas for a small number of participants the inclusion of %DI information (especially in the initial examples with only energy and the claimed nutrient detailed) implied a marketing claim. Amongst some (a minority) participants, the absence of the 'R' (i.e. %DI) raised questions regarding who the intake recommendation was for.

"(RDI) must be scientifically done, they couldn't put things like that on there if it wasn't"

For these participants and those who noticed the advised kilo joule intake, there was some question as to the usefulness of the information. Some participants wondered whether making any statements about the "average" diet was wise, making the incorrect assumption that "average" refers to actual average energy intake levels, and consequently that this "average" diet is leading to increased rates of obesity and related illnesses. Others recognised that personal variables, such as age, sex, activity level and current weight, would significantly affect the desired kilo joule level, and thus affect the usefulness of this "average" requirement.

The other area of confusion existed between the use of 'daily' and 'dietary'. For most participants, there was no discernable difference between these two words and no understanding at all as to why both words would be used and not just one. The overwhelming preference was for 'daily'. This term also implied a balanced approach to managing diet – making sure you have enough of everything in each day. This was seen as more manageable than approaching nutrition from a whole of diet perspective.

Interestingly, the presence of the two terms may well be more apparent to some participants when the %RDI and %DI information is located side by side on the same row (front of pack mock-up) than it would be if the information was in different columns and rows in the NIP. (See section 2.5).

2.2. Use of %DI (and %RDI) to make correct choices

In order to explore consumers' ability to use %DI information to make correct choices about and between products, participants were asked to do a selection of product assessment exercises using mock-up NIPs that included a %DI column. For each product, the %DI column provided information for energy, and one nutrient which was the subject of a nutrient claim on the front of the pack. For example, participants were shown a 'reduced fat' ice cream and the %DI column in the NIP provided DI information for energy and fat. A copy of the label examples can be found in Appendix B.

2.2.1. Take-up of %DI

Overall, participants did not adapt quickly to using the %DI information, even after they had been prompted to do so. Most participants based their initial assessment of the product on the information in either the 'per serve' or 'per 100g' column, depending on their usual habit. It appeared that for

most NIP users, their usual method for making a nutritional assessment of the product was well ingrained and that they unconsciously relied on the information with which they were most familiar and comfortable. It is also hypothesised, based on interview responses, that NIP users are now more familiar with absolute quantity amounts (grams) rather than percentages. As such, they feel more confident using gram amounts and so ignore percentage information. Indeed, some less numerate participants thought the %DI information was referring to grams, rather than a percentage.

It would be reasonable to conclude from the assessment exercises that consumers would need hands-on <u>guided</u> practice using %DI information (3-10 successful attempts) before %DI information became habitual and therefore useful. However, when some participants (regular NIP users) were asked to reflect on how they undertook the exercises and became more practiced at using %DI information, they warmed to the concept of a percentage metric and felt this was far more useful to them because it gave them additional information about the relative quantity of the nutrient. NIP users concluded that the %DI information could be more helpful than gram information because it enabled them to make a judgement about whether the product was 'high' or 'low' in the nutrient – which they could not judge confidently from absolute gram amounts.

Nonetheless, there was another significant proportion of participants for whom the %DI information added nothing. These people still felt they could get everything they needed to know from the 'per serve/per 100g' column. Critically, these people tended to be less likely to make correct judgements about whether a product was high or low in a nutrient (a healthy choice or not) and would still make comparisons between products based on grams to make this decision.

2.2.2. Use of %DI to make a decision as to whether a product is healthy or not

For each product included in the research, specific objectives were set by FSANZ to explore with participants. The results below are therefore separated into these separate products.

"low fat" dairy dessert
  (i) **Do consumers recognise that the low fat product is high in sugar?** NIP users all validated the product's overall 'healthiness' by using the NIP. However not all were looking for the sugar trade-off, though those who did, assessed it as high. This information was gathered from the per serve and per 100g columns using the sugars information, rather than using the %DI information for energy. It became evident that having the %DI column and information for energy and fat (and not sugar or other nutrients) only distracted participants from doing a thorough analysis and looking at sugar. The presence of a low %DI for fat and the absence of further useful information confirmed their feeling that the product was 'healthy' and some looked no further. In this case, a %DI score for sugar would have educated participants as to the high sugar content.
  (ii) **Do consumers check %DI for energy despite the low fat claim?** %DI for energy was not used in the assessment process by any participants. Participants' inability to use energy is discussed later in this report.
  (iii) **Do consumers interpret the %DI energy as high for the product?** as above (no one knew whether the %DI for energy was high or low).

"low fat" yogurt

(i) **Do consumers interpret the %DI energy as low for this product?** as above, %DI for energy was not used in the assessment process by any participants.

"reduced sodium" creamy chicken soup

(i) **Do consumers check the meaning of "reduced" by looking at the %DI for sodium?** NIP users all validated the product's overall 'healthiness' by using the NIP. Those interested in sodium looked at the absolute amount of sodium, and the %DI. For this small number of participants, the %DI information was seen as an advantage, because they were able to interpret the actual level of sodium. However, for these participants, the absolute level was seen as more useful in deciding the sodium level. For most participants, fat was still more important to them in deciding 'healthiness' than sodium, and they paid more attention to fat content, which they were directed to by the inclusion of the word "creamy" in the product name. When probed, they saw the "reduced sodium" as an added bonus, but did not feel it important enough to warrant validation.

(ii) **Do consumers interpret the %DI sodium as reasonably high for this product?** Those that were motivated or interested in the sodium content all assessed the product as 'high' in sodium. For most, the existing absolute value was enough information for them to make the decision and the %DI did not add a great deal to this decision. No one assessed it as low; however non-NIP users weren't able to decide, even using the %DI information. It can be inferred that this is because those who are not watching their sodium intake have no reference point or understanding of acceptable sodium levels, by which to judge sodium content.

Breakfast cereal with "increased fibre"

(i) **Do consumers recognise that the high fibre product is high in sugar?** There is a general perception that cereal products can be high in sugar, so many participants were automatically driven to investigate this. However, it is not the fibre claim that did this, as it is not an expected trade off nutrient, like fat and sugar are. In fact, the most common trade off for products high in fibre was low taste! For participants familiar with checking sugar levels, the absolute amount of sugars was more useful to them than the %DI for energy. Again, no participants felt comfortable in using energy to interpret sugar levels.

(ii) **Do consumers check the %DI for energy despite the fibre claim?** No – %DI for energy was not used in the assessment process by any participants.

(iii) **Do consumers interpret the %DI energy as high for this product?** No – no one knew whether the %DI for energy was high or low.

Toasted muesli with "reduced sugar"

(i) **Do consumers recognise that a reduction in one unhealthy component may not mean the product is healthy overall?** The majority of NIP users searched to validate this claim, with some expectation that it might not be low in sugar despite the claim. To make this decision, the majority used the amount per serve or amount per 100g, and a large number followed their "less than 10%" rule – if a product contains less than 10% of the total amount in sugar, then it is a healthy choice. This is a "rule of thumb" which has been seen in previous research conducted for FSANZ by TNSSR, where consumers apply a 10% ceiling to key nutrients, and make a decision as to the healthiness of a product based on whether it meets this rule.

Non NIP users took the claim at face value and interpreted this to be a lower sugar product and therefore a healthy choice. Some were more concerned about fat – the word "toasted" implied fat, and for these participants, sugar was not a consideration. More savvy label readers applied their own rules to assess healthiness overall, including applying the "less than 10%" rule to fat, while some investigated the fibre content.

(ii) **Do consumers check %DI for energy despite the sugar claim?** No, as with previous products there was no understanding regarding energy.

(iii) **Do consumers interpret the %DI energy as high for this product?** As with previous products, no one knew whether the %DI for energy was high or low.

Wholemeal bread with "good source of fibre"

(i) **Can consumers interpret %DI in a straightforward product?** Most NIP users were able to interpret this as a high or at least medium fibre product, by referring to the %DI amount. There was some concern when participants applied the 17%DI for fibre to the serve amounts, and calculated they needed to eat more than 10 slices of bread per day to achieve their required fibre amount, which prompted some to rethink bread as a primary source of dietary fibre.

General observations across all products

The usefulness and use of the %DI (and the NIP overall) is highly dependent on participants' interest in the information, and in nutrition generally. Those with no interest were less willing to try to work out %DI information, and were more reliant on claims overall. **These participants are not currently evaluating claims, and will not change their behaviour with the inclusion of %DI information.**

For savvy label users (NIP and/or Ingredients List), the usefulness of %DI information is driven by the highlighted nutrient in question - both their knowledge of the specific nutrient, and whether the selected nutrient that provided %DI information was of interest to them. For example, if a participant's key nutrient is fat, and they were asked to assess the reduced sugar or increased fibre product, they were less confident about telling whether a product is 'healthy' based on fibre or sugar information. It can be concluded from the research that these participants would not make a final decision looking at the amount of fibre or sugar, but in the context of whether the food is a high or low fat food.

Therefore, the %DI information is not being used as a replacement for existing information about whether a food is a good or bad choice, but adds to the decision, which is mostly still being made with existing information. However, participants overwhelmingly wanted one column of information to make a decision from. While they recognised that they might use different columns for different products, having to swap from column to column was seen as difficult, confusing and off-putting.

For many consumers, the "10% cut-off" is still a strong decision point, especially for fat and sugar. **Some participants just extend the 10% cut-off from the per 100g (i.e. contains 10% sugar) to the %DI (gives you 10% of DI) - two very different concepts which are potentially being confused.**

Some more savvy people also put the food type and eating occasion into the equation. For example, while the yogurt might be quite high in sugar (very low in fat), they would only eat a little bit, and it might be replacing ice-cream, so it is a healthier choice.

2.2.3. Using %DI to evaluate a claim, including evaluating the "trade off" nutrient

Generally, all participants were very knowledgeable about "trade-off" nutrients, especially the fat/sugar trade off. Currently, most participants are using per serve or per 100g information to assess claims and the trade off nutrients.

However, the absence of the %DI for the trade-off nutrient undermines the benefit of having %DI information, given this current behaviour. Having only %DI information for the claimed nutrient and energy meant that many had to revert back to the per serve or per 100g column to evaluate the trade off nutrient. This reinforces current behaviour rather than encouraging use of the %DI information.

2.2.4. Do people understand that higher is not always better?

All participants, including non-NIP users could correctly make this distinction. There was universal understanding that 'good' nutrients should be present in high amounts (higher the better, e.g. Fibre,

vitamins and minerals, protein) and others should be present in low amounts (lower the better, e.g. Fat, sugar, sodium). There were other nutrients about which most participants were unsure, such as carbohydrate, and energy. Therefore, all participants understood that %RDIs (because they represented vitamin and mineral intake) should all be as high as possible, but for %DI, this would depend on the nutrient. However, more critically, most participants were unconcerned about vitamin and mineral content and thus were even less likely to become confused on this issue – they simply didn't care what the %RDI levels were.

2.3. Understanding and use of energy

No participant in the study coped well with being asked to use %DI for energy to assess a product, stemming from an overall lack of knowledge about energy, and how to use information about energy to assess the nutritional value of a food. Participants, universally, had a low awareness of energy and it fell low down on their list of priority nutrients (well after fat and sugar, and after carbohydrates, fibre and protein).

"That one (energy) has always gone over the top of my head. We all know if we eat honey, chocolate or sugar it's going to give you an instant burst but as far as getting 660kJ out of a slice of bread, does not compute for me. It leaves me blank, it doesn't tell me anything."

Most participants regarded the inclusion of %DI information for energy as meaningless, and some questioned why energy was included and not more 'important' nutrients like fat and sugar. No participant was able to translate the energy information into a decision about whether that food was a good or poor choice for health. The concept of energy recommendations was also further confused, for some, by an awareness that energy requirements vary with lifestyle and activity levels. These people subsequently questioned where an energy recommendation was derived from, and how one recommendation could suit all people's needs.

It can be concluded from this research that for consumers to make meaningful use of %DI for energy, they require education about energy – until now their knowledge and training has been concentrated on fat and sugar. There was no evidence that consumers could self-teach how to assess the nutritional value of a food using %DI for energy.

There were only a small number of complaints or objections to the universal use of kilojoules as the standard unit for energy, mostly relating to long-term use of calories. One participant commented that kilojoules are "unwieldy" given the large numbers involved. While a few participants commented that they still thought in terms of calories, there was widespread acceptance that kilojoules had now replaced calories.

It also appeared from this research that, when comparing products using energy, kilojoules is sufficiently sensitive to enable most consumers to judge which product is higher or lower in energy. For example, in one exercise, participants were asked to compare one product that had an energy %DI of 10 and another that had a %DI of 8, and judge whether one was higher than the other. All participants assessed 10% as being 'higher' than 8% - some commented that it was only 'a little bit higher' but no one made any comment to the effect that they were about the same. When challenged by the interviewer and asked if they were sure that 10% was really that much more to say it's higher,

some participants then referred the interviewer to the absolute kilo joule amounts per serve to substantiate their judgement.

Many consumers use per 100g information to make product comparisons, and feel confident in doing so. However, with %DI information based on per serve information, participants were confused when they tried to use the information to compare products. While offering information to aid product comparisons is not the aim of %DI, it is important to note that participants tried to use this information like they use other existing information. While it is not realistic to have %DI information for per serve and per 100g, it will be important to maintain awareness of this factor when preparing educational materials.

2.4. Inclusion of all nutrients or selected nutrients for %DI in the NIP

Whether the %DI column should present %DI for all nutrients or just energy and the claimed nutrient was explored both in response to spontaneous comments and questions from participants, and through direct questioning late in the interview. Participants in stage one of the research saw mock labels with all nutrients labelled with %DI information. Participants in stage two were shown a number of products with %DI information only for energy and the claimed nutrient. In addition, at the end of the interview in stage two, participants were shown an alternate %DI format, where gram amounts and %DI were presented for all nutrients across one row, on the front of the pack.

Most participants did notice that %DI information on the mock-up products was "missing" for many nutrients, and many wanted to know why that was. Very few participants correctly assumed why particular nutrients had %DIs, and it was clear in most cases that these participants were guessing, as they sometimes offered several options for what the reason could be alongside the correct explanation, such as assuming that nutrients that were not labelled were at high levels (or low for fibre) and therefore the manufacturer did not want to highlight these. A small number made wrong decisions because of the missing information. For example, one participant was basing their good/poor choice decisions on whether the claimed nutrient %DI was greater or lower than the %DI for energy.

Participants that preferred that %DI information be present for all NIP nutrients did so for one or more of the following reasons:
- some want <u>complete</u> information - more of an 'why not, the more the better, depending on your needs' attitude - these are confident NIP users;
- some want specific nutrient information that would not be included by just presenting the claimed nutrient + energy (again capable NIP users who look for trade off nutrients, or base their decision on a few nutrients). When pushed, most would at least want fat and sugar, but leaving some out leads to the question of why others are not included.
- most find the inclusion of energy confusing - why energy (which they know nothing about) and not other more 'useful' nutrients

for some, this eroded the credibility of the information by implying that manufacturers had deliberately excluded negative information. These participants concluded the product must be bad or high in that nutrient.

When participants were asked about their preference for %DI information for all nutrients, versus %DI information for the claimed nutrient and energy, their response was <u>mixed</u>, and people often changed their minds back and forth during the discussion. Participants who preferred that the %DI column only provide information for 2 nutrients did so for reasons of simplicity. These tended to be people who struggled to use an NIP and were adverse to more information ('too much detail' or 'too much clutter'). These also tended to be participants who would be less likely to use %DI information anyway, who preferred to keep their use of the NIP simple by just looking at grams of fat (or who assessed the product using the ingredients list rather than the NIP). However, when these same participants were shown the alternate format for %DI information (all nutrients, front of pack), they changed their mind - in this format, having all nutrients was manageable for them because it met their criteria for simplicity.

2.5. Preferences regarding location of %DI information

Participants in stage two were shown a product mock-up with %DI information on the front of the package. Having seen this alternate format for %DI, the overwhelming majority of participants showed a strong preference for this format and position on the package.

The reasons for their preference were two-fold:
- position (looks good, colourful, easy to see, hard to miss "in your face")
- size - larger font makes it easier to read and therefore easier to use (and would facilitate more widespread use).

Everyone commented how much easier it was to read the nutrition information when in the larger font style, and how much more difficult it was to locate the same information in the NIP.

"It's a very good thing…because these days we got to (sic) think more about what we put in our mouth. It's there in a nutshell, it's right there, you don't have to go down to the tiny little print on the back of the packages…it's more convenient for the shopper – you don't have to get your glasses out."

Furthermore, it is hypothesised based on interviewee comments, that the location of %DI information on the front of the pack would prompt traditional non-NIP users to read the information and, over time, might begin to self-educate.

The simple presentation of the information in a single line highlights the need to have all information consumers will use included in a single column, which is supported by the observed frustration of participants who had to keep reading across, down, then back to the left (to check the nutrient) then back up, to the right etc. The presentation option also includes gram information in the table, which was understood to be different by participants, and did not detract from the simplicity of the design.

2.6.   Education regarding %DI

The most powerful education on the topic for participants were multiple opportunities to attempt product evaluations in a forced situation – most were able to correctly interpret the information once they had done so several times. This was more powerful than the interviewer just telling the participant about the concept and then allowing them to look at the labels alone, without guidance. It was also more powerful than the explanation on the back of the mock product package. Because of this success, highly visible advertising, or at least shopping centre demonstrations would be highly successful in encouraging use.

Many thought the brief explanation on the back of the product example with %DI labelling on the front of the package was useful and easy to understand, and that it enhanced their knowledge of %DI built throughout the interview process. Several thought if they read this information, in combination with seeing the %DI information on the front of the package, they would be encouraged to attempt to use this information. It is likely that in most cases, repeated use of the information will lead to greater accuracy and willingness to use the information.

3. Conclusions and Recommendations

The research has shown that %DI could be an important tool in aiding the assessment of health and nutrition claims, if properly presented and explained.

The research has identified that %DI information could be useful for consumers in making food choices without the need for comparisons, but that uptake will be affected by the information included in the label and the education undertaken.

Given the low levels of current use of %RDI information, FSANZ will be unable to rely on the transference of skills from this information to the new %DI information. It is also not possible to predict the uptake of %DI information using %RDI as a guide, due to its low acceptance. However, a positive note is that participants were readily able to correctly interpret the information of both %RDI and %DI given several attempts, suggesting that it is not the capacity of consumers, but rather the potential usefulness of %RDI information that is driving low take-up.

Willingness to use %DI will be dramatically affected by the nutrients specified. For this reason, we would strongly recommend that if FSANZ recommends the use of %DI information, then all nutrients, not just energy and the claimed nutrient, be specified. It is vital that information be given at least for the claimed nutrient and the perceived "trade-off" nutrient. Without this information, FSANZ risks consumers making incorrect choices, or disregarding the information completely due to lack of credibility of the information.

Energy is problematic to use as the only NIP element labelled with %DI other than the claimed nutrient, given consumers' low levels of knowledge and awareness about energy and how to use information about it. This confusion is in part driven by current acceptance of calories as an alternative, but mostly by a lack of knowledge about what high or low energy means for consumers. While education about energy may have the desired effect, it would have to be extensive to replace consumers' reliance on current information about fat and sugar.

Participants' high level of acceptance of the package example with %DI information on the front of pack reinforces the recommendation that %DI values for all nutrients be included. It also suggests that the positioning of the information on the front of the package may encourage use among those who currently do not look at the NIP. However, this information needs to act as a supplement, not a replacement, to information on the NIP. As seen in previous research conducted for FSANZ, information on the back of the package has higher credibility than information on the front of the package among savvy consumers (driven by a history of non-marketing information appearing on the back of the package) and these consumers will continue to use the NIP to make purchase decisions. This is in part due to its credibility, and due to the fact it is near to other information regularly used by these consumers, such as the ingredients list.

Education on the topic will be vital to encourage consumers to understand and use %DI information. Suggestions of demonstrations or visible communications activities were made by participants, and this recommendation is reinforced by the ability of participants to correctly use the information once they have had several forced attempts. Simple explanations like that included on the product package example are useful as well, particularly in drawing consumers' attention to the information's usefulness and role.

tns social research

APPENDIX A: Recruitment screener

TNS SOCIAL RESEARCH
Food Standards Australia New Zealand (FSANZ)
Interpretations of %RDI and %DI (90261)

> **INTERVIEWER NOTES: This questionnaire must be used in conjunction with IDI Schedule Table to determine allocation to a time.**
>
> INTRODUCTION

<If a child answers the phone, ask to speak to Mum or Dad or an adult in the household. >

Good ... (morning / afternoon / evening). My name is ... calling on behalf of TNS Social Research. WE ARE NOT SELLING ANYTHING. We are currently doing research on behalf of Food Standards Australia New Zealand about food labelling.

We are setting up interviews with people who are the main purchasers of groceries for their household. The interview will be based around different food labels and your interpretation of them. Your input into this research will be used to help in the development of effective food standards that help protect the health and safety of people in Australia.

We will be giving all participants **$70** as a thank-you for their time and assistance with this research. The interview will take approximately 1 hour and will be held in <Office Location>. Your input into this discussion would be completely confidential.

Does this sound like something that may interest you? <If Yes>
Just to make sure we are talking to a wide spread of people as possible I need to ask you a couple of questions. They should only take one or two minutes. Is it convenient to ask these now? (IF NOT MAKE AN APPOINTMENT TO CALL BACK)

Q1   Are you mainly or jointly responsible for the grocery shopping in your household? **(READ OUT)**

    Yes .... 1 (CONTINUE)
    No .... …..2 (ASK TO SPEAK TO MAIN GROCERY BUYER)

Q2   Interviewer record sex of respondent **(DO NOT READ OUT)**

    Female .... 1 (CONTINUE)
    Male .... 2 (CONTINUE)
                (ENSURE MIX OF GENDERS ACROSS ALL INTERVIEWS IN YOUR STATE/TERRITORY)

Q3   Which of the following age groups are you in? **(READ OUT – CHECK QUOTAS)**

    18 - 29 ....**1 (CONTINUE)**
    30 - 54 ....**2 (CONTINUE)**
    55 + ...**3 (CONTINUE)**

Q4   Here are five statements about buying food. Please choose the one which best describes how you feel when buying food for your household. **(READ OUT – CHECK QUOTAS)**

    I'm not at all concerned about the health or nutritional value of the foods that I choose…1 (LOW)
    I usually don't worry about the health or nutritional value of the foods that I choose……..2 (LOW)
    I sometimes like to choose healthy or nutritious foods …....................................……………..3 (MEDIUM)
    I regularly choose the healthy or nutritious alternative ....……………...4 (MEDIUM)
    I always choose the healthy or nutritious alternative……………………………………...5 (HIGH)

Q5   Is English the main language spoken at home?
    Yes...........................1 (CONTINUE, CHECK QUOTA FOR NESB/INDIGENOUS QUOTA)
    No .... …..2 (CONTINUE, CHECK QUOTA FOR NESB/INDIGENOUS QUOTA)

    [Interviewer note: Q5 and Q6 can be inserted at the front of the screener should it be required (i.e. you need to meet quotas for NESB and Indigenous participants]

Q6   Are you or any member of your household of Aboriginal and/or Torres Straight Islander origin? (For Aust)

Are you or any member of your household of Maori origin? (For NZ)
Yes...........................1 (CONTINUE, CHECK QUOTA FOR NESB/INDIGENOUS QUOTA)
No ....…..2 (CONTINUE, CHECK QUOTA FOR NESB/INDIGENOUS QUOTA)

[Interviewer note: Q5 and Q6 can be inserted at the front of the screener should it be required (i.e. you need to meet quotas for NESB and Indigenous participants]

<u>THANK AND CONTINUE</u>

THE GROUP WILL BE A ONE ON ONE INTERVIEW WITH ONE OF OUR RESEARCHERS. AS I MENTIONED EARLIER, WE WILL PAY YOU $70 **AS A REIMBURSEMENT FOR YOUR TIME IN ATTENDING THE INTERVIEW. THE INTERVIEW WILL RUN FOR APPROXIMATELY 1 HOUR.**

The interview will be held at <time> on <date> at <location>. Their address is : <location address>. As there will be some reading involved please remember to bring along any reading aids you may require (reading glasses etc).

Refer to **IDI Tables and listings** for more information

THANK YOU FOR YOUR ASSISTANCE

I certify that this is a true, accurate and complete interview, conducted in accordance with IQCA standards and the ICC/ESOMAR International Code of conduct. I will not disclose to any other person the content of this questionnaire or any other information relating to this project.

INTERVIEWER'S SIGNATURE:_____   DATE: _____

APPENDIX B: Discussion guide and materials – stage one

INTERVIEW PROTOCOL

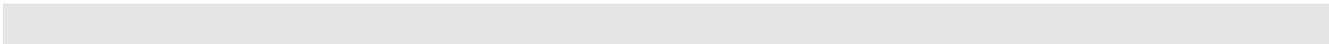## 1   WELCOME & INTRODUCTION   (5 MINS)

- Introduce self.

- Explain purpose of interview – topic is food labels and information on labels about nutrition and health.

- Don't need to know anything about nutrition and health. No right or wrong answers.

- Mix of activities and talking, informal.

- Housekeeping issues – toilets, mobile phones off, confidentiality & taping (audio).

WARM UP

Ask about particular shopping habits/patterns, who they are shopping for and whether have any special dietary needs that influence what food products they buy.

Food allergy 01
Asthma 02
Weight loss 03
Medical condition (diabetes, heart disease, health concerns such as high blood pressure or cholesterol, digestive concerns such as coeliac disease, Irritable Bowel Syndrome)04
Other conditions (migraine, pregnancy and breast feeding)................................. 05
Lifestyle (Vegetarian / vegan, religious / ethical beliefs, training for sports etc) . 06
General health 07
Other **(CODE & WRITE IN)** 08

_____

No, none 09

Relevant participant information:	

For this section, the Researcher has XX products to show.

"I want to talk to you about different things that appear on food labels. Here are some examples of different products. We haven't chosen these products for any particular reason. They are just randomly selected examples from the supermarket. You may recognise some, which is ok, but we're not here to focus on the brands but the other information on the pack. Now please take a look at...... what are all the different labels and pieces of information you can see?"

(How long did it take participant to find the NIP and the %RDI information? Did they find it alone or did you have to point it out?)

2A: Awareness and Use of %RDI
- You mentioned the %RDI (use participant's words) information. Is this something you use when you are shopping? How often do you use it? In what situations do you use it?
- (If yes) how do you use it? What are you looking for?
- What does the information mean to you? What do you think it is telling you?

2B: Assessment of product choice using %RDI
I would like you to have a look at these two products. They are both PRODUCT CATEGORY, but they are slightly different.

- Which product is the healthier product?
- How did you decide that?
- What information did you use?

(Observe participant, did they compare products? On what basis did they compare?)

- Did you use the %RDI information?
- What can you tell me about the differences between the products using the %RDI information?
- Which one has more Niacin? How much more?
- Which one has more Iron? How much more?
- How do you know this?
- How difficult was it to decide this?
- Would you normally compare products using this?
- What information would you normally use to make a decision between products?

(If respondent asks what %RDI means ONLY AFTER QUESTIONS IN THIS SECTION HAVE FINISHED- Recommended Dietary Intakes (RDIs) are the levels of intake of essential nutrients considered to be adequate to meet the known nutritional needs of practically all healthy people.)

3	Awareness and Use of %DI	(20 MINS)

I would like to talk to you now about a different type of information. Before I start asking you questions about it, have a look at this product label and tell me what looks new or different about it. **(Do they notice the %DI information? Do they see it as different to %RDI)**

(Highlight %DI information if required) I would like to talk to you about that information, let's call it %DI information.

- Have you ever seen this type of information before?

- What do you think it is telling you?

- What do you understand about this product?

Here is another product, it also has the %DI information on it.

- What do you see when you compare the products?

- Which product is healthier?

- Which product has more fat in it?

- Which product has more energy in it?

(Are participants able to correctly interpret and compare the labels?)

(Educate participants) – For each nutrient in food there is an amount that the "average" person should have in each day. It might be slightly different for people with different needs and energy intakes. You're familiar with the %RDI information – that refers to vitamins and minerals. This one, %DI, refers to nutrients like fats, carbohydrates and sugar. So the percentage refers to what proportion of say, fat, you should eat in a day, that the product contains.

- Does that make sense? What does that mean to you?

- So if one product says %50DI next to sugar, and the other says %20DI next to sugar, which one is healthier?

- And if one product says %75DI next to dietary fibre and one says %16DI next to dietary fibre, which one is healthier?

- **Show examples, assess whether participants can make a decision between products.**

- How would you tell people about this %DI? How would you explain it?

- Do you think you would use it to compare products? Why? Why not?

THANK AND CLOSE
Your views will assist FSANZ in their work on developing food labelling standards
PROVIDE INCENTIVE.

APPENDIX C: Discussion guide and materials – stage two

tns social research

%RDI and %DI research

Discussion guide

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

Introduction (5 mins)

- Introduce self, company and project
- Discuss their role in the process (part of a number of interviews; understanding of different people's perceptions, etc)
- Don 't need to know anything about nutrition and health, no right or wrong answers
- Taping / confidentiality
- Mobile phones off

Background (5 mins)

Ask about particular shopping habits/patterns, who they are shopping for and whether they have any special dietary needs that influence what food products they buy.

- Food allergy
- Asthma
- Weight loss
- Medical condition (diabetes, heart disease, health concerns such as high blood pressure or cholesterol, digestive concerns such as celiac disease, Irritable Bowel Syndrome)
- Other conditions (migraine, pregnancy and breast feeding)
- Lifestyle (vegetarian/vegan, religious/ethical beliefs, training for sports etc)
- General health

tns social research

2	**Assessing Nutrition and Health Claims**	**(20 MINS)**

For this section, the Researcher has 1 product to show.

"I want to talk to you about different things that appear on food labels. Here are some examples of different products. We haven't chosen these products for any particular reason. They are just randomly selected examples from the supermarket. You may recognise some, which is ok, but we're not here to focus on the brands but the other information on the pack. Now please take a look at...... what are all the different labels and pieces of information you can see?"

(How long did it take participant to find the NIP and the %RDI information? Did they find it alone or did you have to point it out?)

2A: Awareness and Use of %RDI
- You mentioned the %RDI (use participant's words) information. Is this something you use when you are shopping? How often do you use it? In what situations do you use it?
- (If yes) how do you use it? What are you looking for?
- What does the information mean to you? What do you think it is telling you?

2B: Assessment of product choice using %RDI
I would like you to have a look at this product.
- Is this a healthy or unhealthy product?
- How did you decide that?
- What information did you use?

(Observe participant, did they use %RDI? On what basis did they decide?)

- Did you use the %RDI information? Why/why not? Do you ever use this information?
- Does this product have a high or low level of niacin? What about iron?
- How do you know this?
- How difficult was it to decide this?
- Would you normally use this information when you shop?
- What information would you normally use to make a decision between products?

(If respondent asks what %RDI means ONLY AFTER QUESTIONS IN THIS SECTION HAVE FINISHED- Recommended Dietary Intakes (RDIs) are the levels of intake of vitamins and minerals considered to be adequate to meet the known nutritional needs of practically all healthy people)

tns social research

| **3** | **Awareness and Use of %DI** | **(20 MINS)** |

(RESEARCHER HAS 6 MOCKED UP LABELS. START WITH ONE LABEL – ROTATE ORDER, USE THREE IN THIS SECTION AND THREE AFTER "EDUCATION". USE THESE QUESTIONS AND QUESTION AREAS ON NEXT PAGE AS THEY ARISE)

Take a look at this product. What do you notice about this product? What do you think it might be low in? What might it be high in? Why do you think that?

(IF THEY DON'T LOOK AT THE "BACK", ASK THEM TO TURN IT OVER) Have a look at the back of this product and tell me what looks new or different about it. **(Do they notice the %DI information? Do they see it as different to %RDI)**

(Highlight %DI information if required) I would like to talk to you about that information, let's call it %DI information.

- Have you ever seen this type of information before?

- What do you think it is telling you?

- What do you understand about this product?

- Is this a healthy product? Why/why not? How did you decide?

- What nutrients did you look at? Which ones are important for you for this product? Why? (do they look at the claimed nutrient? The "trade-off" nutrient? Other nutrients? The nutrients they mentioned at the beginning? Do they notice some nutrients aren't there?)

REPEAT FOR ALL PRODUCT LABELS (Are participants able to correctly interpret the labels?)

(educate participants if required) – For each nutrient in food there is an amount that the "average" person should have in each day. It might be slightly different for people with different needs and energy intakes. We've talked about the %RDI information – that refers to vitamins and minerals. This one, %DI, refers to nutrients like fats, carbohydrates and sugar. So the percentage refers to what proportion of say, fat, you should eat in a day that a serving of the product contains.

- Does that make sense? What does that mean to you?

- SHOW REMAINING THREE PRODUCTS (IF NECESSARY). Does that explanation help you to understand the information on this product? What does it mean to you now?

- What nutrients did you look at? Which ones are important for you for this product? Why?

- Does it make a difference to your ability to tell whether this is a healthy or unhealthy product?

(perceived need for labelling on all nutrients)

- You'll notice on these labels there is only the %DI information for some nutrients. Why do you think that is?

- What would change for you if the label had information on all the nutrients? Would you use it differently?

- Are there any nutrients in particular you would like to have information for?

(perceptions of value of energy labelling)

- How often do you look at this nutrient – energy? What does that mean to you? Is high energy or low energy healthier for you?

- Let's have a look at these two products (low fat dairy dessert and bread). Compare those two. Which is the healthier product? Why?

(desired location of labelling – use mock product)

- All the versions we have talked about so far have this %DI information on the back. Here is another version, where it is on the front of the package. What do you think about that?

- Is it as believable or credible as when it is on the back? More/less?

- Do you think it would affect the way you might use the information?

- It also has all the nutrients labelled here, rather than just a couple. How do you feel about that? What are the advantages of that? What are the disadvantages?

4	Promoting %DI	(10 MINS)

- You'll notice that pack of cereal has a bit of an explanation there on the back. What do you think of that? Does it help? Make any difference?

- How would you tell people about this %DI? How would you explain it?

- How would you describe the difference between %RDI and %DI?

- What do you think is the main reason people might use %DI information? Does it add anything to what is already on the labels?

- Do you think you would use it to compare products? Why? Why not?

- Will you use this information when purchasing? In which situations? Why/why not?

THANK AND CLOSE

Your views will assist FSANZ in their work on developing food labelling standards

PROVIDE INCENTIVE.

tns social research

Australia Stimulus 1
Australia and New Zealand Stimulus 2

a) Low Fat Ice-Cream

NUTRITION INFORMATION Serves per package: 1 Serve size: 150g			
	Quantity per Serve	% Daily Intake* (per Serve)	Quantity per 100g
Energy	838kJ	10%	559 kJ
Protein	6.9g		4.6g
Fat, total – saturated	1.5g 0.8g	2%	1.0g 0.5g
Carbohydrate – sugars	39.9g 30.9g		24.7g 20.6g
Sodium	80mg		53 mg
*based on an average adult diet of 8700 kJ			

Ingredients: Yoghurt (skim milk, sugar, cream, milk solids, thickeners (1422, 1442), halal gelatine, cultures (including acidophilus and bifidis)), passionfruit cheesecake fruit mix (passionfruit (5.9%), water, sugar, thickener (1442), vegetable gum (415), food acids (330, 332), flavour, preservative (202)

b) Low fat yoghurt

NUTRITION INFORMATION Serves per package: 1 Serve size: 150g			
	Quantity per Serve	% Daily Intake*	Quantity per 100g

		(per Serve)	
Energy	302kJ	4%	201kJ
Protein	8.1g		5.4g
Fat, total – saturated	0.3g 0.2g	<1%	0.2g 0.1g
Carbohydrate – sugars	9.0g 9.0g		6.0g 6.0g
Sodium	90mg		60mg
*based on an average adult diet of 8700 kJ			

Ingredients: skim milk, milk solids, cultures (including lactobacillus, acidophilus)

c) Reduced sodium creamy chicken soup

NUTRITION INFORMATION Serves per package: 2 Serve size: 265g			
	Quantity per Serve	% Daily Intake* (per Serve)	Quantity per 100g
Energy	585kJ	7%	220 kJ
Protein	8.5g		3.2g
Fat, total – saturated	6.1g 2.8g		2.3 g 1.1g
Carbohydrate	12.4g		4.7g

– sugars	3.1g		1.2g
Sodium	687mg	30%	345mg
*based on an average adult diet of 8700 kJ			

Ingredients: Water, skim milk, chicken (12%), cream, maize thickener (1422), wheat flour, flavours (contain sesame oil, flavour enhancers (621, 627, 631)), salt, sugar, herb and spice extracts, colours (160, 101)

d) Breakfast cereal

NUTRITION INFORMATION Serves per package: 12 Serve size: 45g			
	Quantity per Serve	% Daily Intake* (per Serve)	Quantity per 100g
Energy	628kJ	7%	1369kJ
Protein	3.6g		8.1g
Fat, total – saturated	0.7g 0.2g		1.6g 0.4g
Carbohydrate – sugars	32.4g 14.0g		71.9g 31.2g
Dietary Fibre	6.4g	21%	8.5g
Sodium	14mg		30mg
*based on an average adult diet of 8700 kJ			

Ingredients: Cereals (69%) (whole wheat, rolled oats, triticale), sultanas (17%), sugar, dried apricot pieces (3.5%) (dried apricot, fructose, maltodextrin, humectant [glycerol]), thickener (1422), soy flour, vegetable oil (hydrogenated soybean), vegetable gum (466), natural flavour, natural colour (apocarotene), food acid (citric acid), malt extract, salt, honey (0.1%), preservative (220)

e) Toasted muesli

NUTRITION INFORMATION Serves per package: 14 Serve size: 50g			
	Quantity per Serve	% Daily Intake* (per Serve)	Quantity per 100g
Energy	898kJ	10%	1791kJ
Protein	5.3g		10.5g
Fat, total – saturated	9.8g 4.1g		19.6g 8.2g
Carbohydrate – sugars	26.3g 12.4g	14%	52.5g 24.8g
Sodium	178mg		355mg
*based on an average adult diet of 8700 kJ			

Ingredients: Cereals (58%) (oats, wheatgerm), sugar, fruit (12%) (sultanas, raisins, apricot pieces [apple, apricot, invert sugar, sugar, humectant (glycerol), dextrose, wheat fibre, vegetable fat, flavour, emulsifier (soy lecithin), colour (160(B)), acidity regulators (330, 332), maize starch], vegetable oils, coconut, glucose syrup, honey, sesame seeds, salt, sunflower seeds, cashew nuts, humectant (glycerol), flavour, preservatives (220, 223).

tns social research

f) Wholemeal bread

NUTRITION INFORMATION Serves per package: 11.5 Serve size: 60g (2 slices)			
	Quantity per Serve	% Daily Intake* (per Serve)	Quantity per 100g
Energy	660kJ	8%	1080 kJ
Protein	5.6g		9.1g
Fat, total – saturated	1.6g <1g		2.7g <1g
Carbohydrate – sugars	28.1 g 1.3g		46.1g 2.2g
Dietary Fibre	5.2g	17%	7.0g
Sodium	260mg		430mg
*based on an average adult diet of 8700 kJ			

Ingredients: Wheat flour (white, wholemeal), water, kibbled grains (79%) (wheat, rye), wheat gluten, yeast, salt, canola oil, malted barley, soy flour, emulsifiers (471, 481), acidity regulators (263, 330)