# 3.4 OPTIMISING NUTRIENT ELEMENTS (KILOJOULES LABEL)

# 3.4.1 "Kilojoules" versus "Energy"

Participants were first shown two label variants and asked to indicate whether 'Kilojoules' or 'Energy' were more meaningful.

The results shown in Chart 5 below indicate that 'Kilojoules' is significantly (but mildly) more meaningful to consumers, with just over half the sample (53%) selecting this variant. This result supported findings from the qualitative phase of the research.

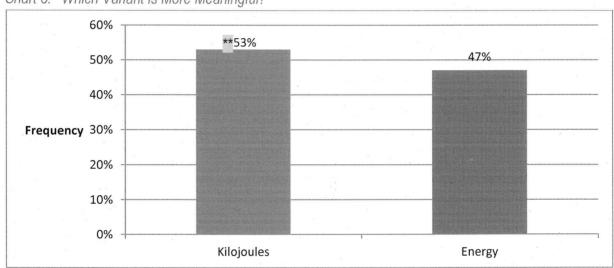


Chart 5. Which Variant is More Meaningful?

N1. Which of these variants is most meaningful to you?

# 3.4.2 "Low/Medium/High" versus "Daily Intake %"

Building on this design, additional components were introduced denoting the level of nutrient – these were 'Low/Medium/High' and 'DI %'.

Respondents were first asked to indicate their relative level of understanding of each variant. The results are shown in Chart 6, below.

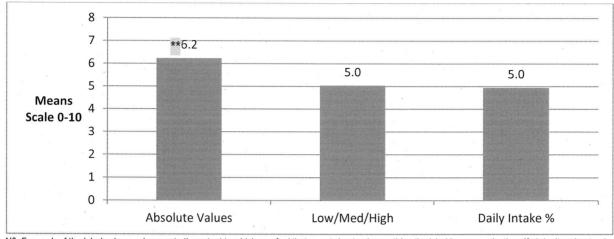


Chart 6. Understanding of the Three Different Labels

N2. For each of the labels above, please rate the extent to which you feel that you understand everything the label is communicating. (0=I don't understand at all 10=I completely understand)

In relation to overall means, the 'Absolute Values' label has the highest level of understanding, while the 'Daily Intake %' and 'Low/Medium/High' labels have roughly similar levels, both of which are lower than 'Absolute Values'. This result suggests that any addition of information to the label will naturally decrease the ease of with which consumers understand the label, and will therefore require a campaign to increase consumer understanding.

Respondents were then asked whether the amount of nutritional information shown on the three labels was too much, not enough, or just right for their needs.

The results (as shown in Chart 7 including comparison to the baseline) show that all three variants are significantly below baseline, suggesting that respondents feel that the labels alone do not contain enough nutritional information for their needs.

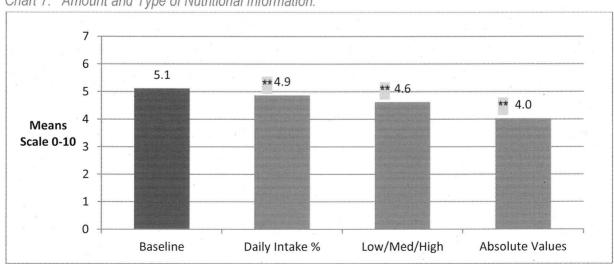


Chart 7. Amount and Type of Nutritional Information.

C4. Please indicate whether the amount of nutritional information currently found on food packaging is too much, not enough, or just right for your needs? (0=A lot less than I need, 5=just right for my needs, 10=A lot more than I need).



N3 If some food packs were only to contain information on kilojoules, on the scale shown below, please indicate whether the amount and type of nutritional information shown on each label is too much, not enough, or just right for your needs. (0=A lot less than I need, 5=just right for my needs, 10=A lot more than I need).

Respondents were then asked to select the one variant that was most meaningful to them. The results are shown in Chart 8, below.

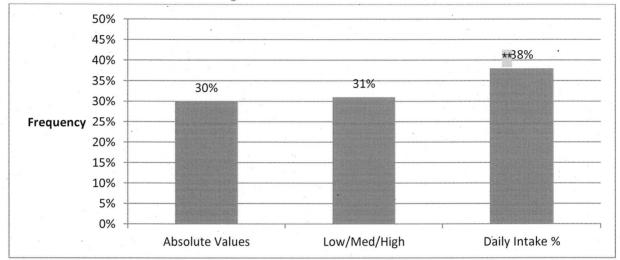


Chart 8. Label Which is More Meaningful to Consumers

N4 Overall, which of these labels is most meaningful to you?

As can be seen in Chart 8, 'Daily Intake %' was selected by significantly more respondents as being the most meaningful out of the three variants, while there was no difference between the 'Absolute Values' label (30%) and the 'Low/Med/High' label (31%).

Note that this result is in direct contrast to findings that will be presented in the next section, which showed that respondents preferred the "Low/Medium/High" scheme. The main difference between the labels presented in this section and the next is the amount of information contained within them – here the labels only have one nutrient (Kilojoules), while in the next section, the nutrient elements that were presented had five nutrients (each containing information on the amount of nutrient). Our hypothesis is that as the number of nutrients shown increases, respondents seek quicker and easier ways of interpreting all the information – and evidence presented in the next section suggests that the "Low/Medium/High" scheme is easier to understand, and is considered to be a more appropriate "amount" of information for consumers' needs.

# 3.5 OPTIMISING NUTRIENT ELEMENTS (ALL NUTRIENTS)

In the next section of the survey, respondents were shown complete nutrient elements, containing five nutrients. They were then asked to focus on different components of the label and provide feedback. The results are outlined in the following sections.



#### 3.5.1 Recall of similar labels

Respondents were first shown an example of a full nutrient element with five nutrients and asked whether they had ever seen "a similar label". The results are shown in Chart 9, below.

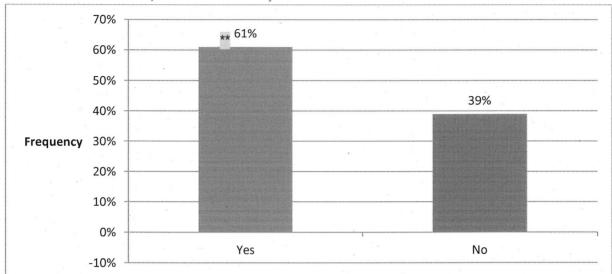


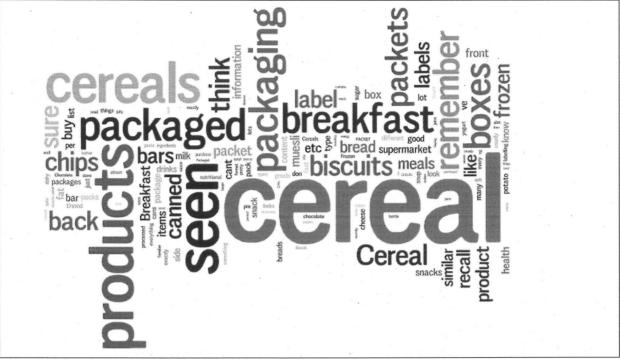
Chart 9. Whether Participants Had Previously Seen A Label Similar to the Full Nutrient Label

N5 The image shown above is an example of a label containing additional information to the labels you saw in the last few questions. It is an example for illustration only. Have you ever seen a label similar to this on the food that you buy?

Three in five respondents (61%) claim to have seen a similar label before. Interestingly, only 45% of respondents claim to have seen the Daily Intake Guide (See Section 3.7).

For those who had seen the label before, open-ended answers were allowed on where they had previously seen the label. As shown within the Word Cloud contained within Chart 10, the main places where consumers claim they had seen this label was on cereal, packaged and pre-prepared foods, and breakfast items generally.

Chart 10. Where Respondents Had Seen Such a Label Previously



N6. Please provide a few details about where you have seen such a label (note: word cloud depicts the number of mentions of a word by the size of the word in the cloud)

# 3.5.2 "Per 100g" versus "Per Xg serve"

Consumers were then presented with two variants of the full nutrient element, with one variant denoting the serving information as "Per 100g" and the other showing "Per 175g serve".

Respondents were then asked to indicate which variant was most meaningful to them. The results are shown in Chart 11, below. Three in five respondents felt that "Per 100g" was the most meaningful way of expressing serving information. These findings support the findings and recommendations in the qualitative study.

70%
60%
50%
40%
40%
20%
10%
0%
Per 175g serve
Per 100g

Chart 11. Label Which is More Meaningful to Consumers

N7 Which option would be more meaningful to you if it were on a nutritional label?

Participants commented on why they had chosen the 100g label. The Word Cloud at Chart 12 below provides detail on some of the general themes that came out from these open ended responses.

Chart 12. Word cloud of reasons Given by Respondents Who Preferred "Per 100g"



N8b. And why is "Per 100g" more meaningful to you?

The main justifications for why 'Per 100g' was chosen over the 'Per 175g serve' related to the former being "easier" for several reasons. 100g was deemed to generally be "easier", as well as easier to measure, easier to compare with different products and packaging, easier to understand, and easier calculate a serving size.



## 3.5.3 "Low/Medium/High" versus "Daily Intake %"

The next section of the survey compared the 'Low/Med/High' component with the 'Daily Intake %' component, both within the full nutrient element (containing all five nutrients).

Respondents were asked to indicate their level of understanding for the 'Low/Med/High' and the 'Daily Intake %' labels. As shown in Chart 13 below, levels of understanding are significantly higher for the "Low/Medium/High" component than for the "Daily Intake" component.

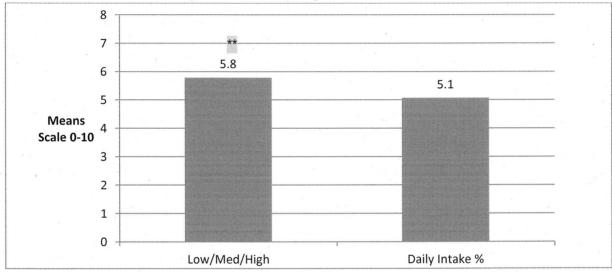


Chart 13. Level of Understanding of the Nutrient Design

N10 For each of the labels above, please rate the extent to which you feel that you understand what the highlighted area is communicating. (0 = I don't understand at all, 10 = I understand completely)

Respondents were then asked whether the amount of nutritional information shown was too low, too high, or just right for their needs. In this question, the original nutrient element label showing just the absolute values for each nutrient was also included for comparison.

The chart below shows the results compared to the pre-exposure baseline.

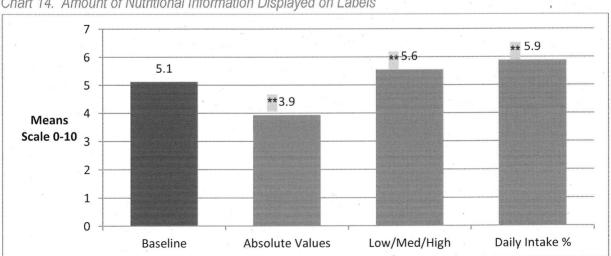


Chart 14. Amount of Nutritional Information Displayed on Labels

C4. Please indicate whether the amount of nutritional information currently found on food packaging is too much, not enough, or just right for your needs? (0=A lot less than I need, 5=just right for my needs, 10=A lot more than I need).



N11. On the scale shown below, please indicate whether the amount and type of nutritional information shown on each label is too much, not enough, or just right for your needs. (0=A lot less than I need, 5=just right for my needs, 10=A lot more than I need)

The results in Chart 14 show that, from consumers' perspective, absolute values alone provide significantly less than the right amount of information. Daily Intake is considered to provide slightly more than "the right" amount of information, as is Low/Medium/High. From the results however, Low/Medium/High seems to be closest to "the right" amount of information as far as consumers are concerned.

Respondents were then asked to provide ratings for each of the three variants, this time in regards to the extent to which each nutrient element "label" would influence their food purchase choices. Results are shown in Chart 15, below, and compared to baseline (which represents existing nutritional information that can be found on food packaging).

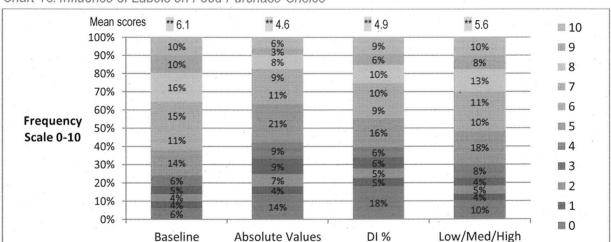


Chart 15. Influence of Labels on Food Purchase Choice

The results in Chart 15 show that, although the Low/Medium/High component is the highest of the three variants tested (in terms of mean scores), in terms of expected influence on purchase choice behaviour, all three variants are significantly lower than the baseline (i.e. the current level of influence that existing nutritional information on food packaging has on consumers' food purchase choices). This is not surprising, given that much of the information in the nutrient element tested in this research can be found elsewhere on current packaging (indeed, considerably more information can be found in the back-of-pack nutritional information table). Our interpretation of these results is that, while the nutrient element adds to the star ratings when it comes to overall impact on consumer food choices, on its own, it is not enough to influence consumer food choices more than existing information on food packaging.

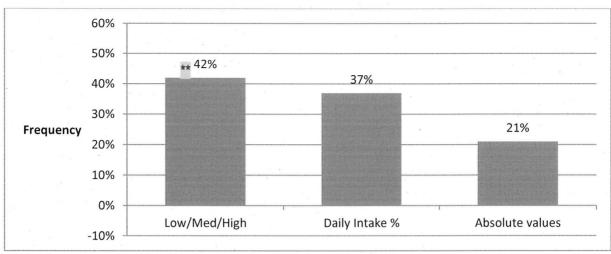
Finally, consumers were asked which of the labels was most meaningful to them. The results are shown in Chart 16, below. The results confirm other findings in this section, with the highest number of respondents selecting "Low/Medium/High" as the most meaningful component.

Chart 16. The Label Which is Most Meaningful to Consumers



C2. To what extent does the current nutritional information on food packaging influence your food purchase choices? (0=It has no influence, 10=It has a very strong influence)

N12. If any of these labels were present on the front of packaged foods, to what extent would each **influence your food purchase choices**? (0=It has no influence, 10=It has a very strong influence)



N13. Overall, which of the variants above is most meaningful to you?

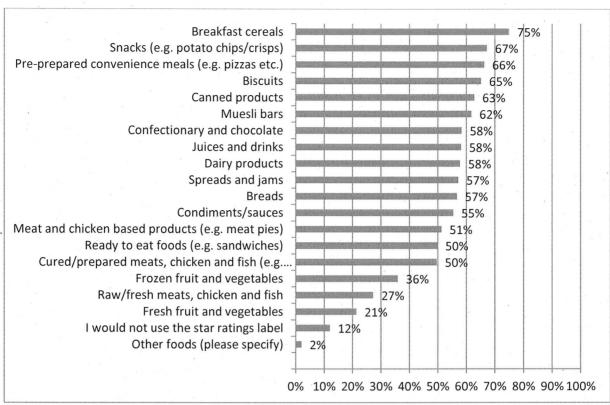
## 3.5.4 Types of foods for which star ratings and nutrient elements would be used

Respondents were asked to indicate the types of foods for which they would use the star ratings and nutrient elements.

- The foods for which the most number of consumers cited they would use either the star ratings element or nutrient element foods were breakfast cereals, snacks, pre-prepared convenience meals and biscuits, and Juices.
- The foods for which the least number of consumers would use either the star ratings element or nutrient element are typically fresh foods, such as meats and vegetables.

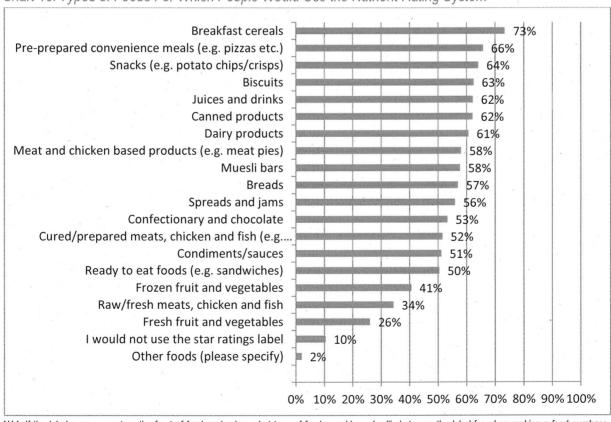
These results are shown in Charts 17 and 18 overleaf





ST3b. If a star rating system was present on the front of food packaging, for what type of foods would you be likely to use the star ratings when making a food purchase choice? You can select as many or few as you like.

Chart 18. Types of Foods For Which People Would Use the Nutrient Rating System



N14. If the label were present on the front of food packaging, what type of foods would you be likely to use the label for when making a food purchase choice? You can select as many or few as you like from the list below.



#### 3.5.5 Types of nutrients to include on a FoPL label

Respondents were asked to indicate their optimal number of nutrients to be included in the nutrient element of a FoPL label. The results, shown in Chart 19 below, suggest that five nutrients are the optimal number to include (based on consumers' own claims).

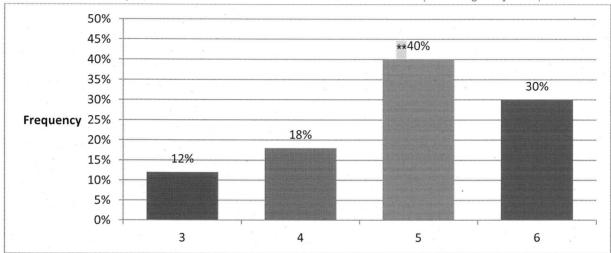


Chart 19. Claimed Optimal Number of Nutrients to Include on the Label (including Kilojoules)

M2a. From the list below, please select the nutritional information that is most important to you personally and that you would like to see on a front-of-pack nutritional label.

In the next section of the questionnaire, respondents completed a maximum difference scaling (MaxDiff) task, which is a variant of conjoint. The task involved showing all potential nutrients in groups of five, and for each group, respondents had to indicate the most important nutrient in the group "for your needs", and the least important. This was repeated on ten different screens, with each screen containing a different combination of nutrients within the group displayed. From the data, utilities were calculated for each nutrient tested, which allowed us to model the relative importance of each nutrient

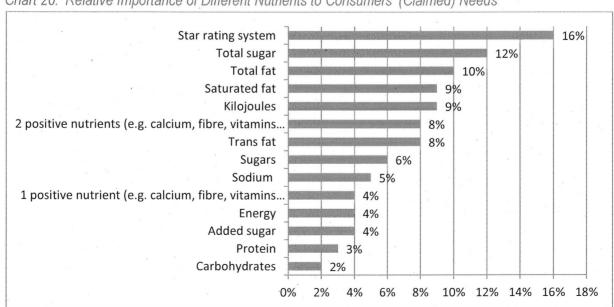


Chart 20. Relative Importance of Different Nutrients to Consumers' (Claimed) Needs

M1a-k. Please select the nutritional component that is most important for your needs to include on a front-of-pack label, and also select the component which you think is least important for your needs



Note that interpretation of MaxDiff output involves comparing of the percentage "scores" for each nutrient. The percentages not only indicate less or greater importance, but also the relative "size" of a difference – in other words, a nutrient with a percentage score of "20%" can be concluded to be twice as important as a nutrient with a score of "10%".

#### Hence, from Chart 20:

- The first thing to note is that the star rating system is, on average, the most important "nutrient" to be included on a front-of-pack label, suggesting that it is the single component, or piece of information, with the greatest value.
- The next most important nutrient was "Total Sugar", which was considered significantly more important than "Sugars", further down the list. This suggests that consumers find more meaning and value in "Total Sugar".
- Interestingly, both "Total fat" and "Saturated fat" are in the top five components in the list, suggesting that consumers see high value in both of these variants (indeed, the current Daily Intake Guide contains both).
- Kilojoules is on par with Saturated Fat in terms of overall importance. Respondents also tended to prefer two positive nutrients, over just one.

Further analysis was then conducted to determine whether natural 'segments' of consumers exist when it comes to favouring specific types of nutrients. The same data as shown in Chart 20 were analysed using latent class analysis, an analytical technique that determines natural groupings based on similar patterns of responses across a range of questions. The analysis revealed five key segments which, for ease of reference, we have called, Power Positives, Star Gazers, Medical Literates, Sweet Conscious, and Kilojoule Counters.

Table 2 below shows the five segments and their relative importance scores for each nutrient.

Table 2. Nutrient Segmentation

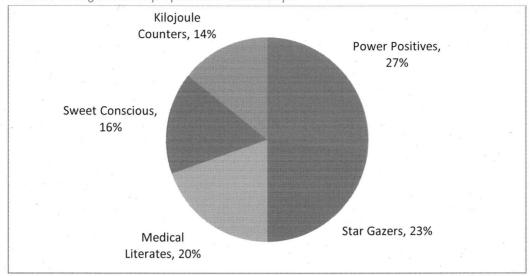
	Total sample	Power Positives	Star Gazers	Medical Literates	Sweet Conscious	Kilojoule Counters
Star rating system	16%	15%	48%	2%	2%	3%
Total sugar	12%	5%	8%	8%	38%	9%
Total fat	10%	6%	9%	18%	10%	11%
Kilojoules	9%	7%	5%	1%	1%	37%
Saturated fat	9%	5%	7%	20%	6%	7%
Trans fat	8%	3%	6%	24%	3%	4%
2 positive nutrients	8%	23%	3%	2%	1%	1%
Sugars	6%	4%	4%	5%	18%	5%
Sodium	5%	4%	3%	12%	5%	3%
Added sugar	4%	3%	2%	4%	11%	3%
Energy	4%	6%	2%	1%	1%	11%
1 positive nutrient	4%	10%	1%	1%	1%	1%
Protein	. 3%	6%	1%	1%	1%	2%
Carbohydrates	2%	4%	1%	1%	2%	3%
Total	100%	100%	100%	100%	100%	100%

As can be seen from the table above, each of the five segments has a distinct emphasis in the nutrients they consider most important:

- **Power Positives**: tend to be focussed on positive nutrients and star ratings, and at 27% of the total sample, they represent the largest segment (see Chart 21 below).
- **Star Gazers**: strongly over-index on the importance placed on the star system, representing 23% of the total sample
- Medical Literates: have a strong focus on fats (particularly unhealthy "trans" and "saturated" fats) and sodium. They represent a fifth of all consumers.
- **Sweet Conscious**: strongly over-index on the importance of sugars, particularly "Total Sugar". They represent 16% of the sample.
- **Kilojoule Counters**: place most importance in understanding kilojoules and energy of foods, and represent the smallest segment, at 14% of the sample.

#### The chart below shows the relative sizes of each of the five segments.

Chart 21. Sizes of segments as proportion of total sample



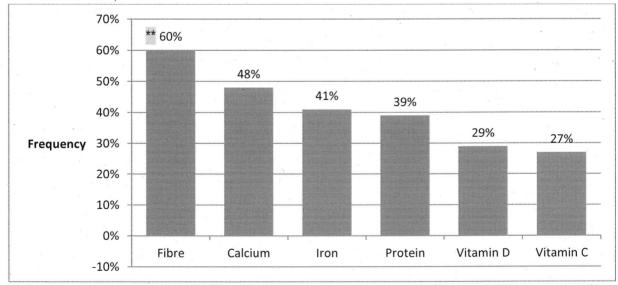
M1a-k. Please select the nutritional component that is most important for your needs to include on a front-of-pack label, and also select the component which you think is least important for your needs.

Chart based on latent class analysis of Max Diff Data.

Base: total sample (n=1,087)

In a separate and subsequent exercise, respondents were asked to select their most important positive nutrients. The results are shown in Chart 22, below.

Chart 22. Most Important Positive Nutrients to Include on the Label



M2. From the list below, please select the nutritional information that is most important to you personally and that you would like to see on a front-of-pack nutritional label

From this graph, the most important element is Fibre, with 60% of respondents selecting this option. Calcium was also quite high at 48%. On the other hand, both Vitamin D and Vitamin C were the lowest, with 29% and 27% respectively.

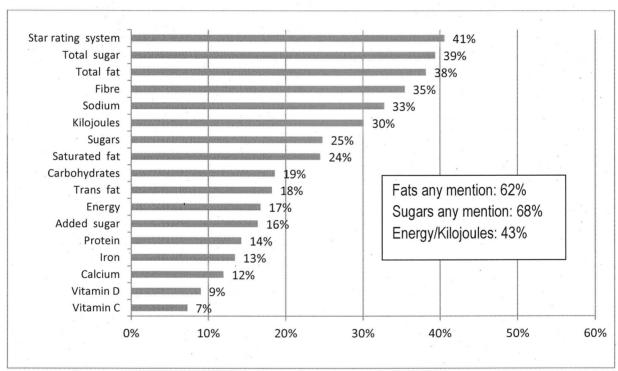


Respondents were then asked to select the most important nutrients when considering five specific food groups, namely:

- Breakfast cereals, muesli bars and snacks (e.g. potato chips/crisps)
- Pre-prepared convenience meals (e.g. pizzas)
- Meats, chicken and fish
- Dairy products
- Juices and drinks

The results are shown in Charts 23-27 below, and discussed subsequently.

Chart 23. Nutrients to Include for Breakfast cereals, Muesli Bars and Snacks



M2b In the grid below, please select the most important nutritional information that you would like to see for each type of food shown. You can select a maximum of <u>five</u> nutrients for each food type.