Front of Pack Labelling from the Perspectives of Māori, Pacific and Low-income New Zealanders

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Executive Summary

Nutrition labels aim to inform consumers about the nutrient value of foods and to guide food choices. Current labelling systems are not well understood or utilised by Māori, Pacific and low-income New Zealanders who are at significant risk from nutrition related diseases. This research evaluates Māori, Pacific and low-income consumers' understanding of and preferences for a number of front of pack labelling systems. It also aims to explore effective ways to promote such labels to these communities. It is part of a wider study that explores the feasibility of simple front of pack labelling to signpost food choices in supermarkets.

Six qualitative focus groups were conducted – two Māori, one Tongan, one mixed Pacific and two low-income groups. The Māori and Tongan researchers recruited participants who were regular food shoppers through their community networks. Participants were asked questions on their use of labels, their interpretation of a range of nutrition labels, and effective ways to promote such labelling systems.

The research suggests that Māori and Pacific people rarely use nutrition labels to guide them in their food choices. Barriers identified were habit, taste, lack of time and the price of healthy food. This finding contrasts with that of the predominantly Pākehā members of the low-income groups, the majority of whom report using labels regularly. All participants agreed that price was more important to them than choosing healthy food, even though they acknowledged that choosing healthy food was vital.

Participants in the study were able to interpret the simple traffic light correctly but wanted more information. With the multiple traffic lights tested, participants correctly interpreted a ratio of two red lights as unhealthy and two green as healthy, although it appears that in each case they merely added the number of red or green lights together to make their decision. Interpreting more complicated multiple traffic lights may not be so easy.

There was agreement from all participants that front of pack labelling would assist them to purchase healthy food and that labels must be simple and quick to understand. There was not a consensus about the most preferred label. The most popular label for the Pacific and low-income groups, of those tested, was the combination of %DI and simple traffic light. However, the research indicates that Pacific and low-income consumers may rely on the simple traffic light to assess the health of the food. Māori preferred the multiple traffic light system.

The focus groups suggest that one option for front of pack labelling with more information is multiple traffic lights. However, complex variations of this label may prove difficult to interpret. Alternatively the use of a combination of multiple and simple traffic light labels or %DI and simple traffic light could be considered, although in practice it appears that consumers would ultimately rely on the simple traffic light to assess the health of the food. Another option is to include a simple traffic light supported by a modified, easier to interpret, Nutrition Information Panel. It should be noted that there is a balancing that needs to occur between what people say they prefer, what they can understand (most people do not understand what saturates means, for example) and how any labelling system is promoted.

Any labelling scheme would need to be accompanied by health and nutrition labelling education that was effective, particularly for Māori and Pacific communities who rarely use labels at present. It is also critical to ensure that healthy food is priced at a level that Māori, Pacific and low-income communities can afford.

Introduction

Approximately 40% of deaths in New Zealand are due to the joint effects of high cholesterol levels, high blood pressure, obesity, and inadequate fruit and vegetable intake.[1] Healthy eating is vital to prevent heart disease, stroke, diabetes, cancer and many other major health issues in New Zealand. Māori and Pacific people are significantly less likely to eat a healthy diet than New Zealand Europeans. Poor nutrition is a major determinant of health inequalities; 47% of deaths among Māori are nutrition related compared to 39% among non-Māori.[2] Similarly, low-income people have high mortality rates from cardiovascular disease and cancer.[3] Pacific peoples also have a high number of nutrition related health problems such as obesity and diabetes mellitus compared to New Zealand Europeans.[4]

Supportive environments that assist people to make healthy food choices are important in promoting healthy nutrition. Nutrition labels on food packaging can provide valuable information to consumers at point of purchase and have the potential to promote healthy food choices and eating behaviours. More than 90% of consumers report checking nutrition labels on packaged foods on at least some occasions (e.g. when buying a product for the first time or trying to lose weight).[5] Despite high rates of self-reported use and understanding of nutrition labels, actual consumer use and understanding of nutrition information is quite low.[6] Recent consumer surveys in the UK and Australia on understanding of nutrition labels found that 49% of the UK sample and about half of the Australian sample misinterpreted the nutrition information.[7][8]

How people understand and use nutrition labels is strongly influenced by sociodemographic factors such as sex, age, income and ethnicity.[9][10] Recent research found that Māori, Pacific and low-income New Zealanders rarely use nutrition labels despite their significantly higher risk of nutrition related disease than the risk of New Zealand Europeans. [11] These communities recommended a nutrition label that is simple, colourful and easy to understand. [11]

Methodology

This research provides further information on the potential of front of pack labelling systems to promote healthy eating. It is an evaluation of Māori, Pacific and low-income consumers' understanding of and preferences for a number of front of pack labelling systems. It also explores effective ways to promote such labels to these communities. It is part of a wider study that explores the feasibility of simple front of pack labelling to signpost food choices in supermarkets. The project was led by a collaboration of Māori, Pacific and Pāhekā researchers throughout the entire process.

Six focus groups were conducted with food shoppers, two focus groups with Māori, two with Pacific (one Tongan group conducted in Tongan and one mixed Pacific group conducted in English) and two with low-income people. The Pacific and low-income groups were conducted in the Wellington region and the Māori groups in the Auckland region. Focus group interview schedule was developed (see Appendix A). Questions were asked about the use of food labels, the interpretation of a range of nutrition labels and effective means to promote such labelling systems. Labels tested included percentage of daily intake, simple and multiple traffic lights, the NY star system, and combinations of the above. They are presented in the results section of this paper. Labels were presented to participants in an enlarged format on flip charts and real product examples of existing labels were also provided. Participants were informed that Nutrition Information Panels are compulsory on all packaged food and were shown an example at the outset of the focus groups.

The focus groups were conducted by two Māori, and one Tongan, researchers. The researchers translated the consent and information sheets into the relevant language if required. The Tongan focus group was conducted in Tongan and the results were translated into English during the transcription process. Māori and Pacific participants were recruited through the community networks of the Māori and Pacific researchers.

Flyers were distributed through community notices and letter boxes of council flats to recruit low-income participants.

There were 68 participants altogether, six of whom were men. They ranged in age from 20 to 61. In the Māori focus groups there were 23 participants aged between 20 and 55, 22 women and one man. Eighteen women participated in the Tongan focus group aged from 20 to 61. The mixed Pacific focus group was attended by 13 women - seven Samoans, four Tongans, one Tokelauan and one Samoan/Cook Islander - all with English as a second language. Fourteen participants participated in the low-income focus group, nine women and five men, eleven of whom identified as New Zealand European. Of the low-income group, only two had a total household annual income above $15,000 and no one had income higher than $35,000.

Results were analysed by the Māori and Pacific researchers with support from the Pākehā researcher. Results were analysed according to the research questions and to the themes that emerged from the data. Careful attention was paid to both similarities and conflicts in the data. The discussion was a collaboration of the lead Māori, Pacific and Pākehā researchers.

Ethics approval was received from the University of Otago Human Ethics Committee and Te Komiti te Rakahau ki Tai Kahu provided advice about consultation with Māori.

Results

Māori Focus Groups

Influences on types of food people buy

All participants agreed that **price** was the most important factor for them when choosing food. Meat such as mince and sausages were highly acclaimed because of the numerous ways it could be prepared, the flavoursome taste and the amount of people it could feed. There was no mention of prime mince or healthier sausages.

All participants agreed that **marketing** and **advertising** affected their food choices but they felt that companies used fancy packaging to attract buyers and that the price of this packaging was an extra cost incurred by the consumer. The 'No Frills' food outlet was mentioned several times as a preferred alternative to buying food products.

There was a general agreement amongst participants that the **quality** of food, which was synonymous with being fresh, was important. One person also used the term **wellbeing** to describe healthy choice and another participant mentioned that healthy choice was considered but that it did not strongly influence their choice of food.

There was also general agreement by participants that **taste** was important. In this context it is important to note that most participants believed that healthy food choices tended to be less flavoursome. 'Trim milk' was used as an example.

Brand was also a factor but did not strongly influence choice. A general discussion about this factor was held amongst the group and corned beef was used as the example. One participant had changed to the less fatty corned beef product because it was made available. Another participant stated that she would not change brands under any circumstances because she was used to it and had eaten that brand for years.

Habit and Tradition were also influential in making food choices. 'If it is something I want it will not matter what the price is because that's what I was brought up with and it

is hard to give up'. 'Fish heads are expensive now but before they used to throw them away'. This statement was made by an older Māori women and further discussion ensued regarding what they were raised on as children. 'Pork bones' and 'boil ups' were also discussed along with the fact that 'pork bones aka the backbone' were once the parts that were discarded by butchers. It was noted that these food items were now more expensive in comparison to the cost when they were growing up. It was also raised by most of the participants that they cooked and ate the way their mothers taught them. They wanted to know how to prepare healthy food because they basically did not know how to. There was also a tension for two participants about the quantity of healthy food they ate which was also problematic. All participants agreed that they wanted their children to eat healthier but excluded their own eating habits as influential in this process.

Location of products in the store and the **proximity of food outlets** to the participants' homes also influenced the choice of food purchased. However **'Pak 'n Save'** was considered a good place to shop because of the perceived savings in costs i.e. the 'no frills' marketing messages used by the food outlet. Participants felt that this meant they were only paying for products and not packaging which saves them money.

Flyers and letterbox drops helped some participants to compare costs, look at new products, utilise the coupons available and take the time to scrutinise the products before going to the store, but this process of scrutiny and seeking information was not at all common amongst participants.

Presentation of products was another factor discussed and was considered important by approximately four of the 23 participants when choosing food. **Colour** was also associated with fresh food and presentation.

Freshness of food was discussed and there was general agreement that this was important. This factor was emphasised by one participant who noted that 'sometimes food doesn't always smell good'. This factor was more likely to be associated with perishable food products.

Importance of health when purchasing food

Participants agreed that choosing healthy food was vital but it was not thought to be more important than **price**. Participants with illnesses like diabetes said that they were more vigilant about reading the information to ensure the sugar and salt content was checked before purchasing food products. In essence the difference seemed to be eating healthily as a lifestyle choice and eating to alleviate and manage the symptoms caused by illnesses and diseases such as diabetes. Healthy food is perceived as expensive and is made up primarily of food that does not last long (is perishable). **Cost** was seen as the most important factor in the choice of food.

Quantity was seen as an important factor. A **'value for money'** perception was discussed. There was clearly a tension between quality versus quantity and for those with larger and younger families quantity was clearly the preferred choice. Fast food outlets provided quick and inexpensive options to those that needed a rest from work and cooking.

Participants revealed that food outlets closest to where they lived were made up primarily of fast and cheap food outlets. Therefore the combination of fast, cheap and easily accessible food outlets was clearly a strong influence when making food choices. An additional discussion about how this appeared to be a particular South Auckland phenomenon caused some participants to express annoyance.

The next influencers probably equal in importance were **quality and taste**. In the context of quality the participants felt that the discussion had raised awareness for them that nutrition advice and information was something they would think about more carefully but they also said that taste played an important part in the final choice. The issue of what they were accustomed to eating as children and as adults was also raised so **habitual choice** also played an important role in selection of food. **Health** was seen as important for those managing symptoms of illnesses such as diabetes but still not as important as the other factors previously mentioned. The participants were asked if they would buy a

healthy product if it cost more and their response was that it would depend on the price difference. If the cost was more than $1 then they would not buy the healthier product.

Use of nutrition labels

- Eighteen of the 23 participants did not read the labels as they have formed strong patterns of purchasing certain food products. They tended to buy by habit and familiarity.
- Of the 18 who did not read food labels, some confessed to reading labels if the product was something new they were eating.
- Five participants do read the labels. Out of this group three participants read the labels because of their health. They felt that health messages on TV, radio and health promotion had influenced their behaviour.
- One participant believed (incorrectly) everything on the nutrition label was associated with sugar.

Understanding of nutrition labels

%DI (Percentage of daily intake):

The following comments were made about the percentage of daily intake label presented:

- Don't understand the numbers
- Too much written information
- Light system should be on front of the package
- Some people are illiterate and cannot read or write
- Now we understand this system we like it more than the current label system
- Good but like the traffic light system
- The green dot on the product tells us that it is a healthy food choice and we like the information about % DI so no changes are needed.

In discussing fat, some participants talked about healthy and unhealthy fat and used olive oil as an example of healthy fat. There was some speculation about whether some participants had seen the % DI labels. Most had not but liked them stating they were 'very eye-catching compared to other labels they had seen'. Some participants perceived the traffic light system as easier.

Simple traffic light system

Green light:

Participants interpreted this label as, 'green is healthier and good for you'. Green means 'go for it'. The question was raised as to whether it would replace the 'Tick' (the National Heart Foundation front of pack label currently in use). This comment would suggest that participants associated the 'green dot' and the 'tick' with a healthy food choice

Most agreed, initially, that this symbol could be trusted however two participants questioned its authenticity. They believed that this image i.e. a 'green dot' on its own was not enough information to inform the consumer that it was a healthy choice. Interestingly other participants then changed their previous view about whether it could be trusted.

When the group was asked what they would do if they could change the label they said it was too plain, needed more oomph/pizzazz. When asked to describe those points further the response was to put something in the circle e.g. what makes it healthier or a picture of why it is healthier e.g. a fish or fruit but not words.

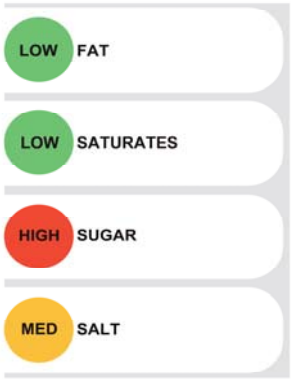
Amber light:

When asked what this meant, participants' comments included 'slow down', 'beware', 'ok choice', 'stop and think about it' and it is a 'sometimes choice'. Again there was some confusion by participants as to what 'amber' was compared to. The amber light on its own did not tell participants why a food product would have an 'amber light' on it. Participants thought the 'amber light' was boring, bland and maybe something should be added to the middle of the circle. One participant thought that the 'amber light' was similar to gold and therefore a good choice.

Red light:

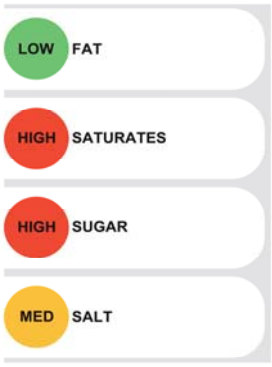
When asked what this meant, participants responses included 'stop', 'don't buy', 'no good', 'less healthy', 'don't touch', 'forget it', 'don't go near it', 'stop and think' and 'less healthy choice'. It was suggested that the word 'choice' be dropped by one participant.. Another participant suggested that the colour red 'makes you look', 'catches the eye' and a red border was suggested by another participant.

Multiple traffic light system, 2 green, 1 red and 1 amber:



This was considered a healthy food choice because of the ratio of two green lights to one red light and one amber light. More green lights meant it was healthier. Some felt it was confusing because the lights were interpreted as a ratio choice i.e. more green lights meant it was a healthy choice. Because the example label system that was shown had two out of four green lights it was perceived to be a healthy option. Two out of four green lights was seen as being proportionately better for you.

Multiple traffic light system, 2 red, 1 green and 1 amber:



This was considered an unhealthy food choice because of the ratio of two red lights to one green light and one amber light. More red lights meant it was unhealthy. Because the example label system they were being shown had two out of four red lights it was perceived to be an unhealthy option. Two out of four red lights was seen as being bad for you.

Multiple and single summary traffic light system:

This was considered a 'NO GO', 'beware of product', 'buyers' risk' and 'only buy if you're very hungry'. It was noted that the top red dot stated high but did not say if it was a healthy or unhealthy choice.

General comments about all multiple traffic light systems:

Most participants did not know what 'saturates' meant. No percentage or reference information explained the words. At this point the question was raised about whether the lights without the information could be trusted. The questions participants asked were 'how much is good/bad/OK? How much is high or too much? How would I know? And what percentage is low fat?' This last comment was directly related to some participants' lack of understanding about what the recommended daily intake was.

Most agreed that this system would immediately be more informative, eye catching, straight to the point and was a good label and that the colours would definitely influence their initial perception of food. However, one participant became suspicious about whether this system was a ploy being promoted by companies who wanted to sell more of their products and used the 'Ribena case' as a false marketing example.

NY star system:

Some thought this label was associated with the five star ranking often used by hotels so a three star represented a healthy choice. However this view was stated as speculative and it was not clear what three stars represented or how the rating worked. The image inside this label was perceived to be a healthy man running and no one understood why the word 'best' was there however there was an assumption that it probably meant it was a good choice.

Participants definitely did not understand what 'three best' stood for. One participant thought that the stars should be replaced with traffic lights to compliment the traffic light system. Participants suggested that the 'words be changed', 'that this system was better suited to clothing items', that 'the colours were not eye-catching', that 'the man be taken off along with the words three and best' leaving literally only the stars. One other participant just did not know because 'it had no context and therefore meant nothing' to them.

%DI (Percentage of Daily Intake) and simple traffic light:

There was uncertainty about whether the %DI information in its brighter format and then the green dot actually caused more confusion then clarity. Some said they would not look at the %DI but just at the green dot if they had to make a choice. They felt that the two labels did not belong together.

Preferred nutrition label

There was a unanimous agreement amongst participants that they liked the multiple traffic light system out of all the choices shown because it was conceptually easier to understand than the current system (Nutrition Information Panel) and that they would be able to make a food choice more quickly. They believed the hard work of understanding the information had been done for them by the manufacturer. Participants were highly influenced by the style of information such as colours instead of writing. The conflict in this feedback is that almost all the participants were clearly more influenced by the colour ratios then the actual written information which was described as 'simple'. This was because of other pressures they had and that they did not have time to read. Again it was reiterated that this system should definitely be on the front of the package as turning the product over to look at the back was time consuming.

Use of preferred nutrition label

Would the multiple traffic light system influence your food choice?

The comment was made, 'if I was better informed it may make a difference'.

There was also a general agreement that it depended on cost difference (an extra $1 difference was the variation between choosing a healthy product over a not so healthy one) and budget. Trim milk was used as an example of a food product that was more expensive then blue top despite the consistency being more water and the taste being bland. Some participants felt that looking for 'alternatives' or 'substitutes' was difficult and in many cases there were not any.

What would stop you from using the multiple traffic light system?

Participants felt that if they had to pay for the system being placed on products that would be a problem. Alternately, if the labels did not appear at all on packaging that would mean they could not or would not utilise the light system. Others noted that they would not use the light system 'if the lights were all red' and 'if the taste good factor wasn't present'.

Own label design

When asked 'if you had to design your own label what would it look like, and what information would be on it' participants replied:

- So simple that even illiterate people would understand
- Less writing
- Icons used and one word
- Women are very busy so it is important to make it simple for them
- Use the traffic light dots and write the percentage inside
- Include daily intake allowance somewhere as a quick point of reference
- More use of pictures used on products as opposed to words only.

Promotion of nutrition labels

When asked 'what is the best way to inform you about these labels and what they mean' participants replied:

- TV
- Radio
- Word of mouth
- Cards explaining the system in the food outlet at the point of entry
- Billboards
- Advertising on buses
- Pamphlets
- Māori settings e.g. marae, kohanga reo.

What to consider when advertising to a Māori audience:

When asked 'what is the best way to inform you about these labels and what they mean' participants replied:

- The ads must include real people, be simple, readable but not too much writing and they must be truthful and honest.
- The only male participant said that hard hitting campaigns like the 'driving ads' just make him and other men shut down 'they can't scare us'.

- It was agreed that different races should be used to advertise so that ‘it wasn’t seen as a Māori thing’.

What should be included in information about labels?

When asked ‘what should be included in the information if it was to be successful in convincing you to use nutrition labels’ participants noted:

- Images of healthy whānau
- Whānau interacting
- Role models
- Real people not athletes
- Benefits for whānau
- Things that they can relate to
- Bilingual language
- Simple information
- Māori role models: there was some discussion about stigma and the negative message this sent to Māori about the fact that they had the problem or issue and not other populations. They felt these messages set them apart from others. Another participant said that this perception was true and that Māori people needed to have the support to make changes. Essentially there was a mixed view overall about targeting Māori whānau in this way.

Pacific Focus Groups

Influences on the type of food people buy

Specials: All the participants indicated they bought foods that are on special. The discount price was usually an incentive to buy food they have never bought before.

Cheap price: There was a general agreement amongst the participants that price was the biggest influence on the type of food they buy. Paying the rent and bills was a priority with the leftover money for shopping; therefore it was very important to budget wisely. One mother said she always bought the cheapest everyday food such as butter, milk, bread and meat such as beef and pork bones. It was noted that beef and pork bones were very cheap at the butcher. There was a tension between price, taste and quality but most participants pointed out that price was the most important factor in their choices. Some of the participants shyly admitted they bought beef and pork bones because they are cheap. They cooked these bones with vegetables to make them tasty for their children to eat. One mother said she shopped around for the cheapest price and often bought food on the 'cheap trolley' at the supermarket.

Children: Parents indicated that their children's choice of food influenced what they bought. However, price and health was part of the consideration process. Some participants were more health conscious than others. They had to be creative in encouraging their children to eat healthy food. One mother said, 'I include vegetables in their mash potatoes'. One person admitted that her children used to eat fish and chips everyday but she managed to cut this down to once a week.

Familiarity: All participants indicated they often bought things they are familiar with and have bought before. They are usually very reluctant to try new products.

Health problems: A few of the participants have diabetes and often read the labels to ensure they were eating the recommended food for people with diabetes. They felt that

these foods are not cheap but they had no choice but to buy them. One person added that she was allergic to dairy food and always had to check food labels.

Taste/habit: There was a general agreement amongst participants that they bought food they enjoy eating. They sometimes gave into temptation and bought food that was not healthy such as lamb flaps and povi masima. A few of the participants had cut down on eating their favourite island food such as taro and lamb flaps to once a week instead of every day because they wanted to eat healthier. They felt it was hard to cut them out totally but in moderation was the best option especially for older parents. 'With the older parents, they are not used to eating rice all the time so we get them taro for lunch'.

Special church/family function: A few participants in the Tongan group mentioned they bought cheap food for their family but bought expensive food when it came to church or special functions. They have learnt to save up for such events well ahead of time. There was a general agreement amongst the Tongan participants that this was considered normal amongst the Tongan community.

Single versus married: A young mother commented on the change in her buying behaviour now she is married. She now lives on a limited budget compared to when she was single. She said she 'was more health conscious and wise with her money now than before'.

Healthy food: A few participants bought healthy food for their young children. One mother said she has been buying brown instead of white bread and gave her children raisins instead of lollies. She learned about healthy food for children at a health promotion workshop. Another participant said she always bought fruits and vegetables for her children when she went shopping because she wanted them to eat healthy.

Importance of health when purchasing food: Participants agreed that buying healthy food was fundamental for their wellbeing but price was more important. Healthy food was perceived as being expensive compared to less healthy food. Some participants

pointed out that health was considered important but not in comparison to price and taste. ‘I shop within our budget and also buy things we like. I buy pork, beef as well as lamb flaps’. However, she said that lamp flaps were a favourite in the household and did not last long. A few of the participants knew that lamb flaps were not healthy for their children and opted to cook them with vegetables to make them healthy. A lot of the participants felt that healthy food such a fruits and vegetables were very expensive. One teenage participant who flats with other teenagers said they live on meat patties because a packet only costs $20 and it lasted them a week.

Participants with health problems such as diabetes and high blood pressure said they had to buy and eat healthy food in order to prevent health problems. One participant said she usually had nice expensive food while the rest of her family ate cheap food. ‘I usually buy fruits and some fish for myself and buy lamb and pork bones for the rest of my family’. Another diabetic participant said she bought food with the Pick the Tick label because she felt it was good not only for her diabetes but for her heart as well. On the other hand, one participant with high blood pressure had to eat the same food as the rest of her family because she could not afford healthy food. ‘We often buy lamb flaps and tinned fish because they are cheap and that’s what we can afford’.

There was a general agreement amongst mothers that their children’s health was paramount to them. However, while some bought only healthy food, others gave into their children’s preference for unhealthy food. ‘Sometimes I think about health and sometimes I just pick things for my kids, whatever they want, because I know if I take it [the food they do not want] home they don’t eat it and it’s a waste’. She admitted that she thought about health a lot but it was difficult being healthy all the time. This mother was concerned about her children’s health and whether her children would get diabetes from eating too many fish and chips.

Buying takeaway food was an easy option for families who lacked time to cook. They pointed out that takeaways were not only fast but cheap. One participant argued that there

should be more healthy food takeaways and the government should make it easier for people to buy healthy food.

Use of nutrition labels

Only four out of the 31 participants regularly used nutrition labels to help them decide what to buy. Sixteen participants read the labels occasionally while ten said they have never used labels.

Of the ten that never used labels, one participant said she does not know how to read in English. They agreed they tended to buy food they are familiar with and found tasty. A few of the participants said reading the labels was not important to them. The only thing they looked at was the price while others may look at the expiry date and whether it was affordable. The majority of participants agreed they did not have time to read the labels while shopping. There was a general agreement amongst participants that Pak'N Save offered cheaper products than other supermarkets. According to the younger participants, they never read the labels. Eating less was their strategy for losing weight, it never changed the way they shopped.

Of the 17 participants that read labels, some did so because they have health problems. Others said they only read the labels when they wanted to try new products. One participant said the Pacific people did not read nutrition labels due to lack of awareness.

Understanding of nutrition labels

%DI (Percentage of daily intake)

Participants agreed that the label showed the amount of protein, fat, sugar and other contents. They indicated that the food was an alright choice. It was very low in fat but high in sugar and carbohydrates while sodium was in the middle range. All of the

participants agreed they did not really understand the words sodium, carbohydrate or saturated fat. They suggested the use of salt instead of sodium.

Some of the participants suggested the use of bright colours or a colour such as green for healthy and red for less healthy instead of the plain blue and white used in the example provided. They felt that bright colours would attract attention. One participant preferred the simplicity of the 'Pick the Tick' by the Heart Foundation. She said 'a Tick showed it was a healthy choice, simple yet clear and saved time trying to identify every nutrient'.

Simple traffic light

Green light*:*

All of the participants agreed that the green light was a good label. Green meant the food was good for you and the label was easy to understand. The majority of the participants said the label was perfect and no changes were needed. However, some suggested the green needed to be brighter and to include a tick inside the green to symbolise a 'correct choice'.

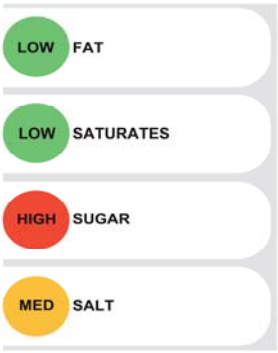
Amber light*:*

There was a general agreement amongst participants that the symbol was easy to understand. Amber meant it was an 'ok' choice, but not healthy like the green light.

Red light:

This was considered easy to understand. That is, that the food was not good for you. One participant said the red would be a warning sign to her and she would go and look for a product with the green light instead. One participant said that the red light on its own did not provide enough information in order to make informed choices. Corned beef was given as an example of a red light food because it was high in fat and salt. Additional preparation information like draining the fat was needed in order to make the choice healthier.

Multiple traffic light system, 2 green, 1 red and 1 amber:

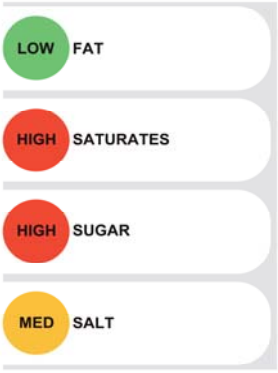


Some participants considered this a healthy food option because it has two green lights, one red and one amber light. One participant argued that it was not a healthy option for diabetic people because it was too high in sugar but probably healthy for people who

need high sugar. A few participants preferred this label over the %DI because it was colourful and had no numbers. They felt that numbers were hard to understand.

One participant said the label was too confusing and was concerned whether the label would fit on one can. Others did not understand the difference between fat and saturated fat. One person said that 'everyone is not educated and don't really understand what is fat and saturated fat'. Participants suggested that people needed nutrition education in order to have a better understanding of food and nutrition.

Multiple traffic light system, 2 red, 1 green and 1 amber:

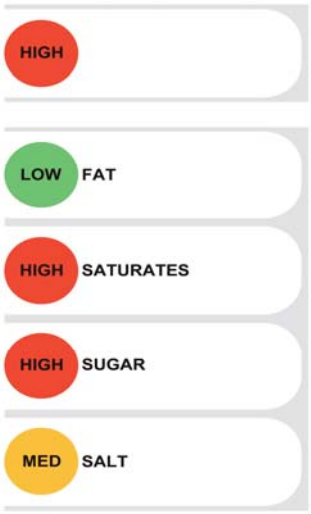


This was considered an unhealthy food option because of the ratio of two red lights to one green light and one amber light.

NY Star System

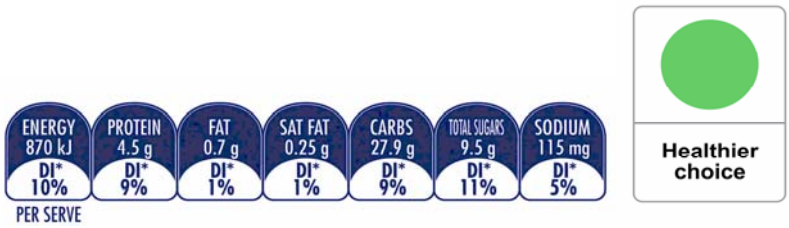
Some thought the image was of a man running and if they eat the food they would run like him. A few participants commented on the use of 'three stars' instead of five stars or some other number. They referred to the rating systems used in hotels such as the five star systems.

Multiple traffic light and single summary traffic light



This was considered an unhealthy choice by all of the participants because of the red single traffic light at the top. Most of the participants based their decision on the single summary traffic light at the top irrespective of the lights at the bottom. Some argued this label was similar to the simple traffic light while others pointed out that this label offered more information for those who needed it, unlike the simple traffic light.

%DI (Percentage of daily intake) and simple traffic light



This was regarded by Pacific participants as the most preferred label. Most participants liked this label because it offered more information than the multiple traffic light. Some liked the simple traffic light on the side because it gave busy shoppers the opportunity to make a quick decision. Others argued that they tended to focus on the simple traffic light only and would not waste time reading the %DI.

Preferred nutrition label

The majority of participants preferred the combination of %DI and simple traffic light out of all the nutrition labels. They felt the %DI provided more information for those who needed it, e.g. those with health problems, while the simple traffic light offered simple yet quick information at a glance for busy people. One participant said she understood the %DI and nutrition information because she attended a nutrition workshop. However, she admitted that she did not fully understand the 'grams' and would need scales.

Use of preferred nutrition label

Would having your preferred label on food packages influence which foods you purchased?

All of the participants agreed that their preferred label would influence their food choice if it was placed on the front of the food pack. However, they pointed out that it depended on the cost difference. A difference of five cents was the limit they were willing to pay for a healthy product over a not so healthy product. The majority of participants said they would choose a healthy product over a not so healthy product if they were the same price. Some suggested a health aisle in the supermarket would make it easier for them to identify healthy food and made informed choices.

What would stop you from using your preferred label?

Participants agreed that an expensive price and lack of time would stop them from looking at the nutrition label. Some said they would not check the nutrition label when buying food they were familiar with.

How could it be made easy for you to use these labels?

There was general agreement amongst participants that colourful labels on the front of pack would make it easy for them to use labels.

Own label design

When asked how they would design a food label participants replied:

- use less writing but more pictures
- make them colourful
- something simple.

Promotion of nutrition labels

When asked how to promote nutrition labels participants noted:

- through Pacific health promoters at Pacific churches and community groups
- Pacific radio
- word of mouth
- TV.

What should be included in information about labels?

When asked 'what should be included in the information if it was to be successful in convincing you to use nutrition labels' there was a general agreement amongst participants that something simple, which had less writing and was colourful would attract their attention. They agreed that mass advertising was not really effective in reaching Pacific people. Pacific people tended to listen to someone they could identify with and relate to. Running health workshops using Pacific health promoters at Pacific churches and communities was the most effective way for Pacific people. Some suggested using well known Pacific sports people to promote nutrition labels would attract the attention of Pacific people especially Pacific youth.

Low-income focus groups

Influences on types of food people buy

Lack of money: All of the participants agreed that lack of money prevented them from buying healthy foods. They pointed out that healthy food was more expensive then unhealthy food. Fruits and vegetables were given as examples. One person said she preferred buying frozen vegetables because they are not only cheap but last longer than fresh ones.

Health: A few of the participants had health problems such as diabetes and asthma and were careful about the type of food they were buying. One participant who had a cancer operation said she was careful not to buy food that could cause cancer. One person was on a diet due to health problems and only ate certain food recommended by her doctor. Some participants were health conscious and tried to buy healthy food.

Habit: Some participants agreed that they mostly bought food they have eaten before. One participant said she could only afford the basic food such as cornflakes, baked beans and bread. She hardly ate meat because she hardly had it when she was a kid and meat is very expensive nowadays.

Location: Some participants felt that most times Pak'n Save offered more competitive prices than New World. They would either walk or catch the bus to Pak'n Save even though New World was closer.

Discounts: Participants compare discounts at New World and Pak'n Save using the supermarket letterbox drops. Food discounts encouraged them to buy some products over others. One participant said discounts sometimes encouraged him to buy food he had never bought before.

Importance of health when purchasing food

There was a general agreement amongst participants that they would buy healthy food if it was cheap. Participants with health problems were buying healthy food due to their sickness but would like to buy more if they had enough money.

Use of nutrition labels

Twelve out of 14 participants reported regularly using nutrition labels to help them decide what to buy while two used them occasionally. Participants used the labels to differentiate between similar products and to check for healthy versus unhealthy ingredients. Of those that occasionally used labels, they agreed that lack of time prevented them from reading the labels. They said they never read the labels when buying food they have bought before. Others commented that there was some food they assumed was healthy and did not bother reading the labels.

Understanding of nutrition labels

%DI (Percentage of Daily Intake)

Some of the participants who were familiar with nutrition labels said this label showed the percentage of dietary intake of nutrients. Others agreed that it showed the percentage of sugar, sodium, fat and other nutrients. Some recommended this food because it was low in fat and sodium while others disagreed because it was high in sugar.

Two participants said they did not understand the difference between fat and saturated fat. One person explained the difference and said ‘fat is healthy fat and saturated fat is unhealthy fat. Saturated fat should be avoided and you should eat fat in moderation’.

Simple traffic light

Green light*:*

Participants felt that the green light on its own without nutrition information was insufficient to make informed choices about healthy food. The majority of the participants made the comparison with the traffic light and green meant 'go' and it meant healthy food.

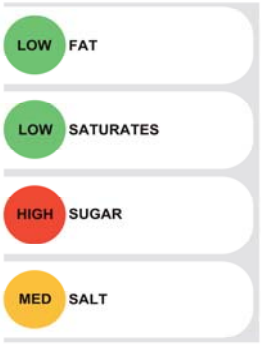
Amber light*:*

There was a general agreement amongst participants that the symbol on its own was not to be trusted because it lacked information to make informed choices. Some pointed out that this food was an 'ok' choice and not as healthy as the green light.

Red light:

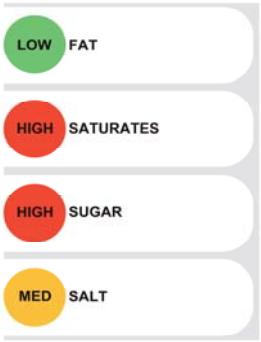
Participants knew that red meant the food was unhealthy. They agreed they would not buy food with a red light.

Multiple traffic light system, 2 green, 1 red and 1 amber:



Most of the participants felt that this food was healthy because of the ratio of two green lights to one amber and red light. Some participants including those with diabetes pointed out that it was unhealthy because it contained very high sugar. Some felt that four lights were confusing and questioned why this was used instead of three lights similar to the street traffic light.

Multiple traffic light system, 2 red, 1 green and 1 amber:

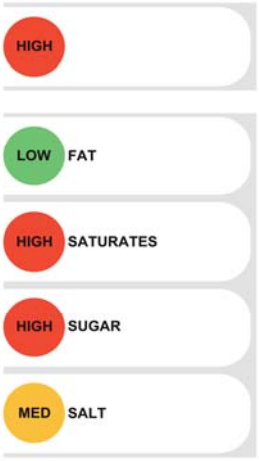


All of the participants pointed out that this food was an unhealthy choice because of the ratio of two red lights to one green and one amber light.

NY Star System

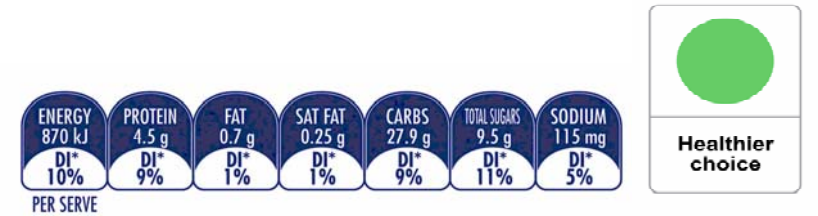
Some participants questioned whether this label had been used before. Others felt this label was too simple and did not provide enough nutrition information for customers to make informed choices about healthy food. One person commented on the use of one to three starts instead of the five stars range used by hotels to classify quality. They indicated that the three stars did not provide enough information to help them make informed choices.

Multiple traffic light and single summary traffic light



There was general agreement amongst participants that this combined label was confusing. Some pointed out they would base their decision on the summary traffic light only and disregard the rest of the lights. Others said they preferred this label because it provided more information then the simple traffic light alone.

%DI (Percentage of daily intake) and simple traffic light



Participants felt that this label provided customers with more information then any other label. This was strongly supported by those with health problems because it gave them more information about the ingredients and the recommended percentage of daily intake. Some participants questioned the practicality of putting this label on small food packages.

Preferred nutrition label

Twelve out of the 14 participants preferred the %DI and simple traffic light combination.

Use of preferred nutrition label

There was a general agreement amongst participants that the %DI and simple traffic light combination would influence their food choices if the price of the food was within their budget. There was a general agreement amongst participants that they were on low-incomes and hardly have any money.

What would stop you from using the preferred nutrition label?

Some participants agreed that lack of time would prevent them from reading the labels. Others said they did not read the labels when buying food they have bought before. A few commented that they never real labels on expensive food because they only bought cheap products.

How could it be made easy for you to use these labels?

All of the participants agreed that front of pack labels would make it easy for them to identify healthy food. They also recommended a healthy aisle in the supermarket would be useful. Some commented that supermarkets would never allow this to happen because it would decrease the sales of unhealthy food.

Own label design

When asked how they would design a food label participants replied:

- Less writing and more pictures
- Something colourful
- Use of a national icon or symbol
- Identification of 'made in New Zealand'.

Promotion of nutrition labels

When asked how to promote nutrition labels participants noted:

- TV, something similar to 'Feeding Our Futures' campaign[1]
- promotion in supermarket
- radio
- health promotion in the community.

What should be included in information about labels?

When asked 'what should be included in the information if it was to be successful in convincing you to use nutrition labels' participants noted:

- role models
- simple but clear messages
- healthy families and children. `

[1] A social marketing campaign promoting healthy eating run by the Health Sponsorship Council for the Ministry of Health.

Discussion

All of the participants agreed that the most important influence on the types of food they buy was the price. There was a widely held view amongst participants that healthy food is expensive and unaffordable. Many participants stated that they often settled for quantity rather than quality food, especially Māori and Pacific participants with big families. Habit and taste were identified by Pacific and Māori participants as a very strong influence on their food choices. Nearly all Māori and Pacific participants knew that some of the food they bought is unhealthy. Some Māori and Pacific participants, especially those with health problems, indicated that they were slowly modifying their diets to replace unhealthy with healthy food. Many participants also stated that children influenced their food choices. All of the participants agreed that choosing healthy food was vital but it was not thought of as more important than price. Participants with health problems stated that they felt vulnerable because they had no choice but to buy expensive healthy food.

The vast majority of the Māori and Pacific participants reported little, if any, use of nutrition labels. However, the majority of the low-income (mainly Pākehā) group reported using nutrition labels regularly. This finding is largely consistent with previous research that found that Māori, Pacific and low-income (including Pākehā) people rarely use nutrition labels.[11] However, the difference in the low-income group may indicate an ethnic difference in nutrition label use amongst those with low-income. Of those that occasionally read labels, they read labels only when purchasing new products or if they have health concerns.

Habit was identified as a major barrier to using nutrition labels. The majority of participants reported that they do not look at the nutrition contents when buying foods they were familiar with. This suggests any labelling scheme needs to be well promoted. Another barrier to using nutrition labels was a lack of time. This suggests that any labelling scheme needs to be easy and quick to understand. Many participants stated that price was the only information they looked at while shopping because it was their most important priority. They indicated they would buy healthy products instead of not so healthy products if the cost difference was not significant.

Of the range of labels studied many participants thought the %DI had too much written information. But whilst they did not like having too much written information, they liked to know the 'evidence' behind the health rating of a product. Most did not understand terms such as sodium and the difference between fat and unsaturated fat.

All of the participants understood the simple traffic light system. However, both the simple traffic light and the NY star system were considered to lack sufficient information by many participants to enable them to make informed choices. Some participants questioned the range of one to three stars in the NY star system. They referred to the five stars used to rate hotels and wondered why this was not used instead of the three star ranges.

There was overwhelming support for the multiple traffic light label in the Māori group. Many participants felt that this label was easier to understand but admitted that their preference was highly influenced by the colours and style. All of the participants in the study correctly interpreted a ratio of two red colours as unhealthy and two green as healthy, although it appears that in each case they merely added the number of red or green lights together to make their decision. Interpreting more complicated multiple lights may not be so easy.

There were mixed feelings about the combination of multiple and and single summary traffic light labels. Many participants stated that they based their decision on the summary traffic light only. Others indicated they prefer the combined label because the multiple traffic light provided more information then the summary one.

The most popular label option for the Pacific and low-income groups was the combination of %DI and simple traffic light. They felt this label provided more information than any other label yet was simple and easy to understand. Some Māori participants preferred this label as well but acknowledged that it was probably a lot to have on the front of pack.

All of the participants felt that front of pack labelling would assist them in reading nutrition labels. They clearly stated a preference for a label with more information than the simple traffic light. It could be a combination of %DI and simple traffic light, a different combination entirely or the multiple traffic light system. However, consumers appear likely to try to interpret multiple traffic lights as a simple traffic light. If the options are more complicated than those presented in the focus groups (e.g. an option with two green lights and an option with two red lights) they may be difficult for people to interpret.

This research suggests there is a need for health and nutrition education to teach people to interpret nutrition labels correctly. In the Māori and Pacific communities this should be undertaken by community health promoters to educate their communities. It is particularly important in these communities because use of nutrition labels is not part of their current food purchasing behaviour. Such initiatives should be supported by well advertised social marketing in Māori and Pacific media.

Most participants indicated they would like to attend courses on health and nutrition. Māori and Pacific participants suggested an education programme compiled by people from their communities for their communities. Taking ownership of the initiatives empowers communities to make changes in their lives. In particular, Pacific participants pointed out that mass media marketing was not an effective way to reach their communities. They strongly advised targeting churches and community groups in addition to marketing in the Pacific media. All of participants suggested using a well known role model in the marketing campaign would be useful. Television advertising was recommended by the largely Pākehā low-income groups. A few participants argued that a healthy aisle in supermarkets, in addition to front of pack labels, would enable consumers to easily identify healthy food. Another approach is to find ways to reduce the price of 'healthy food'. This would enable Māori, Pacific and low-income people better access to healthy food, particularly if simple front of pack labelling was also available.

Conclusion

This research suggests that Māori and Pacific people rarely use nutrition labels to guide them in their food choices. Barriers identified were taste, habit, lack of time and a paramount focus on the price of food. This finding contrasts with that of the largely Pākehā members of the low-income groups, the majority of whom report using labels regularly.

All participants agreed that front of pack labelling would assist them to purchase healthy food. The research suggests that the labels need to be simple and quickly understood. Participants were able to interpret simple traffic light labels correctly but wanted more information than they provided. The fact that all packaged products have a Nutrition Information Panel on them which provides more information was not mentioned by these communities, likely because they rarely use them. Consideration could be given to making the existing Nutrition Information Panel easier to interpret so shoppers can use it to obtain more detailed nutrition information if they chose to.

The focus groups suggest that one option for front of pack labelling with more information is multiple traffic lights. However, complex variations of this label option may prove difficult to interpret. Alternatively the use of a combination of multiple and simple traffic light labels or %DI and simple traffic light could be considered, although in practice it appears that consumers would ultimately rely on the simple traffic light to assess the health of the food. There is also a balancing that needs to occur between what people say they prefer, what they can understand (most people do not understand what saturates means, for example) and how any labelling system is promoted.

Any labelling scheme would need to be accompanied by health, nutrition and labelling education that was effectively delivered, particularly to Māori and Pacific communities because they rarely use labels at present. Ensuring that healthy food is priced at a level that these communities can afford is also critical to enabling them to purchase healthy food.

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Appendix A

SIGNS: SIGnposting Nutrition Study

Focus Group Interview Schedule

1. What kinds of things influence the type of foods you buy? Prompts: taste, habit, price, health

2. Is health important in your choice?

3. **[Show nutrition information panel on the flipchart and product with a nutrition panel on it, also %DI that is on NZ food]**
   I would like to find out if you use nutrition labels like this to help you decide what to buy. I would like to know whether you never, occasionally or often use nutrition labels.
   Could we have a show of hands:
   a. How many people **regularly** use nutrition labels to help decide what to buy?
   b. How many people **occasionally** use nutrition labels to help decide what to buy?
   c. How many people **never** use nutrition labels to help decide what to buy?

4. Why or why don't you use nutrition labels?
   Prompts: you already know what you want to buy, not particularly interested in nutrition, assume food is healthy, do not understand the information on the labels, time, do you use nutrition labels when you have an illness or want to lose weight? What about choosing new products that they may not have bought before?

5. **[Show people each different nutrition labelling option in turn]** (e.g. multiple traffic light system, simple traffic light system, % DI, NY star system). Ask participants about each label:
   a. What is this label telling you?
   b. Do you think this food is a healthy choice? Why/why not?
   c. Do you understand the words they use? What do they mean to you? **Prompt:** are there any words you don't understand? Can you think of a word that would be easier to understand?
   d. What do you think of the label? **Prompts**: language, colour, symbol, how easy is it to understand?
   e. Would you make any changes to it? What changes?

6. Of the labels we have shown you, which label would you most like to see on a food package? Why?

7. Would you be more likely to pay attention to nutrition information about the food if labels like these were placed on the front of food packs? Why, why not?

8. A Nutrition Information Panel is compulsory on all packaged food. If your preferred label was also on the package would this help you to decide more easily if the food is healthy? Why? Why not? **[show NIP again with a simple label].**

9. Would it influence which foods you purchase e.g. would you choose a food with a green light over a similar food with a red light? If the price was the same vs if the price was higher. How much more (if any) might you pay?

10. What would stop you from using these labels?

11. How could it be made easy for you to use these labels?

12. If you had to design your own label what would it look like, and what information would be on it?

13. What is the best way to inform you about these labels and what they mean? **Prompts**: TV ads, radio, in the supermarket, newspapers, through churches, through marae?

14. What should be included in the information if it was to be successful in convincing you to use nutrition labels? **Prompts:** Simple messages, role models, explanation of how to read them, reasons why you should follow the system, culturally specific language, culturally specific role models, culturally specific images.

15. Do you have any final comments, suggestions or questions?

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