

**Submission from Cancer Council Australia to  
Food Standards Australia New Zealand on Labelling Review Recommendation 17: Per  
serving declarations in the nutrition information panel**

**13 February 2015**

**Introduction**

Cancer Council Australia welcomes the opportunity to comment on Recommendation 17 of the *Labelling Logic Report*:<sup>1</sup> that the declaration in the nutrition information panel (NIP) of amount of nutrients per serve be no longer mandatory unless a daily intake claim is made. This submission is made with the support of the Cancer Society of New Zealand.

Cancer Council Australia is a federated, community-funded organisation established to support the interests of its eight State and Territory members. Our mission is to lead a cohesive approach to defeating cancer through the development of prevention strategies, research into new treatments and cures, and by providing support to those affected by cancer.

There is convincing evidence that excess body fat is a cause of bowel cancer, post-menopausal breast cancer and cancers of the kidney, pancreas, oesophagus and endometrium. Excess body fat has also been shown to be a probable cause of ovarian, gallbladder and prostate cancer.<sup>2</sup> In addition, there is some evidence that a healthy body weight may prevent cancer recurrence and improve survival for people diagnosed with certain cancers.<sup>3,4,5</sup>

Cancer Council Australia advocates for policy and regulation that supports individuals to make healthy choices and reduce their own and their family's risk of developing cancer. We recognise the importance of clear food labelling as a source of nutrition information for both consumers and health professionals.

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<sup>1</sup> Blewett N, Goddard N, Pettigrew S, Reynolds C, Yeatman H (2011) *Labelling Logic: Review of food labelling law and policy* (2011). Department of Health and Ageing, Canberra, Australia. Available at: <http://www.foodlabellingreview.gov.au/internet/foodlabelling/publishing.nsf/Content/labelling-logic>. Accessed 13 January 2015.

<sup>2</sup> World Cancer Research Fund, American Institute for Cancer Research. *Food, nutrition, physical activity, and the prevention of cancer: a global perspective*. Washington DC: AICR; 2007.

<sup>3</sup> Chlebowski RT, Blackburn GL, Thomson CA, Nixon DW, Shapiro A, Hoy MK, et al. *Dietary fat reduction and breast cancer outcome: interim efficacy results from the Women's Intervention Nutrition Study*. *Journal of the National Cancer Institute* (2006) Dec 20;98(24):1767-76.

<sup>4</sup> Protani M, Coory M, Martin JH. *Effect of obesity on survival of women with breast cancer: systematic review and meta-analysis*. *Breast Cancer Research Treatment* (2010) Oct;123(3):627-35.

<sup>5</sup> Vrieling A, Kampman E. *The role of body mass index, physical activity, and diet in colorectal cancer recurrence and survival: a review of the literature*. *American Journal of Clinical Nutrition* (2010) Sep;92(3):471-90.

## Executive Summary

- Cancer Council Australia is in favour of maintaining the status quo, so that per serving declarations continue to be a mandatory inclusion in the NIP.
- Although serving size is not an appropriate basis for nutrition icons in Front-of-Pack Labelling (FoPL), serving size declarations should remain mandatory in the Back-of-Pack NIP.
- If Recommendation 17 were to be implemented, we consider that per serving declarations should remain mandatory where a % DI, nutrition content or health claim is made, or where a Health Star Rating is used. The potential interactions between Recommendation 17 and the Health Star Rating should be carefully reviewed.
- Although the evidence is mixed, some consumers and health professionals find the per serving declarations in the NIP useful, especially when comparing products that have the same serving size or for evaluating the nutrients in a product that contains a single serve or has a meaningful serving size.
- Implementing Recommendation 17 would introduce further inconsistencies in labelling between products because per serving declarations would continue to be required for caffeinated beverages and where a percentage daily intake (% DI), nutrition content or health claim is made.
- Consumers prefer familiar label formats and are able to use them more accurately. Inconsistent formats in labelling will increase consumer confusion.
- Cancer Council Australia acknowledges that serving sizes have limitations because they are nominated by manufacturers and not the Code.

### Overall Recommendation

That the declaration in the NIP of amount of nutrients per serve remains mandatory.

## Questions

### 1. How do you or your organisation use per serving information in the nutrition information panel on food labels?

The State and Territory members of Cancer Council Australia provide a range of nutrition programs that aim to encourage healthy eating to reduce overweight and obesity and improve quality of life for those recovering from cancer treatment. Label reading is incorporated into Cancer Council programs targeting a range of groups, such as parents, families, adults and cancer survivors.

Dietitians, nutritionists and public health professionals are involved in the design and delivery of these nutrition programs. Clients may be advised to check per serving information in circumstances such as the following:

- when choosing a discretionary item that contains less than 600 kJ per serve;
- to be able to conceptualise serving sizes and evaluate the extent to which these correspond with their own usual eating habits;
- when choosing a product that should be eaten only in very small serves eg. tomato sauce, vegemite or mayonnaise;
- when there is a medical need to monitor the consumption of certain nutrients closely. For example, carbohydrates for people with diabetes and sodium for people with

kidney disease. This information is more useful than per 100g when the serve is discrete.

**2. Are there any particular food categories or types of food packages (eg. single serve packages) for which per serving information is particularly useful? If so, what are they? Explain why the information is useful.**

A weakness of per serving information is that serving sizes are not prescribed by the Code and consumers may have difficulty interpreting them. There are situations, however, in which per serving information is particularly useful:

- when the serving is discrete (ie. single serve item or x slices/ biscuits are one serve) the per serving information allows people to see how that food will fit into their daily diet. It reduces the number of calculations they have to do and therefore decreases the burden of label reading;
  - many consumers lack the numeracy skills to easily determine the nutrition information for the serve given 100g/100ml;
  - some consumers with low numeracy may presume that, in the absence of a per serve column, the per 100 g/ mL nutrition information refers to one serve or the whole pack;
  - per serving information allows consumers to compare single serve items and choose healthier options;
  - per serving information is useful for people with special dietary needs who wish to evaluate the nutrients that they will actually consume from a product with a discrete serving size. For example, those monitoring carbohydrates for glycaemic control and those with cardiovascular disease or hypertension monitoring their sodium intake.
- 3. The Labelling Review recommendation suggests that per serving information be voluntary *unless a daily intake claim is made.***

**Do you support this approach? That is, do you think declaration of per serving information in the nutrition information panel should be mandatory if a daily intake claim is made (e.g %DI or %RDI)? Give reasons for your answer.**

Cancer Council Australia is in favour of retaining both the per serving and per 100g declarations in the NIP. Whilst we recognise that food labels are a finite space for providing nutrition information and that per serving information has some weaknesses, there is evidence that some consumers and health professionals find the per serving declarations useful especially when comparing products that have the same serving size or for evaluating the nutrients in a product that contains a single serve or has a meaningful serving size.

Consumers' preferences for either per serving or per 100g declarations appear to be fairly evenly spread. In a European review of the literature by Grunert & Willis (2007)<sup>6</sup>, studies showed mixed preferences among consumers for per serving information, per 100g and for providing both. One study indicated that these preferences varied by product and another suggested that it depended on the intended use of the information – comparing different products or evaluating the amount of a nutrient in a particular product.

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<sup>6</sup> K. Grunert & JM. Willis, *A review of European research on consumer response to nutrition information on food labels*. Journal of Public Health (2007) 15, 385-399.

The way that information is presented on the NIP can influence food choices.<sup>7</sup> A study of over 13,000 participants from six European countries found consumers factor serving sizes into their judgments of healthiness.<sup>8</sup>

Research summarised in the Consultation Paper indicates that consumers are divided over their preference for and use of per serving and per 100g declarations in the NIP. Australian and New Zealand participants in a study by Scott et al (1999)<sup>9</sup> were more likely to use the per serving information than the per 100g information, both for evaluating a single products and comparing products. Similarly, the per serving column was used by the majority of participants in a 2003 study for comparing products, regardless of whether the serving sizes were the same.<sup>10</sup> A more recent study found little differences in consumers' preferences for per serving or per 100g.<sup>11</sup>

Although the evidence is limited in amount and quality, it appears that some consumers may prefer per serving information. The Consultation Paper acknowledges that some consumers may find per serving information confusing, but the weight of evidence at this stage would support retaining both columns in the NIP.

Consumer's preferences for familiar label formats and consistency between products would also militate against implementing Recommendation 17. This is discussed in more detail in response to question 4 below.

If, however, Recommendation 17 is well supported by other stakeholders and is incorporated into the Code, Cancer Council Australia contends that it should not be interpreted or applied narrowly. Per serving declarations should continue to be mandatory where a product's packaging includes:

- % DI or a recommended dietary intake (% RDI) claims;
- nutrition content claims;
- health claims;
- any endorsements or implied claims;
- Health Star Ratings.

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<sup>7</sup> Antonuk B, Block LG. *The effect of single serving versus entire package nutritional information on consumption norms and actual consumption of a snack food.* Journal of Nutrition Education & Behavior (2006) Nov; 38(6): 365-70

<sup>8</sup> Raats MM, Hieke S, Jola C, Hodgkins C, Kennedy J, Wills J. *Reference amounts utilised in front of package nutrition labelling; impact on product healthfulness evaluations.* European Journal of Clinical Nutrition (2014) Nov 5; In-press

<sup>9</sup> V. Scott, J. Allen, F. Cumming. (1999) *Consumer Reactions to Three Different Nutrition Information Panel Formats, Canberra.*

<sup>10</sup> NFO Donovan Research (2003) Food Labelling Issues: Quantitative Research with Consumers. Evaluation Report Series No. 4, Canberra. Available at: <http://www.foodstandards.gov.au/publications/pages/evaluationreportseries/foodlabellingissuesquantitative/Default.aspx>. Accessed 13 January 2015.

<sup>11</sup> TNS Social Research (2008) Consumer Attitudes Survey 2007. Canberra. Available at: <http://www.foodstandards.gov.au/publications/pages/consumerattitudes/Default.aspx>. Accessed 13 January 2015.

Per serving information is critical to allow consumers to accurately interpret any claims about nutrition content, health or % DI. For example, whilst a product might provide 80% of an individual's niacin needs, it may also contribute 80% of their recommended maximum saturated fat intake. Supplying % DI information for only one nutrient does not allow the consumer to consider the whole food and how it fits in their diet.

- 4. As noted in section 4, there is currently variation in the format of NIPs on food labels because of voluntary permissions for the use of %DI labelling and the option to include a third column for foods intended to be prepared or consumed with at least one other food. If per serving information in the NIP was voluntary this would result in more variability in the format of NIPs across the food supply. Do you think this would be a problem? Why/why not?**

Increased variability in the format of the NIP between products should be avoided, where reasonably possible, to reduce consumer confusion. Implementation of Recommendation 17 would create further inconsistencies because per serving declarations would continue to be required for caffeinated beverages and where a percentage daily intake (% DI), nutrition content or health claim is made. In a systematic review by Campos et al (2011),<sup>12</sup> the authors observed that consumers prefer nutrition labelling to be consistent across products and manufacturers. This enables consumers to assess the information more easily. There is also evidence that consumers both prefer and are better able to understand labelling formats that they are already familiar with.<sup>13</sup> Rather than having the effect of simplification, Recommendation 17 could cause confusion for consumers because it would result in greater diversity in the appearance of the NIP and introduce a change to a now familiar format. This is particularly important for consumers with low literacy or numeracy levels or those with low English literacy.

- 5. If per serving information in the nutrition information panel was voluntary, do you think the inclusion of per serving information in the nutrition information panel should be mandatory when a nutrition content claim about vitamins, minerals, protein, omega-3-fatty acids or dietary fibre is made? Give reasons for your answer.**

Yes, per serving declarations in the NIP should be mandatory when any nutrition content claim is made. Consumers should be able to verify the nutrition content claims made by manufacturers by checking the per serving declaration in the NIP. This is particularly important for people with certain medical conditions.

People with some medical conditions would not be using % DI information as their needs would not be "average". Therefore they need the per serve information to make their own assessment of how that food fits in their daily diet.

- 6. If per serving information in the nutrition information panel was voluntary, do you think the inclusion of per serving information in the NIP should be mandatory in any other specific regulatory situations? Explain your answer.**

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<sup>12</sup> S. Campos, J. Doxey & D. Hammond, *Nutrition labels on pre-packaged foods: a systematic review* (2011) *Public Health Nutrition* 14(8), 1496-1506.

<sup>13</sup> Cowburn G. & Stockely L. *Consumer understanding and use of nutrition labelling: a systematic review*. (2005) *Public Health Nutrition* 8(1):21-28.

As the *Labelling Logic* report was released before the introduction of the voluntary Health Star Rating system, it is important to consider the possible implications of Recommendation 17. The Consultation Paper contemplates that per serving nutrient declarations will only remain mandatory if the Health Star Rating includes % DI information that is only included in the graphic for energy and only when the amount of energy is given per pack. If Recommendation 17 were adopted, nutrient content declarations could be made per pack or per industry agreed serving size in the Health Star Rating graphic, but would not be required to be listed in the NIP. This could create confusion for consumers. We would therefore recommend that per serving declarations continue to be mandatory when any kind of Health Star Rating is adopted.

**7. What additional studies examine consumer use and understanding of per serving information in the nutrition information panel on food labels? Please provide a copy of studies where possible.**

As noted in the Consultation Paper, there are limited studies in the peer reviewed literature that examine consumer use of per serving information in the NIP and few are in the Australian and New Zealand context. We have been able to locate some additional studies that may assist FSANZ with its review. These are provided with our submission as electronic attachments.

*S. Campos, J. Doxey & D. Hammond, 'Nutrition labels on pre-packaged foods: a systematic review' (2011) Public Health Nutrition 14(8), 1496-1506*

This is a systematic review of the literature on nutrition labels of pre-packaged foods. The review of 120 articles included four from Australia and New Zealand. The authors found that the self-reported use of nutrition labels varied considerably across different subgroups. Women, individuals with healthier diets and those with special dietary requirements or health conditions reported the greatest use of nutrition labels, with lower use among children, adolescents and older, obese adults. When interpreting nutrition labels, the authors reported that consumers may become confused when comparing products and determining the amount of energy per serving and per package.

*D. Gorton, 'Nutrition labelling – update of scientific evidence on consumer use and understanding of nutrition labels and claims' (2007) Prepared for New Zealand Food Safety Authority and the Ministry of Health. Available at:*  
[http://www.foodsafety.govt.nz/elibrary/industry/signposting-nutrition-study-research-projects/signs-literature-review-report\\_final-2.pdf](http://www.foodsafety.govt.nz/elibrary/industry/signposting-nutrition-study-research-projects/signs-literature-review-report_final-2.pdf)

This review summarises the literature published between August 2005 and September 2007 on consumer use and understanding of nutrition labels and claims. An earlier review had found that although self-reported use of nutrition labels was high, actual rates of use and understanding were much lower. Forty-two papers were included, with one quarter of the research from Australia and New Zealand. The author concluded that labels should be simplified to facilitate understanding because consumers are often unable to use the information to determine whether a food is healthy. Percentage DI was not well liked or well understood by New Zealand consumers. Serving size information may influence the amount of food consumed, depending on the number of servings in a pack. Low income, low-education and ethnic minority populations were less likely to use and understand nutrition labels than majority populations. Those with low levels of literacy and numeracy had difficulties calculating amounts that differ from the serving size provided in the NIP. Consumers preferred standardisation and consistency in labels across different manufacturers.

*K. Grunert & JM. Willis, 'A review of European research on consumer response to nutrition information on food labels' (2007) Journal of Public Health 15, 385-399*

In this review of 58 studies conducted in the European Union between 2003 and 2006, the authors examined how consumers perceive and use nutrition labels. Self-reported use of nutrition labels was high but actual use was considerably lower. Consumers could apply the information in nutrition labels in simple tasks but may become confused as the complexity increased. In several studies, participants considered that nutrition information was more relevant for processed foods than for fresh foods. Consumers were generally positive about nutrition labelling, especially when applied systematically to all packaged products. On the presentation of information per serving or per 100g, the authors commented:

“Several studies have looked at liking of reporting nutrition information per 100g or per serving. Participants in these studies generally agreed that it is important that it is absolutely clear what a ‘serving’ is, and often this is far from the case, but apart from that preferences for these various formats seem to vary a good deal, with preference found both for information per 100g, for information per serving and for providing both. One study indicates that these preferences vary by product, and another indicated that preferences for one or the other may also depend on what the information is to be used for – comparison between products or how much of a nutrient is present in a serving of the product.”

*C.Ni Mhurchu & D. Gorton, 'Nutrition labels and claims in New Zealand and Australia: a review of use and understanding' (2007) Australia and New Zealand Journal of Public Health, 31(2), 105-112*

This is a review of Australian and New Zealand research on consumer use of nutrition labels published before the end of July 2005. The review identified 16 studies. The study of actual use showed that understanding of nutrition labels was moderate at best. The review noted a lack of research on the understanding of nutrition labels among low-income, low-education and ethnic minority populations.

*MM Raats, S. Hieke, C. Jola, C. Hodgkins, J. Kennedy, J. Wills. Reference amounts utilised in front of package nutrition labelling; impact on product healthfulness evaluations' (2014) European Journal of Clinical Nutrition Nov 5; In-press*

This study included over 13,000 participants from six European countries and examined whether different reference amounts used in front of package labels influence participants' evaluation of product healthfulness. Reference amounts included per 100g, 'typical portion' and 'half portion'. The study showed that when judging the healthfulness of food, consumers factor in the reference amount, which is the amount of food for which the nutritional information is presented. Across the three food categories (biscuits, sandwiches and yoghurts), the larger the reference amount the less healthful it was perceived to be.

*R. Rothman, R. Housam, H. Weiss et al. 'Patient Understanding of Food Labels: The Role of Literacy and Numeracy' (2006) American Journal of Preventive Medicine, 31(5), 391-398*

This study investigated the effects of literacy and numeracy levels on understanding of nutrition labels. Higher comprehension of food labels was significantly correlated with higher income and numeracy skills. Although most respondents reported using food labels, errors were common. The reasons for these errors included misapplication of serving size, confusion due to extraneous material and incorrect calculations. Only 37% of respondents

were able to calculate the number of carbohydrates consumed from a 20-ounce bottle of soft drink that contained 2.5 servings. Even respondents with higher levels of literacy and numeracy had difficulties with certain tasks, depending on the complexity.

**8. From your perspective, what are the advantages and disadvantages of per serving information in the nutrition information panel being voluntary? Please provide evidence where possible.**

**Disadvantages**

- It would modify a familiar label format, potentially increasing confusion among consumers;
- Further inconsistencies in labelling between products would be introduced because per serving declarations would continue to be required for caffeinated beverages and where a percentage daily intake (% DI), nutrition content or health claim is made;
- It may be detrimental to some consumers and health professionals who find the per serving declarations in the NIP useful, especially when comparing products that have the same serving size or for evaluating the nutrients in a product that contains a single serve or has a meaningful serving size.

**Advantages**

- Packaging is a limited space and removing per serving information in the NIP would provide manufacturers with greater flexibility;
- For consumers who prefer to use per 100g information, the omission of the per serving information column would simplify the NIP and may improve their comprehension.

**9. Do you think the declaration of the amount of energy and nutrients per serving in the NIP should be voluntary? YES/NO/UNCERTAIN**

No, Cancer Council Australia recommends that the declaration in the NIP of amount of nutrients per serve be mandatory for the reasons outlined in this submission. In particular, we would emphasise the following:

- (a) Although Recommendation 17 aims to simplify the NIP, it may not have this effect because per serving declarations would continue to be required for caffeinated beverages and where a percentage daily intake (% DI), nutrition content or health claim is made. This would result in further inconsistencies in labelling between products, potentially causing confusion amongst consumers. This diversity would also make food labelling education and communication more difficult.
- (b) Consumers are able to use familiar label formats more effectively, so in the absence of compelling reasons to change, the NIP should not be modified.
- (c) Studies show that some consumers prefer to use per serving information when comparing products that have the same serving size or when evaluating the nutrients in a product that contains a single serve or has a meaningful serving size.
- (d) The available evidence indicates that consumers are divided over their preference for and use of per serving and per 100g declarations in the NIP. This would support retaining both information columns in the NIP.



Should you require further information or wish to clarify any matter raised in this submission, please contact Caitlin Kameron, Legal Policy Advisor, Cancer Council WA, on (08) 9388 4315 or [ckameron@cancerwa.asn.au](mailto:ckameron@cancerwa.asn.au).