

CONSUMER UNDERSTANDING OF PERCENTAGE DAILY INTAKE (%DI) INFORMATION

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Introduction

During the development of the proposed *Nutrition, Health and Related Claims* standard comments were made on the draft standard expressing the view that consumers may be misled by some nutrition content claims. Concerns centred around the ability of consumers to assess the overall nutritional value of 'less healthy' products carrying nutrition content claims. In response, FSANZ proposed that percentage daily intake (%DI) labelling for energy and the claimed nutrient(s), would be required in the nutrition information panel for products carrying nutrition content claims. This study was carried out to evaluate the likely effectiveness of %DI labelling in assisting consumers with the assessment of the overall nutritional value of products with content claims.

What is Percentage Daily Intake Labelling?

Daily intake reference values for macronutrients are based on recommendations for an 'average' adult consuming an 8700 kJ diet. Percentage daily intake information therefore expresses the percentage of the daily intake reference value for a particular macronutrient, sodium or energy that will be obtained from consuming one serving of the food. This information could provide a tool to assist consumers in evaluating how 'healthy' foods carrying a nutrition content claim are. Percentage daily intake is a similar concept to percentage recommended daily intake (%RDI), which is used for vitamins and minerals.

Objectives

To investigate:

- Consumer understanding of %DI labelling;
- Consumer use of %DI labelling in the assessment of the overall nutritional value of products with nutrition content claims; and
- Whether %DI labelling information should be presented for all 'core' nutrients in the nutrition information panel (NIP) or just energy and nutrient(s) for which a content claim is made.

Methodology

- 51 one-hour face-to-face interviews in Australia (n=33) and New Zealand (n=18)
- 35 female & 16 male participants aged 18 yrs and over
- all participants required to be the main or joint main household shopper
- six mock-up product labels with content claim, %DI information for energy and the claimed nutrient in the NIP, and list of ingredients were used during interview (see example in box) (products included low fat ice-cream, low fat yoghurt, reduced sodium creamy chicken soup, breakfast cereal, toasted muesli, wholemeal bread)
- additional mock-up product with %DI labelling on front-of-pack and %DI information for energy and all core nutrients in the NIP
- participants questioned about general use of NIP information, overall assessment of nutritional value of product and how assessment was made, nutrients of most interest, inclusion of %DI values for some vs all nutrients, understanding of %DI values for energy
- understanding of %DI labelling was assessed before and after participants were provided with information about %DI and how it may be used

- participants divided into two groups (capable NIP users and non-capable NIP users) for subsequent analysis
- content of interviews were analysed by identifying key themes

Mock-up product NIP information

Breakfast cereal

NUTRITION INFORMATION

Serves per package: 12

Serve size: 45g

	Quantity per Serve	% Daily Intake* (per Serve)	Quantity per 100g
Energy	628kJ	7%	1369kJ
Protein	3.6g		8.1g
Fat, total	0.7g		1.6g
– saturated	0.2g		0.4g
Carbohydrate	32.4g		71.9g
– sugars	14.0g		31.2g
Dietary Fibre	6.4g	21%	8.5g
Sodium	14mg		30mg

*based on an average adult diet of 8700 kJ

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

Results

- when exposed to %DI information for the first time, participants needed assistance and practice before being able to use the information because of the complexity of the %DI concept
- inclusion of %DI information for only energy and the claimed nutrient limited interpretation of the product's nutritional value and raised questions about missing values
- participants wanted values for all NIP nutrients for the following reasons: desire for complete information, particular interest in individual nutrients e.g. fat and sugar
- %DI for energy very poorly understood
- for those who currently use and understand values in the NIP, %DI information may assist in product purchase decisions after education
- for those who do not currently use values in the NIP, %DI information is not likely to be useful because of the complexity of the concept
- areas of confusion identified include: difference between %RDI and %DI, interpretation of three columns of data in the NIP, use of percentages, use of %DI information to compare products when serve sizes vary, understanding of energy
- education would be essential to encourage and facilitate the use of the concept

Conclusions

- %DI labelling on foods did not readily assist participants with the assessment of the overall nutritional value of products with nutrient content claims because of the complexity of the concept and the non-inclusion of values for all core nutrients and sodium
- capable NIP users were generally able to assess the overall nutritional value of a product, however, the omission of %DI data for other nutrients in the NIP limited interpretation of the product's nutritional value and raised questions about missing values
- %DI for energy was confusing for most participants
- even after receiving information on %DI labelling, non capable NIP user participants, were unlikely to use %DI information, however overall interest in nutrition will also influence use of %DI labelling information.

Outcome

FSANZ considered that this research indicated mandating %DI labelling would be an ineffective risk management tool to address consumer misunderstanding of nutrition content claims.

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Reference

FSANZ 2006. *Qualitative Research into the Interpretation of %DI and %RDI Labelling*. Report prepared by TNS Social Research. Available at www.foodstandards.gov.au

