

Workshop to explore global consumer attitudes to the provision of nutrition information on food labels

Josephine M. Wills¹, David B Schmidt², Francy Pillo-Blocka³, Georgina Cairns⁴

Moderators: Dr Tee E-Siong, President of Nutrition Society of Malaysia
Dr Jonathan Back, DG SANCO, Brussels.

Abstract

In many parts of the world, food companies, consumers and governments are re-examining the provision of nutrition information on food and drink product labels. In a climate where the prevalence of diet, nutrition and health related diseases is increasing, it is important that the nutrition information provided on label is appropriate and understandable to the consumer, and has an impact on food choice behaviours. The nutrition label is an important vehicle through which food manufacturers can communicate essential information about the nutritional value and composition of their product. Potentially, this represents a valuable tool to help consumers make informed decisions about their diet and lifestyle. However, it appears that nutrition labels are not always effective in getting the message across.

The Food Information Organisations globally have been following consumer attitudes and trends in the perception and use of this information on label, and consumers attitudes to food, nutrition and health. Some regions have had nutrition information on label for some time, in other regions provision of nutrition information is developing. This Workshop looked at consumer insights gathered in each region, and sought to establish commonalities and differences.

A review of research on consumer response to nutrition information on food labels in Europe from 2003-2006

Klaus Grunert, Aarhus School of Business, Denmark; Josephine M Wills

In some European countries, nutrition labelling has been a major instrument for providing consumers with information, enabling them to make nutritionally appropriate choices. In recent years, there has been a particular focus on interpretational aids, where a simplified message or nutrition summary on the front of pack (signpost) summarises the more complex information that is given on the back of the label. Consumer research conducted in 2003-2006 in Europe on how consumers perceive, understand, like and use nutrition information on food labels, was reviewed.

¹ Director General, European Food Information Council, Brussels, Belgium

² President and CEO, International Food Information Council (IFIC); CEO, IFIC Foundation, Washington DC, USA

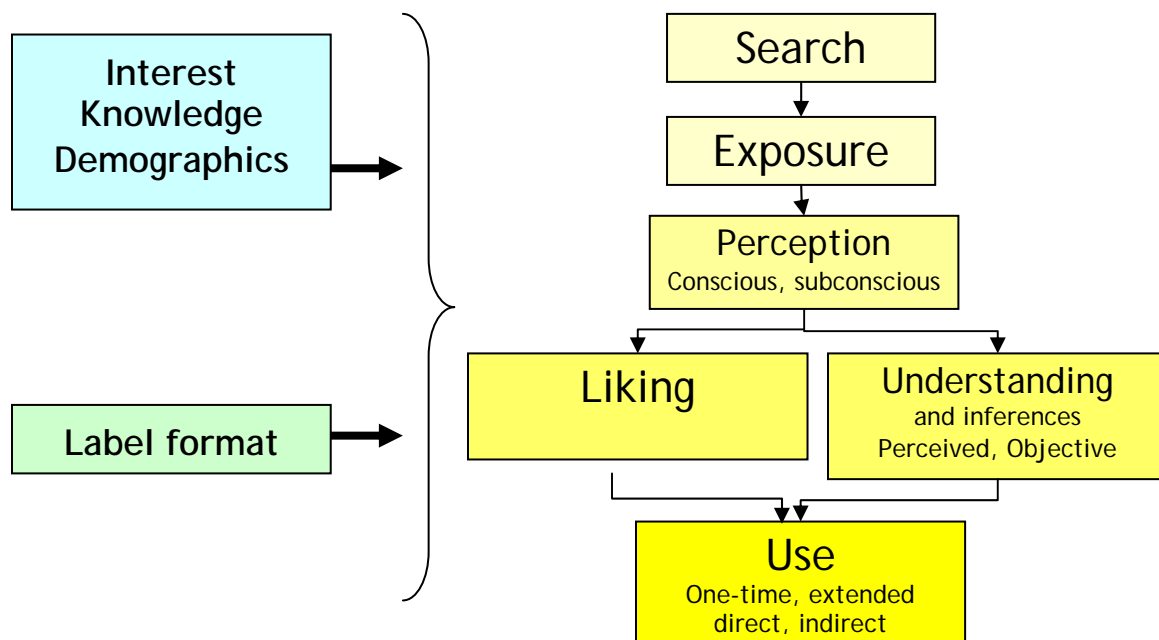
³ President and CEO, The Canadian Council of Food and Nutrition, Toronto, Canada

⁴ Executive Director, Asian Food Information Centre, Bangkok, Thailand

Based on a search of databases on academic publications, Google-based search, and direct enquiries with a range of food retailers, food companies, consumer associations and government agencies, 58 studies were identified. These studies were summarised using a standard format (Figure 1) guided by a model of consumer information processing, and then processed using MaxQDA software in order to identify key findings and common themes.

The studies showed widespread consumer interest for nutrition information on food packages, though this interest varied across situations and products. Consumers liked the idea of simplified front-of-pack information but differed in their liking for the various formats (colour-coded indicators of nutrient level [traffic lights], Guideline Daily Amounts, healthy logos). Differences can be related to conflicting preferences for ease of use, being fully informed, and not feeling pressurised into behaving in a particular way. Most consumers understand the most common signposting formats. There is, however, virtually no insight into how labelling information is used in a real world shopping situation, and how it will affect consumers' dietary patterns. Further research is needed in a real world setting.

Figure 1: Theoretical model



Reference:

Grunert K.G and Wills J.M (2007) J. Public Health (in press) A review of European research on consumer response to nutrition information on food labels.

Consumer Perception and Use of Nutrition and Health Information on Food Labels; the USA Perspective

David B. Schmidt

For the past 15 years, consumers in the United States have had access to nutrition and health information on food labels but there are many questions about the perception and use of this information.

Since 2003, the International Food Information Council (IFIC) Foundation has conducted qualitative and quantitative research to explore how consumers see, understand, and apply key health, nutrition, and ingredient information on the food label when purchasing or consuming foods and beverages.

The *Dietary Guidelines for Americans* convey science-based advice on food and physical activity choices for health.¹ One of the communication tools developed to help consumers apply the Guidelines is the Nutrition Facts Panel (NFP), which provides information on the nutrient content of foods and beverages (see Figure 2). This information is intended to aid consumers in making informed and healthful decisions about what to eat and drink in the context of their overall daily diet.²

Since 2003, the International Food Information Council (IFIC) Foundation has conducted qualitative and quantitative research to explore how consumers perceive, understand, and apply health and nutrition information on the food label.³⁻⁹ The following are key research findings on consumers' perceptions of the NFP, its elements, and nutrition-related claims.

The NFP. In an environment where about half of consumers say their overall diet is healthful, the food label is one of the top three sources of information among those who are trying to make a diet-related change over a six-month period.³ About 58% of consumers say they use the NFP when deciding to buy a certain food or beverage, especially when making first-time purchases or comparing two products with similar prices or front-of-package claims.³⁻⁵ Despite the high frequency of NFP usage, only a quarter of consumers find it easy to use.³

Figure 2. The Nutrition Facts Panel (NFP).

Nutrition Facts	
Serving Size 1 cup (228g)	
Servings Per Container 2	
Amount Per Serving	
Calories 260	Calories from Fat 120
% Daily Value*	
Total Fat 13g	20%
Saturated Fat 5g	25%
Trans Fat 2g	
Cholesterol 30mg	10%
Sodium 660mg	28%
Total Carbohydrate 31g	10%
Dietary Fiber 0g	0%
Sugars 5g	
Protein 5g	
Vitamin A 4%	• Vitamin C 2%
Calcium 15%	• Iron 4%
* Percent Daily Values are based on a 2,000 calorie diet. Your Daily Values may be higher or lower depending on your calorie needs:	
	Calories: 2,000 2,500
Total Fat	Less than 65g 80g
Sat Fat	Less than 20g 25g
Cholesterol	Less than 300mg 300mg
Sodium	Less than 2,400mg 2,400mg
Total Carbohydrate	300g 375g
Dietary Fiber	25g 30g
Calories per gram:	
Fat 9	* Carbohydrate 4 * Protein 4

Calories. Two-thirds of consumers say they look at calorie information on the NFP. However, they cannot place this information in the context of their total energy requirements. Eighty-eight percent (88%) of consumers incorrectly estimated their daily calorie needs based on their age, weight, and height. Nearly half of consumers would not even venture a guess (see Figure 3). Less than a third of consumers correctly stated that calories in general—regardless of their source—caused weight gain if consumed in excess.³

Percent Daily Values (DV)s. Key nutrients listed on the NFP have recommended intake levels known as Daily Values (DV)s. These are stated in the footnote section of the NFP (See Figure 2). The percent DVs help determine whether a serving of the product is high or low in certain nutrients based on a 2,000-calorie reference diet.²

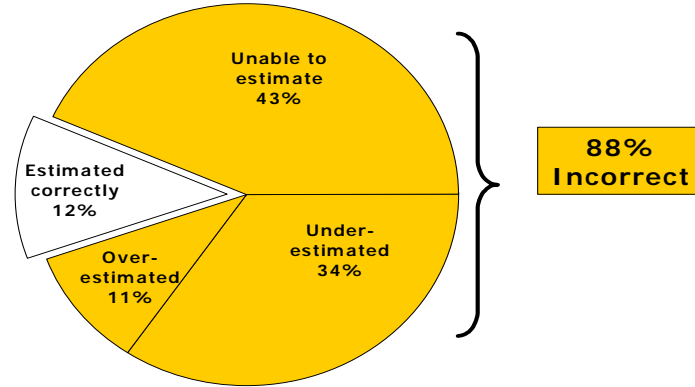
Consumers are not using percent DVs to see how nutrients fit into their overall daily diet. They believe these are industry-defined thresholds vis-à-vis science-based, government-regulated standards.⁶ Some also think percent DVs describe a product's composition (e.g. a product with 10% fat listed is perceived to be made of 10% fat).⁴ Consumers seem to prefer amount per serving information, expressed in metric units (grams) instead of percent DV.³

Nutrition-Related Claims. Table 1 provides examples of current claim formats regulated by the US Food and Drug Administration (FDA). The definitions and levels of scientific evidence required to support these claims are described elsewhere.¹⁰⁻¹¹ Health claims contribute to greater awareness of diet-disease relationships, but the regulatory process and the levels of scientific evidence required for various claims is poorly understood by consumers, which suggests that simpler language may be preferred.⁷ Still, the presence of health claims on the front of packages may yield increased use of the NFP.⁴⁻⁵

Suggestions for Improving the NFP. Table 2 summarizes key consumer recommendations for improving the NFP. The changes include format and font adjustments; standardization of serving sizes and terminology; clarifying nutrient-calorie relationships and the meaning of % DV; and moving key information to a small panel on the front of the package.⁴⁻⁵

Consumers Have Limited Knowledge of Calorie Needs per Day

As far as you know, how many calories should a person of your age, weight, and height consume per day?



(n = 1000)

Figure 3. Estimation of calorie needs per day. (Source: IFIC Foundation *Food and Health Survey*, 2006).

Table 1. Sample Formats of Nutrition-Related Claims.

Claim Format	Sample Claim
Health Claim	"25 grams of <u>soy protein</u> (food component) a day, as part of a diet low in saturated fat and cholesterol, may reduce the risk of <u>heart disease</u> (condition)"
Structure-Function Claim	"Calcium (nutrient) builds strong bones (structure)."
Dietary Guidance Statement	"Diets rich in fruits and vegetables may reduce the risk of some types of cancer and other chronic diseases."

Table 2. Consumer Recommendations for Improving the NFP.

Readability	Usability	Clarity	Visibility
<ul style="list-style-type: none"> • Increase font size • Avoid "paragraph style" NFPs. • Present gram and percent information in a columnar form. • Bold the serving size. 	<ul style="list-style-type: none"> • Maintain a standard serving size across similar products. • Provide information for a serving size that is easily interpreted. • Maintain consistent terminology (e.g., "bag" and "package"). • Link the information to standards consumers know, e.g. the Food Pyramid graphic. 	<ul style="list-style-type: none"> • Clarify the relationship of total fat to other fats. • Clarify the relationship of total calories to calories from fat. • Clarify the meaning of the percent daily value; consider moving the footnote into columnar format. 	<p>Move key information to a small panel on the front of the package.</p>

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2. Center for Food Safety and Applied Nutrition, US Food and Drug Administration (2004). *How to Use and Understand the Nutrition Facts Panel*. Available at: <http://www.cfsan.fda.gov/~dms/foodlab.html#see2>
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6. IFIC Foundation (2004). *Food Label and Calorie Research*. Available at: <http://www.ific.org/research/calorielabelres.cfm>
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11. Center for Food Safety and Applied Nutrition, US Food and Drug Administration (2006). *Label Claims*. Available at: <http://www.cfsan.fda.gov/~dms/lab-hlth.html>

Tracking Nutrition Trends VI (TNT VI); the Canadian Perspective **Francy Pillo-Blocka**

The Tracking Nutrition Trends survey was first conducted in 1989 in Canada to study adult consumers' self-reported knowledge, attitudes and behaviours on food and nutrition. Each wave of the series (I through VI) has built on the previous findings and tracked changes.

The intent of the TNT Series is to provide health professionals, academics and the food industry with insights into Canadians' perspective on the importance of nutrition, their knowledge and behaviours.

The survey themes have evolved as the marketplace and regulatory landscape has. Results of the survey have shown that eighty-seven per cent of Canadians believe they have some knowledge of nutrition. Self-rated knowledge is a good predictor of knowledge about specific nutrition issues and a strong driver of nutrition-related decisions and lifestyle choices.

Access to information about nutrition is key to being informed and being in a position to make relevant choices. The sources from which Canadians received nutrition information are: product labels (77%), print media (76%), friends, relatives and colleagues (66%) and electronic media (65%), family physician or other health professional (51%) and dietitian (23%). Previous TNT studies show a high credibility rating for health professionals (dietitians, physicians and others) by more than three quarters. The label is also viewed as credible (40%).

It appears that many Canadians (66%) do not recall health claims or statements made by food companies. For those who do recall something, the focus on the fat content of a food (38%), followed by general health claims (16%) and specific references to fibre or whole grains (14%).

Most Canadians (77%) continue to get nutrition information from product labels. A larger proportion indicate being able to find what they were looking for on the label (67% often can find this information, versus 56% in TNT V). The purpose of reading labels is to find information about ingredients and nutrition. Half of those who read labels often look to find foods that claim to be good for their health. While few people see their health or eating habits as poor, there is some variation between good and excellent ratings. The desire to maintain good health is the most important motivator. A large majority indicates thinking they are in at least good health. Next is the desire to have food that provides energy and stamina, followed by weight management and the need to follow a prescribed diet.

The motivation to eat well raises the question of what Canadians care about when it comes to nutrition and food choices. Nutrition is almost as important for Canadians as taste, and much more important than cost or convenience, when

selecting foods. Canadians also care about food-based considerations (e.g. whole grains) more than others (e.g. a low glycaemic index) although there is a knowledge gap. The next important attributes are the presence of omega-3 fatty acids, the presence of added nutrients and being organic.

Food choices are also affected by the tendency for people to select food based on the amount of a particular nutrient. When selecting foods based on specific nutrients, people are most often choosing food based on its composition of fibre, protein and vitamins. The largest increase occurred with respect to the presence of trans fatty acids, with 68 per cent indicating they sometimes or often select a food based on this nutrient (versus 41% in TNT IV).

Reference:

Tracking Nutrition Trends VI, 2006, The Canadian Council of Food and Nutrition

**Consumer attitudes to nutrition information on food labels and packaging:
Perspectives from Asia**
Georgina Cairns

AFIC conducted qualitative research in 2006, in China and Malaysia which explored consumer responses to nutrition information on packaging of food products available in the market; as well as contextual factors which impacted consumer responses.

Conclusions drawn from this research were –

- Consumer approved of the provision of nutrition information on packaging but self-rated own knowledge levels as low.
- Structure function claims were preferred to simple nutrient content claims. Response to qualified health claims was more mixed, and was determined by many factors including validation of claims by third party (eg national regulatory authority, internationally recognised organization), previous knowledge (unfamiliar/new information was ignored and had low credibility); volume of information provided (supplementary information or claims perceived as surplus was ignored and had low credibility).
- Consumer mindsets regarding the impact of dietary choice on health was focused on short term, and recognition of long term impact of eating behaviour on health was poor. This may be related to 2000 year-old Asian tradition of consuming specific foods to influence specific health/disease states.

Qualitative data from AC Nielsen, a market research agency on eating out-of-home choices and attitudes to weight management in 12 countries in Asia was also presented. This survey found –

- Eating out of home choices were primarily driven heuristically by familiarity, taste, convenience and social inclusion criteria. Survey

- respondents reported that health and nutritional balance were also included as decision criteria but were of secondary importance.
- Consumer definitions of 'healthful' and 'nutritional balance' were socially determined, scientifically inaccurate (e.g energy contribution of greasy food could be reduced by combining with sour foods) and rarely re-examined.
 - Energy content of out-of-home foods was frequently under-estimated, especially local/traditional food dishes.
 - Consumers welcomed the concept of nutrition information on label but desired positive/good-for-me indicators, as well as warnings and information/advice 'on reducing consumption'

Frequency of eating out of home is higher in Asia than in other parts of the world, across all income groups and contributes substantially to nutrition status. Furthermore, a large proportion of out-of-home food as well as grocery spend is within the informal sector where pre-packaging is rare and regulatory monitoring and control is difficult. These sectors are unlikely to be included in nutrition information on label policies.

In conclusion, nutrition information on labels is in early stages of implementation in the Asia region. Asian nations can gain from the experiences of countries that began implementation and evaluation of nutrition information on food packaging some time ago. The region represents a very wide, unique mix of culinary patterns, knowledge levels, and values in relation to food and health. Therefore, it is recommended that regional, contextual factors which may influence consumer responses to nutrition information should also be considered when developing nutrition information strategies.

AFIC is planning further quantitative research to test some of the findings and preliminary conclusions drawn from the 2006 research.

References:

AFIC 2006 Survey of Consumer Responses to Nutrition Information and Health Claims on Packaged Food, see www.afic.org
AC Nielsen 2005 Life Choices Survey,
http://www2.acnielsen.com/reports/index_consumer.shtml