

Canada's New Nutrition Label from the Concept to the Cupboard

Brought to you by the Team of Registered Dietitians at Kellogg Canada Inc.



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Introduction

Nutrition information is about to become much more accessible to Canadian consumers as Health Canada finalizes its proposed regulations for mandatory nutrition labelling, *Canada Gazette Part I*, June 16, 2001 (1). Health Canada received approximately 2,500 comments on this proposal from nutritionists and other public health experts, the academic community, consumer groups and the food industry. The final regulations are expected to be issued some

time in 2002, at which time food companies will begin working immediately to translate the new rules into nutrition labels that will appear on the vast majority of packaged foods. This article discusses the scope of the proposed regulations and summarizes some of the consumer research that helped shape them. Specific highlights of the proposed label are also provided.

Scope of the Proposed Regulations

Public health is the driving force behind nutrition labelling and Health Canada's objectives for the initiative are very ambitious:

- To provide a system for conveying information about the nutrient content of foods in a standardized format
- To enable consumers to make appropriate food choices in relation to reducing the risk of developing chronic diseases and to help in the dietary management of such diseases

- To encourage the availability of foods that contribute to diets that reduce the risk of developing chronic diseases

These objectives are addressed by comprehensive labelling regulations that will include detailed specifications for the format of "Nutrition Facts" panels, updated criteria for nutrient content claims and authorization of health claims for the first time in Canada. Highlights of Canadian consumer research on nutrition and nutrition labelling are helpful to help set the stage.

It's all About Consumers

The full potential of nutrition labelling can only be achieved if consumers respond to it. This fact prompted the National Institute of Nutrition to conduct extensive research (2,3,4)

with Canadian consumers to gather information on topics related to nutrition and nutrition labelling.

Nutrition is Important, but Diet-Disease Knowledge is Limited

Two-thirds of a sample of 901 consumers polled in 1999 (3) responded that nutrition is either “extremely” or “very” important in choosing a food. In addition, 78% of this sample stated that nutrition-related information on food packages is “very” or “fairly” important, and a large majority (83%) reported that they are putting this information into practice by choosing a diet they consider “good” in terms of nutrition.

When participants were asked to identify diseases that could be influenced by diet, the most frequent unaided responses were coronary heart/vascular disease (62%), cancer (47%) and diabetes (39%) – leading causes of morbidity and mortality in Canada. However, only 20% or fewer of the survey participants mentioned hypertension, obesity, osteoporosis or stroke, and there were no mentions of neural tube birth defects.

The “Nutrition Information Panel” is used for a Variety of Purposes

Consumers use the current “Nutrition Information” panel in three general ways: to help select foods that are high or low in specific nutrients; to assess the calorie content of foods; and, to help

make comparisons between similar or different types of foods. It is reasonable to expect that consumers will use the new “Nutrition Facts” panel similarly in the future.

Varied Uses of the “Nutrition Information” Panel (4)

| Purpose | Percent of consumers who “often” or “sometimes” use the “Nutrition Information” panel |
|---|---|
| To see how high or low a food is in nutrients like fat or sodium | 87 |
| To see how high or low a food is in nutrient like fibre, vitamins or minerals | 83 |
| To get a general idea of the calorie content | 78 |
| To compare similar types of foods with each other | 76 |
| To compare different types of foods | 74 |
| To see if something in the advertising/package is true | 65 |
| To figure out how much of a food you should eat | 54 |

Consumers want Uncluttered Labels and Clear, Easy-to-Understand Claims

When given a choice between nutrients declared in absolute amounts or as a percentage of the Reference Daily Intake (% RDI), consumers have a clear preference for the latter (4). This preference may reflect the fact that it is easier to apply nutrition information when expressed in a relative context than it is to determine the significance of amounts of nutrients expressed in grams, milligrams or micrograms.

Consumers tend to be ambivalent about the bilingual format of the current “Nutrition Information” panel (4). Three bilingual formats were evaluated by consumers for the following performance characteristics: correct communication of nutrient content; ease of finding nutrient information; being useful; and, effectiveness in communicating relative nutrient amounts. Although there were some individual preferences according to linguistic group, labels with both languages on the same panel were deemed to perform just as effectively as separate English and French labels according to the performance measures noted above.

A large majority of Canadians (92%) reported that having access to health claims on foods was either “very” or “fairly” useful (3). Consumers’ perceptions regarding health claims

were dependent on how the claims were worded. Clear, concise language was preferred, but punchy slogans were not considered credible. Acceptance of health claims was also higher if the consumer had a personal interest in the disease, the product that the claim appeared on was deemed nutritionally appropriate and if the claim included a third-party endorsement. However, the value of a third-party endorsement was seen as less important after consumers were told that all health claims would be regulated by Health Canada. Consumers also expressed a preference for “split” health claims, which provide a short, concise statement on the front of the package and more detailed information on a separate panel.

In summary, Canadian consumers are interested in nutrition and overwhelmingly favour mandatory nutrition labelling on packaged foods (3,4). Consumers want clear, understandable labels and credible claims. Given the current lack of knowledge about the relationship between nutrition and disease, there is a clear opportunity to use the new nutrition label as an educational tool to help Canadians make healthy and informed food choices.

The Proposed Regulations – a Primer

The new nutrition labelling regulations will address three closely related areas:

“Nutrition Facts”

The proposed nutrition label will provide information on calories and 13 core nutrients. The standard bilingual format for the “Nutrition Facts” panel shown below is provided as an example of the proposed format (1).

All nutrients are proposed to be expressed as percent Daily Value per serving of food. The basis for the Daily Values will continue to be the *Recommended Nutrient Intakes* (1983 edition) in order to maintain consistency with the current voluntary



nutrition labelling system. However, Health Canada has expressed an inclination to switch to the new *Dietary Reference Intakes* (DRIs) after the National Academy of Sciences completes the task of establishing them. The availability of a complete set of DRIs will create an opportunity for Health Canada to work with the U.S. Food and Drug Administration to establish a single basis for the Daily Values in both countries.

The labelled serving size is proposed to be standardized using reference amounts that have been established by Health Canada for 151 different categories of foods. These reference amounts will be used by food

Nutrition Facts Valeur nutritive

| Amount Quantité | % Daily Value % valeur quotidienne |
|--|---------------------------------------|
| Per 1 cup (264g) pour 1 tasse (264g) | |
| Calories / Calories 260 | |
| Fat / Lipides 13g | 20% |
| Saturated / saturés 3g + Trans / trans 2g | 25% |
| Cholesterol / Cholestérol 30mg | |
| Sodium / Sodium 660mg | 28% |
| Carbohydrate / Glucides 31g | 10% |
| Fibre / Fibres 0g | 0% |
| Sugars / Sucres 5g | |
| Protein / Protéines 5g | |
| Vitamin A / Vitamine A | 4% |
| Vitamin C / Vitamine C | 2% |
| Calcium / Calcium | 15% |
| Iron / Fer | 4% |

manufacturers to determine the appropriate serving size expressed in common household measures (e.g. cups, pieces, ounces) so that it will be easy for consumers to visualize a serving of the product and compare the nutrient content of different brands of similar foods.

Health Canada has provided a variety of other "Nutrition Facts" formats that may be used depending on the size and configuration of the package, and the nutrient content of the food. These formats include separate English and French labels, simplified labels (for foods of minimal nutritional value) and a tabular format as shown below (1):

| Nutrition Facts | |
|------------------------------------|---------------|
| Per 1 cup (264g) | |
| Amount | % Daily Value |
| Calories 260 | |
| Fat 13g | 20% |
| Saturated Fat 3g + Trans Fat 2g | 25% |
| Cholesterol 30mg | |
| Sodium 660mg | 28% |
| Carbohydrate 31g | 10% |
| Fibre 0g | 0% |
| Sugars 5g | |
| Protein 5g | |
| Vitamin A 4% • Vitamin C 2% | |
| Calcium 15% • Iron 4% | |

Standard English Format

| Nutrition Facts | |
|--|---------------|
| Per stick (2.5g) | |
| Amount | % Daily Value |
| Calories 5 | |
| Fat 0g | 0% |
| Carbohydrate 2g | 1% |
| Protein 0g | |
| Not a significant source of saturated fat, trans fat, cholesterol, sodium, fibre, sugars, vitamin A, vitamin C, calcium, and iron. | |

Simplified Format



| Nutrition Facts | | | |
|---|------------|-------------------------|------------|
| Per 1 cup (264g) | | | |
| Amount | % DV* | Amount | % DV* |
| Fat 13g | 20% | Carbohydrate 31g | 10% |
| Saturated Fat 3g + Trans Fat 2g | 25% | Fibre 0g | 0% |
| Cholesterol 30mg | | Sugars 5g | |
| Sodium 660mg | 28% | Protein 5g | |
| Vitamin A 4% • Vitamin C 2% • Calcium 15% • Iron 4% | | | |

Tabular Format

Health Claims

Health Canada is proposing to make health claims available to Canadian consumers for the first time. Unlike nutrient content claims, which provide information about the nutritional

composition of foods, health claims disseminate information about the relationship of nutrients to disease.

Suggested Wording of Health Claims Proposed to be Authorized by Health Canada (1)



A healthy diet containing foods high in potassium and low in sodium may reduce the risk of high blood pressure, a risk factor for stroke and heart disease

A healthy diet with adequate calcium and vitamin D, and regular physical activity, help to achieve strong bones and may reduce the risk of osteoporosis

A healthy diet low in saturated and *trans* fats may reduce the risk of heart disease

A healthy diet rich in a variety of fruits and vegetables may help reduce the risk of some types of cancer

Won't cause cavities (e.g., for chewing gum)

Health Canada has also indicated they plan to quickly evaluate additional health claims that have already been authorized in the United States:

- Folate and neural tube birth defects
- Fibre-containing grain products, fruits and vegetables and cancer
- Fruits, vegetables and grain products that contain fibre, particularly soluble fibre, and risk of coronary heart disease
- Soluble fibre from certain foods (oats and psyllium) and coronary heart disease

Health claims have had a dramatic impact on consumers in the United States (5), which suggests that they may also have public health benefits in Canada.

Nutrient Content Claims

Nutrient content claims can be used in labelling or advertising to call attention to specific nutritional attributes of a food or to make relevant comparisons to other foods.

Health Canada's proposed labelling regulations define 42 such claims.



Brief Description of Proposed Nutrient Content Claims (1)

| Claim | General Definition | Other Criteria |
|---|---|--|
| Free of: <ul style="list-style-type: none"> Energy • Fat • Saturated fatty acids <i>Trans</i> fatty acids • Cholesterol Sodium or salt • Sugars <ul style="list-style-type: none"> 100% fat-free | Contains a negligible amount of the nutrient such that the label declaration is "0" per serving | <ul style="list-style-type: none"> Saturated fatty acid-free foods must also be free of <i>trans</i> fatty acids <i>Trans</i> fatty acid-free foods must also be free of saturated fatty acids Cholesterol-free foods must also be low in saturated fatty acids Sugar-free foods must also be free of energy (with the exception of chewing gums) Foods bearing "100% fat-free" claims are not permitted to contain any added fat |
| Low in: <ul style="list-style-type: none"> Energy • Fat • Saturated fatty acids Cholesterol • Sodium or salt <ul style="list-style-type: none"> 100% fat-free | Contains a very small amount of the nutrient per reference amount | <ul style="list-style-type: none"> Foods with small reference amounts (30 g or less or 30 mL or less) must also qualify for the claim on the basis of 50 g food Foods low in saturated fatty acids and <i>trans</i> fatty acids must not contain more than 15% of calories from the combination of the two Foods low in cholesterol must also be low in saturated fatty acids "% fat-free" claims may only be used on foods that are also low in fat |
| Reduced in: <ul style="list-style-type: none"> Energy • Fat • Saturated fatty acids <i>Trans</i> fatty acids • Cholesterol Sodium or salt • Sugars | Food must be formulated to contain at least 25% less of the component per reference amount compared to a reference amount of a similar reference food | <ul style="list-style-type: none"> The reference foods for "reduced" claims cannot be low in the component that is the object of the claim Reduced cholesterol foods must also be low in saturated fatty acids |
| Lower in: <ul style="list-style-type: none"> Energy • Fat • Saturated fatty acids <i>Trans</i> fatty acids • Cholesterol Sodium or salt • Sugars | The food provides at least 25% less of the component per reference amount compared to a reference amount of another food from the same food group | <ul style="list-style-type: none"> The reference foods for "lower in" claims cannot be low in the component that is the object of the claim Foods lower in cholesterol must also be low in saturated fatty acids |
| Source of: <ul style="list-style-type: none"> Energy • Protein • Omega-3 poly-unsaturated fatty acids Omega-6 poly-unsaturated fatty acids • Fibre Vitamins and minerals | The food contains a significant amount of the component (approximately 5% DV) per reference amount | <ul style="list-style-type: none"> The protein in foods making a "source of protein" claim must have a protein rating of 20 or more The protein in 30 g breakfast cereal combined with 125 mL of milk may be used to qualify for a "source of protein" claim |
| High in/Excellent source of: <ul style="list-style-type: none"> Protein • Fibre | The food contains a highly significant amount of the component (approximately 15% DV or more) per reference amount | <ul style="list-style-type: none"> The protein in foods making an "excellent source of protein" claim must have a protein rating of 40 or more The protein in 30 g breakfast cereal combined with 125 mL of milk may be used to qualify for an "excellent source of protein" claim Foods with at least 6 g fibre per serving may use a "very high source" claim |
| More: <ul style="list-style-type: none"> Protein • Fibre | The food contains at least 25% more of the nutrient than an appropriate reference food | <ul style="list-style-type: none"> The protein in foods making a "more protein" claim must have a protein rating of 20 or more The protein in 30 g breakfast cereal combined with 125 mL of milk may be used to qualify for a "more protein" claim Foods must contain at least 7 g protein per serving or 2 g fibre to qualify for "more" claims |
| No added: <ul style="list-style-type: none"> Salt • Sugar | The substance cannot be added to the food | <ul style="list-style-type: none"> A similar reference food for "no added salt" claims cannot be low in sodium/salt A similar reference food for no "added sugar" claims must contain added sugars Sugars cannot be increased through processing intended to impart sweetness |
| Lightly salted | The food contains at least 50% less salt than a similar reference food | <ul style="list-style-type: none"> The similar reference food is not low in salt/sodium |
| Light in energy or fat | The food must be either "reduced in" energy or "reduced in" fat | |

Bringing Nutrition Information to Consumers

The food industry has been working with Health Canada and other stakeholders in the process of developing the new labelling regulations from its inception. The food industry is also poised to commence with the formidable task of implementing the new regulations as soon as they are finalized. This task includes: interpreting the new regulations; determining how they impact individual products; updating nutrient databases; redesigning and printing millions of labels; managing existing label inventories so that they can be exhausted; and, introducing the new labels as quickly as possible, among many other logistical challenges.

The food industry will also play an important role in helping consumers to use and understand the new labels. However, it is not appropriate, or possible for food companies to act alone in this critical task. Health professionals – especially the dietetic community – working in partnership with Health Canada and other stakeholders must share in the responsibility of helping all Canadians reap the public health benefits of this bold and exciting new venture.

Are you ready?



References

1. Health Canada. Regulations amending the Food and Drug regulations (nutrition labelling, nutrition claims and health claims). June 16, 2001. *Canada Gazette Part I*. <http://www.canada.gc.ca/gazette/part1/pdf/g1-13524.pdf>
2. National Institute of Nutrition. Nutrition labelling in Canada: The nutrition information panel: A consumer focus. 1998. NIN Report, Ottawa, ON.
3. National Institute of Nutrition. Health claims in Canada: Taking the consumer pulse. 1999. NIN, Ottawa, ON. http://www.nin.ca/Publications/Other/health_claims.html
4. National Institute of Nutrition. Nutrition labelling consumer research. 1999. NIN Report, Ottawa, ON.
5. Ippolito, P.M. and Mathios, A.D. Health claims in advertising and labeling: A study of the cereal market. 1989. Bureau of Economics Staff Report. Federal Trade Commission, Washington, DC.



FROM

RESEARCH
TO PRACTICE

NUTRITION LABELLING

Brought to you by the Team of Registered Dietitians at Kellogg Canada Inc.

On June 16, 2001, Health Canada published a proposal for regulations for nutrition information on food labels in the *Canada Gazette Part I* - (www.canada.gc.ca/gazette/part1/pdf/g1-13524.pdf). The proposal includes requirements for nutrition labelling, nutrient content claims and diet-related health claims. Below we have provided an example of a label simulated using the proposed requirements to illustrate how the regulations might appear on a food product.



Sample† front panel



Sample† back panel

Sample† side panel

| Nutrition Facts | | Valeur nutritive | |
|--------------------------------------|--|----------------------|------------|
| 3/4 cup (46g) | | | |
| 3/4 tasse (46g) | | | |
| Amount | | % Daily Value | |
| Quantité | | % valeur quotidienne | |
| Calories / Calories 170 | | | |
| Fat / Lipides 1.2g | | | 2% |
| Saturated / saturés 0.2g | | | 1% |
| + Trans / trans 0g | | | |
| Cholesterol / Cholestérol 0mg | | | |
| Sodium / Sodium 250mg | | | 10% |
| Carbohydrate / Glucides 39g | | | 13% |
| Fibre / Fibres 2g | | | 9% |
| Sugars / Sucres 10g | | | |
| Protein / Protéines 4g | | | |
| Vitamin A / Vitamine A | | | 0% |
| Vitamin C / Vitamine C | | | 0% |
| Calcium / Calcium | | | 0% |
| Iron / Fer | | | 45% |

Nutrition facts

When the final regulations are implemented, Canadians will need to make sense of the changes they start to see on the labels of their favourite foods. Consumers receive nutrition information from a number of sources, including food labels. The Team of Registered Dietitians at Kellogg Canada Inc. challenges dietitians, as nutrition educators and communicators, to take a lead role in interpreting and understanding the new regulations so that we can help consumers choose foods to meet their individual needs and preferences.

† This represents a sample food label based on the regulations as proposed in the *Canada Gazette Part I* (<http://www.canada.gc.ca/gazette/part1/pdf/g1-13524.pdf>). Real label content and format will depend upon the final regulations to be published in the *Canada Gazette Part II*.

