

Claims Related to Glycemic Impact of Food: Health Canada's Perspective

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Outline

- Federal Role in Food and Nutrition
- Health Claims Framework
- Glycemic claims
 - Function claims
 - Glycemic Index (GI) claims

Federal Role in Food and Nutrition

Health Canada (HC) plays an important role in promoting conditions that enable Canadians to make healthy food choices by:

- Regulating food safety, composition, labelling and advertising under the *Food and Drugs Act and Regulations*
- Providing information so Canadians can make informed decisions about their health
- Working with P/Ts and stakeholders to advance nutrition initiatives and policies
- Providing national dietary guidance (Canada's Food Guide), including life stage guidance (e.g. Nutrition for Healthy Term Infants)

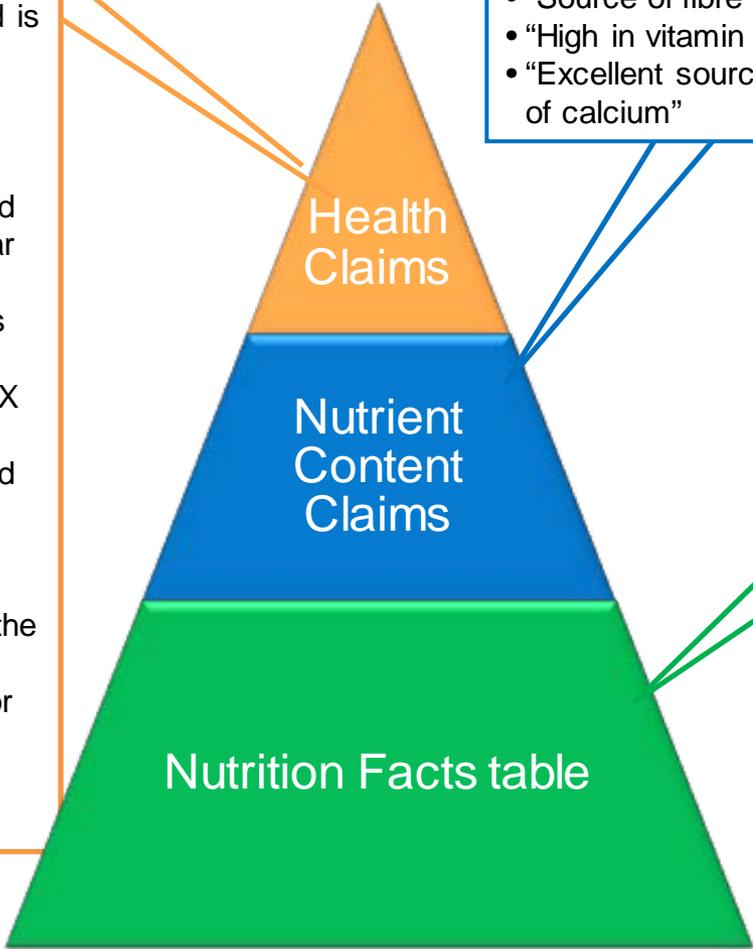
Federal responsibility for food labelling is shared between HC and the Canadian Food Inspection Agency (CFIA)

- Health Canada establishes food labelling policies, regulations and standards relating to the health, safety and nutritional quality of food sold in Canada.
- The CFIA enforces the policies and regulations that are developed by Health Canada. It also establishes and enforces non-health and safety food labelling policies, regulations, and standards.

Nutrition Information on Food Labels

- “A healthy diet low in saturated and trans fats may reduce the risk of heart disease. X food is free of saturated and trans fats.”
- “A healthy diet with adequate calcium and vitamin D, and regular physical activity, help achieve strong bones and may reduce the risk of osteoporosis. X food is an excellent source of calcium and vitamin D.”
- “A healthy diet low in sodium may reduce the risk of high blood pressure, a risk factor for stroke and heart disease. X food is sodium-free.”

- “Sodium free”
- “Lower in saturated fatty acids”
- “Source of fibre”
- “High in vitamin D”
- “Excellent source of calcium”



Nutrition Facts Valeur nutritive

Per 1 cup (37 g)
pour 1 tasse (37 g)

	% Daily Value* % valeur quotidienne
Calories 140	
Fat / Lipides 2 g	3 %
Saturated / saturés 0.4 g + Trans / trans 0 g	3 %
Carbohydrate / Glucides 29 g	
Fibre / Fibres 3 g	9 %
Sugars / Sucres 15 g	15 %
Protein / Protéines 3 g	
Cholesterol / Cholestérol 0 mg	
Sodium 204 mg	9 %
Potassium 0 mg	0 %
Calcium 169 mg	13 %
Iron / Fer 7 mg	38 %

*5% or less is **a little** / 5% ou moins c'est **peu**
15% or more is **a lot** / 15% ou plus c'est **beaucoup**

Health Claims in Canada

- Any representation in labelling or advertising that states, suggests or implies that a relationship exists between the consumption of a food and health
- All health claims are subject to subsection 5.(1) of the Food and Drugs Act and must be truthful and not misleading
- For most health claims, pre-market assessment is not required, but they are subject to post-market oversight
- For health claims referring to diseases and conditions stated in Schedule A of the Food and Drugs Act , pre-market assessment and authorization are required
- All health claims are subject to the same level of standards of evidence and are voluntary

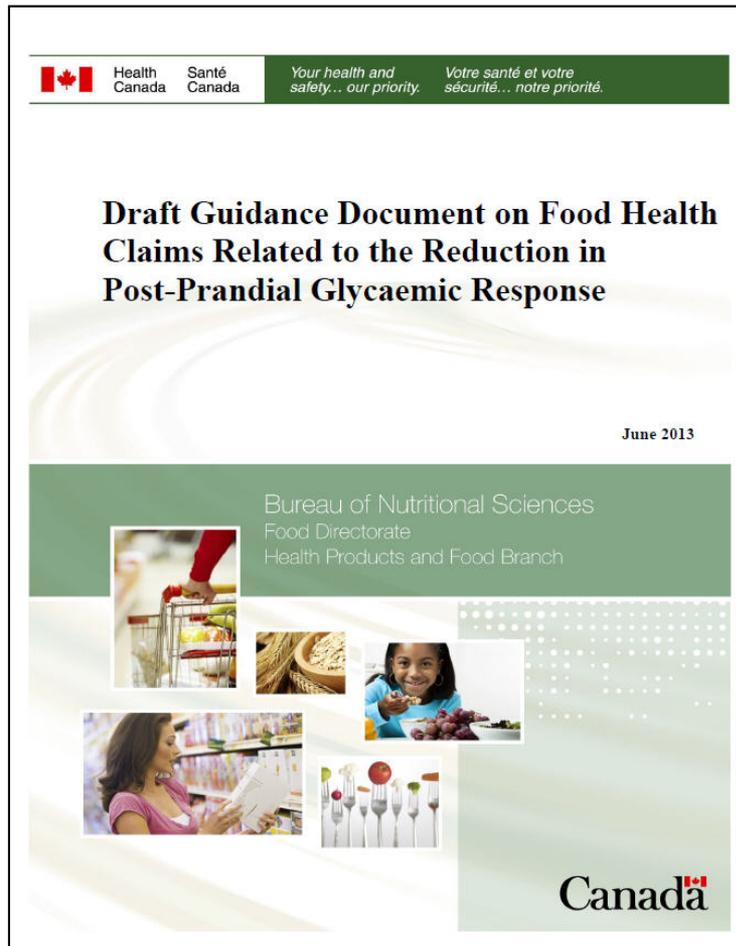
Types of Health Claims

- Disease risk reduction and therapeutic claims
 - Food X may reduce the risk of heart disease
 - Plant sterols help lower cholesterol
- Function claims (including nutrient function claims)
 - Coarse wheat bran promotes regularity
 - Calcium aids normal bone and tooth development

Health Canada's Approach to Glycemic Claims

- Messages about postprandial glycemic control, in the context of a healthy eating pattern, can be useful to consumers
- To give more information to consumers, Health Canada's approach is to allow specific claims about the reduction of post-prandial glycemia
- Claims on the reduction of post-prandial glycemia
 - Do not require premarket assessment, but documentation of scientific evidence must be maintained
 - Refer to the acute effect of reducing post-prandial blood glucose levels within normal physiological ranges in the context of food consumption
 - Must not refer, explicitly or implicitly, to the long term control or management of overall glycaemia

Health Canada's Approach to Glycemic Claims



- Claims can be made for:
 - Addition of ingredients
 - Substitution of ingredients
 - Foods with multiple compositional changes
 - Foods with inherent properties
- Document provides guidance study design and claim wording
 - 2 slices of Bread X contain 4 g of Fibre Y. This ingredient reduces the glycemic response to this food.
 - Bread A results in a lower glycemic response compared to Bread B.

Stakeholder Feedback

- Support for classifying of claims about the post-prandial glycaemic response as **function claims**
- Reservations about **comparative claims**
- Comments about smaller effect in **mixed meals**
 - *“The differences in glycemic response among carbohydrate containing foods are diminished and all but disappear when those foods are combined with other foods in a mixed meal.”*
- Suggestion to use a **standardized reference food**
- Disagreement with the requirement for **insulin data**

Stakeholder Feedback

- Suggestion to establish **nutritional criteria** for the foods to carry the claims
 - *“Low glycaemic response is almost always due to fat, fructose or fibre. Of these, only fibre is healthy.”*
- Disagreement with the criterion for limiting the amount of **fructose** replacing glucose
 - *“Fructose could be allowed as a substitute ingredient when at a level obtainable from fruit (e.g., 10 g/serving).”*
- Comments about the **minimum 20% reduction** in glycaemic response
- Revisions and clarifications will mainly affect the categories of foods with multiple compositional changes and foods with inherent properties, characteristics of test and control foods, and acceptable claim wording

Health Canada's Position on Glycemic Index Claims

- Glycemic index (GI) claims are neither nutrient content nor function claims, but implied health claims
- Identified challenges with respect to reproducibility of numerical value, consumer perception and understanding of the concept, and congruency with federal nutritional policies and guidelines

Special Article

Health Canada's evaluation of the use of glycemic index claims on food labels¹⁻⁴

Alfred Aziz, Lydia Dumais, and Jennifer Barber

GI Claims: Path Forward

- Scientific literature supports low GI diets as one of several healthy dietary patterns
- The Canadian Diabetes Association expressed interest in endorsing a GI logo program on eligible foods
- Consumer education, mitigating issues and challenges (e.g. sugars, nutrient criteria, multiplicity of front-of-pack symbols), and compliance promotion are key components of a successful labelling/claim program
- Health Canada's role is to provide regulatory/policy advice
- Engaging the Canadian Food Inspection Agency is necessary

Dietary Fibre

Definition (revised dietary fibre policy 2012)

1. Carbohydrates with a degree of polymerization of 3 or more that naturally occur in foods of plant origin and that are not digested and absorbed by the small intestine; and
2. accepted novel fibres

Novel fibres are ingredients manufactured to be sources of dietary fibre and consist of carbohydrates with a degree of polymerization of 3 or more that are not digested and absorbed by the small intestine. They are synthetically produced or are obtained from natural sources which have no history of safe use as dietary fibre or which have been processed so as to modify the properties of the fibre contained therein. Accepted novel fibres have at least one physiological effect demonstrated by generally accepted scientific evidence.

Physiological Effects Recognized for Dietary Fibres

- Improvement of laxation or regularity by increasing stool bulk
- Reduction of blood total and/or LDL-cholesterol levels
- Reduction of post-prandial blood glucose and/or insulin levels
- Production of energy-yielding metabolites through colonic fermentation

Health Claims for Dietary Fibre

Relationships accepted by Health Canada:

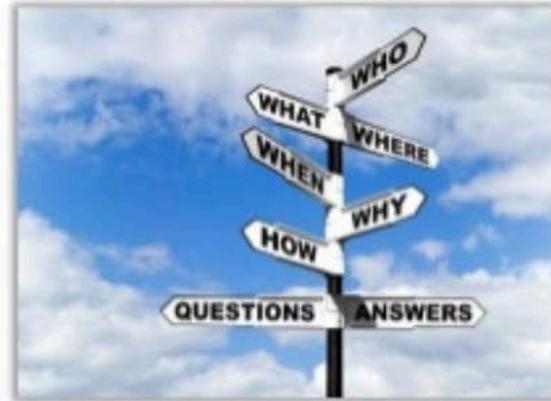
- Coarse wheat bran and laxation
- Psyllium and laxation
- Oat products and blood cholesterol lowering
- Psyllium products and blood cholesterol lowering
- Barley products and blood cholesterol lowering
- Polysaccharide complex (glucomannan, xanthan gum, sodium alginate) and blood cholesterol lowering
- Polysaccharide complex (glucomannan, xanthan gum, sodium alginate) and reduction in post-prandial glycemic response

Whole Grains Claims

- Whole Grain content claims fall under the mandate of CFIA
- Whole grain content claims are permitted for cereal products provided they retain most of their original nutritive value (e.g. rolled oats and cracked wheat)
- Whole Grain stamp permitted in Canada:
 - At least 8 g of whole grain per serving (same requirements as U.S.)
 - 100% stamp can only appear on products where 100% of ingredients are whole grains
- In 2012, Health Canada concluded there was insufficient evidence to support a heart disease risk reduction claim for whole grains

Challenges, Gaps and Opportunities

- Cluttered nutrition information environment with competing, confusing, and often contradictory messages can erode public confidence; credibility among consumers is key
- Carbohydrate quality needs to be better characterised
 - Is it about whole vs processed/refined? Digestibility / fibre? Beneficial physiologic effect? What about sugars?
- Carbohydrate remains the main source of energy and better characterisation of carbohydrate quality can lead to better foods/diets, and ultimately better health
 - What does the evidence say in relation to the management vs prevention of diet-related chronic disease?
- Substantiation of evidence: study protocols should resemble real-life situations to the extent possible and claims should be commensurate with evidence



Questions and discussion