Sugar claims on foods: health professionals’ understanding compared to marketplace practice

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Canadian Sugar Institute
Nutrition Information Service

• Inform and educate Canadians about sugars and healthy eating and advocate for science-based nutrition policies

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Nutrient content claims are meant to help consumers make informed dietary choices.

For food and beverages bearing a sugar claim, comparative reductions in carbohydrates and calories are required for changes to have nutritional significance.

- All carbohydrates (including naturally occurring and added sugars) contribute 4 kcal/g.

Sugar claims may not be useful if:

- Consumer expectations are not met (e.g. “no added sugar” does not mean “no sugar”);
- Benefits are misinterpreted (e.g. for people with diabetes);
- Products do not comply with Canadian Food Inspection Agency (CFIA) criteria.
### Sugars Terminology (Canada)

<table>
<thead>
<tr>
<th>Terminology</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td><strong>Sugar</strong></td>
<td>Sucrose (from sugar cane or sugar beets). Canadian food standards specify that sugar must have a minimum purity of 99.8% sucrose.</td>
</tr>
<tr>
<td><strong>Added Sugars</strong></td>
<td>All sugars added to foods, including sugar and sugar syrups, honey, maple syrup, and corn sweeteners (high fructose corn syrup (“glucose-fructose”), glucose syrup, and dextrose).</td>
</tr>
<tr>
<td><strong>Total Sugars</strong></td>
<td>All monosaccharides (glucose, fructose, galactose) and disaccharides (sucrose, lactose, maltose) occurring in foods (e.g., milk, fruit and vegetables) or added to foods (see “added sugars”).</td>
</tr>
</tbody>
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## Canadian Food Inspection Agency (CFIA) compositional criteria for sugar claims on foods

<table>
<thead>
<tr>
<th>Claim</th>
<th>Conditions – Food</th>
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<tbody>
<tr>
<td><strong>Reduced in sugar(s)</strong></td>
<td>• Food is modified so it contains at least 25% less sugars, totalling at least 5g less per reference amount compared to similar reference food*.</td>
</tr>
<tr>
<td>“reduced in sugar”; “sugar-reduced”</td>
<td></td>
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<tr>
<td><strong>Lower in sugar(s)</strong></td>
<td>• Food contains at least 25% less sugars, totalling at least 5g less per reference amount compared to similar reference food.</td>
</tr>
<tr>
<td>“less sugar”; “lower sugar”</td>
<td></td>
</tr>
<tr>
<td><strong>No added sugar(s)</strong></td>
<td>• Food contains no added sugars, ingredients containing added sugars, or ingredients that functionally substitute for added sugars.</td>
</tr>
<tr>
<td>“no added sugar”; “without added sugar”</td>
<td>• Sugars content is not increased through some other means.</td>
</tr>
<tr>
<td></td>
<td>• Similar reference food contains added sugars.</td>
</tr>
<tr>
<td><strong>Unsweetened</strong></td>
<td>• Food meets conditions for “no added sugars” and does not contain non-caloric sweeteners.</td>
</tr>
</tbody>
</table>

*“Similar reference food” means a food of the same type as the food to which it is compared and that has not been processed, formulated, reformulated or otherwise modified in a manner that increases or decreases either the energy value, or the amount of a nutrient that is the subject of the comparison.

Objectives

1. To assess health professionals’ understanding of sugar claims (“reduced in sugar”, “no sugar added”, “unsweetened”);

2. To compare calories, carbohydrates, and sugars content between claim and reference products in the market place; and

3. To determine the level of compliance with CFIA criteria among sugar claim products.
Methods

1. **Survey of Health Professionals**
   - Voluntary questionnaires completed at two National conferences
   - Surveys assessed understanding and expectations of sugar claims.

2. **Marketplace Research**
   - Four Toronto grocery stores were surveyed (June-August 2012)
   - Information on sugars, calories, and carbohydrates were collected for both claim and reference products; and reductions in sugars, calories and carbohydrate were calculated.
   - Products were assessed for compliance with CFIA criteria.

• **Microsoft Office Excel 2007 was used to conduct all analyses.**
Health Professionals’ Expectations and Understanding of Sugar Claims on Foods and Beverages

• Questionnaires were completed by 442 respondents: dietitians (43%); nurses (22%); other health professionals (29%).

“Reduced in Sugar” claims:
• 2/3 of respondents expected calories to be reduced along with sugars;
• 1/3 expected calories to be reduced by 25%.

“No Added Sugar” claims:
• 43% of respondents expected calories to be reduced;
• 57% incorrectly thought concentrated fruit juice could be added as a sweetener;
• <15% knew naturally-occurring sugars could be present.
Sugar Claims on Foods Do Not Meet Health Professionals’ Expectations

Sugar Claim Products in the Marketplace:

- 402 products had a sugar claim.
- 38% of products were not reduced in calories by $\geq 25\%$ as expected by health professionals:
  - 15% of products were higher in calories;
  - 18% were higher in carbohydrates; and
  - 6% were higher in sugars compared to reference products.

Figure 1: Percent of food products bearing sugar claims that did not have a 25% reduction in calories.
**REDUCED SUGAR CLAIMS**

% sugar reduction

- One-third of “reduced in sugar” products did not meet the % sugar reduction claimed on the package.
Sugar Claims in the Marketplace in Comparison to CFIA Guidelines

SUGAR CLAIMS

Compliance with CFIA criteria

• <40% of products complied with CFIA criteria:
  – Absence of an appropriate reference product (n=141);
  – Incorrect use of concentrated fruit juice as a sweetener in “no sugar added” products (n=99).

Ingredients

FRUIT (RASPBERRIES, STRAWBERRIES, BLACKBERRIES), CONCENTRATED FRUIT JUICES (WHITE GRAPE AND/OR APPLE AND/OR PINEAPPLE), WATER, FRUIT PECTIN, LOCUST BEAN GUM AND/OR GUAR GUM, CITRIC ACID, NATURAL FLAVOUR, SUCRALOSE, SODIUM BENZOATE, COLOUR. SUCRALOSE 5mg PER 15mL SERVING.
Conclusions

• Overall, the nutritional composition of products bearing a sugar claim did not meet health professionals’ expectations.

• Sugar claims may be misleading if used incorrectly or if there is not a meaningful reduction in calories.

• The perception that sugar claim products are free of sugars and/or lower in carbohydrates may be of concern for people with diabetes.

![Lower Sugar Image]

≠ “Lower in carbohydrates”
≠ “Lower in calories”

![No Sugar Added Image]

≠ “No sugar”
Questions?

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