

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

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## Introduction

- Nutrition claims are meant to help consumers make informed dietary choices.<sup>1</sup>
- All carbohydrates (including naturally occurring and added sugars) contribute 4kcal/g.
- Under isocaloric conditions (i.e. sugars exchanged for another carbohydrate) there is no effect of sugars on weight gain or other metabolic disturbances.<sup>2,3,4</sup>
- Therefore, for products bearing a sugar claim, comparative reductions in calories are required for any meaningful changes regarding health.
- Sugar claims on foods may not be useful if:
  - Consumer expectations are not met;
  - Benefits are misinterpreted; or
  - Products do not comply with Canadian Food Inspection Agency (CFIA) criteria.



## Terminology



- **Sugar** = sucrose (from sugar cane or sugar beet)
- **Added sugars** = all sugars added to foods, e.g. sugars and syrups, corn sweeteners, and other ingredients that act as a sweetener (e.g. concentrated fruit juice)
- **Sugars** = all naturally occurring and added sugars

## Canadian Food Inspection Agency (CFIA) compositional criteria for sugar claims on foods<sup>1</sup>

Claim	Conditions - Food
Reduced in sugar(s) & lower in sugar(s) "reduced sugar", "sugar-reduced", "less sugar", "lower sugar"	<ul style="list-style-type: none"> <li>• Modified food must contain at least 25% less sugar, totaling at least 5g less sugar per reference amount.</li> </ul>
No added sugar(s) "no sugar added" "without added sugar"	<ul style="list-style-type: none"> <li>• Food must not contain added sugars (see term above) and sugars content is not increased through some other means.</li> <li>• Similar reference food contains added sugars.</li> </ul>
Unsweetened	<ul style="list-style-type: none"> <li>• Food meets conditions for "no added sugars" and does not contain non-caloric sweeteners.</li> </ul>

## 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 marketplace; and
- 3) To determine the level of compliance with CFIA criteria among sugar claim products.

## References:

- 1) CFIA. 2013. <http://www.inspection.gc.ca/english/fssa/labeti/guide/ch7be.shtml>.
- 2) Sievenpiper JL. Ann Intern Med. 2012;156(4):p291-304
- 3) Te Morenga L. BMJ. 2013;346:e7492.
- 4) Gibson SG. Crit Rev Food Sci. 2013. 53(6):p591-614.

## Methods

A survey of health professionals and marketplace research were used to meet study objectives.

### Survey of Health Professionals:

- Health professionals completed voluntary questionnaires at two National conferences to assess their understanding of sugar claims and expectations of the products bearing sugar claims.

### Marketplace Research:

- Four Toronto grocery stores were surveyed between June and August 2012 to identify products with sugar claims.
- Information on sugars, calories, and carbohydrates were collected for both claim and reference products (*reference product was defined as a food of the same type to which it is compared that has not been processed, formulated, reformulated or otherwise modified in a manner that increases or decreases the energy value, or amount of a nutrient that is being compared*).<sup>1</sup>
- The nutrient content of the claim product was subtracted from the reference product to calculate reductions in sugars, calories, and carbohydrate.
- Products were assessed for compliance with CFIA criteria.
- Microsoft Office Excel 2007 was used to conduct all analyses.

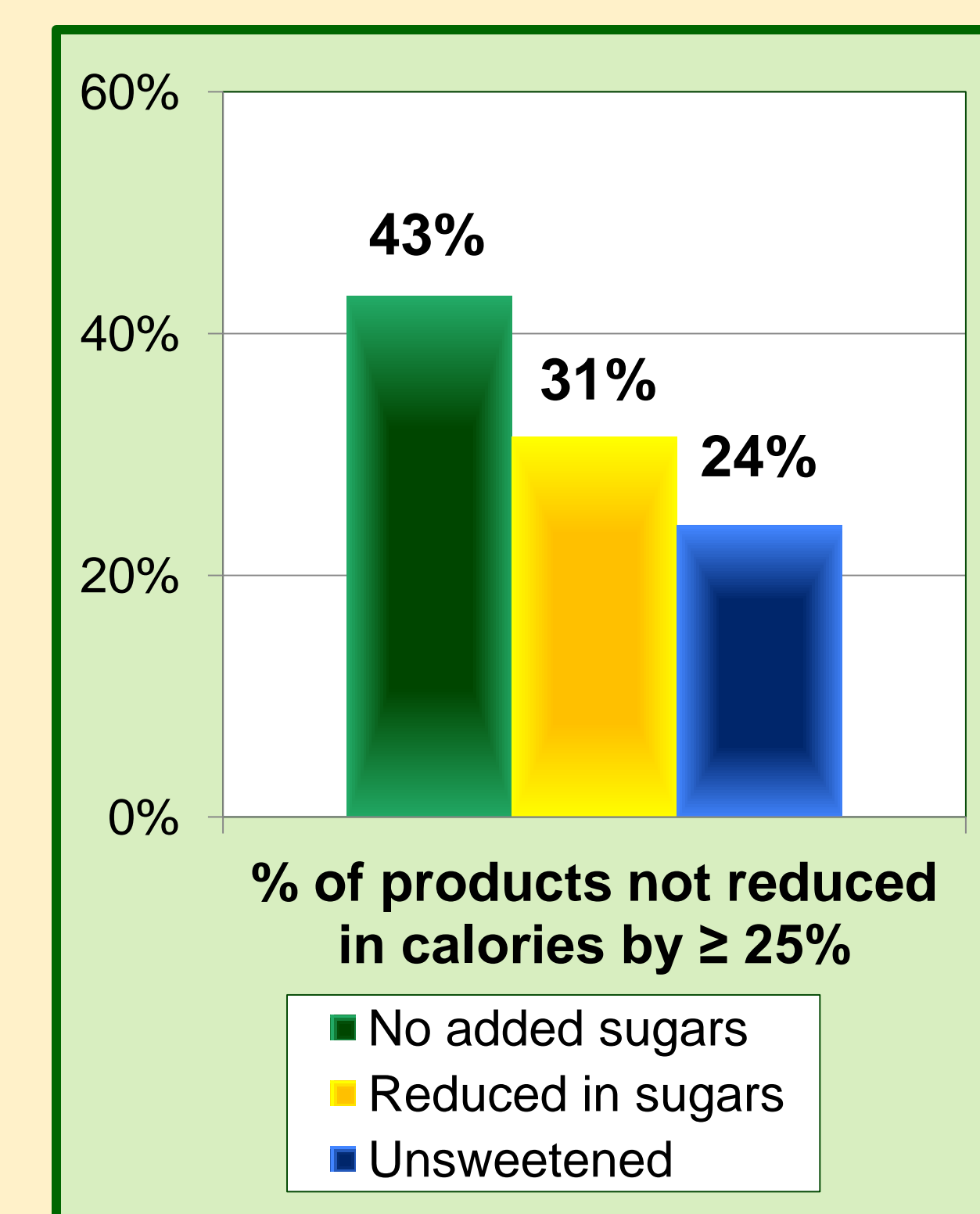
## Results

### Health Professionals' Understanding of Sugar Claims on Foods

- Questionnaire respondents (n=442); dietitians (43%), nurses (22%), other health professionals (29%).
- "Reduced in Sugar" claims:
  - Majority of respondents (65%) expected calories to be reduced; one third expected calories to be reduced by 25%.
- "No Added Sugar" claims:
  - Almost half (43%) of respondents expected calories to be reduced.
  - More than half (57%) of respondents incorrectly thought concentrated fruit juice could be added as a sweetener.
  - Fewer than 15% of respondents knew naturally occurring sugars could be present.

### Sugar-Claim Products in the Marketplace

- 402 products bore 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.
- One-third of "reduced in sugar" products did not meet the % sugar reduction claimed on the package.
- Less than 40% of products complied with CFIA criteria; mainly due to:
  - the absence of a reference product (n=141); or
  - the incorrect use of concentrated fruit juice as a sweetener in "no sugar added" products (n=99).



**Figure 1:** Percent of food products bearing sugar claims that did not have a 25% reduction in calories. Calorie reduction in sugar claim products obtained from marketplace analysis. Only claim products with an applicable reference product were included.

## Conclusions & Significance

- Sugar claims may be misleading if used incorrectly or if there is not a meaningful reduction in calories.
- The nutritional composition of products bearing a sugar claim did not meet health professionals' expectations.
- The perception that sugar claim products are free of sugars and/or lower in carbohydrates may be of concern for people with diabetes.