ARTICLE IN PRESS

Journal of Food Composition and Analysis xxx (xxxx) xxx-xxx

FISEVIER

Contents lists available at ScienceDirect

Journal of Food Composition and Analysis

journal homepage: www.elsevier.com/locate/jfca



Short communication

Canadian Nutrient File (CNF): Update on Canadian food composition activities[★]

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ARTICLE INFO

Keywords:
Food composition database
Database update
Nutrition
Samples
Sample design
Canadian
Priority foods
National nutrition survey

ABSTRACT

A new update of Canada's food composition database, the Canadian Nutrient File (CNF) 2015, is now available on our website at www.healthcanada.gc.ca/cnf. Users will find updates to many food categories, as well as additions to better reflect the continually changing food market. For 12 updated food categories, the nutrient profiles were obtained through our relatively new Sampling and Nutrient Analysis program for sample collection and analysis of Canadian food samples. Depending on the nature of the food market for a given category, the method approach to developing a sampling plan can vary. The approaches developed are outlined in this paper. The goal of CNF sampling is to provide generic food profiles that are representative of at least 85% of the market presented to the Canadian consumer. The updated nutrient data are being used to calculate nutrient intakes from the 2015 Canadian national nutrition survey, as well as inform a multitude of nutrition studies, policies and health promotion activities in Canada.

1. Introduction

The Canadian Nutrient File (CNF; Health Canada, 2015) is a computerized, bilingual food composition database containing average values for nutrients in foods available in Canada. This nutrition research tool is integral to many activities within the Food Program at Health Canada, such as policy formulation, standard setting for the Food and Drug Act and Regulations, risk assessment studies, and the food consumption surveys. Numerous other government departments, health professionals, educators, food manufacturers and the general public use this nutrient data to positively influence healthy eating and better food choices. Many of the data in the Canadian Nutrient File have been derived from the comprehensive United States Department of Agriculture (USDA) National Nutrient Database for Standard Reference (NDL, 2015), up to and including standard release 27. A subproject of the CNF is the Sampling and Nutrient Analysis of Canadian food samples project (SNAP-CAN), which collects samples of priority foods and analyzes for comprehensive nutrient profiles of at least one food category per year. Since the release of the 2010 version of the CNF, the following food categories have been sampled, analyzed and added to the database through our SNAP-CAN program:

- Ready-to-eat breakfast cereals
- Yogourts

- Processed cheese products
- Sausages
- Wieners
- Deli-meats
- Commercial breads
- Baby foods; infant cereals and jarred foods
- Soups; condensed and ready- to-eat
- Margarines
- Energy drinks
- Vitamin waters

2. Methods

Data relevant to the Canadian food market which were released by USDA in SR 23 through 27 (USDA, 2015) are featured in the 2015 version. Foods included in the USDA database that are known to not be available on the Canadian market are excluded. Modification for Canadian levels of fortification and regulatory standards (Government of Canada, 2015), along with addition of unique Canadian foods or Canadian commodity data, as well some brand name foods where appropriate, form this standard Canadian resource.

In 2007 our SNAP-CAN program, modelled on USDA's National Food and Nutrient Analysis Program (Haytowitz et al., 2008), was initiated. Under this program, priority foods are chosen, sample designs

http://dx.doi.org/10.1016/j.jfca.2017.04.009

[†] This paper was originally presented as a poster at the 39th National Nutrient Databank Conference (NNDC), held May 16–18, 2016 in Alexandria, VA (USA).

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Market research: Review of Nielsen market share data



Most popular products identified

Sample design: Top selling brands > 85% of consumer market



National and control brands

Collection and processing



- Collection usually at grocery, convenience and drug stores
- 3 unique lots per product combined into 1 composite

Laboratory analysis: ~80 nutrients



- AOAC or Health Canada approved methods
- 4 Health Canada Laboratories

Data Analysis and Aggregation



- Aggregate similar products into generic types
- Calculate nutrient profiles (mean weighted by market share for each product in the type and standard error)

CNF Data Entry

Fig. 1. SNAP-CAN process.

are implemented and the samples are analyzed for a comprehensive set of nutrients by Health Canada regional laboratories. Scarce resources limited us to only sampling the very highest priority foods for this program. These are chosen based on the following criteria:

- the amounts consumed by Canadians; staple foods are high priorities, e.g. milk, bread
- strong evidence that the Canadian product is very different from the US, e.g. flour, processed cheese

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