



Converting Your Labels from 2003 to 2016 Health Canada Regulations

Presented by ESHA Research

Wednesday, July 11, 2018 11:00 AM PDT | 1:00 PM CDT | 2:00 PM EDT

ESHA Research



ESHA Research was established in 1981 as the first comprehensive nutrition analysis software solution. Today, ESHA's suite of nutritional software products, services, and databases are recognized as the industry's top choice for food and supplement formulation, recipe development, labeling, nutritional analysis, and regulatory compliance.

ESHA Services and Software Solutions

- Genesis R&D® Food Formulation
- Genesis R&D® Supplement Formulation
- Food Processor® Nutrition & Diet Analysis
- Consulting Services

Genesis R&D Food



Genesis R&D was released in 1991 and is designed to help users manage processes and industry challenges, and meet federal requirements.

- Product Development
- Formulation Analysis
- Menu Analysis
- Reporting
- Regulatory Compliance



Upcoming Webinars

Genesis R&D Foods 11.6 Overview

Genesis R&D Foods Version 11.6 includes updates to nutrient names, the option to alphabetize the nutrient entry list, and the ability to include the Added Sugars Symbol on a Nutrition Facts Label. During this 30-minute webinar, we will cover all of these new features in detail.

Creating Health Canada Dual Format Nutrition Facts Tables with Genesis R&D

During this webinar, we will discuss the Health Canada regulations and requirements for packages that require Dual Format Labels. Additionally, we will demonstrate how to create a Dual Format Label for Different Amounts of Food, from a single recipe in the Genesis R&D Food Labeling software.

Best Practices for Creating and Managing Nutrition Labels for Multiple Countries

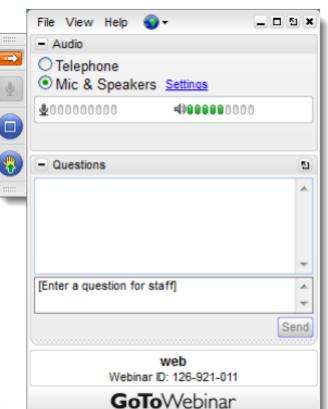
There are many aspects to consider when creating products that will be sold and distributed in multiple regions or countries. During this 45-minute webinar, we will cover considerations and best practices for creating and managing recipes and nutrition labels for multiple countries.

To view the schedule, register, or view archived webinars please visit: www.esha.com/news-events/webinars

Please Note!

- ✓ The webinar is being recorded
- ✓ All webinars available on our website
- ✓ Submit your questions in the GoToWebinar control panel











- During this 60 minute webinar we will cover:
- Overview of What's Happened
 - Timeline for Compliance
 - New Label Format
 - Nutrient Changes
 - Ingredient List Changes
- Updates in Genesis R&D
- Best practices for making the transition

2016 Canadian Labels in Genesis R&D



Nutrition Facts / Va Per 1 slice (79 g) pour 1 tranche (79 g)	leur nutritive
Calories 130	% Daily Value* % valeur quotidienne*
Fat / Lipides 0.4 g	1 %
Saturated / saturés 0.1 g + Trans / trans 0 g	1 %
Carbohydrate / Glucides 28 g	
Fibre / Fibres 1 g	4 %
Sugars / Sucres 4 g	4 %
Protein / Protéines 4 g	
Cholesterol / Cholestérol 0 mg	
Sodium 1 mg	1 %
Potassium 1750 mg	37 %
Calcium 10 mg	1 %
Iron / Fer 1.5 mg	8 %
*5% or less is a little , 15% or more is a l *5% ou moins c'est peu , 15% ou plus c'e	

Regulation	U.S
	U.S.
	Canada
	Mexico
	European Union

Access the Canadian Labeling Module in Genesis R&D: Available labeling regulation modules are displayed in the Edit Label settings.



Click on the About button to check your version number.

Timeline for Compliance



On December 14, 2016, Government of Canada finalized changes to the Nutrition Facts tables and list of ingredients for packaged foods.

- Manufacturers have a five-year compliance period, which started Dec. 14, 2016, and during that time both pre-existing and new Nutrition Facts tables will be seen on grocery store shelves.
- The compliance date for the updated Nutrition Facts table is December 14, 2021.

ARE YOU READY?

Old vs New Label



Nutrition Facts Valeur nutritive Serving Size 1/2 cup (80 q) Portion 1/2 tasse (80 g) Servings Per Container 8 Portions par contenant 8 % Daily Value Amount Teneur % valeur quotidienne Calories / Calories 100 7 % Fat / Lipides 4.5 q Saturated / saturés 1.5 q 8 % + Trans / trans 0 g Cholesterol / Cholestérol 0 mg Sodium / Sodium 3 mg 1 % 7 % Carbohydrate / Glucides 21 g Fibre / Fibres 1 q 4 % Sugars / Sucres 8 g Protein / Protéines 1 g 20 % Vitamin A / Vitamine A Vitamin C / Vitamine C 15 % Calcium / Calcium 0 % Iron / Fer 2 %

Nutrition Facts	
Valeur nutritive	
Per 1/2 cup (80 g)	
pour 1/2 tasse (80 g)	
Per Container 8	
par contenant 8	
Calories 100	% Daily Value* valeur quotidienne
Fat / Lipides 4.5 g	6 %
Saturated / saturés 1.5 g + Trans / trans 0 g	8 %
Carbohydrate / Glucides 21 g]
Fibre / Fibres 1 g	4 %
Sugars / Sucres 8 g	8 %
Protein / Protéines 1 g	
Cholesterol / Cholestérol 0 m	ng
Sodium 3 mg	1 %
Potassium 100 mg	2 %
Calcium 10 mg	1 %
Iron / Fer 0.3 mg	2 %
*5% or less is a little, 15% or more is *5% ou moins c'est peu, 15% ou plus	

Note: Both the pre-existing and new label formats will be available in Genesis R&D as we transition through effective and compliance date timelines.

The format options include the appropriate regulations for each.

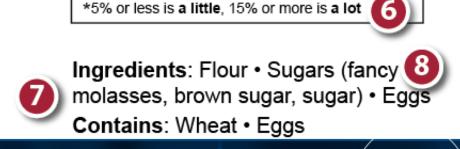
Key Changes

- 1. More prominent display of serving size and Calories
- 2. Modified serving-size definitions
- 3. %DV no longer listed for Carbohydrates
- 4. Percent daily value for total sugars
- 5. Updated list of core label nutrients and quantitative amounts reported
- 6. A new footnote that explains how to use the % DV
- 7. Improved legibility for list of ingredients and allergen information
- 8. Grouping of sugar-based ingredients in the list of ingredients

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Serving Size 1/2 cup (80 g) Servings Per Container about 6

	Servings Fer Container about 6								
U	Calories 70	% Daily Value*							
	Fat 1.5 g	2 %							
	Saturated 0.3 g + Trans 0.3 g	3 %							
	Carbohydrate 11 g								
	Fibre 3 g	12 %							
	Sugars 3 g	3 %							
	Protein 4 g								
	Cholesterol 0 mg								
	Sodium 250 mg	11 %							
	Potassium 50 mg	1 %							
	Calcium 20 mg	2 %							
	Iron 1.25 mg	6 %							





New Footnote



- The new footnote at the bottom of the table will easily summarize the % DV numbers as such:
- 5% or less is a little
- 15% or more is a lot
- This is intended to help consumers understand how much sugar, sodium, and other nutrients are in foods.

*5% or less is a little, 15% or more is a lot

^{*5%} ou moins c'est peu, 15% ou plus c'est beaucoup

Updates in Genesis R&D

- Label Formats
- Standard, Tabular, and Linear
- Simplified Standard, Tabular, and Linear
- Dual Format- Foods requiring preparation
- Aggregate Format Different kinds of foods
- Aggregate Format Different amounts of food
- AND MORE!

		Nu	uiuoi					
		Per	eur n 1 Browni 1 lutin (e			
Nutrition Facts	Fat	Calo	ories 2	70	% Daily Value* % valeur quotidienne*	31		
Per 1 Brownie (60 g) Calories 270	Pro Soc Pota	Fat/			20 %	21	g g	
	* = 9	. + .	rans / tran	s 0.2 g	Nutrition Fact	S		
			ohydrate	/ Glucid	Per 4 tbsp (42 g)	2.0		
		Fibr	re / Fibres	1 g	about 1 cup prepared			
		Sug	ars / Suc	res 21 g		As sold	Prepared# w/1% milk	
		Prote	ein / Prot	éines 5 g	Calories	160	240	
		Cholesterol / Cholesté				% Daily Value		
Nutrition Facts	Per 1 cup	Sodi	um 230 n	na	Fat 2.5 g [†]	3 %	6 %	
Calories	170	_	ssium 125		Saturated 0.5 g + Trans 0 g	3 %	8 %	
	Amount	1 —	um 40 m		Carbohydrate 30 g			
Fat	1 g	Calci	um 40 mg	3	Fibre 3 g	11 %	11 %	
Saturated	0 g	Iron /	Fer 1 mg)	Sugars 7 g	7 %	16 %	
+ Trans	0 g			ttle, 15% or				
Carbohydrate	40 g	*5% o	u moins c'e	st peu , 15%				
Fibre	5 g	18 %	_	Z1 %	Sodium 160 mg	7 %	10 %	
Sugars	9 g	9 %	10 g	10 %	Potassium 100 mg	2 %	5 %	
Protein	5 g		5 g		Calcium 0 mg	0 %	17 %	
Cholesterol	0 mg		0 mg		Iron 1.5 mg	8 %	8 %	
Sodium	1 mg	1 %	1 mg	1 %	† Amount in food as sold.	- 88	78 19	
Potassium	175 mg	4 %	200 mg	4 %	* 3/4 cup 1% milk adds 80 Cald 0.1 g Trans), 9 g Carbohydraf			
Calcium	10 mg	1 %	20 mg	2 %	10 mg Cholesterol, 80 mg So	dlum.	- 31 resemb	
Iron	6.5 mg	36 %	7 mg	39 %	* 5% or less is a little, 15% or	more is a lot		

Nutrition Facts

Nutrient Changes

Potassium

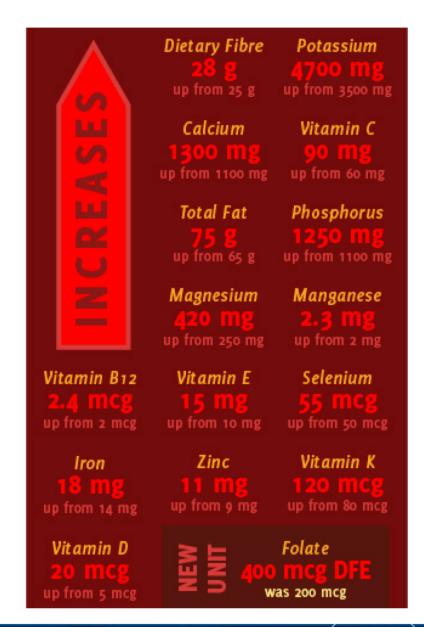
- New Core Nutrient
- 4700 mg (up from 3500 mg)

Vitamin C

- Changed to Additional Label Nutrient
- 90 mg (up from 60 mg)

Folate

- Additional Nutrient
- 400 mcg DFE (up from 220 mcg)





Nutrient Changes

Vitamin A

- Change to Additional Label Nutrient
 900 mcg RAE (change from 1000 RE)

Sodium

- Core Label Nutrient
- 2300 mg (down from 2400 mg)

Sugar

- **Core Label Nutrient**
- Newly Established DV of 100 g

Choline

- New Additional Label Nutrient
- DV of 550 mg





Daily Value Changes - Potassium



8 %

2003 Label

DV = 3500 mg

1750 mg = 50% DV

Nutrition Facts	
Valeur nutritive Serving Size 1 slice (79 g) Portion 1 tranche (79 g) Servings Per Container 8 Portions par contenant 8	
Amount % D Teneur % valeur qu	aily Value* uotidienne*
Calories / Calories 130	
Fat / Lipides 0.4 g	1 %
Saturated / saturés 0.1 g + Trans / trans 0 g	1 %
Cholesterol / Cholestérol 0 mg	
Sodium / Sodium 1 mg	1 %
Potassium / Potassium 1750 mg	50 %
Carbohydrate / Glucides 28 g	9 %
Fibre / Fibres 1 g	4 %
Sugars / Sucres 4 g	
Protein / Protéines 4 g	
Vitamin A / Vitamine A	0 %
Vitamin C / Vitamine C	0 %
Calcium / Calcium	0 %
Iron / Fer	10 %
*Based on a 2,000 Calorie diet.	
*Selon un régime alimentaire de 2 000 calories.	

2016 Label

DV = 4700 mg

1750 mg = 37% DV

Nutrition Facts / Valeur nutritive Per 1 slice (79 g)

pour 1 tranche (79 g)

Calories 130

Fat / Lipides 0.4 g
Saturated / saturés 0.1 g
+ Trans / trans 0 g

% Daily Value*
% valeur quotidienne*
1 %
1 %

Carbohydrate / Glucides 28 g
Fibre / Fibres 1 g 4 %
Sugars / Sucres 4 g 4 %

Sugars / Sucres 4 g 4 %

Protein / Protéines 4 g

Cholesterol / Cholestérol 0 mg

 Sodium 1 mg
 1 %

 Potassium 1750 mg
 37 %

 Calcium 10 mg
 1 %

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

Iron / Fer 1.5 mg



Nutrient Unit Changes



Vitamin A (additional nutrient - previously core)

 Change from Retinol Equivalents (RE) to mcg Retinol Activity Equivalents (RAE)

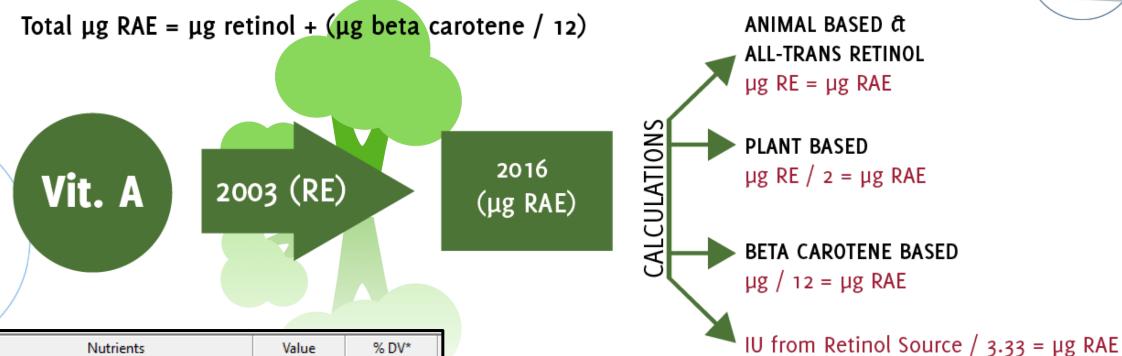
Folate (additional nutrient)

• Change from mcg to mcg Dietary Folate Equivalents (DFE)



Vitamin A: Nutrient Conversion Calculations





Nutrients	Value	% DV*
Vitamin A - IU (IU)	333.000	
Vitamin A - RAE (mcg)	100.000	11.111
Vitamin A - RE (mcg)	100.000	
Carotenoid RE (mcg)	0	
Retinol RE (mcg)	100.000	

2016 NFt 2003 NFt

Populate the correct fields in Genesis R&D to report the proper information on your labels

Folate: Nutrient Conversion Calculations





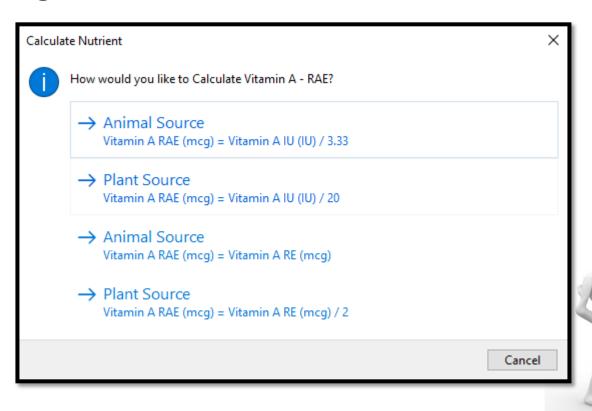
Populate the correct fields in Genesis R&D to report the proper information on your labels

	Nutrients	Value
2003 NFt -	Folate (mcg)	160.000
	Folic Acid (mcg)	140.000
2016 NFt	Folate, DFE (mcg DFE)	258.000
·	Folate, food (mcg)	20.000

Nutrient Calculator

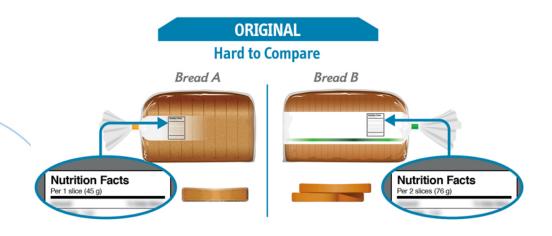
Assists in Calculating the Following Nutrients:

- Carbohydrates
- New U.S. Dietary Fiber Fields
- Vitamin A
- Vitamin B3
- Niacin Equivalents
- Tryptophan
- Vitamin D
- Vitamin E
- Folate/Folic Acid



Updated Serving Sizes





 Serving sizes have been modified to be more consistent and list realistic measures.



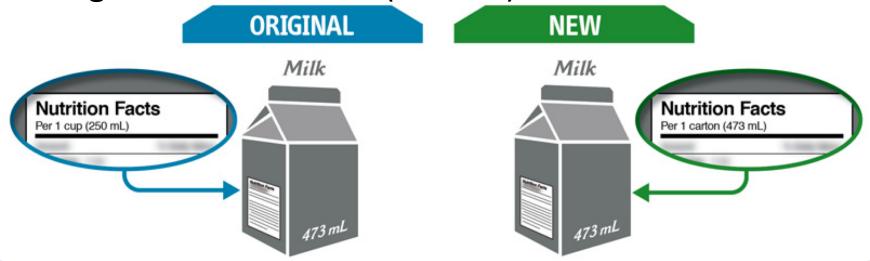
 With this change, Canadians can more easily compare similar foods and understand how many calories (and nutrients) they are consuming.

Single Serving Containers

For packages containing up to 200% of Reference Amount, the serving size should be the whole container.

Example: Reference Amount for Milk is 250 mL (1 Cup)

- Original Serving Size: Per 1 Cup (250 mL)
- New Serving Size: Per 1 carton (473 mL)



Single Serving Containers with 200% or More

"If a package doesn't contain less than 200% of the reference amount, determine if it can be reasonably consumed by one person at a single eating occasion. If yes, then it is a single-serving prepackaged product."

Example: 100 g, individually wrapped, prepackaged cookie

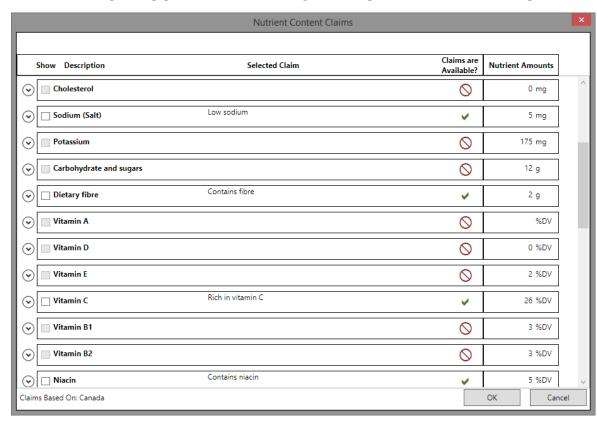
- Reference amount (RA) for cookies = 30 g
 Per *Table of Reference Amounts for Food*; Bakery Products
- Package contains more than 200% of the 30 g RA, but it's not expected that the cookie would be partially consumed, re-wrapped, and saved for later.
- This 100 g cookie can be reasonably consumed during a single eating occasion and is labeled as a single-serving product.

Nutrient Content Claims



Changes to %DV may affect the qualifications of claims!





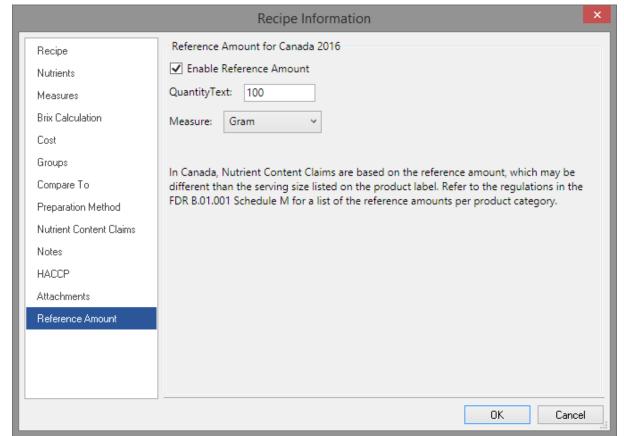


Reference Amount



Nutrient Content Claims are based on a reference amount from the Table of Reference Amounts for Food

- The serving size is not always the same as the reference amount
- You can set a reference amount that is different from your serving size in order to view your eligible claims

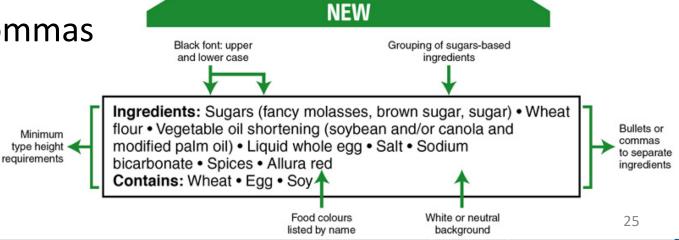


List of Ingredients



- In descending order by weight
- Mostly lower case text, using upper case when:
 - First letter of each ingredient or, in the case of a food additive shown in whole or in part by an acronym, the entire acronym
 - The alpha-descriptor that forms a part of the common name for a food additive, vitamin or micro-organism

Separated by bullet points or commas



Sugar Defined



Ingredients designated as sugars include

- Mono- and di-saccharides:
 - White sugar, cane sugar, beet sugar, raw sugar
 - Fructose, glucose, glucose-fructose (also known as high fructose corn syrup), maltose, sucrose, dextrose
- Sweetening agents
 - Brown sugar, agave syrup, honey, maple syrup, fancy molasses, other syrups
- Functional substitutes for a sweetening agent
 - Fruit juice concentrates and puree concentrates that are added to replace sugars in foods
 - Replaces a sweetening agent and has one or more functions of the sweetening agent include sweetening, thickening, texturing, or caramelizing

Sugars in the List of Ingredients



- Sugar-based ingredients are to be grouped within the list of ingredients to provide the relative proportion of such ingredients
- Sugar-based ingredients are to be listed in descending order by weight, placed in parenthesis after the name Sugars/Sucres
- Sugar-based ingredients are entirely in lower case letters
- Separated by commas (not bullets)

ORIGINAL

INGREDIENTS: WHEAT FLOUR FANCY MOLASSES,
VEGETABLE OIL SHORTENING (SOYBEAN AND/OR
CANOLA AND MODIFIED PALM OIL) BROWN SUGAR,
LIQUID WHOLE EGG, SUGAR, SALT, SODIUM
BICARBONATE, SPICES, COLOUR
CONTAINS: WHEAT, EGG, SOY

NEW

Ingredients: Sugars (fancy molasses, brown sugar, sugar) • Wheat flour • Vegetable oil shortening (soybean and/or canola and modified palm oil) • Liquid whole egg • Salt • Sodium bicarbonate • Spices • Allura red
Contains: Wheat • Egg • Soy

Sugars Not Grouped

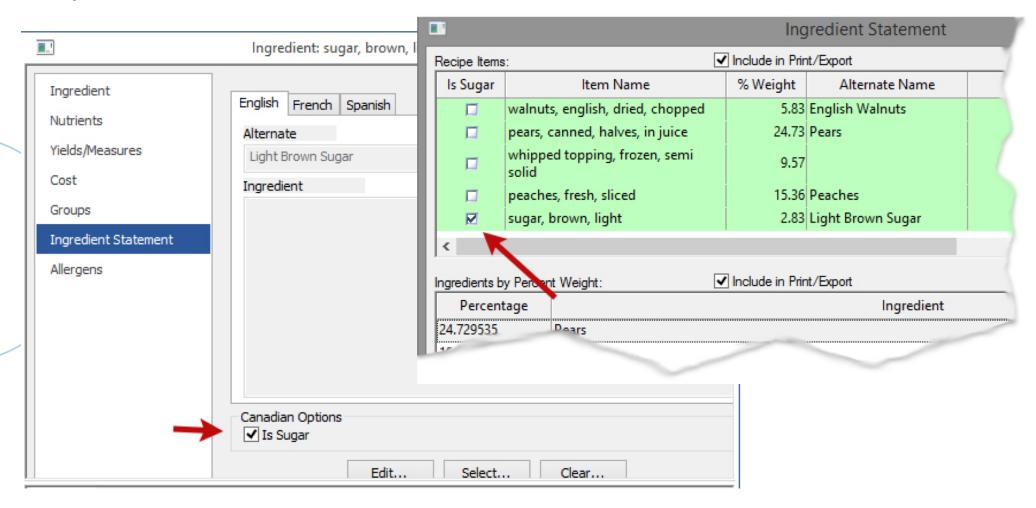


- Sugar alcohols and other non-nutritive sweeteners
- Fruit and vegetable juices reconstituted to regular strength and have no sweetening agents added
- The only sugar-based ingredient in a product and "sugar" is in the ingredient name, like "brown sugar"
- Sugar-based ingredients present within another ingredient in the packaged food
 - Sugar in chocolate chips in a chocolate chip cookie:

Ingredients: Sugars (brown sugar, sugar) • Flour • Chocolate chips [unsweetened chocolate, Sugars (sugar, dextrose) • soy lecithin • artificial flavour] • Butter • Dried whole egg • Sodium bicarbonate • Vanilla extract • Salt

Updates to Genesis R&D





Documentation



- Document how you arrived at your nutritional information
- Attach document files to your recipes and ingredients in Genesis R&D
- Documentation examples:
 - Supplier spec and data sheets
 - Analyses from nutrient databases
 - Recipes or formulations
 - Batch records
 - Any other records that contain required and supporting information
 - Notes fields in Genesis
 - Audit trail feature in Genesis







Fill in Missing Data



Nutrition Facts Valeur nutritive

Per 1 muffin (113 g)

pour i mullin (113 g)	
Amount Teneur	% Daily Value % valeur quotidienne
Calories / Calories 380	
Fat / Lipides 18 g	28 %
Saturated / saturés 1.5 g + Trans / trans 0 g	8 %
Cholesterol / Cholestérol 40) mg
Sodium / Sodium 400 mg	17 %
Carbohydrate / Glucides 52	g 17 %
Fibre / Fibres 2 g	8 %
Sugars / Sucres 32 g	
Protein / Protéines 4 g	
Vitamin A / Vitamine A	100 %
Vitamin C / Vitamine C	8 %
Calcium / Calcium	2 %
Iron / Fer	10 %

Nutrition Facts Valeur nutritive

Per 1 muffin (113 g) pour 1 muffin (113 g

pour 1 muπin (113 g)	
Calories 380	% Daily Value* % valeur quotidienne*
Fat / Lipides 18 g	24 %
Saturated / saturés 1.5 + Trans / trans 0 g	8 %
Carbohydrate / Glucides	s 52 g
Fibre / Fibres 2 g	7 %
Sugars / Sucres 32 g	32 %
Protein / Protéines 4 g	
Cholesterol / Cholestéro	ol 40 mg
Sodium 400 mg	17 %
Potassium mg	%
Calcium 20 mg	2 %
Iron / Fer 1.5 mg	8 %
Vitamin A / Vitamine A 20	μg 2 %
*5% or less is a little 15% or n	nore is a lot

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

Potassium is a Core Nutrient: displayed here with a dashed line due to missing data = NOT COMPLIANT

If you have several ingredients that contain Vitamin A, but you have not populated the RAE field, the value will be missing or underdeclared

Spreadsheet Report

Search for Missing Values/Documentation

	■■ Spreadsheet: Bread - Canada *													
lt	em Name	Quantity	Measure	Cals (kcal)	Fat (g)	SatFat (g)	TransFat (g)	Carb (g)	TotFib (g)	Sugar (g)	Prot (g)	Chol (mg)	Sod (mg)	Pot (mg)
🖃 🤠 Bread	d - Canada	1	Serving	130.93	0.41	0.08	0	27.77	1.08	3.73	3.63	0.15	2.00	1750.00
- 👗 w	our, all purpose, hite, unbleached, nriched	0.068608	Pound	113.28	0.30	0.05	0	23.75	0.84	0.08	3.21	0	0.62	33.30
å w	ater, distilled	0.117613	Pound	0	0	0	0	0	0	0	0	0	0	0
å y∈	east, bakers, active, y	0.00196	Pound	2.89	0.07	0.01	0	0.37	0.24	0	0.36	0	0.45	8.49
	ıgar, white, anulated	0.007865	Pound	13.81	0	0	0	3.57	0	3.56	0	0	0.04	0.07
- 🤚 vit	ilk, 2%, with amins A & D issing	0.059011	Fluid ounce	0.96	0.04	0.02	-	0.09	0	0.08	0.06	0.15	0.89	-
Mois Loss	ture Adjustment:	0.03	Pound											
₹ Total		1	Serving	130.93	0.41	0.08	0	27.77	1.08	3.73	3.63	0.15	2.00	1750.00

Best Practices for Transition to 2016 Label



- Did formulas or ingredients change?
- Did the reference serving size change?
- Does your product qualify to be labeled as one serving based on 200% of the reference?
- Are your nutrient content claims supported by your 2016 labels?
- Use Spreadsheet report find and populate missing nutrient values
- Use the Nutrient Calculator to help convert nutrients
- Contact suppliers for updated information that supports 2016 labels
- Update lists of ingredients and update allergens

Resources



Health Canada

Canadian Food Inspection Agency (CFIA)

- Steps for Choosing a Nutrition Facts Table
- Industry Labeling Tool (ILT)
 - Quick references and interpretations
 - Evolving as policy is updated

Acts and Regulatory

- Food and Drug Regulations (FDR)
- Food and Drugs Act (FDA)
- Consumer Packaging and Labelling Act (CPLA)



Genesis R&D Training

Genesis Professional Training | July 19-20, 2018 | Oak Brook, IL
This training session covers the fundamentals of the Genesis R&D Food program: creating ingredients, building recipes/formulas, obtaining nutrition analysis, analysis reporting, best practices, and basic labeling features.

Genesis Professional Training | August 8-9, 2018 | Orlando, FL

This training session covers the fundamentals of the Genesis R&D Food program: creating ingredients, building recipes/formulas, obtaining nutrition analysis, analysis reporting, best practices, and basic labeling features.

Advanced Genesis Workshop | August 15-16, 2018 | Oak Brook, IL

This workshop session covers advanced topics in detail such as new FDA labeling regulations, due diligence and documentation for transitioning to the new labels, new program features, PDCAAS (protein digestibility score), range formulas, advanced labels, and more.

Genesis Professional + Menu Label Training | Sept 12-13, 2018 | Oak Brook, IL
This training session covers ingredient creation and recipe/menu building, best practices, and analysis reporting specific to restaurants, grocery stores, and those who have to comply with the FDA's Menu Labeling regulations. Additionally, we will discuss how Genesis R&D helps you comply with the Menu Labeling regulations.

Learn more: https://www.esha.com/news-events/training-schedule/

QUESTIONS?



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