



**WEBINAR**



# Update on Added Sugars

**Presented by ESHA Research**

Wednesday, February 20, 2019

11:00 AM PDT | 1:00 PM CDT | 2:00 PM EDT



# ESHA Research

ESHA Research was established in 1981 as one of the very first nutrition software solutions. 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 Solutions**

- Genesis R&D<sup>®</sup> Food Formulation
- Genesis R&D<sup>®</sup> Supplement Formulation
- Food Processor<sup>®</sup> Nutrition & Diet Analysis
- Consulting Services

Our mission is to help remove the complexity of product development and regulatory compliance for the food, beverage, and supplement industries through software, services, and nutritional databases.



# Genesis R&D Food

Genesis R&D® Foods, first release in 1991, is designed to help users manage processes and industry challenges, and meet federal requirements. Industry professionals use Genesis R&D for quick and accurate nutrient evaluation, virtual product development, nutrition labeling, and government regulation compliance.

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



# Upcoming Webinars



## **Update on Dietary Fiber | March 12, 2019**

During this webinar, we will provide an update on Dietary Fiber labeling, discuss the new Dietary Fiber definition, review the list of approved dietary fibers, and cover how to use the Genesis R&D Food program for compliance with the 2016 regulations.

## **Working with Recipes in Genesis R&D Foods | April 24, 2019**

Setting up your recipe correctly in Genesis R&D is critical for ensuring you produce a regulatory compliant Nutrition Facts label. During this webinar, we will walk through the process of creating a recipe, setting the serving size, best reports for recipe auditing, and more.

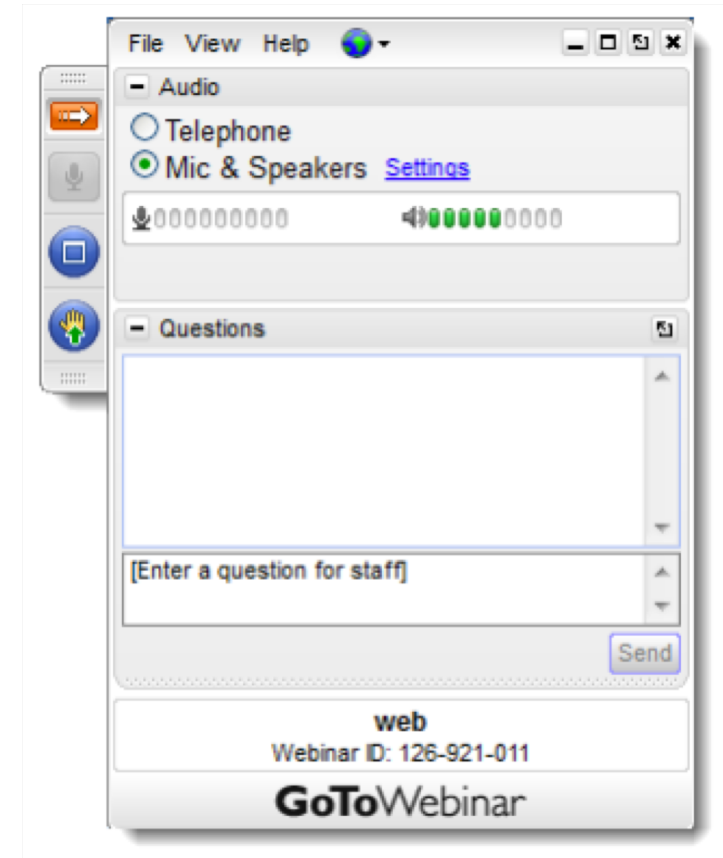
To register or view archived webinars please visit: [www.esharesearch.com/news-events/webinars](http://www.esharesearch.com/news-events/webinars)



# Please Note!

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

WEBINAR



# What we'll cover today

- Added Sugars - Review
  - What is considered Added Sugar (and what is not)
  - Quantitative and %DV Declaration
- Guidance Documents
- Farm Bill
- User Tips for Compliance
- Best Practices for Documentation
- Q&A





# Added Sugars – Brief Review

2016 FDA final rule for food labeling includes  
Added Sugars as a new, mandatory label  
nutrient

## Nutrition Facts

8 servings per container  
Serving size 1 slice (59g)

Amount per serving  
**Calories 180**

	% Daily Value*
<b>Total Fat</b> 6g	8%
Saturated Fat 4g	20%
Trans Fat 0g	
<b>Cholesterol</b> 25mg	8%
<b>Sodium</b> 190mg	8%
<b>Total Carbohydrate</b> 30g	11%
Dietary Fiber 1g	4%
Total Sugars 15g	
Includes 14g Added Sugars	28%

**Protein** 3g

Vitamin D 0mcg	0%
Calcium 55mg	4%
Iron 2mg	10%
Potassium 1750mg	35%

\*The % Daily Value tells you how much a nutrient in a serving of food contributes to a daily diet.



# Added Sugars - DV

- Ties into Dietary Guidelines for Americans
- Recommendation of Less than 10% of Calories from Added Sugars
- 2000 Calories – recommended for general labeling
- 200 Calories / 4 Calories per gram of Sugar = 50g







# Nutrient Density vs. Empty Calories



WHOLE FOODS

MIXED FOODS

SUGAR INGREDIENTS



# Added Sugars - Definition

Sugars that are either added during the processing of foods or packaged as such and includes sugars (free, mono- and disaccharides), sugars from syrups and sugars concentrated from fruit or vegetable juices that are in excess of what would be expected from the same volume of 100% fruit or vegetable juice of the same type.

## EXAMPLES:

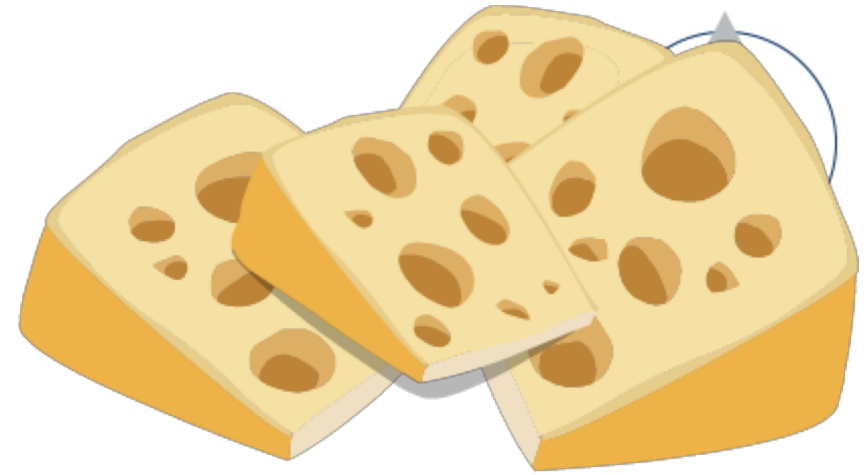
- Sugar
  - White sugar, brown sugar, beet sugar, cane sugar, invert sugar, raw sugar, turbinado sugar, dextrose, fructose, galactose, glucose, lactose, maltose, sucrose
- Honey
- Molasses
- Syrups
  - Agave syrup, high fructose corn syrup, malt syrup, maple syrup
- Juice Concentrates (in some cases)

AND MORE...

# Added Sugars - Lactose

## Dehydrated Milk Powder vs. Purified Lactose

- Dairy ingredients, except lactose as defined in § 168.122, are not included in the definition of added sugars.
  - Dehydrated milk powder is all of the nutrients from milk minus the water
- Lactose is defined as a sweetener under CFR 168.122
  - Lactose is the sugar from milk





# FDA Guidance - November 2018

*Contains Nonbinding Recommendations*

## **Nutrition and Supplement Facts Labels: Questions and Answers Related to the Compliance Date, Added Sugars, and Declaration of Quantitative Amounts of Vitamins and Minerals: Guidance for Industry**

*Additional copies are available from:  
Office of Nutrition and Food Labeling  
Center for Food Safety and Applied Nutrition  
Food and Drug Administration  
5001 Campus Drive  
College Park, MD 20740  
240-402-1450*

<https://www.fda.gov/FoodGuidances>

You may submit electronic or written comments regarding this guidance at any time. Submit electronic comments to <https://www.regulations.gov>. Submit written comments on the guidance to the Dockets Management Staff (HFA-305), Food and Drug Administration, 5630 Fishers Lane, Rm. 1061, Rockville, MD 20852. All comments should be identified with the docket number FDA-2016-D-4414.

U.S. Department of Health and Human Services  
Food and Drug Administration  
Center for Food Safety and Applied Nutrition

November 2018

## Includes

- Clarification of Added Sugars definitions
- Concentrates
- Brix
- Examples of Added Sugars calculations
- Hydrolysis
- Fermentation



*cheat sheet*

# ADDED SUGARS

*noun* | add·ed su·gars | \ 'a-dəd 'shü-gərs \

: a statement of the number of grams of added sugars in one serving of a food

## DEFINITION

Sugars that are either added during the processing of foods or packaged as such and includes sugars (free, mono- and disaccharides), sugars from syrups and sugars concentrated from fruit or vegetable juices that are in excess of what would be expected from the same volume of 100% fruit or vegetable juice of the same type.

## added sugars

### CONSIDERED ADDED

Molasses  
Corn Sweetener  
Pure Maple Syrup  
Honey

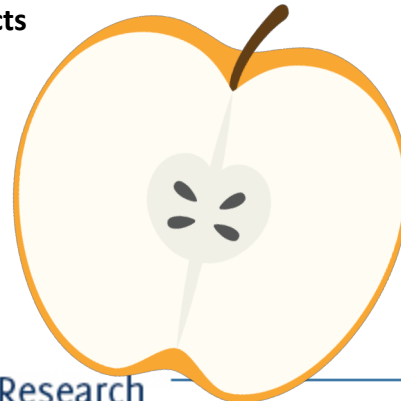


Sugar  
Agave Syrup

### NOT CONSIDERED ADDED

*Naturally occurring sugars in:*

Dairy products  
Vegetables  
Fruits  
Grains



## ON THE LABEL

Added Sugars are indented and listed under Total Sugars.

Rounding Rules:

- Less than 1 g: declaration not required with insignificant footnote or you can show “less than 1 g” or “< 1 g” on the label.
- Less than .5 g: may be expressed as zero

### Nutrition Facts

2 servings per container	
Serving size	1 cup (140g)
Amount per serving	
<b>Calories</b>	<b>160</b>
% Daily Value*	
Total Fat 8g	10%
Saturated Fat 3g	15%
Trans Fat 0g	
Cholesterol 0mg	0%
Sodium 60mg	3%
Total Carbohydrate 21g	8%
Dietary Fiber 3g	11%
Total Sugars 15g	
Includes 5g Added Sugars	10%
Protein 3g	
Vitamin D 5mcg	25%
Calcium 20mg	2%
Iron 1mg	6%
Potassium 230mg	4%

\*The % Daily Value tells you how much a nutrient in a serving of food contributes to a daily diet. 2000 calories a day is used for general nutrition advice.

### MANDATORY NUTRIENT

**DV: 50g.**

The FDA recommends that your added sugar intake Not to exceed 10% of total calories.



### THESE ITEMS REQUIRE SPECIAL CONSIDERATION

Juice concentrates - Example: if juice concentrate is added to a product, and the sugar content exceeds that contributed by whole foods and 100% juices, some of the sugars may be considered added sugars.

Purees/Pastes, Sugars after fermenting, Corn syrup solids



# Rounding and Consistency of Declarations

(iii) “Added Sugars”: A statement of the number of grams of added sugars in a serving, **except that label declaration of added sugars content is not required for products that contain less than 1 gram of added sugars in a serving** if no claims are made about sweeteners, sugars, added sugars, or sugar alcohol content. Except as provided for in paragraph (f) of this section, if a statement of the added sugars content is not required and, as a result, not declared, **the statement “Not a significant source of added sugars” shall be placed at the bottom of the table of nutrient values in the same type size.**

21 CFR 101.9

## Nutrition Facts

12 servings per container  
Serving size 2 slices (79g)

Amount per serving  
**Calories 130**  
% Daily Value\*

Total Fat 0g 0%

Cholesterol 0mg 0%

Sodium 0mg 0%

Total Carbohydrate 28g 10%

Dietary Fiber 1g 4%

Total Sugars 4g

Protein 4g

Vitamin D 0mcg 0%

Calcium 5mg 0%

Iron 1mg 6%

Potassium 43mg 0%

Not a significant source of saturated fat, trans fat and added sugars.

\*The % Daily Value tells you how much a nutrient in a serving of food contributes to a daily diet. 2,000 calories a day is used for general nutrition advice.

Ingredients: Flour, Water, Sugar, Yeast, Soybean Oil, Salt, Wheat Gluten, Corn Starch.

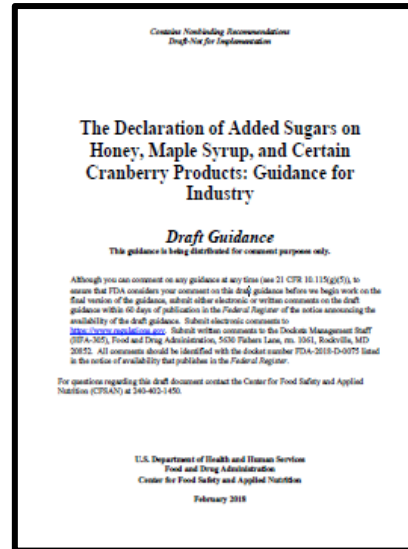
# FDA Draft Nonbinding Recommendations

Published February 2018



Nutrition Facts	
8 servings per container	
<b>Serving size</b>	<b>1 cup (240ml)</b>
<b>Amount per serving</b>	
<b>Calories</b>	<b>110</b>
<b>% Daily Value*</b>	
<b>Total Fat</b> 0g	<b>0%</b>
Saturated Fat 0g	<b>0%</b>
Trans Fat 0g	
<b>Cholesterol</b> 0mg	<b>0%</b>
<b>Sodium</b> 5mg	<b>0%</b>
<b>Total Carbohydrate</b> 27g	<b>9%</b>
Dietary Fiber 0g	<b>0%</b>
Total Sugars 25g	
Includes 23g Added Sugars	<b>54%†</b>
<b>Protein</b> 0g	
Vitamin D 0mcg	<b>0%</b>
Calcium 0mg	
Iron 0mg	
Potassium 45mg	

\* The % Daily Value (DV) tells you how much a serving of food contributes to a daily diet. A diet is used for general nutrition advice.



“Given the concerns outlined earlier regarding the added sugars declaration on **pure honey, pure maple syrup**, and certain **cranberry products** described here (dried cranberries and cranberry juice sweetened with added sugars that provide an amount of total sugars in a serving that does not exceed the level of total sugars in a serving of a comparable product with no added sugars), we intend to exercise enforcement discretion for such products to use a “†” symbol immediately following the added sugars percent Daily Value”

† Sugars added to improve the palatability of naturally tart cranberries. The 2015-2020 Dietary Guidelines for Americans state that there is room for limited amounts of Added Sugars in the diet, especially from nutrient dense food like naturally tart cranberries.

Nutrition Facts	
16 servings per container	
<b>Serving size</b>	<b>1 Tbsp. (21g)</b>
<b>Amount per serving</b>	
<b>Calories</b>	<b>60</b>
<b>% Daily Value*</b>	
<b>Total Fat</b> 0g	<b>0%</b>
Saturated Fat 0g	<b>0%</b>
Trans Fat 0g	
<b>Cholesterol</b> 0mg	<b>0%</b>
<b>Sodium</b> 0mg	<b>0%</b>
<b>Total Carbohydrate</b> 17g	<b>6%</b>
Dietary Fiber 0g	<b>0%</b>
Total Sugars 17g	
Includes 17g Added Sugars	<b>34%†</b>
<b>Protein</b> 0g	
Vitamin D 0mcg	<b>0%</b>
Calcium 0mg	<b>0%</b>
Iron 0mg	<b>0%</b>

† All these sugars are naturally occurring in honey.

# 2018 Evolution of Declaration of Single Ingredient Sugars

- Single Ingredient Sugars that Meet FDA definition of Added Sugars for 2016 Nutrition Facts label
  - White sugar, brown sugar, agave syrup, corn syrup, honey, maple syrup, etc.
- Honey, Pure Maple Syrup, and Some Cranberry Products
  - Symbol and factual statement allowed on packages
- FDA continues review of the approach to single ingredient sugars
- Agriculture Improvement Act of 2018



"Is this a dagger  
which I see before  
me..."

*Macbeth (II, i, 33)*





# Agriculture Improvement Act of 2018

## H.R.2 a.k.a. 2018 Farm Bill

### Sec. 12516 Labeling Exemption for Single Ingredient Foods and Products:

The food labeling requirements under section 403(q) of the Federal Food, Drug, and Cosmetic Act (21 U.S.C. 343(q)) shall not require that the nutrition facts label of any single-ingredient sugar, honey, agave, or syrup, including maple syrup, that is packaged and offered for sale as a single-ingredient food bear the declaration “Includes X g Added Sugars.”

<https://www.congress.gov/bill/115th-congress/house-bill/2/text>



# 2018 FARM BILL



# Best Practices for Documentation

- Make and keep records of the amount of added sugars included in the food and added during processing
- Look for Added Sugars on ingredient supplier sheets
- Added Sugars can be equal to or less than Total Sugars
- Added Sugars should not be greater than Total Sugars
- Single ingredient sugars: Total Sugars = Added Sugars
  - As per Farm Bill, Added Sugars is not required to be declared for single-ingredient sugars, then the nature of the ingredient itself (it meets the FDA definition of Added Sugars) will be a factor in your documentation.
- Mixed food ingredients – if Added Sugars are not reported, contact supplier
- If the Ingredient List identifies that the product contains no Added Sugars ingredients, then a value *might* be determined.
- You want to be accurate in the values you record and confident that your documentation supports the values you report.

# Total vs. Added Sugar Fields in Genesis

Recipe		* %DV based on US Label 2016 standards.	
Nutrients		Nutrient values based on 100.000000 grams	
Measures	Nutrients	Value	% DV*
Brix Calculation	Insoluble Fiber (2016) (g)	0	
Cost	Non-digestible Carbohydrate (g)	0	
Groups	Soluble Non-digestible Carbohydrate (g)	0	
Compare To	Insoluble Non-digestible Carbohydrate (g)	0	
Preparation Method	<b>Total Sugars (g)</b>	<b>12.09792</b>	
Reference Amount	<b>Added Sugar (g)</b>	<b>3.45000</b>	<b>6.90000</b>
Nutrient Content Claims	Monosaccharides (g)	2.18064	
Notes	Galactose (g)	0.01799	
HACCP	Glucose (g)	2.85280	
Attachments	Fructose (g)	4.86984	
Audits	Disaccharides (g)	3.19929	
	Lactose (g)	0	
	Sucrose (g)	4.00531	
	Maltose (g)	0.02397	
	Other Carbs (g)	0.56100	

**Total Sugar:** Contains both naturally occurring and added sugar.

**Added Sugar:** Empty Calorie ingredients such as: sugar, honey, high fructose corn syrup, etc. Mixed food may contain Added Sugars

# Review the Spreadsheet Report

Item Name	Quantity	Measure	Cals (kcal)	Prot (g)	Carb (g)	Fib(16) (g)	Sugar (g)	SugAdd (g)	Fat (g)
Bread	1	Serving	137.08	3.58	29.21	1.16	5.04	3.72	0.5
flour, all purpose, white, unbleached, enriched	0.068126	Pound	112.48	3.19	23.58	0.83	0.08	0	0.3
water, distilled	0.116788	Pound	0	0	0	0	0	0	
sugar, white, granulated	0.00781	Pound	13.71	0	3.54	0	3.54	3.54	
yeast, bakers, active, dry	0.001946	Pound	2.87	0.36	0.36	0.24	0	0	0.0
raisins, seedless	1.00669	Gram	3.01	0.03	0.80	0.04	0.60	0	0.0
cranberries, dried, sweetened	0.883637	Gram	2.72	0.00	0.73	0.05	0.64	--	0.0
syrup, corn, light	0.234387	Gram	0.66	0	0.18	0	0.18	0.18	0.0
oil, soybean, salad or cooking	0.17579	Gram	1.55	0	0	0	0	0	0.1
salt, table	0.023439	Gram	0	0	0	0	0	0	
starch, corn	0.017579	Gram	0.07	0.00	0.02	0.00	0	0	0.0
Moisture Adjustment: Loss		0.03 Pound							
Total	1	Serving	137.08	3.58	29.21	1.16	5.04	3.72	0.5

Identify missing values (indicated by dashes) and populate the **Ingredient record** to fill in the blanks.

# FDA Resources and Contacting the FDA

FDA Industry Resources page:

- Links to Guidance
- Access the Inquiry form to submit questions to the FDA

<https://www.fda.gov/Food/GuidanceRegulation/GuidanceDocumentsRegulatoryInformation/LabelingNutrition/ucm513734.htm>





# Genesis R&D Training

## **Advanced Genesis Workshop | March 13-14, 2019 | 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.

## **Professional Genesis + Menu Label Training | June 19-20, 2019 | 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.

**See the Full Schedule:** <https://www.esharesearch.com/news-events/training-schedule/>

QUESTIONS?



## CONTACT US

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