



**WEBINAR**

# Genesis R&D 101

## Part 3: Ingredient Statements

Presented by **ESHA Research**

Wednesday, March 10, 2021

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 Foods

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

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





# Upcoming Webinars

## **April 14, 2021 | Genesis R&D Foods 101 – Part 4: Allergens**

During this webinar, we will demonstrate how to modify your allergen statement and discuss best practices for compliance when working with the Allergen features in Genesis R&D.

## **June 9, 2021 | Working with Serving Sizes**

The FDA requires that the serving size on your Nutrition Facts label be shown as a common household measure suitable for the food and based on the amount of that food typically consumed. The FDA has defined and cataloged these amounts as RACCs (Reference Amounts Customarily Consumed). In this webinar, we will demonstrate how to enter serving size information in Genesis R&D and work with serving information on your labels.

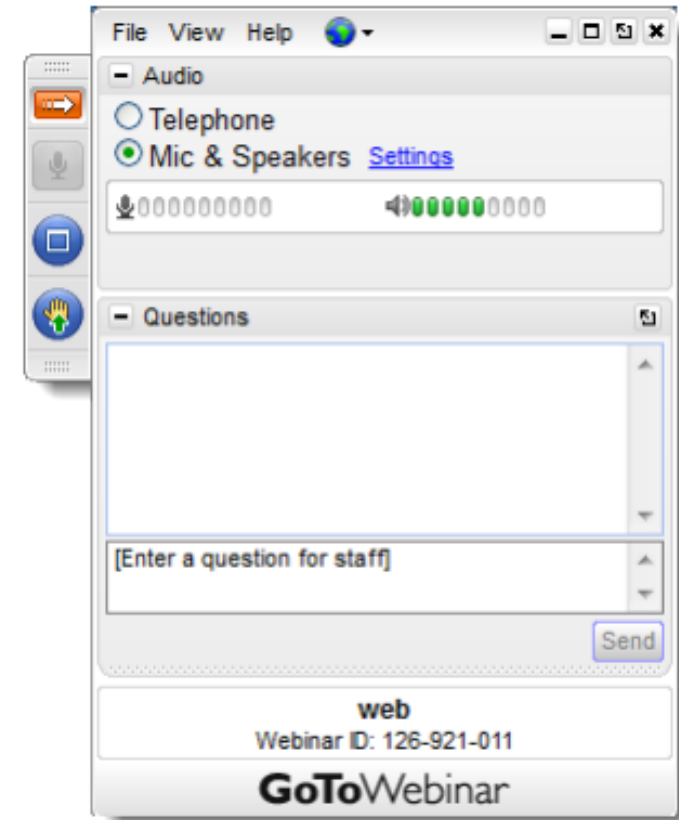
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# Please Note!

- ✓ The webinar is being recorded
- ✓ All webinars available on our website
- ✓ Submit your questions in the GoToWebinar control panel
- ✓ We'll email a copy of the recording and the slides following the webinar

WEBINAR





# What We'll Cover Today

- General Rules for Ingredient Statements
- Considerations in Ingredient Records
- Working with the Ingredient Statement Features
- Display Options
- Q&A





# Ingredient Statements

INGREDIENTS: Palm Fruit Oil, Pea Protein, Allulose, Rice Flour, Cane Sugar, Chicory Fiber, Tapioca Flour, Cocoa Powder, Xanthan Gum, Natural Flavors, Sunflower Lecithin, Baking Soda, Sea Salt, Stevia Extract.

INGREDIENTS: ENRICHED FLOUR (WHEAT, BARLEY), WATER, LIGHT RYE FLOUR, WHOLE WHEAT FLOUR, SOURDOUGH (LIGHT RYE FLOUR, WATER, BACTERIAL CULTURE), SUGARS (BLACKSTRAP MOLASSES, HONEY), SALT, FLAX SEEDS, SUNFLOWER SEEDS, SESAME SEEDS, YEAST.

INGREDIENTS: STRAWBERRY PUREE, APPLE JUICE, BANANA PUREE, ORANGE JUICE, NATURAL FLAVORS

INGREDIENTS: Spinach, Garbanzo Beans, Multigrains (Brown Rice, Red Rice, Red Quinoa, Black Barley), Water, Red Bell Peppers, Sweetened Dried Cranberries (Cranberries, Apple Juice Concentrate, Sunflower Oil), Apple Cider Vinegar, Contains Less Than 2% Of: Soybean Oil, Modified Corn Starch, Sugar, Spice, Salt, Onion Powder, Xanthan Gum, Carob Bean Gum.



# General Rules for Ingredient Statements

- Differences from one country to the next - familiarize yourself with each country's regulations that you label
  - Spelling – flavor vs. flavour
  - Phrasing – high fructose corn syrup vs. glucose-fructose
- Common or usual names
- Standards of Identity
- Bilingual – required vs. optional
- Listed in descending order of predominance by weight
  - Completely in descending order
  - Ingredients listed with sub-ingredients in parenthesis
- Exemptions and exceptions





# U.S. Designation of Ingredients

- 21 CFR 101.4
- Listed by common or usual name
- Must be specific ingredient name, not collective, generic
  - Except spices, flavorings, colorings, and chemical preservatives, 101.22
- Descending order of predominance by weight
  - Ingredients within ingredients can be listed in parenthesis following parent ingredient or dispersed\* throughout the list by weight
  - Does not apply to ingredients present in amounts of 2% or less
    - Can include a statement at end of list: “Contains \_\_\_% or less of the following...” or “Less than \_\_\_% of \_\_\_\_.”

\*must know weights of all sub-ingredients



# Canada List of Ingredients

- FDR B.01.008
- Declared by common name
- Descending order by weight before combined to make the food, “based on what was added to the mixing bowl”
  - Components – ingredients within ingredients can be listed in parenthesis following parent ingredient or dispersed\* throughout the list
  - Spices, flavours, flavour enhancers, some food additives, vitamins, and minerals can be declared at the end of the list
- Sugars-based ingredients are grouped
- Considerations for bilingual labels\*

## **Sugar-Based Ingredients**

- a monosaccharide or disaccharide or a combination of these
- a sweetening agent other than one referred to above
- any other ingredient that contains one or more sugars and that is added to the product as a functional substitute for a sweetening agent

\*must know weights of all sub-ingredients



# Standards of Identity

- What is the food called?
- Example: CFR 131... Milk and Cream
- Milk
  - Nomenclature
    - “Milk
    - Solids and milkfat content
    - If vitamins A or D added
- How are the ingredients listed?
  - Label Declaration: “Each of the ingredients used in the food shall be declared on the label as required by the applicable parts of 101 and 130 of this chapter.”

TITLE 21--FOOD AND DRUGS CHAPTER I--FOOD AND DRUG ADMINISTRATION DEPARTMENT OF HEALTH AND HUMAN SERVICES SUBCHAPTER B - FOOD FOR HUMAN CONSUMPTION PART 131 <u>MILK AND CREAM</u>
<u>Subpart A - General Provisions</u>
§ <u>131.3</u> - Definitions.
§ <u>131.25</u> - Whipped cream products containing flavoring or sweetening.
<u>Subpart B - Requirements for Specific Standardized Milk and Cream</u>
§ <u>131.110</u> - Milk.
§ <u>131.111</u> - Acidified milk.
§ <u>131.112</u> - Cultured milk.
§ <u>131.115</u> - Concentrated milk.
§ <u>131.120</u> - Sweetened condensed milk.
§ <u>131.125</u> - Nonfat dry milk.
§ <u>131.127</u> - Nonfat dry milk fortified with vitamins A and D.



# Exemptions and Exceptions

- U.S. 101.100
  - Incidental ingredients – present in insignificant amounts typically present as an ingredient within an ingredient and no technical function in finished food
  - Processing Aids – added for processing purposes, but removed, converted, or otherwise occurring in insignificant amount and providing no technical function in the finished food, or substances that migrate from equipment, but occur as stated above
- Canada FDR
  - Generations (1<sup>st</sup> - ingredients, 2<sup>nd</sup> - ingredients within ingredients, 3<sup>rd</sup> - ingredients within ingredients within ingredients; generally, ingredients in the third generation or after are not required to be declared
  - Sugars-based ingredients in the first generation are grouped; in the second generation may be listed in parenthesis following the parent ingredient; see examples on the CFIA website
  - List of ingredients generally exempt from declaring components (CFIA – Ingredients, Manner of Declaring, Table A)
- Allergens

If an ingredient is exempt from declaration but contributes an allergen, the allergen must be declared



# Working with Ingredient Records

Hierarchy to the name fields for ingredient statements

1. Ingredient Statement Name
2. Common Name
3. Ingredient Name

Ingredient: flour, all purpose, white, unbleached, enriched WEB 3 US

Ingredient

Nutrients

Yields/Measures

Cost

Groups

Attributes

Ingredient Statement

Allergens

Attachments

Designations

Required

\*Name: flour, all purpose, white, unbleached, enriched WEB 3 US

\*Quantity: 100 \*Measure: Gram

Optional

Common: Unbleached Enriched Flour

User: FLOUR WEB

Product: USDA Select...

Supplier: USDA SR-Legacy Select...

Created: 03/01/2021 ESHA Code: 0  
Modified: 03/02/2021 Government\USDA Code: 0

Ingredient: flour, all purpose, white, unbleached, enriched WEB 3 US

Ingredient

Nutrients

Yields/Measures

Cost

Groups

Attributes

Ingredient Statement

Allergens

Attachments

Designations

English French Spanish

Ingredient Statement Name: Unbleached Enriched Flour

Sub Ingredients: (Wheat Flour, Malted Barley Flour, Niacin [Vitamin B3], Iron, Thiamin [Vitamin B1], Riboflavin [Vitamin B2], Folic Acid)

Edit... Select... Clear...



# Ingredient Statement in Genesis R&D

This window shows three sections.

- List of Ingredients and names information, including translations
- Ingredients by %Weight
- Ingredient Statement as it will appear

Can edit ingredient names (top section) and/or the ingredient statement (bottom section) directly.

Item Name	% Weight	English Name	English Sub Ingredients	French Name	French Sub Ingredients	Spanish Name	Spanish Sub Ingredients
flour, all purpose, white, unbleached, enriched	44.12	All Purpose Unbleached Flour	(Wheat Flour, Malted Barley Flour, Niacin (Vitamin B3), Iron, Thiamin (Vitamin B1), Riboflavin (Vitamin B2), Folic Acid)				
Water	48.99	Water		Eau		Agua	
sugar, white, granulated	3.92	Sugar		Sucre		Azúcar	
yeast, bakers, active, dry	0.98	Yeast		Levure de boulanger		Levadura	

Percentage	Ingredient
48.99	Water
44.12	All Purpose Unbleached Flour (Wheat Flour, Malted Barley Flour, Niacin (Vitamin B3), Iron, Thiamin (Vitamin B1), Riboflavin (Vitamin B2), Folic Acid)
3.92	Sugar
1.96	Butter (Sweet Cream, Natural Flavor)
0.98	Yeast
0.03	Salt

Ingredient Statement

INGREDIENTS: Water, All Purpose Unbleached Flour (Wheat Flour, Malted Barley Flour, Niacin (Vitamin B3), Iron, Thiamin (Vitamin B1), Riboflavin (Vitamin B2), Folic Acid), Sugar, Butter (Sweet Cream, Natural Flavor), Yeast, Salt.

INGRÉDIENTS: Eau, flour, all purpose, white, unbleached, enriched, Sucre, Butter, Levure de boulanger, Sel de table.

INGREDIENTES: Agua, flour, all purpose, white, unbleached, enriched, Azúcar, Butter, Levadura, salt, table.





# Label Display

Shows the Label and Ingredient Statement as you build and edit

Ingredient Statement is displayed on other reports as well; choose which works best for you

Label: Webinar Bread Cinnamon WEB 3 \*

<b>Nutrition Facts</b>	
16 servings per container	
<b>Serving size</b>	<b>1 slice (43g)</b>
<b>Amount per serving</b>	
<b>Calories</b>	<b>140</b>
<b>% Daily Value*</b>	
<b>Total Fat</b> 2g	<b>3%</b>
Saturated Fat 1g	5%
Trans Fat 0g	
<b>Cholesterol</b> 5mg	<b>2%</b>
<b>Sodium</b> 230mg	<b>10%</b>
<b>Total Carbohydrate</b> 26g	<b>9%</b>
Dietary Fiber 1g	4%
Total Sugars 6g	
Includes 3g Added Sugars	6%
<b>Protein</b> 5g	
Vitamin D 0mcg	0%
Calcium 145mg	10%
Iron 1mg	6%
Potassium 79mg	2%

\*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:** Enriched Flour (Wheat Flour, Malted Barley Flour, Niacin [Vitamin B3], Iron, Thiamin [Vitamin B1], Riboflavin [Vitamin B2], Folic Acid), Raisins, Nonfat Milk, Wheat Gluten, Sugar, Butter (Sweet Cream, Natural Flavor), Cinnamon, Water, Soybean Oil, Yeast, Raisin Juice Concentrate, Salt, Dough Conditioners (Monocalcium Phosphate, Calcium Sulfate, Monoglycerides), Ascorbic Acid, Soy Lecithin.



# Genesis R&D Training

## Genesis R&D Foods Professional + USDA Regulations

This 2-day training session covers the fundamentals of the Genesis R&D Food program with a primary focus on USDA regulations: creating ingredients and composite ingredients, building recipes/formulas, nutrition analysis, moisture loss, reporting, labeling, best practices, and much more. In addition, this session covers a comprehensive USDA regulatory review.

## Genesis R&D Foods Professional + FDA Regulations

This 2-day training session covers the fundamentals of the Genesis R&D Food program with a primary focus on FDA regulations: creating ingredients and composite ingredients, building recipes/formulas, nutrition analysis, moisture loss, reporting, labeling, best practices, and much more. In addition, this session covers a comprehensive FDA regulatory review.

## Genesis R&D Foods Advanced Training

The 1-day Advanced session builds upon the skills learned in the Professional training and offers deeper learning on topics including PDCAAS, International Food Labeling, Advanced Label Settings, and more.

### Session Options:

- 3-day Combined Professional + Advanced Training
- 2-day Professional Training
- 1-day Advanced Training (Prerequisite: Professional Training)

Date	Training Session Title
March 23-25, 2021	Genesis R&D Foods Professional and/or Advanced
April 20-21, 2021	Genesis R&D Foods Professional + USDA
May 11-13, 2021	Genesis R&D Foods Professional and/or Advanced

<https://esha.com/news-events/training-schedule/>

[training@esha.com](mailto:training@esha.com)

QUESTIONS?



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