About ESHA Research

ESHA Research was established in 1981 with the goal of providing a comprehensive nutrition database with few missing values.

Our Solutions Include
• Food Formulation & Labeling Software
• Restaurant Menu Analysis & Labeling Software
• Supplement Formulation & Labeling Software
• Nutrition & Diet Analysis Software
• Consulting Services
Genesis R&D

Food Analysis & Labeling Software

- Released in 1991
- Pre & Post 2016 Label formats
- Product Development
- Menu Analysis
- Nutrient Analysis
- Nutrient Search
- Reporting Features
- Audit Trails

- US, Canada, Mexico, & EU Label Formats
- Labeling & Compliance
  - Allergen Statements
  - Ingredient Statements
  - Nutrient Content Claims
Upcoming Webinars

Restaurant Menu Labeling Regulations and Best Practices | April 11, 2017
May 2017, restaurants, supermarkets, convenience stores, and movie theaters will be required to post calories on menu items. During this 45 minute webinar, we will provide a brief overview of the FDA Menu Labeling regulations, discuss labeling best practices, and demonstrate how the Food Menu Report in Genesis R&D can help you with compliance.

Importing Supplier Ingredients with ESHA Port | May 16, 2017
The FDA finalized the new Nutrition Facts label for packaged foods and supplements to reflect new scientific information and food manufacturers have 1-2 years to update their labels with the newly required label nutrients. As a result, there is an increased pressure for Ingredient suppliers to provide updated nutrition information to their customers. During this webinar we explore how the newest version of the ESHA Port workflow utility can help you streamline data from ingredient suppliers into your Genesis R&D program database.

The Buzz on FDA’s Definition of Added Sugars | May 30, 2017
As food manufacturers prepare for compliance there is still some confusion regarding the definition of Added Sugars and how to calculate this new mandatory label nutrient. On May 30th, we will discuss what is considered an Added Sugar (and what is not), best practices for documentation, and Genesis R&D user tips for achieving compliance.

To register or view archived webinars please visit: www.esha.com/news-events/webinars
Today’s Agenda

During this 45 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 11.3
  – Converting to the New Labels
  – Updating Nutrients
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 tables is December 14, 2021.
Old vs New Label

**Note**: Both the pre-existing and new label formats will be available in Genesis as we transition through effective and compliance date timelines. The format options will include the appropriate regulations for both. Be mindful with your labeling and remember, our Support team is on hand to help you out.
Key Changes

- More prominent display of serving size and Calories
- Modified serving-size definitions
- Percent daily value for total sugars
- Updated list of mandatory label nutrients
- A new footnote that explains how to use the % DV
- Improved legibility for ingredients list and allergen information
- Grouping of sugar-based ingredients in the ingredient statement

Ingredients: Sugars (fancy molasses, brown sugar, sugar)
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 2400mg)

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

**Choline**
- New Additional Label Nutrient
- DV of 550
Vitamin A

• Vitamin A was a core nutrient and is now an additional label nutrient.
• If Vitamin A is listed on the new nutrition table it must be listed in mcg of Retinol Activity Equivalents (RAE)

The conversion factors are:
• 1 RAE = 1 mcg retinol
• 1 RAE = 12 mcg beta-carotene
Folate

Folate is an additional nutrient whose label unit has changed from mcg to mcg DFE (Dietary Folate Equivalents).

• 1 mcg DFE = food folate mcg + (1.7 x folic acid mcg)
Single Serving Containers

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)
Ingredient Statement Format

• 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 a bullet point or a comma
Sugar Defined

According to the government documentation, ingredients designated as sugars include:

- White sugar, beet sugar, raw sugar or brown sugar
- Agave syrup, honey, maple syrup, barley malt extract or fancy molasses
- Fructose, glucose, glucose-fructose (also known as high fructose corn syrup), maltose, sucrose or dextrose
- Fruit juice concentrates and purée concentrates that are added to replace sugars in foods”
Sugar on the Ingredient Statement

- Sugar-based ingredients are to be grouped within the ingredient statement.
- These sugar-based ingredients are to be listed in descending order by weight, placed in brackets after the name Sugars/Sucre.
- Sugar based ingredients are entirely in lower case letters*
- Separate multiple ingredients with a comma (not a bullet point)
Updated Serving Sizes

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

With this change, Canadians will be more easily able to compare similar foods and make it easier to understand how many calories (and nutrients) they are consuming.
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 and other nutrients (like sodium) are in their food.

*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
- Bilingual Standard, Tabular, and Linear
- Dual Format - Foods Requiring Preparation
- Aggregate Format - Different Kinds of Foods
- Aggregate Format - Different Amounts of Food
- AND MORE!
Updates to Genesis R&D
# Updates to Genesis R&D

## Calculate Nutrients

**Select Nutrients to Calculate**

<table>
<thead>
<tr>
<th>Nutrient</th>
<th>Formula</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbohydrates</td>
<td>Carbohydrates = Carbohydrates (Available) + Total Dietary Fiber</td>
</tr>
<tr>
<td>Total Dietary Fiber</td>
<td>Choose a formula.</td>
</tr>
<tr>
<td>Total Soluble Fiber</td>
<td>Total Soluble Fiber = Soluble (Beneficial) Fiber (2016) + Other Soluble Fiber (2016)</td>
</tr>
<tr>
<td>Total Insoluble Fiber</td>
<td>Total Insoluble Fiber = Insoluble (Beneficial) Fiber (2016) + Insoluble Soluble Fiber (2016)</td>
</tr>
<tr>
<td>Vitamin A - RAE</td>
<td>Choose a formula.</td>
</tr>
<tr>
<td>Vitamin D - mcg</td>
<td>Vitamin D mcg (mcg) = Vitamin D IU (IU) / 40</td>
</tr>
<tr>
<td>Vitamin E - Alpha-Toco</td>
<td>Choose a formula.</td>
</tr>
<tr>
<td>Vitamin B3 - Niacin Equiv</td>
<td>Vitamin B3 Niacin Equiv (mg) = Vitamin B3 (mg) + (Tryptophan (g) x 1000 / 60)</td>
</tr>
<tr>
<td>Folate, DFE</td>
<td>Folate, DFE (mcg DFE) = Folate, food (mcg) + 1.7 x Folic Acid (mcg)</td>
</tr>
</tbody>
</table>

*Missing Nutrient Values will be set to 0 if used in a calculation.*
Recap

- Do you have the latest version of Genesis?
  - 11.3 is latest release

- Update your ingredients with nutrients
  - Potassium
  - Vitamin A and Folate
  - Highlight ‘Is Sugar’ as needed
  - Convert nutrients using auto-calculator

- Check for missing nutrients
  - Use the Spreadsheet report for the given nutrients

- Check your Serving Size and Reference Amount

- Check DVs – effect nutrient content claims?
Genesis R&D Training

Advanced Genesis Workshop | April 25-26, 2017 | Washington, DC
This workshop 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 Training (Canadian Specific) | April 27-28, 2017 | Toronto, ON
This training session will cover the essentials of Genesis R&D including creating ingredients and recipes/formulas, reporting, best practices, and basic labeling features.

Genesis Professional Training | May 9-10, 2017 | Lombard, 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.

For more information including cost and availability, please contact our training coordinator by phone at 503-585-6242 or by email at training@esha.com.
Questions?

Contact Us!
Phone: 503-585-6242
Email: sales@esha.com

Helpful Resources
LinkedIn: bit.ly/ESHA-LinkedIn
Blog: www.esha.com/blog
eNewsletter: www.esha.com/esha-enewsletter