#### **FDA Nutrition Facts Label Webinar Series**

**Webinar Series Part 2: Nutrients Overview** 

#### **ESHA Research**

August 16, 2016





# 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

- Labeling & Compliance
  - Allergen Statements
  - Ingredient Statements

Nutrient Content Claims





# Genesis R&D Training

#### Genesis Professional Training - October 24-25, 2016, Anaheim, CA

This training session will cover the essentials of Genesis R&D including creating ingredients and recipes/formulas, reporting, best practices, and basic labeling features.

#### Advanced Genesis Workshop – December 1-2, 2016, Anaheim, CA

This workshop session will cover advanced topics in detail such as the due diligence process and documentation, ingredient and recipe management, advanced label topics, allergen statements, nutrient content claims, and more.

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



# **Upcoming Webinars**

# New FDA Nutrition Facts Labels | Part 3 September 13, 2016

ESHA Webinar Series Part 3 of 3 will go over user best practices for transitioning from the pre-existing labels to the new label formats both in and outside of Genesis, as well as a discussion regarding required documentation for certain nutrients.

# Creating US Supplement Facts Labels Using Genesis R&D Supplement Software September 20, 2016

During this 30 minute webinar, we will provide an overview of the new Genesis R&D Supplement Formulation & Labeling software program, including how to add ingredients, create formulas, and generate a Supplement Facts label.

To register or view archived webinars please visit: <a href="www.esha.com/news-events/webinars">www.esha.com/news-events/webinars</a>





# Agenda

#### During this 45 minute webinar we will cover:

- Regulations Timeline
- RACC Changes
- Nutrient Changes
  - Vitamin D
  - Potassium
  - Added Sugars
  - Dietary Fiber
- Q&A
- Reminder to use our resources





# News From USDA

"Revision of the Nutrition Facts Panels for Meat and Poultry Products and Updating Certain Reference Amounts Customarily Consumed"

On July 27, the USDA sent its proposed version of their new Nutrition Facts label to be reviewed.



# Timeline for Compliance

 The compliance date for the updated Nutrition Facts labels will be July 26, 2018, for companies with more than 10 million dollars in annual food sales

#### **OR**

July 26, 2019, for companies with less than 10 million dollars in annual food sales.





# 1990 NLEA & 2016 NLEA

#### **Nutrition Facts**

Serving Size 2/3 cup (55g) Servings Per Container About 8

Servings Per Contain	er About 8
Amount Per Serving	
Calories 230	Calories from Fat 72
	% Daily Value*
Total Fat 8g	12%
Saturated Fat 1g	5%
Trans Fat 0g	
Cholesterol 0mg	0%
Sodium 160mg	7%
Total Carbohydra	te 37g 12%
Dietary Fiber 4g	16%
Sugars 1g	
Protein 3g	
Vitamin A	10%
Vitamin C	8%
Calcium	20%

<sup>\*</sup> Percent Daily Values are based on a 2,000 calorie diet. Your daily value may be higher or lower depending on your calorie needs.

45%

	Calories:	2,000	2,500
Total Fat	Less than	65g	80g
Sat Fat	Less than	20g	25g
Cholesterol	Less than	300mg	300mg
Sodium	Less than	2,400mg	2,400mg
Total Carbohydrate		300g	375g
Dietary Fiber		25g	30g

#### **Nutrition Facts**

8 servings per container

Serving size 2/3 cup (55g)

Amount per serving

Calories

230

% Daily Value\*

Total Fat 8g	10%
Saturated Fat 1g	5%
Trans Fat 0g	
Cholesterol Omg	0%
Sodium 160mg	7%
Total Carbohydrate 37g	13%
Dietary Fiber 4g	14%
Total Sugars 12g	
Includes 10g Added Sugars	20%
Protein 3g	
Vitamin D 2mcg	10%
Calcium 260mg	20%
Iron 8mg	45%
Potassium 235mg	6%
The % Deily Velve (DV) telle you have much a	

<sup>\*</sup> The % Daily Value (DV) 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.

**Note**: Both the preexisting 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.



# **RACC Changes Overview**



#### **Carbonated/Non Carbonated Beverages**

- 360 mL 12 fl oz (old 240 mL 8 fl oz)
- Does not include milk, fruit juices, fruit drinks, and vegetable juices

#### Hard/Powdered/Liquid Candies

- 15 mL for liquid candies
- 15 g for all others (old 15g)

#### Prepared Coffee/Tea Flavored/Sweetened

• 360 mL - 12 fl oz (old 240 mL - 8 fl oz)

#### **Breakfast Cereals Weighing 20 g - 43 g Per Cup**

40g (old 30g)

#### **Breakfast Cereals Weighing 43 g Per Cup**

60g (old 55g)

#### **Pie Crust/Pastry Sheets**

 The allowable declaration closest to an 8 square inch surface area (old 1/6 of 8"; 1/8 of 9" crust)

#### **Fruits Used Primarily as Ingredients**

- Avocado 50g (old 30g)
- Others (cranberries, lemon, lime) 50g (old 55g)





# **RACC Changes Overview**



#### **Cake Frostings/Icings**

2 Tbsp (old 35g)

#### Fish/Shellfish/Game Meat Canned

• 85g (old 55g)

#### **Ice Cream/Frozen Desserts/Frozen Fruit Juices**

- Includes the volume for coatings and wafers
- 2/3 cup (old 1/2 cup)

# Milk/Milk Substitutes/Fruit Juice Concentrates

- e.g., drink mixers, frozen fruit juice concentrate, sweetened cocoa powder)
- Amount to make 240 mL drink (without ice)

#### Yogurt

170g (old 225g)

#### Sugar

• 8g (old 4g)





# Yogurt RACC Change Example

#### 225 g RACC & Serving Size

#### **Nutrition Facts** Serving Size 1 Container (225g) **Amount Per Serving** Calories 170 Calories from Fat 10 % Daily Value\* 2% Total Fat 1g Saturated Fat 0g 0% Trans Fat 0g Cholesterol 10mg 3% Sodium 75mg 3% **Total Carbohydrate 23g** 8% Dietary Fiber 1g 4% Sugars 21g Protein 19g • Vitamin C 0% Iron 0% Calcium 20%

\*Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs:

depending on your calone needs.			
	Calories:	2,000	2,500
Total Fat	Less than	65g	80g
Saturated Fat	Less than	20g	25g
Cholesterol	Less than	300mg	300mg
Sodium	Less than	2,400mg	2,400mg
Total Carbohydra	ate	300g	375g
Dietary Fiber		25g	30g

Calories per gram: Fat 9 • Carbohydrate 4 • Protein 4 Excellent Source of Calcium

#### 170 g RACC & Serving Size

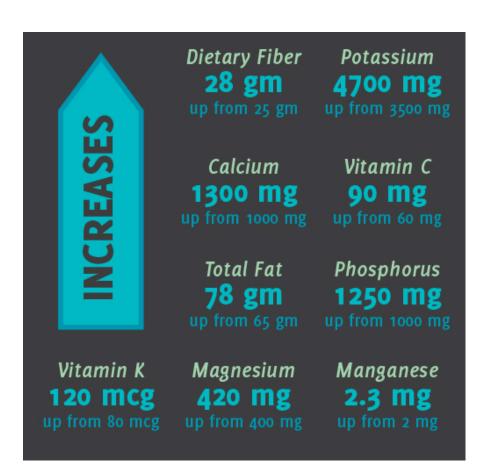
Nutrition Facts Serving size 1 Container (170g)		
Amount per serving Calories	130	
% D	aily Value*	
Total Fat 0.5g	1%	
Saturated Fat 0g	0%	
Trans Fat 0g		
Cholesterol 5mg	2%	
Sodium 60mg	3%	
Total Carbohydrate 17g	6%	
Dietary Fiber 1g	4%	
Total Sugars 16g		
Includes 10g Added Sugars	20%	
Protein 14g	14%	
Vitamin D 0mcg	0%	
Calcium 155mg	10%	
Iron 0mg	0%	
Potassium 210mg	4%	
*The % Daily Value tells you how much a n serving of food contributes to a daily diet. 2 day is used for general nutrition advice.		
Calories per gram: Fat 9 • Carbohydrate 4 • Pro	tein 4	

- RACC changes may affect NutrientContent Claims
- Be sure to evaluate your entire package when updating labels with RACC changes

Good Source of Calcium



# **DV Increases Highlights**



#### **Dietary Fiber**

- Mandatory nutrient
- New definition
- Increase in DV from 25 g to 28 g

#### Potassium

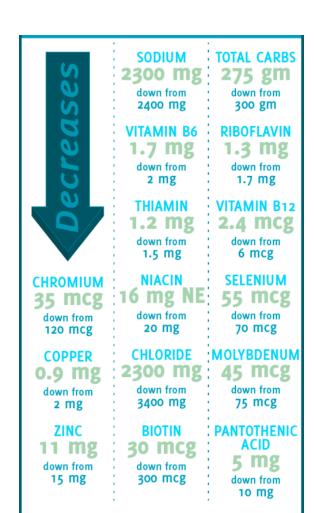
- Mandatory nutrient (previously voluntary)
- Increase in DV from 3500 mg to 4700 mg

#### Vitamin C

- Voluntary nutrient (previously mandatory)
- Increase in DV from 60 mg to 90 mg



# **DV** Decreases Highlights



#### **Sodium (Mandatory)**

Decreased from 2400 mg to 2300 mg

#### **Total Carbs (Mandatory)**

- A macronutrient that includes starch, sugars, sugar alcohols, and fiber
- Decreased from 60 percent of calories to 55 percent of calories for a DV of 275 grams (down from 300 g) for a 2,000calorie diet.

#### **Biotin (Voluntary)**

Decreased from 300 mcg to 30 mcg



# Nutrient *Unit Changes* + New Nutrients



#### Added Sugars

- New mandatory nutrient
- DV of 50 g

#### Choline

- New voluntary nutrient
- DV of 550 mg

# Vitamin A 900 mcg RAE was 5000 IU Folate 400 mcg DFE was 400 mcg was 400 lU Vitamin D 20 mcg was 400 lU

#### Vitamin A

- Voluntary nutrient (previously mandatory)
- Change from 5000 IU to 900 mcg

#### Vitamin E

- Voluntary nutrient
- Change from 30 IU to 15 mg a-tocopherol

#### **Folate**

- Voluntary nutrient
- Change from 400 mcg to 400 mcg DFE

#### Vitamin D

- Mandatory nutrient (previously voluntary)
- Change from 400 IU to 20 mcg



# Vitamin D

- Vitamin D was a voluntary nutrient and is now a mandatory nutrient.
- The new label must list the amount of Vitamin D in mcg per serving and percent DV, unless the product contains an insignificant amount (< 2% of the DV).</li>
- Reporting Vitamin D in mcg is a change in units from the pre-existing label which reports Vitamin D in IU units.
- Vitamin D must be listed in mcg, however, Vitamin D IUs may be listed voluntarily in parenthesis as well
- Calculation: 1 mcg vitamin D = 40 IU
- Can be calculated via lab analysis



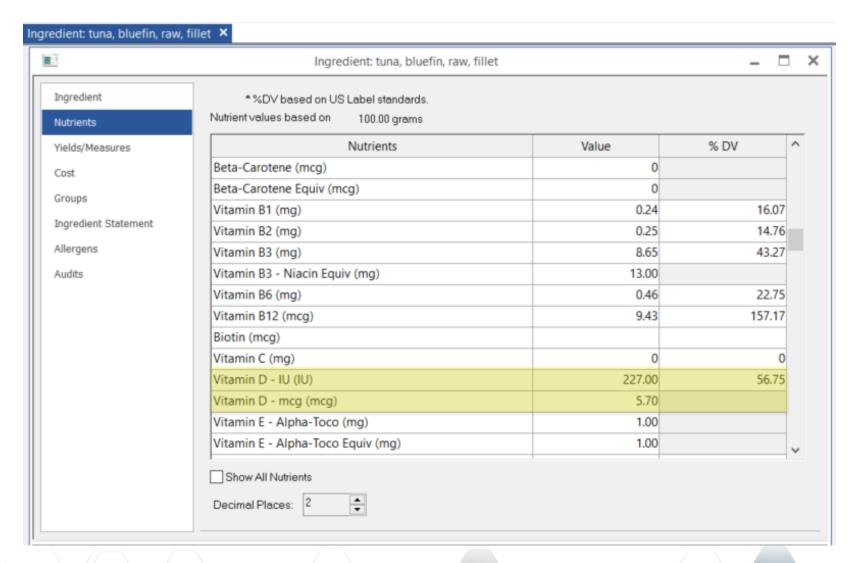
# Vitamin D – unit conversion

- Example: Vitamin D
  - A new mandatory nutrient that you may have IU data for
  - Conversion:
- 1 mcg Vitamin D = 40 IU Vitamin D
- Bluefin Tuna previously had a Vitamin D value of 227.00 IU
- According to our formula we know 40 IU = 1 mcg of Vit. D
  - So 227.00 IU / 40 = 5.67 or 5.7 mcg Vitamin D. Which is what you will see in Genesis for ESHA item # 17058





# Vitamin D





# Potassium

- Potassium has changed from a voluntary label nutrient to a mandatory label nutrient.
- The DV has increased from 3500 mg to 4700 mg.
- Potassium can be found by performing lab analysis.

# **Added Sugars**

- New mandatory label nutrient
- The DV is 50 g and 10% of total calories
- Lab analysis can only test for Total Sugars but cannot distinguish the difference between added sugars and naturally occurring sugars.

# Labeling Added Sugar

 The label must list the amount of added sugars in a serving, and the % DV

> Total Sugars 15g Includes 5g Added Sugars 10%

- If added sugars is not declared such as in a simplified label the statement, "Not a significant source of added sugars" shall be placed at the bottom of the nutrition facts panel. (Genesis will do this for you automatically if you choose "simplified label"). This can only be used if 8 or more of the mandatory nutrients are in insignificant amounts.
- If the serving contains less than 0.5 grams the amount may be reported as zero





# Added Sugars Defined

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.

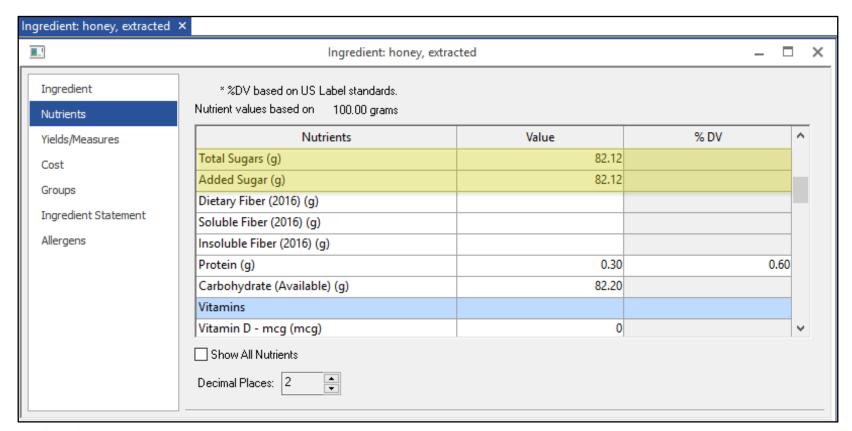
- Honey
- Molasses
- Corn Sweetener
- Sugar
  - Raw sugar, brown sugar, cane sugar, beet sugar, dextrose, fructose, glucose, invert sugar, lactose, maltose, malt sugar, trehalose, turbinado, sucrose, galactose
- Syrup
  - High fructose corn syrup, malt syrup, crystalline fructose, maple syrup
- Fruit Juice Concentrates (in some cases)



# Added Sugar in Genesis

#### Honey – Added Sugar

The Total Sugars value is the same as the Added Sugars value

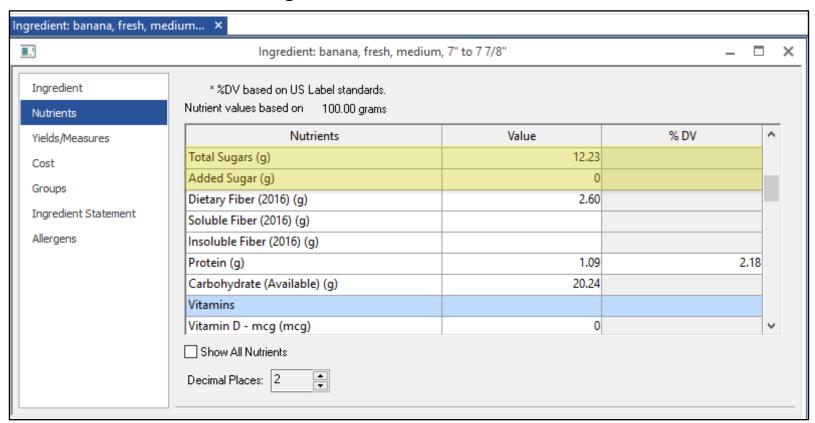




# Added Sugar in Genesis

#### Banana - Naturally Occurring Sugar

Has a Zero for Added Sugar





# Added Sugar Examples - Lactose

- Determine the source and consider how its being used
  - Is it part of a whole food?
  - Example: milk vs. powdered lactose
- \*\*Milk is a whole ingredient, so the lactose contained in milk is considered naturally occurring and not an added sugar
- \*Powdered lactose however is an isolated form of lactose and this would be considered an added sugar under the new 2016 regulations



# Added Sugar Examples – Fruit Juice Concentrate

- This ingredient may or may not be determined to be "added sugar", depending on how and in what concentration it is used
- If you are adding apple juice concentrate to a mixed nut and grain breakfast bar, this would be considered using it as an added sugar
- However, if you are reconstituting apple juice concentrate to 100% apple juice or less this would not be considered an added sugar on the new label. We have taken a conservative measure in Genesis and populated all juice concentrates as added sugar. In this scenario you will need to override the added sugar at the recipe level





# Dietary Fiber

- Increase in %DV from 25g to 28g
- New Definition: The new definition focuses on reporting fiber (soluble and insoluble) that is considered beneficial to human health
  - naturally occurring fibers
  - added fibers (isolated or synthetic) that have been determined to be beneficial
- Lab analysis can test for Dietary Fiber but cannot distinguish the difference between beneficial and other fibers. You have the responsibility of determining this for the ingredients you have entered



# New Dietary Fiber Definition Examples

#### **Isolated or Synthetic Fibers**

- Beta-glucan soluble fiber
- Psyllium husk
- Cellulose
- Guar gum
- Pectin
- Locust bean gum
- Hydroxypropylmethcellulose

#### **Naturally Occurring Fibers**

- Oat bran
- Beans
- Berries
- Nuts & Seeds
- Barley
- Asparagus

<sup>\*</sup>The F.D.A. plans to publish a separate notice that will seek comment on the available scientific data on non-digestible carbohydrates. Publicly available clinical trial data will be identified and summarized for non-digestible carbohydrates, including inulin, bamboo fiber, soy fiber, pea fiber, wheat fiber, cotton seed fiber, sugar cane fiber, sugar beet fiber and oat fiber.



# As a Result....

#### **Nutrition Facts**

Serving Size 2/3 Cup Servings Per Container About 3

**Amount Per Serving** 

 Calories 190
 Calories from Fat 90

 % Daily Value\*

 Total Fat 10g
 15%

 Saturated Fat 6g
 30%

 Cholesterol 30mg
 10%

 Sodium 65mg
 3%

 Total Carbohydrate 25g
 8%

 Dietary Fiber 1g
 4%

#### Protein 3g

Sugars 22g

Vitamin A 8%	<ul> <li>Vitamin C 2%</li> </ul>
Calcium 10%	• Iron 4%

\*Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs:

Calories:	2,000	2,500
Less than	65g	80g
Less than	20g	25g
Less than	300mg	300mg
Less than	2,400mg	2,400mg
ate	300g	375g
	25g	30g
	Less than Less than Less than	Less than 65g Less than 20g Less than 300mg Less than 2,400mg ate 300g

Calories per gram:

Fat 9 · Carbohydrate 4 · Protein 4

Nutrition	Facts
About 3 servings per	container
Serving size	2/3 Cup

#### Amount per serving Calories

190

	% Daily Value*
Total Fat 10g	13%
Saturated Fat 6g	30%
Cholesterol 30mg	10%
Sodium 65mg	3%
Total Carbohydrate 25g	9%
Dietary Fiberg	%
Total Sugars 22g	
Includes 15g Added S	ugars 30%
Protein 3g	

0%
8%
6%
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.

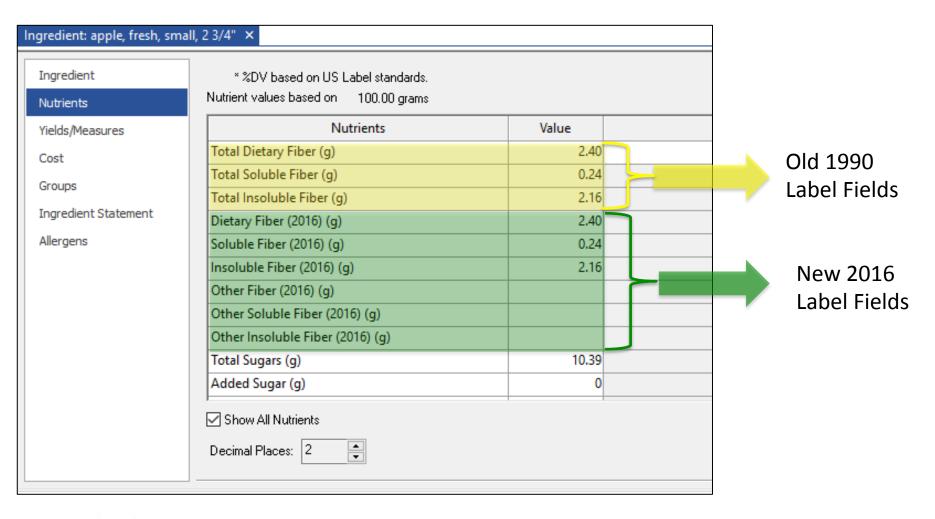
Calories per gram:

Fat 9 • Carbohydrate 4 • Protein 4

As a result of this change, your label might look like this in Genesis.

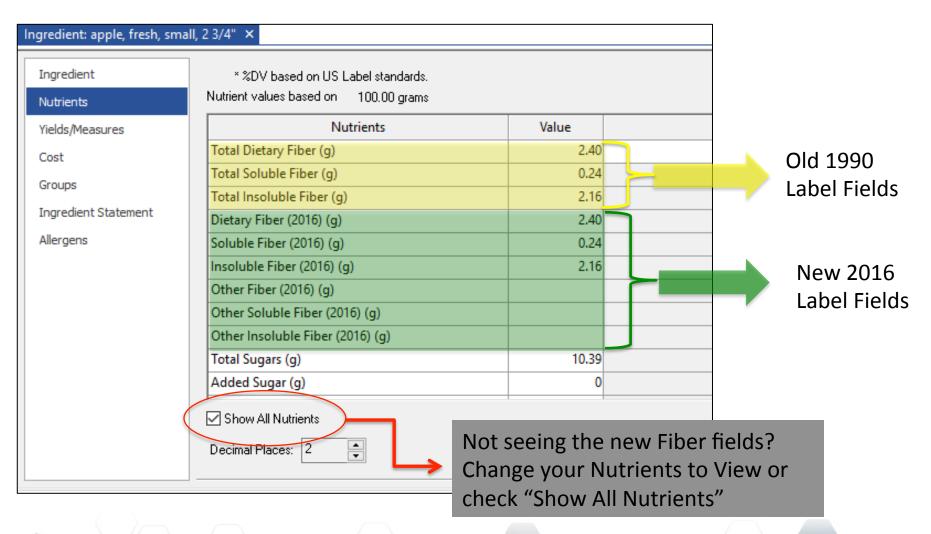


# Dietary Fiber in Genesis





# Dietary Fiber in Genesis





# Dietary Fiber in Genesis

1990 Label
All fiber

Enter into:

Total Dietary Fiber Total Soluble Fiber Total Insoluble Fiber 2016 Label

Naturally Occurring Fiber

(i.e. oat bran, berries, beans )

Enter into:

Dietary Fiber (2016) Soluble Fiber (2016) Insoluble Fiber (2016) 2016 Label

Beneficial Added Fiber

(i.e. guar gum, pectin, cellulose)

Enter into:

Dietary Fiber (2016)

Soluble Fiber (2016)
Insoluble Fiber (2016)

2016 Label

Other Fiber

(i.e. inulin)

Enter into:

Other Fiber (2016)

Other Soluble Fiber (2016)

Other Insoluble Fiber (2016)



# Documentation

Because there are not analytical methods that can distinguish the required nutrient definitions, the new labeling regulations require maintenance records to support the amounts of:

- Dietary Fiber
- Added Sugar
- Folate (when a food product contains both folate and folic acid.)
- Vitamin E (when a food product contains both RRR-  $\alpha$ -tocopherol and all rac- $\alpha$ -tocopherol acetate)

As a result, the FDA allows for use of electronic databases for analysis. The final rule requires that the records be kept for at least 2 years after the food is introduced to the market.



# Recap

- ✓ Did the RACC change?
- ✓ Are you making a nutrient content claim?
- ✓ Nutrient DV increases or decreased
- ✓ Unit Changes
- ✓ Do you need to perform some unit conversions?
- ✓ Vitamin D & Potassium can be tested for



# Recap

- ✓ Are you seeing a null value on your label?
- ✓ Use the spreadsheet report to view missing nutrients
- ✓ Create a plan to efficiently update your ingredients
- ✓ Take your time
- ✓ Talk to your suppliers
- ✓ Document, document
- ✓ Join us next to as we show you best practices for transitioning from an old to new label



# 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



