



A GUIDE TO

NUTRITION LABELING

AN INTRODUCTION

Every day, Eurofins experts around the globe field questions from clients about nutrition labeling, allergen claims, and the Nutrition Labeling and Education Act of 1990 (NLEA) put forth by the U.S. FDA.

At the Eurofins [Nutrition Analysis Center \(ENAC\)](#), the ENAC team is capable of accommodating all matrices including but not limited to adult food products, supplements, infant food, and alcoholic beverages. We work closely with all of our clients to determine the most appropriate testing for each situation.

GET YOUR LABEL TODAY

We have created a questionnaire to help assist in generating the most accurate label. For example, nutrition facts panels on products intended for younger children require different daily values than those for an adult.

This questionnaire, alongside industry knowledge and FDA reference materials, allows us to confidently work with all types of products and cater to the specific needs of each client.



[Visit our online nutrition and supplement analysis questionnaire.](#)

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WHAT IS *NEW* IN THE NEW FACTS PANEL?

NUTRIENTS REMOVED

- 1 | **Calories from Fat** – Research suggests the type of fat is more important than the amount, therefore this information was deemed no longer necessary for consumers.
- 2 | **Other Carbohydrates** – This nutrient was previously voluntary and described as difference between Total Carb and the sum of Dietary Fiber + Sugar, representing starch and other compounds. Other Carbs was removed because there is no quantitative intake recommendation and/or public health significance.

NEW MANDATORY NUTRIENTS

- 1 | **Vitamin D** – Added because nationwide surveys found that Americans do not get sufficient amounts of Vitamin D.
- 2 | **Potassium** – Similar to Vitamin D, it was found that Americans do not get sufficient amounts of Potassium, a vital mineral for health measurements such as blood pressure.
- 3 | **Added Sugars** – The FDA determined Americans receive too much added sugar. Added sugar is not naturally occurring in foods, but added by the manufacturer and has a 50g daily value.



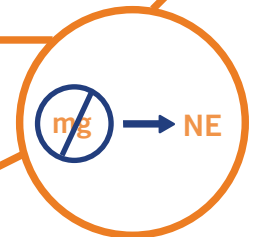
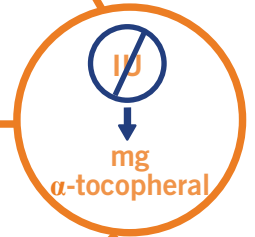
NEW VOLUNTARY NUTRIENTS

- 1 Vitamin A** – Previously a mandatory nutrient, the FDA found that Vitamin A deficiency is rare and no longer a nutrient of concern.
- 2 Vitamin C** – Has been made voluntary because Vitamin C deficiency is now a rare nutrient concern.
- 3 Fluoride** – Previously not permitted to be listed on NFPs at all, Fluoride is now a voluntary nutrient.
- 4 Choline** – Before, choline was not permitted, but the FDA found that Choline is needed in the body to maintain liver function.



NUTRIENTS WITH NEW DEFINITIONS

- 1 Folate** – The label unit is changing from mcg total folate to Dietary Folate Equivalents (DFE). Eurofins has already prepared the capability to report DFE units.
- 2 Vitamin E** – This label unit is changing from IU to mg α -tocopherol. The change accounts for the difference in biological activity between naturally occurring and synthetic Vitamin E.
- 3 Niacin** – The label unit is changing from mg of Niacin to Niacin Equivalents (NE). This change considers how bodies convert Tryptophan into Niacin and provides a more accurate representation of available Niacin in the body. Eurofins can report NE.
- 4 Dietary Fiber** – Redefined to focus on types of fiber deemed beneficial for health. Now includes both naturally occurring and added fiber.



CURRENT VS. MODERN PANELS

CURRENT PANEL

Nutrition Facts	
Serving Size 2/3 cup (55g) Servings Per Container 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 Carbohydrate 37g	12%
Dietary Fiber 4g	16%
Sugars 1g	
Protein 3g	
Vitamin A 10%	
Vitamin C 8%	
Calcium 20%	
Iron 45%	
* Percent Daily Values are based on a 2,000 calorie diet. Your daily value may be higher or lower depending on your calorie needs.	
	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

MODERN PANEL

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 0mg	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 % 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.	

SERVING SIZE
larger, bolder type

CALORIES
larger, bolder type,
Calories From Fat,
no longer listed

DAILY VALUES
updated

ADDED SUGARS
newly added

VITAMINS & MINERALS
declared in actual
amounts (and %DV)

FOOTNOTE
updated

UPDATED DAILY VALUES

Label Nutrient	Change (C)	New Regulations		Existing Regulations	
		Mandatory/Voluntary	Daily Value	Mandatory/Voluntary	Daily Value
Calories	C	M	–	M	–
Calories from Fat	C	Not listed		M	–
Calories from Saturated Fat		V	–	V	–
Total Fat	C	M	78 g	M	65 g
Saturated Fat		M	20 g	M	20 g
Trans Fat		M	–	M	–
Polyunsaturated Fat		V	–	V	–
Monounsaturated Fat		V	–	V	–
Cholesterol		M	300 mg	M	300 mg
Sodium	C	M	2300 mg	M	2400 mg
Fluoride	C	V	–	Not listed	
Total Carbohydrate	C	M	275 g	M	300 g
Dietary Fiber	C	M	28 g	M	25 g
Soluble Fiber	C	V	–	V	–
Insoluble Fiber	C	V	–	V	–
Total Sugars		M	–	M	–
Added Sugars	C	M	50 g	Not listed	
Sugar Alcohol		V	–	V	–
Other Carbohydrate	C	Not listed		V	–
Protein		M	50 g	M	50 g
Vitamin D	C	M	20 mcg	V	400 IU
Calcium	C	M	1300 mg	M	1000 mg
Iron		M	18 mg	M	18 mg
Potassium	C	M	4700 mg	V	3500 mg
Vitamin A	C	V	900 mcg RAE	V	5000 IU

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Label Nutrient	Change (C)	New Regulations		Existing Regulations	
Vitamin C	C	V	90 mg	V	60 mg
Vitamin E	C	V	15 mg α -tocopherol	V	30 IU
Vitamin K	C	V	120 mcg	V	80 mcg
Thiamin	C	V	1.2 mg	V	1.5 mg
Riboflavin	C	V	1.3 mg	V	1.7 mg
Niacin	C	V	16 mg NE	V	20 mg
Vitamin B6	C	V	1.7 mg	V	2 mg
Folate/Folic Acid	C	V	400 mcg DFE	V	400 mcg
Vitamin B12	C	V	2.4 mcg	V	6 mcg
Biotin	C	V	30 mcg	V	300 mcg
Pantothenic Acid	C	V	5 mg	V	10 mg
Phosphorus	C	V	1250 mg	V	1000 mg
Iodine		V	150 mcg	V	150 mcg
Magnesium	C	V	420 mg	V	400 mg
Zinc	C	V	11 mg	V	15 mg
Selenium	C	V	55 mcg	V	70 mcg
Copper	C	V	0.9 mg	V	2 mg
Manganese	C	V	2.3 mg	V	2 mg
Chromium	C	V	35 mcg	V	120 mcg
Molybdenum	C	V	45 mcg	V	75 mcg
Chloride	C	V	2300 mg	V	3400 mg
Choline	C	V	550 mg	Not listed	

DEFINITIONS KEY:

RAE: Retinol Activity Equivalents

DFE: Dietary Folate Equivalents

mcg: Micrograms

mg: Milligrams

g: Grams

ALLERGEN LABELING

Although allergen claims are not impacted by the NLEA, the FDA also enforces the labeling of 8 major allergens as determined by the Food Allergen Labeling and Consumer Protection (FALCPA) Act of 2004.

Eurofins GeneScan has provided industry-leading PCR and ELISA assay allergen testing for over 15 years, including the 'Big 8' allergens and other allergens of concern:

- Milk
- Eggs
- Fish (e.g. bass, flounder, cod)
- Crustacean shellfish (e.g. crab, lobster, shrimp)
- Tree nuts (e.g. almonds, walnuts, pecans)
- Peanuts
- Wheat
- Soybeans
- Gluten (e.g. wheat, rye, barley)
- Gluten (fermented products)
- Casein
- Coconut
- Mustard
- Sesame
- Lupin



FAQ

HOW ARE DAILY VALUES AND SERVING SIZES CHANGING?

Reference Daily Intakes (RDIs) and Daily Reference Values (DRVs) are being updated to reflect current understanding of the role of macro and micronutrients in the human diet. The changes implemented will adjust (upward or downward) the contribution of each nutrient toward the RDI, which in turn will impact the percent Daily Values displayed on the nutrition facts panel. More information pertaining to the specific changes can be found [here](#).

HOW DO I KNOW WHAT TO DECLARE AS AN ADDED SUGAR IN MY PRODUCT?

The declared value for added sugar depends on the ingredients included in your particular product. Added sugar is calculated based on the sugar contribution from: "sugars (free, mono- and disaccharides), sugars from syrups and honey, and sugars from concentrated fruit or vegetable juices that are in excess of what would be expected from the same volume of 100 percent fruit or vegetable juice of the same type (FDA)."

If any of the ingredients listed above are added to your product, they will need to be declared on your nutrition facts panel as

Added Sugar. This value must be calculated from your formulation as there is no current analytical method which is able to determine which sugars are added to a product by this definition and which are naturally occurring.

HOW IS DIETARY FIBER AFFECTED BY THIS UPDATE?

The FDA no longer recognizes all fibers as being equivalent in terms of how they are declared on a nutrition label. As such, fibers that are synthetic or isolated and added to your product must now meet the FDA definition of being beneficial to human health. Due to this new requirement, fiber-containing ingredients of the product must be provided to our team so the appropriate method of analysis can be performed. This ensures that the final dietary fiber statement reflects the most up-to-date fiber classifications.

WHAT ARE THE UPDATES TO VITAMIN DECLARATIONS? WILL THIS IMPACT MY NUTRITION LABEL?

The FDA has taken into consideration the efficacy of various vitamin forms in its determination for how food producers can declare them on their labels. The key updates are:

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Vitamin A is now a voluntary nutrient and is no longer required to appear on nutrition facts panels. The units for Vitamin A have been updated from the often difficult to understand "IU", to the more recognizable mcg. Vitamin A will be reported as Retinol Activity Equivalents (RAE), which recognizes the Vitamin A contribution from various carotenoids (ie. α and β carotene, retinol, β -cryptoxanthin) using a conversion factor for each which is based on the relative bioactivity of the Vitamin A form.

Folic Acid will now be reported as Dietary Folic Equivalents (DFE), which delineates the contribution of folates and folic acid to human health. Selection of the appropriate method for determining DFE is now highly important and your Eurofins representative will work closely with you to ensure that the appropriate analyses are performed.

Vitamin E will now be reported in mg α -tocopherol instead of IUs. Synthetic and natural forms of Vitamin E will contribute to the mg as α -tocopherol declared value based on factors outlined by the FDA. Other antioxidants of similar function such as β , δ , and γ -tocopherol or tocotrienols are still not considered as contributors to total Vitamin E content.

Niacin (or Vitamin B3) now has a Niacin Equivalence (NE) calculation which is similar to the update to Vitamin A. Additional forms of Niacin (inositol hexanicotinate and niacinamide) contribute to total NE. The FDA has also included the amino acid Tryptophan as a contributor to NE due to the special relationships that it has with Niacin metabolism.



STILL HAVE QUESTIONS?

Visit: www.eurofinsus.com/food-testing/contact-eurofins/

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