



Nutrition Facts Labeling

Understanding the Nutrition Facts Label



on the menu

nutrition consultants
to the food industry

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Food & Drug Administration (FDA)

- Enforces the Federal Food, Drug and Cosmetic Act
- Five “Centers” including Center for Food Safety and Applied Nutrition (CFSAN)
- FDA does not approve labels!



FDA vs. USDA

- USDA (meat and poultry)
 - 3% meat or more
 - 2% poultry or more
- FDA (all other foods)
- FDA and USDA have comparable authority but divergent approaches
 - USDA pre-approval process
 - FDA relies on detailed regulations and market place surveillance
- Lots of regulatory overlap and fragmentation



The Code of Federal Regulations

- Title 21: Food and Drugs
 - most food regulations in 21 CFR 100-169
- Published yearly
- Free online through:
 - <http://www.gpo.gov>
 - <http://www.fda.gov>



FFD&C Act and FPLA

Big Six Requirements:

- Statement of identity
- Net quantity of contents
- Nutrition labeling
- Ingredient statement
- Allergen declaration
- Name and place of business of manufacturer, packer or distributor



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Statement of Identity

- Name specified by law or regulations
- Common or usual name
- Appropriately descriptive name or fanciful term

(21 CFR 130-169 and 21 CFR
102)



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Net Quantity of Contents

- Must show in both metric (grams, kilograms, milliliters, liters) and U.S. Customary System (ounces, pounds, fluid ounces) terms
 - Net Wt 1 lb 4 oz (567 g)
 - Net 8 fl oz (237 mL)



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Nutrition Labeling Exemptions

- Small business
- Bulk food for further manufacturing
- Restaurant and food service foods
- Food sold or served for immediate consumption
- Foods with insignificant amounts of nutrients
- Infant formulas
- Dietary supplements
- Medical foods



Small Business Exemption Criteria

- Low volume food products
 - <100 employees and <100,000 units
 - Required to submit exempt form to FDA
 - <10 employees and <10,000 units
 - Exempt form to FDA is optional
- No nutrition claims or statements made



Benefits of Nutrition Labeling

- Gives insight into nutrition profile of product
- Majority of consumers want to know
 - Consumers read labels
 - Important in consideration of food purchases
- Allows you to make claims
- Competitive edge
 - Look professional
 - Player in the market place
- Ability to market your food product
 - Nutrition “sells” to today’s consumer



Nutrition Facts Panel

Three major sections:

- Serving size
- Nutrient values
- Footnote

Nutrition Facts			
Serving Size 2 Tbsp (28g)			
Servings Per Container 16			
Amount Per Serving			
Calories 30		Calories from Fat 0	
<hr/>			
% Daily Value*			
Total Fat 0g			0%
Saturated Fat	0g		0%
Trans Fat	0g		
Cholesterol 0mg			0%
Sodium 170mg			7%
Total Carbohydrate 8g			3%
Dietary Fiber	0g		0%
Sugars	7g		
Protein 0g			
<hr/>			
Vitamin A 0%		• Vitamin C 0%	
Calcium 2%		• Iron 2%	
*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
Total Fat	Less Than	65g	80g
Saturated Fat	Less Than	20g	25g
Cholesterol	Less Than	300mg	300 mg
Sodium	Less Than	2,400mg	2,400mg
Total Carbohydrate		300g	375g
Dietary Fiber		25g	30g
Calories per gram:			
Fat 9 • Carbohydrate 4 • Protein 4			



Serving Size

- Based on Reference Amounts
- In household measures

(21 CFR 101.12)



Mandatory Nutrients

- Calories
- Calories from fat
- Total fat
- Saturated fat
- *Trans* fat
- Cholesterol
- Sodium
- Total carbohydrate
- Dietary fiber
- Sugars
- Protein
- Vitamin A
- Vitamin C
- Calcium
- Iron

(All nutrients have specific rounding rules to be followed on a Nutrition Facts label.)



Voluntary Nutrients

- Calories from saturated fat
- Polyunsaturated fat
- Monounsaturated fat
- Potassium
- Soluble fiber
- Insoluble fiber
- Sugar alcohol
- Other carbohydrate
- Other vitamins and minerals that have established RDI's
- Beta-carotene
- Folic acid



Footnote

- All labels must have *“Percent Daily Values are based on a 2,000 calorie diet.”*
- Remaining information in the full footnote may be left off if the package is small.
- Daily values on footnote remain the same for each nutrient and are based on public health experts’ advice.



Label Formats

- Standard
- Tabular
- Dual Declaration
- Aggregate
- Simplified
- Other



Standard

Nutrition Facts

Serving Size 2 Tbsp (28g)
Servings Per Container 16

Amount Per Serving

Calories 30 **Calories from Fat 0**

% Daily Value*

Total Fat 0g **0%**

Saturated Fat 0g **0%**

Trans Fat 0g

Cholesterol 0mg **0%**

Sodium 170mg **7%**

Total Carbohydrate 8g **3%**

Dietary Fiber 0g **0%**

Sugars 7g

Protein 0g

Vitamin A 0% • Vitamin C 0%

Calcium 2% • Iron 2%

*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
Total Fat	Less Than	65g	80g	
Saturated Fat	Less Than	20g	25g	
Cholesterol	Less Than	300mg	300 mg	
Sodium	Less Than	2,400mg	2,400mg	
Total Carbohydrate		300g	375g	
Dietary Fiber		25g	30g	

Calories per gram:

Fat 9 • Carbohydrate 4 • Protein 4



Tabular

Nutrition Facts	Amount / Serving	% Daily Value*	Amount / Serving	% Daily Value*	*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
	Serving Size 2 Tbsp (28g) Servings Per Container 16 Calories 30 Calories from Fat 0	Total Fat 0g	0%	Total Carbohydrate 8g	
	Saturated Fat 0g	0%	Dietary Fiber 0g	0%	
	Trans Fat 0g		Sugars 7g		
	Cholesterol 0mg	0%	Protein 0g		
	Sodium 170mg	7%			
	Vitamin A 0% • Vitamin C 0%		Calcium 2% • Iron 2%		Calories per gram: Fat 9 • Carbohydrate 4 • Protein 4
					Total Fat Less Than 65g 80g Saturated Fat Less Than 20g 25g Cholesterol Less Than 300mg 300 mg Sodium Less Than 2,400mg 2,400mg Total Carbohydrate 300g 375g Dietary Fiber 25g 30g



Dual Declaration

Nutrition Facts

Serving Size 1/2 cup (55g)
Servings Per Container 15

Amount Per Serving	Granola	Granola with 1/2 Cup Fat	Free Milk
Calories	230	290	
Calories from Fat	100	70	
	% Daily Value**		
Total Fat 11g*	17%	12%	
Saturated Fat 2g	10%	3%	
Trans Fat 0g			
Cholesterol 0mg	0%	0%	
Sodium 90mg	4%	7%	
Total Carbohydrate 31g	10%	15%	
Dietary Fiber 3g	12%	16%	
Sugars 17g			
Protein 4g			
Vitamin A	0%	6%	
Vitamin C	0%	2%	
Calcium	4%	15%	
Iron	8%	10%	

*Amount in Granola. Granola with 1/2 Cup Fat Free Milk contributes an additional 60 Calories, 70 mg Sodium, 13 g Total Carbohydrate (1 g Dietary Fiber, 7 g Sugars), 6 g Protein.

**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
Total Fat	Less Than	65g	80g
Saturated Fat	Less Than	20g	25g
Cholesterol	Less Than	300mg	300 mg
Sodium	Less Than	2,400mg	2,400mg
Total Carbohydrate		300g	375g
Dietary Fiber		25g	30g

Calories per gram:
Fat 9 • Carbohydrate 4 • Protein 4



Aggregate

Nutrition Facts	Plain Granola	Almond-Raisin Granola	Pecan-Cranberry Granola
Serving Size	1/2 cup (57g)	1/2 cup (57g)	1/2 cup (57g)
Servings Per Container	15	15	15
Amount Per Serving			
Calories	230	240	250
Calories from Fat	100	70	120
	% Daily Value*	% Daily Value*	% Daily Value*
Total Fat	11g 17%	8g 12%	13g 20%
Saturated Fat	2.5g 13%	0.5g 3%	2.5g 13%
Trans Fat	0g	0g	0g
Cholesterol	0mg 0%	0mg 0%	0mg 0%
Sodium	130mg 5%	90mg 4%	95mg 4%
Total Carbohydrate	32g 11%	37g 12%	31g 10%
Dietary Fiber	3g 12%	4g 16%	3g 12%
Sugars	16g	18g	17g
Protein	4g	5g	4g
*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
Total Fat	Less Than	65g	80g
Saturated Fat	Less Than	20g	25g
Cholesterol	Less Than	300mg	300 mg
Sodium	Less Than	2,400mg	2,400mg
Total Carbohydrate		300g	375g
Dietary Fiber		25g	30g
Calories per gram:			
	Fat 9 • Carbohydrate 4 • Protein 4		
Vitamin A	0%	0%	0%
Vitamin C	0%	0%	0%
Calcium	4%	4%	4%
Iron	10%	10%	8%



Simplified

- Seven or more nutrients are present in “insignificant amounts”

Nutrition Facts	
Serving Size 1 oz.	
Servings Per Container 10	
<hr/>	
Amount Per Serving	
Calories 10	Calories from Fat 0
<hr/>	
% Daily Value*	
Total Fat 0g	0%
Saturated Fat 0g	0%
Trans Fat 0g	
Cholesterol 0mg	0%
Sodium 0mg	0%
Total Carbohydrate 3g	1%
Dietary Fiber 0g	0%
Sugars 1g	
Protein 0g	
<hr/>	
Vitamin A 0%	• Vitamin C 4%
Calcium 0%	• Iron 0%
<hr/>	
*Percent Daily Values are based on a 2,000 calorie diet.	



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- **Ingredient statement**
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Ingredient Statement

- All ingredients used to fabricate a food must be listed in the ingredient statement by their common or usual name
- Except, if covered by an exemption

(21 CFR 101.4)



Ingredient Labeling Requirements

- Ingredients must be listed in descending order of predominance by weight
- Ingredients must be listed by common or usual name
- Multi-component ingredients must list ingredients in parenthesis
- Special rules apply to spices, flavorings and colorings



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Allergen Declaration

FALPCA

- Food Allergen Labeling and Consumer Protection Act
- Signed by President Bush: 8/2/04
- Labeling required effective: 1/1/06
- Requires label to disclose eight major allergens
- <http://www.cfsan.fda.gov/~dms/alrguid2.htm>
|



Eight Major Food Allergens

- Milk
- Egg
- Wheat
- Fish (e.g., bass, flounder, cod)
- Crustaceans (e.g. crab, shrimp)
- Soy
- Peanuts
- Tree Nuts (e.g., almonds, pecans, walnuts)



Fish, Crustaceans and Nuts

In the case of a tree nut, fish or Crustacean shellfish, use the name of the specific type of nut or species of fish or shellfish.

Correct	Incorrect
“Contains Almonds”	“Contains Tree Nuts”
“Contains Tuna”	“Contains Fish”
Contains Shrimp”	“Contains Crustacean”



Declaring Allergens

- Ingredient statement
 - **INGREDIENTS:** Oats, Raisins, Maple Syrup, Brown Sugar, Almonds, Sunflower Oil, Wheat Bran, Water, Salt.
- Allergen statement
 - Contains Wheat and Almonds.



Allergen Labeling

- Questionable
 - INGREDIENTS: LIQUID CORN OIL, PARTIALLY HYDROGENATED SOYBEAN OIL, WHEY, SALT VEGETABLE MONO- AND DIGLCLERIDES AND SOY LECITHIN...
 - CONTAINS: MILK
- Recognizable
 - INGREDIENTS: LIQUID CORN OIL, PARTIALLY HYDROGENATED SOYBEAN OIL, WHEY (MILK), SALT VEGETABLE MONO- AND DIGLCLERIDES AND SOY LECITHIN...
 - Or...
 - CONTAINS: MILK AND SOY



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- **Name and place of business of manufacturer, packer or distributor**



Name and place of business of manufacturer, packer or distributor

- Must appear with nutrition/ingredient labeling
- Must include:
 - Name of manufacturer, packer or distributor
 - Street address (if not in current directory)
 - City
 - State
 - Zip Code
- Telephone and website optional

(21 CFR 101.5)



Name and place of business of manufacturer, packer or distributor

- Principal place of business may be listed if the food is manufactured at a site other than the principal place of business
- Terms that may be used if the food is not manufactured by the company named on the label:
 - *“Manufactured for”*
 - *“Distributed by”*
 - *“Imported by”*



Claims

- Nutrient Content Claims
- Health Claims
- Other Claims

Nutrition Facts label is required when making claims.



Nutrient Content Claims

- Claim about the level of a nutrient in a food based on Reference Amount
- General requirements 21 CFR 101.13
- Authorized claims 21 CFR 101.54 - 101.67



Example of a Nutrient Content Claim

- High Fiber

Based on FDA Reference Amount (RA) food must contain 20 percent or more of the Daily Value. If the food is not “low fat,” you must declare the fat content per serving.



Health Claims

- Describes relationship between diet and health:
 - How a nutrient affects a disease or health-related condition
 - How a nutrient affects normal structure or function in humans



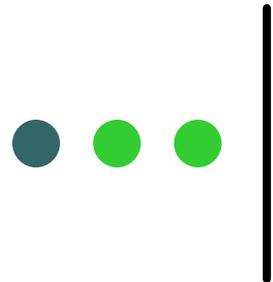
Example of a Health Claim

- *“Diets low in sodium may reduce the risk of high blood pressure, a disease associated with many factors”*



Other Claims

- Comparative
 - *“30% less fat than regular potato chips”*
- Implied
 - *“High in oat bran”*
- Structural
 - *“Calcium builds strong bones”*



Label Shopping

- What is included in the price?
 - Recipe analysis
 - Database vs. lab
 - Nutrition Facts panel
 - Ingredient statement
 - Allergen declaration
- What is the primary focus of the company?
- Is there a dietitian on staff?



on the menu

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