The following is a comprehensive presentation on the essential requirements for nutrition labeling on meat, poultry, and egg products. If at the end of the presentation, the reader has questions, he/she may contact the Labeling and Consumer Protection Staff or FSIS.labeling@fsis.usda.gov
Nutrition Labeling – FSIS Regulated Foods

Nutrition Facts

Requirements
Definitions
Serving sizes
Formats
Exemptions

Based upon the Nutrition Labeling and Education Act

June 15, 2006
USDA-FSIS
Nutrition Labeling and Education Act

- Requires what nutrients are listed on label, and how they are to be listed
- Defines nutrients
- Establishes reference amounts for determining serving sizes
- Adopts standardized format
- Requires nutrition labeling on most foods that contain more than insignificant amounts of nutrients
- FSIS is not covered by NLEA
### Nutrients Listed on Label

<table>
<thead>
<tr>
<th>Nutrient</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calories</td>
<td>Total carbohydrate</td>
</tr>
<tr>
<td>Calories from fat/calories from</td>
<td>Dietary fiber (soluble and insoluble fiber)</td>
</tr>
<tr>
<td>saturated fat</td>
<td></td>
</tr>
<tr>
<td>Total fat</td>
<td>Sugars (sugar alcohols)</td>
</tr>
<tr>
<td>Saturated fat, stearic acid,</td>
<td>Other Carbohydrates</td>
</tr>
<tr>
<td>polyunsaturated fat,</td>
<td></td>
</tr>
<tr>
<td>monounsaturated fat, trans fat</td>
<td></td>
</tr>
<tr>
<td>Cholesterol</td>
<td>Protein</td>
</tr>
<tr>
<td>Sodium</td>
<td>Vitamins and minerals (for which RDI’s have been established)</td>
</tr>
<tr>
<td>Potassium</td>
<td></td>
</tr>
</tbody>
</table>
Definitions

- **Total fat**: Total lipid fatty acids expressed as triglycerides [317.309(c)(2), 381.409(c)(2)]
- **Saturated fat**: The sum of all fatty acids containing no double bonds [317.309(c)(2)(i)]
- **Polyunsaturated fat**: *cis, cis*-methylene-interrupted polyunsaturated fatty acids [317.309(c)(2)(ii)]
- **Monounsaturated fat**: *cis*-monounsaturated fatty acids [317.309(c)(2)(iii)]
Definitions (contd.)

- **Total carbohydrate**: Amount calculated by subtraction of the sum of crude protein, total fat, moisture, and ash from the total weight of food [317.309(c)(6)]

- **Sugars**: The sum of all free mono- and disaccharides [317.309(c)(6)(ii)]

- **Other carbohydrate**: The difference between total carbohydrate and the sum of dietary fiber, sugars, and, when declared, sugar alcohol [317.309(c)(6)(iv)]
Daily Values (DV)

- Two sets of label reference values
  - reference daily intakes (RDIs)
  - daily reference values (DRVs)
- Applicable to persons 4 or more years of age
### Reference Daily Intakes (RDIs)

<table>
<thead>
<tr>
<th>Vitamin A</th>
<th>Riboflavin</th>
<th>Magnesium</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vitamin C</td>
<td>Niacin</td>
<td>Zinc</td>
</tr>
<tr>
<td>Calcium</td>
<td>Vitamin B₆</td>
<td>Selenium</td>
</tr>
<tr>
<td>Iron</td>
<td>Folate</td>
<td>Copper</td>
</tr>
<tr>
<td>Vitamin D</td>
<td>Vitamin B₁₂</td>
<td>Manganese</td>
</tr>
<tr>
<td>Vitamin E</td>
<td>Biotin</td>
<td>Chromium</td>
</tr>
<tr>
<td>Vitamin K</td>
<td>Pantothenic acid</td>
<td>Molybdenum</td>
</tr>
<tr>
<td>Thiamin</td>
<td>Phosphorus</td>
<td>Chloride</td>
</tr>
</tbody>
</table>
**Daily Reference Values (DRVs)**

<table>
<thead>
<tr>
<th>Nutrient</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total fat</td>
<td>65 grams*</td>
</tr>
<tr>
<td>Saturated fat</td>
<td>20 grams*</td>
</tr>
<tr>
<td>Cholesterol</td>
<td>300 milligrams</td>
</tr>
<tr>
<td>Total carbohydrate</td>
<td>300 grams*</td>
</tr>
<tr>
<td>Dietary fiber</td>
<td>25 grams*</td>
</tr>
<tr>
<td>Sodium</td>
<td>2400 milligrams</td>
</tr>
<tr>
<td>Potassium</td>
<td>3500 milligrams</td>
</tr>
<tr>
<td>Protein</td>
<td>50 grams*</td>
</tr>
</tbody>
</table>

*Based on a 2000 calorie daily diet*
Reference Amount Customarily Consumed (RACC)

- Established for 27 red meat categories
- 27 red meat (317.312) 26 poultry (381.412)
- Basis for labeled serving size
- Basis for nutrient “claims”
- Derived from food consumption data
- Developed jointly with FDA
- Petition process to modify RACC
What’s Needed?

- Serving size
  - household and metric measure
- Servings per container
- Mandatory nutrients
- Established format
Serving Size

- As packaged
- In household measures
  - cups, tablespoons, teaspoons: fl oz for beverages
  - pieces, slices, fractions, etc.
- ounces (appropriate visual unit is optional)
- Based on Reference Amount
Required: household and metric measure

- 1 cup (___g)
- 1 slice (___g)
- 1 dinner (___g)
- 2 oz (___g)

Options: ounce or fluid ounce

- 1 cup (___g/_fl oz)
- 1 slice (___g/_oz)
Examples of Acceptable Serving Size Designations

- Chili: 1 cup (___g)
- Meat pizza: 1/5 pie (___g)
- Sliced ham: 4 slices (___g)
- Gravy: 1/4 cup (___g)
Labeled Serving Size Designations

- Bulk products (e.g., soup, gravy):
  - household measure closest to reference amount
- Discrete large unit (e.g., pizza, quiche):
  - fraction closest to reference amount
Labeled Serving Size Designations

- Discrete individual units (e.g., sausage, sliced luncheon meat):
  - >50% but <200% of RACC = 1 unit
  - <50% RACC = number of units closest to reference amount
  - >50 but <67% = 1 or 2
Labeled Serving Size Designations

- If contents are <200% RACC
  - declare as one serving

- If RACC is >100 grams and contents are >150 but <200%
  - may be declared as 1 or 2
Label Serving Size Designations

- **Consumer friendly fractions**
  - \(1/2\)  \(1/3\)  \(1/4\)  \(1/5\)  \(1/6\) and fractions obtained dividing these by 2 or 3
  - \(1/7\) (not a consumer friendly fraction)
  - \(1/2 \div 2 = 1/4\)  \(1/4 \div 3 = 1/12\)
Label Serving Size Example

Soup

- RACC = 245 g - Label serving size is in cups
- measure 245 g (14.5 fl oz)
- the nearest 1/4 or 1/3 cup = 14 fl oz = 1-3/4 cup
- serving size: 1-3/4 cup (236 g/14 oz)
Label Serving Size Example

- Jerky
  - RACC = 30 g
  - if 2 g pieces: number of pieces closest to 30g
    - 15 pieces (30 g)
  - if large piece: size of chunk closest to 30 g
    - 1 piece (25 g)
  - If pieces vary by 100% (10g to 20g)
    - 1 oz (28 g)
Label Serving Size Example

- Pizza
  - RACC = 140 g
  - weight = 24 oz (1-1/2 lb)
    - 1.5 x 454 = 681 g
    - 681/140 = 4.86 pieces (or slices)
    - 4.86 = 5 which is a consumer friendly fraction
    - 681/5 = 136.2 g = 136 g
  - serving size: 1/5 pizza (136 g)
Compliance Criteria

- **Class I (Nutrients added in fortification or fabrication of food) (NONE for FSIS)**
  - Class I vitamin, protein, dietary fiber, or potassium = 100% of declared value
- **Class II (naturally occurring nutrients)**
  - Class II vitamin, mineral, protein, total carbohydrate, dietary fiber, other carbohydrate, polyunsaturated or monounsaturated fat, or potassium = at least 80% of declared value
  - Calories, total fat, saturated fat, cholesterol, sodium, and sugars = no more than 120% of declared value
Choosing a Format

- Amount of “space available for labeling”
- Amount of continuous vertical space
- Dual declaration - “As Packaged” & “As Prepared”
- Dual declaration - Combination with another food
- Aggregate declaration - Variety of foods
- Bilingual declaration - English & another language
- Food represented as food for children
Package has more than 40 square inches of space available for labeling

At least 3 continuous vertical inches
Side-by-Side

- Full vertical format with footnote on the side (information following vitamin and mineral listing)

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**Nutrition Facts**

<table>
<thead>
<tr>
<th>Serving Size 1 cup (228g)</th>
<th>Servings Per Container 2</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Amount Per Serving</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calories 260</td>
</tr>
<tr>
<td>% Daily Value*</td>
</tr>
<tr>
<td>Total Fat 13g</td>
</tr>
<tr>
<td>Saturated Fat 5g</td>
</tr>
<tr>
<td>Cholesterol 30 mg</td>
</tr>
<tr>
<td>Sodium 660 mg</td>
</tr>
<tr>
<td>Total Carbohydrate 31g</td>
</tr>
<tr>
<td>Dietary Fiber 0g</td>
</tr>
<tr>
<td>Sugars 0g</td>
</tr>
<tr>
<td>Protein 5g</td>
</tr>
<tr>
<td>Vitamin A 40%</td>
</tr>
<tr>
<td>Calcium 15%</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Calories:</th>
<th>2,000</th>
<th>2,500</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Fat</td>
<td>Less than 65g</td>
<td>80g</td>
</tr>
<tr>
<td>Sat. Fat</td>
<td>Less than 20g</td>
<td>25g</td>
</tr>
<tr>
<td>Cholesterol</td>
<td>Less than 300mg</td>
<td>300mg</td>
</tr>
<tr>
<td>Sodium</td>
<td>Less than 2400mg</td>
<td>2400mg</td>
</tr>
<tr>
<td>Total Carbohydrate</td>
<td>300g</td>
<td>375g</td>
</tr>
<tr>
<td>Dietary Fiber</td>
<td>25g</td>
<td>30g</td>
</tr>
</tbody>
</table>

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Calories per gram:
- Fat 9 • Carbohydrate 4 • Protein 4
- Insufficient vertical space (less than 3 inches)
- Footnote is required

### Nutrition Facts

<table>
<thead>
<tr>
<th>Amount/serving</th>
<th>% Daily Value*</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total Fat</strong></td>
<td>1.5g 2%</td>
</tr>
<tr>
<td>Saturated Fat</td>
<td>0.5g 3%</td>
</tr>
<tr>
<td>Trans Fat</td>
<td>0.5g 3%</td>
</tr>
<tr>
<td><strong>Cholesterol</strong></td>
<td>0mg 0%</td>
</tr>
<tr>
<td><strong>Sodium</strong></td>
<td>280mg 12%</td>
</tr>
<tr>
<td><strong>Vitamin A</strong></td>
<td>0%</td>
</tr>
<tr>
<td><strong>Vitamin C</strong></td>
<td>0%</td>
</tr>
<tr>
<td><strong>Thiamin</strong></td>
<td>15%</td>
</tr>
<tr>
<td><strong>Riboflavin</strong></td>
<td>8%</td>
</tr>
<tr>
<td><strong>Niacin</strong></td>
<td>10%</td>
</tr>
<tr>
<td><strong>Calcium</strong></td>
<td>6%</td>
</tr>
<tr>
<td><strong>Iron</strong></td>
<td>6%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Amount/serving</th>
<th>% Daily Value*</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total Carbohydrate</strong></td>
<td>26g 9%</td>
</tr>
<tr>
<td>Dietary Fiber</td>
<td>2g 8%</td>
</tr>
<tr>
<td>Sugars</td>
<td>1g 8%</td>
</tr>
<tr>
<td><strong>Protein</strong></td>
<td>4g 8%</td>
</tr>
</tbody>
</table>

---

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 300mg
- Sodium Less than 2,400mg 2,400mg
- Total Carbohydrate 300g 375g
- Dietary Fiber 25g 30g
Tabular
(Small and Intermediate-Sized Packages)

- 40 sq. in. or less available for labeling
- “Nutrition Facts” on any label panel
- May omit footnotes if another asterisk is placed at the bottom of panel with statement “Percent Daily Values are based on a 2,000 calorie diet”
Instead of showing “zeros”, allows nutrients present at insignificant levels to be listed as “Not a significant source of _________”

Listed in the order as they would in the regular format

“Insignificant is defined in 9 CFR 317.309(f)(1)
5 core nutrients must always be listed

When nutrients are added or voluntarily declared,

Must list “zero” level nutrients, by adding statement “Not a significant source of ______”, (Names of nutrients present at insignificant levels)
At least 7 of the designated nutrients are insignificant (calories, total fat, saturated fat, cholesterol, sodium, total carbohydrates, dietary fiber, sugars, protein, vitamin A, vitamin C, calcium, iron)

Five core nutrients must always appear
Simplified Tabular (FDA)

- May be used on any size package that qualifies for simplified format, when there is insufficient space for vertical simplified format.

- Simplified format 5 core nutrients listed; at least 7 insignificant nutrients; voluntarily added or listed nutrients.

Nutrition Facts

<table>
<thead>
<tr>
<th>Amount /serving</th>
<th>% Daily Value*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Fat</td>
<td>0g</td>
</tr>
<tr>
<td>Sodium</td>
<td>190mg</td>
</tr>
<tr>
<td>Total Carbohydrate</td>
<td>5g</td>
</tr>
<tr>
<td>Sugars</td>
<td>5g</td>
</tr>
<tr>
<td>Protein</td>
<td>0g</td>
</tr>
</tbody>
</table>

Serving Size 1 oz. (28g/about 12 slices)  
Servings Per Container 16  
Calories 20

* Percent Daily Values are based on a 2,000 calorie diet

Note – Trans fat content required
Omit “servings per container” and metric declaration of serving size

Must be description of container
Prepared Foods

- Vertical format with second column indicating “as consumed”
- Preparation according to package directions
- Quantitative amounts needed only for packaged food
- Omit second column if nutrient values are the same
Vertical format with second column indicating nutrients added by combination of foods

Quantitative amounts needed only for packaged food
Variety Pack

- Vertical format with additional columns indicating nutrients in the other foods
- Package contains two or more packaged foods
- Foods are eaten individually
- Packages used interchangeably
Tabular display does not fit on small & intermediate sized packages (must prove)

Package shape cannot accommodate the nutrition information placed in columns
- Separate nutrition facts panel may be used, or combined
- Second language following the English text
- Numeric characters identical in both languages need not be repeated
- All required nutrition information must be included in both languages
Food for Children
(Less than 2 years old)

- Certain nutrients cannot be listed
- No %DV listed for several nutrients
- Two column format - nutrient names & amounts by weight
- % Daily Value required for protein, vitamins, and minerals

<table>
<thead>
<tr>
<th>Nutrient</th>
<th>Amount Per Serving</th>
<th>% Daily Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Fat</td>
<td>0g</td>
<td></td>
</tr>
<tr>
<td>Sodium</td>
<td>10mg</td>
<td></td>
</tr>
<tr>
<td>Total Carbohydrate</td>
<td>27g</td>
<td></td>
</tr>
<tr>
<td>Dietary Fiber</td>
<td>4g</td>
<td></td>
</tr>
<tr>
<td>Sugars</td>
<td>18g</td>
<td></td>
</tr>
<tr>
<td>Protein</td>
<td>0g</td>
<td></td>
</tr>
<tr>
<td>Protein</td>
<td>0%</td>
<td>Vitamin A 6%</td>
</tr>
<tr>
<td>Vitamin C</td>
<td>45%</td>
<td>Calcium 2%</td>
</tr>
<tr>
<td>Iron</td>
<td>2%</td>
<td></td>
</tr>
</tbody>
</table>

Serving Size 1 jar (140g)
Food for Children
(2 years to 4 years old)

- Same as “Children under 2 years
- Calories from fat allowed
- Saturated fat allowed
- Cholesterol allowed
“Very Small”

- Less than 12 sq. in. available for labeling
- No nutrient content claims or other nutritional information on label
- Telephone number or address must be stated
- Type size - no smaller than 6pt (uppercase) or not less than 1/16 inch
Exemptions and Special Labeling

- Small businesses based on number of employees
- Low volume food products
- Products for further processing
- Products not for sale to consumers
- Products in small packages, less than ½ ounce
- Products custom slaughter
- Products for export
Exemptions and Special Labeling

- Following products prepared and served or sold at retail
- RTE products packaged or portioned at retail
- Multi-ingredient products processed at retail
Exemptions and Special Labeling - Small Business

- Firm with 500 or fewer employees
- Individual product produced at 100,000 pounds or less annually
- All forms of a product are counted toward the 100,000 pounds, e.g., pork sausage, bulk, patties, links, consumer product, HRI product, hot/mild if the same nutrient profile
Exemptions and Special Labeling - Low volume food products

- Applies only to Nutrition Facts panel
- No nutritional claims permitted
- Firms not required to file or file annually for exemption
Differences Between FSIS and FDA

- FSIS is not under NLEA
- Small business exemption & no approval/notification for the exemption
- No required “visual” for serving size declared in ounces
- Use of simplified format with one nutrient, other than core, declared as “0”
- FSIS Permits voluntary declaration of “stearic acid” indented under sat fat
- FSIS has no Class 1 nutrients since we do not permit fortification.