

Food Labeling

Introduction

In 1990, the Nutrition Labeling and Education Act (NLEA [Pub L No. 101-535]) was enacted, mandating numerous changes in food labeling. Before that time, nutrition labeling on food products was voluntary, except for those that contained added nutrients or carried nutrition claims. As Americans became more interested in nutrition, food label regulations were revised to provide nutrition information that would help consumers make more informed food choices to meet national dietary recommendations.

The US Food and Drug Administration (FDA) published final rules implementing the NLEA in 1993. The labels of most packaged foods were required to feature the new “Nutrition Facts” panel.¹ Labeling is voluntary for fresh fruits and vegetables and raw meat, poultry, and seafood. For these raw foods, nutrition information may be printed on the package or on pamphlets or posters displayed near the food in the supermarket. Food labeling is regulated by the FDA, with the exception of meat and poultry products, which are regulated by the US Department of Agriculture (USDA).

In 2016, the FDA published regulations revising the Nutrition Facts label format, updating the Daily Values, modifying requirements for determining serving sizes, and updating the mandatory declared nutrients taking into consideration nutrients of public health significance and information to help inform dietary choices. Compliance with the new regulations is enforced as of January 1, 2020. These regulations constitute the most significant changes to the Nutrition Facts label since it was developed in 1993.

Ingredient Labeling

Ingredient labeling is an important source of information for consumers about the composition of packaged foods. Both FDA and USDA regulations require that food products with 2 or more ingredients provide a listing of ingredients in descending order of their prominence by weight.²⁻⁴ There are exemptions for declaration of certain minor ingredients. Preservatives and color additives, when used, must be labeled as such, and certified color additives must be listed by name (eg, Blue 1 or Yellow 5).

In January 2006, food allergen labeling requirements of the Food Allergen Labeling and Consumer Protection Act (FALCP [Pub L No. 108-282]) became effective on FDA-regulated food and beverage products.⁵ The Act defined the 8 major food allergens (milk, egg, wheat, soy, peanuts, tree

nuts, fish, and crustacea) and requires 1 of 2 options for ingredient labeling of food products:

1. Immediately following the ingredient listing, the label states “Contains:” followed by the name of the food source from which the major food allergen is derived (eg, “Contains: milk, egg, walnuts.”). In the case of tree nuts, fish, or shellfish, each specific food in these classes that is an ingredient in the food must be declared (ie, salmon, cod, crab, pecan, hazelnut) rather than the group listing.
2. Within the ingredient listing, in parentheses following the common or usual name of the allergenic ingredient, the label presents the name of the food source from which the major food allergen is derived—for example, “...whey (milk)...”

For families with food allergies, it is essential to read the ingredient listings on food labels to determine the presence of the 8 major allergens. Because food and beverage manufacturers are continually making ingredient and recipe changes, food-allergic individuals and their caregivers should read the ingredient declaration and check the “Contains...” statement on the food label of every product purchased, each time it is purchased and consumed (or served). It is important to remember that the “Contains” allergen statement is optional. If a product label does not have a “Contains” allergen statement, consumers or their caregivers should read the list of ingredients and not assume that no allergens are present in the food. There are currently no regulations for “May Contain” allergen statements that also appear on many food labels. “May Contain” allergen statements are often used by manufacturers when controls and cleaning are not adequate to ensure that allergen containing foods or ingredients do not come into contact with foods that do not contain the allergen as part of the recipe.

THE NUTRITION FACTS PANEL

The Nutrition Facts panel includes information on the quantity of nutrients in a food as well as how much the nutrient contributes to the established Daily Value for that nutrient (Fig 50.II.1, Fig 50.II.2, and Fig 50.II.3). The nutrients and percent Daily Values required on the label were revised by FDA in 2016 and manufacturers are in the process of revising labels for their products (<https://www.fda.gov/regulatory-information/search-fda-guidance-documents/guidance-industry-food-labeling-guide>). Simplified or shortened formats may be used for products that contain insignificant

Fig 50.II.1.
Nutrition Label Format, Food for Children and Adults 4 Years and Older

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 240mg	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.	

amounts (an amount declarable as zero in labeling; generally less than 0.5 g) of certain mandatory label nutrients. Package size constraints may also dictate different formats.

The following provides more details about the various features of the Nutrition Facts panel for foods for adults and children 4 years and older (Fig 50.II.1):

1. **Serving size:** Serving sizes are determined based on FDA-defined reference amounts for different food categories. The reference amounts represent the amount of food typically eaten at one time, using data from national food consumption surveys. Because serving sizes are based

Fig 50.II.2.
Nutrition Label Format, Food for Children Younger Than 12 Months

Nutrition Facts	
4 servings per container	
Serving size	1 pack (70g)
Amount per serving	
Calories	25
% Daily Value	
Total Fat 0g	0%
Saturated Fat 0g	
Trans Fat 0g	
Cholesterol 0mg	
Sodium 74mg	
Total Carbohydrate 5g	5%
Dietary Fiber 1g	
Total Sugars 3g	
Includes 0g Added Sugars	
Protein 0g	0%
Vitamin D 0mcg	0%
Calcium 10mg	4%
Iron 1mg	10%
Potassium 230mg	35%

- on consumption, they do not always correspond to an amount of food that is recommended as part of a healthy balanced diet. The serving size typically includes both a common household measure and a metric amount (eg, 1 muffin [42 g]).
2. **Calories:** Total calories in one serving are identified. In the FDA revised Nutrition Facts format, the type size required for declaration of calories has increased substantially, which may benefit consumers in weight control and maintenance.
 3. **Nutrients:** Information about the content of nutrients most related to today's health concerns must be listed. For the new Nutrition Facts panel, in addition to calories, these nutrients include total fat, saturated fat, trans fat, cholesterol, sodium, total carbohydrate, dietary fiber, total sugars, added sugars, protein, vitamin D, calcium, iron, and potas-

Fig 50.II.3.
Nutrition Label Format, Food for Children 1 Through 3 Years

Nutrition Facts	
1 serving per container	
Serving size	1 container (85g)
Amount per serving	
Calories	70
% Daily Value*	
Total Fat 1.5g	4%
Saturated Fat 0.5g	5%
Trans Fat 0g	
Cholesterol 10mg	3%
Sodium 240mg	16%
Total Carbohydrate 11g	7%
Dietary Fiber 1g	7%
Total Sugars 1g	
Includes 1g Added Sugars	4%
Protein 3g	23%
Vitamin D 0mcg	0%
Calcium 40mg	6%
Iron 0.6mg	8%
Potassium 30mg	0%
* The % Daily Value (DV) tells you how much a nutrient in a serving of food contributes to a daily diet. 1,000 calories a day is used for general nutrition advice.	

sium. Mandatory declaration of vitamins A and C is no longer required, because the FDA determined them to no longer be of public health significance. These and other nutrients are listed voluntarily, unless they are added to the food, such as a fortified food, or a claim is made about the nutrient on the label or in labeling. If a food contains an insignificant amount of certain required nutrients, these may be omitted from the label or declared in a footnote as “not a significant source...” Nutrient amounts on the new labels are listed in both quantitative amounts (grams, milligrams, or micrograms) and for those nutrients with defined daily values, in percent Daily Value. When label space is limited, quantitative amounts of micronutrients may be omitted from the label (Fig 50.II.1).

4. **Daily Values:** The “% Daily Value” characterizes how the amount of a nutrient in a food or beverage contributes to a moderate, varied, and balanced diet. The term Daily Value is an umbrella term for 2 sets of reference values: Daily Reference Values (DRVs) and Recommended Daily Intakes (RDIs). The DRVs are set for total fat, saturated fat, cholesterol, total carbohydrate, dietary fiber, added sugars, sodium, and protein. They are established for adults and children 4 years or older on the basis of current nutrition recommendations. DRVs have been established for total fat, saturated fat, total carbohydrate, dietary fiber, and protein on the basis of a 2000-kcal reference diet; DRVs for cholesterol and sodium are not based on caloric intake. Actual dietary need for nutrients that are based on caloric intake may be higher or lower depending on the calorie needs of the individual (Fig 50.II.1). There is no defined Daily Value for trans fat or total sugars for any age group. Declaration of percent Daily Values for nutrients with a DRV is required except for protein.
5. **Added sugars:** With the revisions to the food label, the FDA now requires mandatory declaration of “added sugars” in the Nutrition Facts panel. Added sugars are included in the amount listed for total sugars. Added sugars include sugars (free, monosaccharides, and disaccharides) as well as sugars from syrups, honey, molasses, and concentrated fruit juices and vegetable juices. Juice that is not concentrated (single strength juice) and concentrated juice sold to consumers for the purposes of making single strength juice are not considered “added sugars.”

Current Dietary Reference Intakes are listed in Appendix E.

Nutrition Facts Panels for Infants Younger Than 12 Months and Children Between 1 and 3 Years of Age

Nutrition Facts panels on food labels on products specifically marketed to infants through 12 months of age and children 1 through 3 years of age are different from those for children and adults 4 years of age and older. Protein is listed in grams per serving and as a percentage of the Daily Value on foods for children between 1 and 3 years of age (Fig 50.II.3). Other than on labels for foods specifically marketed for infants and children 3 years or younger, percent Daily Value for protein is not required to be included on the food label unless the label includes a claim made for protein content. For children 1 through 3 years of age, DRVs have been established for total fat, saturated

fat, total carbohydrate, dietary fiber, and added sugars on the basis of a 1000-kcal diet (Fig 50.II.3). For infants, protein is a Reference Daily Intake and not a DRV. DRVs for infants through 12 months are only defined for total fat and total carbohydrate (Fig 50.II.2). The Daily Value used to calculate other nutrient percentages are calculated based on the RDI for each population (Table 50.II.1).

Serving sizes of foods for infants and children 1 through 3 years are based on government-defined reference amounts that have been determined on the basis of consumption data. These reference amounts are typically

Table 50.II.1.
Daily Values Used to Calculate % Daily Value for Nutrition Facts Panel^a

Food Component	Adults and Children 4 Years and Older	Children 1 Through 3 Years	Infants Through 12 Months
	Daily Reference Value		
Total fat	65 g ^b	39 g ^c	30 g
Saturated fat	20 g ^b	10 g ^c	
Cholesterol	300 mg	300 mg	
Sodium	2400 mg	1500 mg	
Total carbohydrate	300 g ^b	150 g ^c	95 g
Dietary fiber	25 g ^d	14 g ^c	
Protein	50 g ^b	13 g ^c	11 g ^e
Added sugars	50 g ^b	25 g ^c	
	Reference Daily Intake		
Potassium	4700 mg	3000 mg	700 mg
	Reference Daily Intake		
Potassium	4700 mg	3000 mg	700 mg

^a Based on a 2000-kcal diet for adults and children older than 4 years.
^b Daily value based on a 2000-kcal reference diet.
^c Based on a 1000 calorie diet.
^d Daily value based on 11.5 g/1000 kcal.
^e Protein is an RDI for infants.

smaller than those established for adults and children 4 years and older. Many young children consume the same foods as the rest of the family. Percent daily values on labels of foods not specifically marketed to young children, represent the contribution to an adult diet and not the contribution to the diet of an infant or toddler. This is particularly important for children younger than 3 years who consume foods not specifically marketed (or labeled) for young children. For example, a 15-g serving of crackers labeled with a daily value for sodium of 6% DV (150 mg of sodium) would actually contribute 10% DV for a child 1 through 3 years of age. Another example would be a ready-to-eat “all family” breakfast cereal with 6 g of added sugar per serving (12% of the DV), which would contribute 24% DV for a child 1 through 3 years for the same serving size.

Nutrition Claims

Nutrient content claims are those that characterize the amount of a nutrient in a food, using terms such as free, low, reduced, less, more, added, good source, and high. Using these terms in connection with a specific nutrient is strictly defined (Table 50.II.2).

Table 50.II.2.
Nutrition Claims

	Definition, per Serving
Calories	
Calorie free	<5 kcal
Low calorie	≤40 kcal
Reduced or fewer calories	At least 25% fewer calories ^a
Light or lite	One third fewer calories or 50% less fat ^a
Sugar	
Sugar free	<0.5 g
Reduced sugar or less sugar	At least 25% less sugars
No added sugar; without added sugar; no sugar added	No sugars added during processing or packaging, including ingredients that contain sugars, such as juice or dry fruit

Table 50.II.2. *Continued***Nutrition Claims**

	<i>Definition, per Serving</i>
Fat	
Fat free	<0.5 g
Low fat	≤3 g
Reduced or less fat	At least 25% less fat ^a
Light or lite	One third fewer calories or 50% less fat ^a
Saturated fat Saturated fat free Low saturated fat Reduced or less saturated fat	<0.5 g ≤1 g saturated fat and no more than 15% of calories from saturated fat At least 25% less saturated fat ^a
Cholesterol	
Cholesterol free	<2 mg cholesterol and <2 g fat
Low cholesterol	≤20 mg cholesterol and <2 g saturated fat
Reduced or less cholesterol	At least 25% less cholesterol ^a and <2 g saturated fat
Sodium	
Sodium free	<5 mg
Very low sodium	≤35 mg
Low sodium	≤140 mg
Reduced or less sodium	At least 25% less sodium ^a
Light in sodium	50% less sodium ^a
Fiber	
High fiber	≥5 g ^b
Good source of fiber	2.5 to 4.9 g
More or added fiber	At least 2.5 g more or added ^a

Continued

Table 50.II.2. *Continued*
Nutrition Claims

	<i>Definition, per Serving</i>
Other Claims	
High, rich in, excellent source of [name of nutrient]	≥20% of daily value ^a
Good source of, contains, provides [name of nutrient]	10% to 19% of daily value ^a
More, enriched, fortified, added [name of nutrient]	≥10% or more of daily value more or added ^a
Lean ^c	<10 g fat, (<4.5 g saturated fat, and <95 mg cholesterol)
Extra lean ^c	<5 g fat, <2 g saturated fat, and <95 mg cholesterol
Healthy	Meets standards for “low” fat and saturated fat; contains ≤480 mg sodium; ≤60 mg cholesterol; and contains at least 10% daily value for vitamin A, vitamin C, calcium, iron, protein, or fiber

^a Compared with a standard serving size of the traditional food.
^b Must also meet the definition for low fat, or the level of fat must appear next to the high-fiber claim.
^c On meat, poultry, seafood, and game meats.

Infant food labels may carry claims for vitamins and minerals. Claims about protein, total fat, saturated fat, cholesterol and sodium are not currently allowed on products intended for infants younger than 1 year.

Ingredient absence claims (eg, no preservatives) or ingredient presence claims (eg, made with apples) are permitted if they are truthful and not misleading. Claims that address a product’s taste such as unsweetened or unsalted are also permitted.

Juice Labeling

There are specific labeling requirements for juice. Since 1994, the percentage of juice must be specified on the food label if a beverage claims to contain fruit or vegetable juice.⁶ Label statements must be declared using the language, “Contains [x] percent [name of fruit or vegetable] juice,” “[x] percent

juice,” or a similar phrase (eg, Contains 50% apple juice”). If a beverage contains minor amounts of juice for flavoring, the product may use the term “flavor,” “flavored,” or “flavoring” with a fruit or vegetable name, as long as the product does not bear the term “juice” (other than in the ingredient declaration) and does not visually depict the fruit or vegetable from which the flavor is derived. If the beverage contains no juice, but appears to contain juice, the label must state, “Contains no [name of fruit or vegetable] juice,” or similar statements. These percentage juice statements appear near the top of the information panel of the beverage label.

Gluten-Free Labeling

In August 2013, the FDA published its final rule to define the term “gluten free” for voluntary use in labeling of foods. The rule allows manufacturers to label a food gluten free if the food does NOT contain any of the following^{7,8}:

1. An ingredient that is any type of wheat, rye, barely, or crossbreeds of these grains.
2. An ingredient derived from these grains and that has not been processed to remove gluten.
3. An ingredient derived from these grains and that has been processed to remove gluten, if it results in the food containing 20 or more parts per million (ppm) of gluten.
4. 20 ppm or more gluten.

“Gluten-free” is a voluntary claim that can be used at the manufacturer’s discretion provided the product complies with the defined regulatory requirements. There is no third-party certification required to make a gluten free claim and no FDA established iconography.

Health Claims

In addition to nutrient content claims, a food label may bear claims about the health benefits of the food or a component of the food. Products must meet strict nutrition requirements before they can carry these claims associating foods, nutrients, or substances with reduced risk of a disease or health related condition.

Health claims are based on significant scientific agreement and to date, the FDA has authorized 12 health claims.⁹ Although the wording on packages may differ, all health claims must include both a substance and the name of the disease or health related condition. The following summarizes the allowed claims that describe the link between reduced risk of disease or health related condition and a substance:

1. Calcium and osteoporosis: Physical activity and a calcium-rich diet may reduce the risk of osteoporosis, a condition in which the bones become soft or brittle.
2. Fat and cancer: A diet low in total fat may reduce the risk of some cancers.
3. Saturated fat and cholesterol and heart disease: A diet low in saturated fat and cholesterol may reduce the risk of heart disease.
4. Fiber-containing grain products, fruits, and vegetables, and cancer: A low-fat diet rich in fiber-containing grain products, fruits, and vegetables may reduce the risk of some cancers.
5. Fruits, vegetables, and grain products that contain fiber and heart disease: A diet low in saturated fat and cholesterol and rich in fruits, vegetables, and grain products that contain some types of dietary fiber may reduce the risk of heart disease.
6. Sodium and high blood pressure: A low-sodium diet may reduce the risk of high blood pressure, which is a risk factor for heart attacks and strokes.
7. Fruits and vegetables and some cancers: A low-fat diet rich in fruits and vegetables (foods that are low in fat and may contain dietary fiber, vitamin A, or vitamin C) may reduce the risk of some cancers.
8. Folic acid and neural tube birth defects: Women who consume 0.4 mg of folic acid daily may reduce their risk of giving birth to a child affected with a neural tube defect.
9. Noncariogenic carbohydrate sweeteners (sugar alcohols, sucralose) and dental caries: Frequent eating of foods high in sugars and starches as between-meal snacks can promote tooth decay. The [name of sugar alcohol, or sucralose] used to sweeten this food may reduce the risk of dental caries.
10. Soluble fiber from certain foods and risk of coronary heart disease: Soluble fiber from [name of food (eg, oat bran, psyllium, or barley fiber)], as part of a diet low in saturated fat and cholesterol, may reduce the risk of heart disease.
11. Soy protein and risk of coronary heart disease: Diets low in saturated fat and cholesterol that include 25 g of soy protein a day may reduce the risk of heart disease. One serving of [name of food] provides [x] g of soy protein.
12. Plant sterol or stanol esters and risk of coronary heart disease: Diets low in saturated fat and cholesterol that include 2 servings of foods

that provide a daily total of at least 1.3 g of vegetable oil sterol esters in 2 meals may reduce the risk of heart disease. A serving of [name of the food] supplies [x] g of vegetable oil sterol esters. Diets low in saturated fat and cholesterol that include 2 servings of foods that provide a daily total of at least 3.4 g of vegetable oil stanol esters in 2 meals may reduce the risk of heart disease. A serving of [name of the food] supplies [x] g of vegetable oil stanol esters.

To bear a health claim, each food must not exceed (unless exempted by FDA) specified levels of fat, saturated fat, cholesterol, and sodium.

Claims that describe the link between a substance and a disease that have not reached a level of significant scientific agreement are referred to as “qualified health claims.” The qualification of the claim reflects the level of scientific evidence supporting the disease-substance relationship. There are currently 17 qualified health claims that can be used without objection from FDA. Included in this category are claims for the benefits of nuts and heart disease; calcium and hypertension, pregnancy induced hypertension and preeclampsia; and tomatoes and cancer risk; and the recent qualified health claim for peanut introduction and reduce risk of developing peanut allergy. The complete list of qualified health claims is available on the FDA website.

In addition to the above health claims, the FDA Modernization Act of 1997 (FDAMA [Pub L No. 105-115]) established an additional route to establish health claims as well as nutrient content claims. FDAMA procedures allow a health claim to be made if it is based on a published authoritative statement, currently in effect, about the relationship between a nutrient and a disease or health-related condition to which the claim refers, issued by a scientific body of the US government with official responsibility for public health protection or research directly relating to human nutrition (eg, *Dietary Guidelines for Americans* from USDA and the Department of Health and Human Services; DRI reports from the National Academy of Sciences).

In July 1999, the first such health claim was established related to whole-grain foods and reduced risk of heart disease and cancer. The health claim states: Diets rich in whole-grain foods and other plant foods and low in total fat, saturated fat, and cholesterol, may help reduce the risk of heart disease and certain cancers. To qualify for the claim, a food must contain 51% or more whole-grain ingredients per serving, be low in fat, and meet other general criteria for health claims.

In October 2000, a second FDAMA health claim was established related to potassium-containing foods and reduced risk of high blood pressure

and stroke. The health claim states: Diets containing foods that are good sources of potassium and low in sodium may reduce the risk of high blood pressure and stroke. To qualify for the claim, a food must be a good source of potassium and low in sodium, total fat, saturated fat, and cholesterol (see “Nutrition Claims”).

In December 2003, a third FDAMA health claim was established related to whole-grain foods with moderate fat content and reduced risk of heart disease. The health claim states: Diets rich in whole-grain foods and other plant foods may help reduced the risk of heart disease. To qualify for the claim, a food must contain 51% or more grain ingredients as whole grain and meet other FDA-specified criteria. These foods do not have to be low fat (≤ 3 g per serving) but must contain ≤ 6 g of fat per serving and must meet other criteria for saturated fat, cholesterol, and sodium and have ≤ 0.5 g of trans fat per serving.

Health claims for nutrient deficiency diseases (eg, iron and reduced risk of iron deficiency anemia) are permitted and do not follow the same process for other health claims. Claims for reduced risk of nutrient deficiency diseases should include reference to the occurrence of the nutrient deficiency disease in the United States. Health claims are also permitted on exempt infant formulas and medical foods.

Structure/Function Claims

A food label may also include a structure/function claim that describes the role of a nutrient or dietary ingredient and its effect on the normal structure or function of the body. Structure/function claims can be used on FDA-regulated foods and dietary supplements. The FDA published final regulations defining the types of structure or function claims permitted on dietary supplement labels in February 2000.¹⁰ Structure/function claims may be based on well-known and established nutrition science or they may be based on modest levels of evidence. Companies are not required to notify FDA before making structure function claims on foods or presubmit labels for approval; however, for a structure/function claim made for a dietary supplement, notification must be submitted to the FDA no later than 30 days after marketing. The FDA can take action against a structure/function claim if the claim is false or misleading. For a comparison of structure/function claims and health claims, see Table 50.II.3.

Structure/function claims typically include the name of the nutrient or substance as well as the function or structure of the body affected.

Table 50.II.3.

Structure/Function Claims Versus Health Claims on Food Labels

<i>Structure/Function Claim Language</i>	<i>Health Claim Language</i>
Supports the immune system	Reduces risk of colds
Builds strong bones	Reduces risk of fractures
Helps promote softer stools	Reduces risk of chronic constipation
Promotes digestive health	Reduces risk of diverticulitis

Additional examples of structure/function claims that have been found on food label marketed for children are as follows:

- Vitamin C proven to help build a strong immune system
- Vitamin E and calcium to support healthy growth and development
- Prebiotics to support digestive health
- Calcium for strong bones
- Nucleotides, prebiotics, and carotenoids for immune support
- Reduced lactose formula for fussiness and gas
- Docosahexaenoic acid (DHA) to help support brain and eye development
- Good bacteria/probiotics to help strengthen an infant's digestive system
- Antioxidants vitamin C to help maintain cell integrity
- Iron to help support learning ability

Structure/function claims have been used frequently on infant formula labels, and in 2016, the FDA issued a proposed draft of voluntary guidance for industry for substantiation of structure/function claims made in infant formula labels and labeling. This was published in the *Federal Register* but remains in the draft stage.¹¹

Package Dating

Package dating on labels provides a measure of a product's freshness. Although the FDA does not regulate most package dating, FDA food labeling law and regulations require that such information is truthful and not misleading. *Open dates* are calendar dates that are imprinted or stamped on

a food label that indicate to the consumer the freshness and safety of the product. Open dates are stated alphanumerically (eg, October 15) or numerically (eg, 10–15 or 1015). An open date might be featured as:

1. Pull or “sell by” date: This is the last day that the manufacturer recommends sale of the product. Usually, the date allows for additional storage and use time at home.
2. Freshness or quality assurance date: This date suggests how long the manufacturer believes the food will remain at peak quality. The label might read, “Best if used by October 2007.” However, the product may still be used safely after this date. A “freshness date” has a different meaning than the word “fresh” printed on the label, which often suggests that a food is raw or unprocessed.
3. Pack date: The date when the food was packaged or processed.
4. Expiration date: The last day the product should be eaten. State governments regulate these dates for perishable foods, such as milk and eggs. The FDA requires expiration dates on infant formula.

Front-of-Package Nutrition Rating Systems and Symbols

Over the past 40 years, there has been substantial growth in the number of front-of-package (FOP) symbols and rating systems designed to summarize nutritional profiles of food products for the consumer. In response to this, Congress in 2009 directed the Centers for Disease Control and Prevention (CDC) to undertake a study with the Institute of Medicine (IOM) to examine and provide recommendations regarding FOP nutrition rating systems and symbols.¹² In 2010, Congress directed the CDC to continue the study, for which the FDA and later the USDA Center of Nutrition Policy and Promotion provided support.¹³ This has resulted in 2 reports from the IOM on FOP labeling.^{12,13} The 2010 IOM report reviewed 20 representative systems that had been introduced into the marketplace.¹² They had been developed by the food industry, governments, and nonprofit organizations to encourage healthier food choices and purchase decisions.¹³

As many consumers have difficulty in evaluating product healthfulness on the Nutrition Facts panel, a well-designed and simplified FOP labeling system would more likely be used by consumers unable to understand or are less motivated to use the Nutrition Facts panel, given time constraints at the point of purchase. Therefore, the 2012 IOM report,¹³ which extended the 2010 IOM report¹² on FOP labeling systems, recommended that the FDA develop, test, and implement a single, standardized FOP system to appear

on all food and beverage products, consistent with 2010 *Dietary Guidelines for Americans*. Implementation of this system will require further modifications and/or exemptions to current FDA regulations and development of both new regulations and food group specifications for establishing evaluative criteria.

In the meantime, a voluntary FOP labeling program, “Facts Up Front,” was adopted by the Grocery Manufacturers Association and the Food Marketing Institute in 2011. It includes 4 basic icons on the principal display panel that provide information on calories, saturated fat, sodium, and total sugar content.¹⁴ In a letter to the Grocery Manufacturers Association and the Food Marketing Institute in December 2011, the FDA viewed the “Facts Up Front” and basic icons as nutrient content claims subject to all the requirements of the Agency’s regulations.¹⁵ However, the FDA recognized that the standardized, nonselective presentation of the 4 basic icons on a company’s product line would alleviate some of its concerns regarding the potential for product labeling to mislead consumers by presenting only the “good news” about nutrient content of the front of the package (selecting only the favorable nutrient information for the label). The FDA also acknowledged in its letter that, if the “Facts Up Front” program were uniformly adopted by the food industry, it may contribute to the FDA’s public health goals by fostering public awareness of the nutrient content of foods in the marketplace and the ability to make healthy food choices. The FDA agreed to work with industry to evaluate the “Facts Up Front” system to ensure that it promotes public health and is useful to consumers.¹⁵ However, it is important to point out that the Facts Up Front program does not specifically apply to infants and young children.

Conclusion

Food labeling helps consumers and parents make food choices to meet dietary recommendations by providing specific information about the content of certain nutrients in the product. This information currently contained in the recently revised nutrition facts panel on the back of the package may be used to compare foods, to choose foods that help provide a balance of recommended nutrients, and to build meals and a total diet that is moderate, varied, and balanced. In addition, ingredient declarations are useful for consumers to make food choices based on health, or food allergy concerns. The new Nutrition Facts panel which is currently appearing in the marketplace, also helps consumers and caregivers make more informed

choices about the foods they select, while informing them about elements of public health significance.

Food labels may contain both health claims and structure/function claims, but these are not without controversy and have been reviewed here. There are no FDA guidelines for FOP nutrition rating systems and symbols, and there is currently no timetable for instituting a national FOP labeling system as recommended by the IOM.

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