

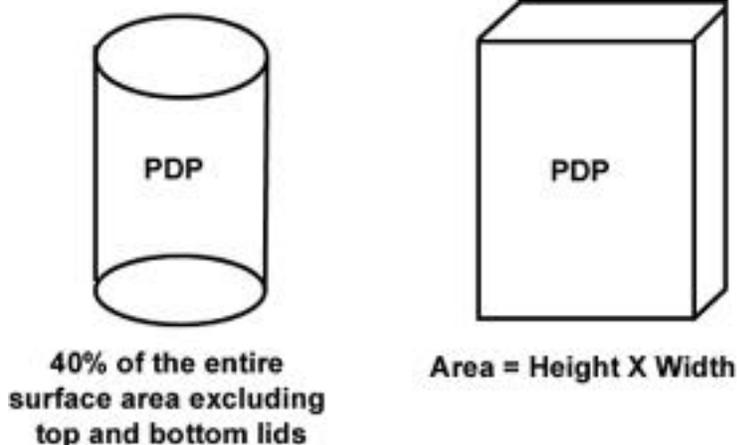
INTRODUCTION TO FOOD LABELING

Labels are found on varying shapes and sizes of food containers. To aid the consumer, there are requirements that specify the location of required information. Labels must be designed to meet these requirements.

The area that is most likely to be "viewed" is the **principle display panel** (PDP). The size of the panel is the entire viewed area, not just the size of the label. For a rectangular package, it is the side's height times its width. For a cylinder, it is 40% of the entire surface area excluding top and bottom lids. For irregular packages, it is the entire surface area that is viewed by the consumer. Areas to the left, right, top, bottom or rear are called "side panels".

All required information on the label must be **legible**. It cannot be concealed in any manner such that it is unlikely to be read by the consumer. The size of the lettering unless otherwise stated must be at least 1/16 inch. [There are exceptions for small, single-service packages in the Code of Federal Regulations (CFR)]. Each word must be spelled out completely unless there is a recognized abbreviation in the CFR. All required information must be in **English**. Accurately translated information in other languages is optional.

Labels must be made of materials that do not contaminate the food. If there is a likelihood that the paper, ink or adhesive of a label will touch the product or penetrate the packaging, these materials must be **food safe**.



BASIC LABELING CONCEPTS

1) NAME (on the PDP): All foods must be named. This name is either the common name of the food or a fanciful name. If a fanciful name is used, it must be accompanied by a descriptive phrase at least one-half the type size of the product name. The name has to be truthful. If it is flavored product, it must state that it is a "Cherry Flavored" pie. If the flavor is not derived from cherries then it must state that it is "Artificial Cherry Flavored Pie". The term wild can refer to a type of flavor such as wild cherry. If however, it is used to describe a food such as wild rice, the food must have been gathered from uncultivated and undomesticated sources. Products with fanciful names must be clearly described by the accompanying phrase. "Mountain Delight" is a fanciful name and would not be acceptable by itself. Describing it as an "artificial flavored strawberry candy" might clearly and properly "name" it. The order of the wording is significant and indicates ingredient predominance by weight. While "Orange Pineapple Juice" must have the same or greater weight orange juice than pineapple juice, "Cherry Flavored Apple Juice" does not indicate more cherry than apple juice. It only indicates that the predominant flavor is cherry.

There are some foods that have standard names and identities (i.e., unsweetened orange juice, mayonnaise or ketchup) and these foods must meet the quality and ingredient standards set or they are misbranded, adulterated, and falsely advertised. They must be labeled as specified in the CFR.

Imitation is used to describe foods that simulate a particular food in flavor, color, function and/or texture. Imitation foods may have been made with synthetic ingredients or do not meet the standard set in CFR for the food imitated (e.g., imitation vanilla contains only synthetic flavors and imitation mayonnaise may have less oil and eggs than the standard). The word "imitation" must be in type of uniform size and prominence, and immediately thereafter, the name of the food imitated.

2) INGREDIENTS (on PDP or next right panel): Prepackaged foods that are fabricated from two or more ingredients must declare those ingredients on the food's label. For foods that are sold from bulk, ingredients must be stated on a sign or on the food's original container. The ingredients must be plainly visible to the consumer. In both cases the ingredients must be legible and be correctly listed in **descending order of their predominance by weight**. Ingredients must be listed by their common names. Ingredients that are themselves fabricated foods must be broken down into their respective ingredients. Certain ingredients require special declarations:

a) **Fats and Oils:** These ingredients must state their source and their hydrogenation state, if any. "Vegetable Oil" is unsatisfactory. "Hydrogenated vegetable oil (soybean, cotton seed, and palm oils)" would be acceptable. The use of "and/or" is acceptable for fats and oils if one or more may be present in a product.

b) **Preservatives:** These food additives must declare their function in the ingredients statement [e.g., sodium benzoate (added as a preservative).] The specific amount does not have to be declared. The amount used is governed by food additive limits and the good manufacturing practices.

c) **Colors:** Colors are to be declared as "artificial colors". Stating "certified food colors" is incorrect. **FD & C Yellow No. 5 & 6** must be stated separately to alert the consumer.

d) **Flavors:** There are artificial and natural flavors. Natural flavors are derived from the food being represented (e.g., vanilla extract). Artificial flavors are those flavors that are made to imitate the real flavors such as imitation vanilla flavor or vanillin. The use

of flavors must be stated properly. The stated order depends on predominance by weight if both artificial and natural flavors are used. The specific flavor need not be declared.

e) Spices: Food ingredients that can be called spices are specifically listed in the Code of Federal Regulations. If the ingredient is not listed as a spice (e.g., salt and monosodium glutamate), it must be declared separately in proper place. Spices can be collectively stated as spices if the food is not primarily a spice or blend of spices.

f) Leavening: Ingredients that are used to make "gas" to expand a product before or during baking must be specifically listed on the label.

g) Enrichment: Ingredients that have been added to a food or its ingredients must declare the enrichment additives [e.g. Enriched flour (wheat flour, iron, thiamine, riboflavin, niacin)].

h) Sugars: There are many types and forms of sugar. Sucrose, glucose, fructose, lactose, high fructose corn syrup, turbinado sugar, molasses, honey, and maple syrup are all forms or concentrated sources of sugar. Currently, these can be listed separately. This gives an impression that sugar is not the main ingredient in some foods. Foods that have been sweetened with these ingredients cannot be called sugar free or claim to have no sugar added. Foods that are sweetened with fruit or other sugar containing ingredients cannot be called sugar free or low in sugar.

i) Water: Water is an ingredient in most foods. It does not have to be declared if it is removed during processing (e.g., bread baking, noodles by drying, etc.). Water that is described as spring, purified, natural, distilled, etc. must be of the same nature as declared (e.g., tap water is not spring water, water purified by osmosis is not distilled water, etc.).

j) Processing Aids: These are food additives used in ingredients of finished products. They are only found in insignificant amounts and do not have any effect on the finished product. They

were essential to an ingredient or a manufacturing step. For example, a preservative in an artificial flavor that keeps the flavor from spoiling until it is used, is a processing aid. In the final product this preservative is so diluted that it does not preserve and is insignificant. Processing aids do not have to be declared in the ingredient statement. Status as a processing aid requires laboratory confirmation of quantity and determination of lack of additive function.

3) RESPONSIBLE FIRM: There must be a firm identified on the label as a responsible party. The name, city, state and zip code must be declared. If that firm is not in the current telephone guide for that city, the street address must also be listed. Only the actual product manufacturer can claim to have made the product. Other firms must be stated as "Distributed By", "Packed For", "Made For", etc. A firm may list its headquarters as the responsible party. The listing of mail/e-mail addresses and phone numbers is optional.

4) QUANTITY (On PDP): Every packaged food must declare its count, net weight or volume. The guidelines for quantity declarations are in the Fair Packaging and Labeling Act (CFR). Similar products must declare their quantities in identical units of measurement.

Net weight declarations must be in ounces and pounds. Products from one to four pounds must declare the net weight in ounces and then again in pounds (dual declaration). Under one pound must be in ounces. Over four pounds must be in pounds. [Decimal declarations (e.g. "Net Wt. 1.5 lbs.") may only be used on automated weighing equipment that prints the label.]

Net Wt. 3 oz.

Net Wt. 22 ounces (1 pound 6 ounces)

Net Wt. 6 lbs. 3 oz.

Volume declarations must be stated in fluid ounces, pints, quarts and gallons. Containers under one pint must be in fluid ounces. Containers from one pint to one gallon must be a dual declaration. Containers more than one gallon must be in gallons.

12 fl. oz.
 Net contents 1.5 fluid ounces
 34 fl. oz. (1qt. 2 fl. oz.)
 20 fl. oz. (1 pt. 4 fl. oz.)
 4 1/2 gallons net

The use of net and net contents is discretionary. The declaration of fluid or fl. with ounces is mandatory.

Using counts with some foods that are of uniform size and shape is acceptable, but it is preferable to state the net weight and use the count as additional information:

Ten medium tortillas ... Net weight 14 ounces
 Glazed Doughnuts ... Net wt. 16 oz. (1 lb.) Twelve count

Some foods packed in liquids must be declared in drained weight. This means that the weight of the food is declared without any syrup or broth. If the label does not state drained weight, the weight given is the weight of the entire contents of the container. There are some foods that have standards of fill and these must be met. There are limitations on slack filling and laws against deceptive packaging.

The size and location of the quantity statement must meet current requirements. The size of the lettering is based on the size of the principal display panel. There must be an open area around the declaration equal to the height of the letters (top and bottom) and twice the letter width (both sides). This statement must be in the lower 30% of the label.

PDP in Square Inches	Minimum Height in Inches (for printing)	Minimum Height in Inches (blown or molded)
5 or less	1/16	1/8
over 5 to 25	1/8	3/16
over 25 to 100	3/16	1/4
over 100 to 400	1/4	5/16
over 400	1/2	9/16

The addition of contents information in metric units is voluntary. If grams are to be added to the statement they must follow the mandatory information:

Net Wt. 16 oz. (1 lb.) 455 grams

(Alcoholic beverages such as wine and liquor must be declared in metric units while beer and wine coolers must be declared in fluid ounces.)

5) WARNINGS AND MANDATORY INFORMATION: Many foods require information or must support statements with facts about advertising claims.

(a) Foods that are subject to the growth of pathogenic bacteria at normal temperatures and must be stored at or below 41 degrees Fahrenheit, require the statement "**Perishable - Keep Refrigerated**" on the PDP.

(b) Any juice or beverage containing juice (fruit or vegetable) that has not been pasteurized or treated in another way capable of preventing, reducing or eliminating harmful bacteria by at least 100,000 fold must now bear a warning statement. The warning statement must read:

"WARNING: This product has not been pasteurized and, therefore, may contain harmful bacteria that can cause serious illness in children, the elderly, and persons with weakened immune systems."

This regulation applies to packaged juice products only, not untreated juices served in restaurants, delis, grocery stores, etc. that are not prepackaged and are intended for immediate consumption.

(c) Foods that contain alcohol in amounts exceeding 1/2 of one percent by volume must declare that they contain in excess of 1/2% alcohol on the PDP on the same panel as the ingredient statement.

(d) Foods that state they are for special dietary use, are enriched or claim to be meals within themselves must have a nutritional panel (on PDP, panel to right of PDP or a panel serving as an information panel). The format for this panel is in 21 CFR (Part 101).

(e) Foods that contain the colors FD&C Yellow No. 5 and/or 6 must specifically declare these colors in the food's ingredient statement.

(f) Foods that contain saccharin, certain levels of mannitol and/or sorbitol, aspartame and other artificial sweeteners have specific warnings in the CFR.

(g) Foods that claim to be significant sources of required and important nutrients, must declare the amount of that nutrient per serving. No claim can be made for a food as a significant source (e.g. high in vitamin C, rich in protein, etc.) if that nutrient has an established U.S. Recommended Daily Allowance (U.S. RDA) and the amount per serving is less than 10% of the U.S. RDA.

(h) Foods that claim to be no sugar added, sugar free, or low calorie, must give warnings to diabetics and declare their caloric content per serving. Sugar Free or No Sugar Added does not mean that the food has no calories.

(i) If the food claims to be reduced then it must be lower by one third than the regular or comparable product.

(j) If the food claims a sodium quality then it must be labeled appropriately. Reduced sodium foods must be at least 75% lower than the usual form of the product. Sodium free or salt free must contain less than 5 mg of sodium per serving. Very low sodium means that there is less than 35 mg per serving. Low sodium means that there is less than 140 mg per serving. Statements such as no salt added means that no additional table salt was added during manufacture. In all cases, the label must declare the number of milligrams of sodium per a specified serving size on the PDP or on the panel with the nutritional information.

(k) If ground beef is advertised or labeled with comparative leanness claims, then labels or display signs must state relative fat contents. These claims are specifically limited to (or the proposed United States Department of Agriculture regulations. Refer to the policy memorandum on "Fat Content Labeling and Advertising of Ground Beef and Hamburger Sold at Retail Food Facilities):

Does not exceed thirty percent fat

Does not exceed twenty-two percent fat

Does not exceed fifteen percent fat

Ground Chuck labels must state "Does not exceed 26% fat". Ground chuck, ground round and other primal source meats can only be made from those primal cuts.

(l) Labels for cuts of meat must state the species (e.g., beef, pork, lamb, veal, etc.) the primal cut (e.g., loin, round, shoulder, etc.) and the retail cut. A label on the package or sign in the meat display could read beef loin, T - bone steak, or pork tenderloin. The primal cut does not have to be restated if it is part of the retail name or if the meat is stew meat or cube steak (see the Sherman Law).

(m) Labels that have cholesterol claims must state the amount of cholesterol in milligrams per serving size.

(n) Foods that claim to be organic, wild or organically, ecologically, naturally, or biologically grown must comply with the growing, manufacturing, record keeping and labeling requirements the California Organic Foods Act of 1990, e.g., "Organically grown and processed in accordance with the California Organic Foods Act of 1990."

(o) Date Codes: Some foods require that a pull date be on the label. **It is mandatory for infant formulas and dairy products.** It may also be mandatory for fresh sandwiches depending on county ordinances.

Product dating is highly recommended for foods that have short shelf lives.

(o) Lot Coding: Lot coding is required for any food that is subject to the canning laws of the state. These are foods that require acidification or thermal processing to prevent botulism. Lot coding is also required for bottled water. Lot coding is highly recommended for traceability.

6) OPTIONAL LABEL DECLARATIONS: There are many optional statements that can be made on a label. These include serving suggestions, storage and thawing information, directions for use, product pictures and representations. In all cases, these representations must be true and not misleading.

a) Directions: Any directions, such as for storage (e.g., keep refrigerated after opening) or thawing (e.g., thaw in a refrigerator for three to four hours before serving) must not be unsafe or cause the growth of pathogenic bacteria.

b) Universal Product Code (UPC): The UPC is the bar code found on most food packages. It is a voluntary code used for inventory and price determinations. It is **not** the product code or lot number. UPC numbers are obtained from the UPC Council in Dayton, Ohio (513) 435-3870.

Reprinted in part from the State of California Health and Welfare Agency, Department of Health Services, Food and Drug-Public Health Message (FDBELS-242E-88).

Revised June 1, 2000/JLW

County of Orange, Environmental Health