A select group of packages with more than 40 square inches of labeling space is allowed a format exception, too. These are packages with insufficient vertical space (about 3 inches) to accommodate the required information. Some examples are bread bags, pie boxes, and bags of frozen vegetables. On these packages, the "Nutrition Facts" panel may appear, in tabular format, with the footnote information appearing to the far right.

For larger packages in which there is not sufficient space on the principal display panel or the information panel (the panel to the right of the principal display), FDA allows nutrition information to appear on any label panel that is readily seen by consumers. This lessens the chances of overcrowding of information and encourages manufacturers to provide the greatest amount of nutrition information possible.

For products that require additional preparation before eating, such as dry cake mixes and dry pasta dinners, or that are usually eaten with one or more additional foods, such as breakfast cereals with milk, FDA encourages manufacturers to provide voluntarily a second column of nutrition information. This is known as dual declaration.

With this variation, the first column, which is mandatory, contains nutrition information for the food as purchased. The second gives information about the food as prepared and eaten.

Still another variation is the aggregate display. This is allowed on labels of variety-pack food items, such as ready-to-eat cereals and assorted flavors of individual ice cream cups. With this display, the quantitative amount and % Daily Value for each nutrient are listed in separate columns under the name of each food.
g. **Serving sizes**

The serving size remains the basis for reporting each food's nutrient content. However, unlike in the past, when the serving size was up to the discretion of the food manufacturer, serving sizes now are more uniform and reflect the amounts people actually eat. They also must be expressed in both common household and metric measures.

FDA allows as common household measures: the cup, tablespoon, teaspoon, piece, slice, fraction (such as "1/4 pizza"), and common household containers used to package food products (such as a jar or tray). Ounces may be used, but only if a common household unit is not applicable and an appropriate visual unit is given--for example, 1 oz (28g/about 1/2 pickle).

Grams (g) and milliliters (mL) are the metric units that are used in serving size statements.

NLEA defines serving size as the amount of food customarily eaten at one time. The serving sizes that appear on food labels are based on FDA-established lists of "Reference Amounts Customarily Consumed Per Eating Occasion."

These reference amounts, which are part of the regulations, are broken down into 139 FDA-regulated food product categories, including 11 groups of foods specially formulated or processed for infants or children under 4. They list the amounts of food customarily consumed per eating occasion for each category, based primarily on national food consumption surveys. FDA's list also gives the suggested label statement for serving size declaration. For example, the category "breads (excluding sweet quick type), rolls" has a reference amount of 50 g, and
the appropriate label statement for sliced bread or roll is "___ piece(s) (___ g)" or, for unsliced bread, "2 oz (56 g/___ inch slice)."

The serving size of products that come in discrete units, such as cookies, candy bars, and sliced products, is the number of whole units that most closely approximates the reference amount. Cookies are an example. Under the "bakery products" category, cookies have a reference amount of 30 g. The household measure closest to that amount is the number of cookies that comes closest to weighing 30 g. Thus, the serving size on the label of a package of cookies in which each cookie weighs 13 g would read "2 cookies (26 g)."

If one unit weighs more than 50 percent but less than 200 percent of the reference amount, the serving size is one unit. For example, the reference amount for bread is 50 g; therefore, the label of a loaf of bread in which each slice weighs more than 25 g would state a serving size of one slice.

Certain rules apply to food products that are packaged and sold individually. If such an individual package is less than 200 percent of the applicable reference amount, the item qualifies as one serving. Thus, a 360-mL (12-fluid-ounce) can of soda is one serving, since the reference amount for carbonated beverages is 240 mL (8 ounces).

However, if the product has a reference amount of 100 g or 100 mL or more and the package contains more than 150 percent but less than 200 percent of the reference amount, manufacturers have the option of deciding whether the product can be one or two servings.

An example is a 15-ounce (420 g) can of soup. The serving size reference amount for soup is 245 g. Therefore, the
manufacturer has the option to declare the can of soup as one or two servings.

h. **Daily values--DRV}s**

The new label reference value, Daily Value, comprises two sets of dietary standards: Daily Reference Values (DRV}s) and Reference Daily Intakes (RDIs). Only the Daily Value term appears on the label, though, to make label reading less confusing. DRV}s have been established for macronutrients that are sources of energy: fat, saturated fat, total carbohydrate (including fiber), and protein; and for cholesterol, sodium and potassium, which do not contribute calories.

DRV}s for the energy-producing nutrients are based on the number of calories consumed per day. A daily intake of 2,000 calories has been established as the reference. This level was chosen, in part, because it approximates the caloric requirements for postmenopausal women. This group has the highest risk for excessive intake of calories and fat.

DRV}s for the energy-producing nutrients are calculated as follows:

- fat based on 30 percent of calories
- saturated fat based on 10 percent of calories
- carbohydrate based on 60 percent of calories
- protein based on 10 percent of calories. (The DRV for protein applies only to adults and children over 4. RDIs for protein for special groups have been established.)
- fiber based on 11.5 g of fiber per 1,000 calories.

Because of current public health recommendations, DRV}s for some nutrients represent the uppermost limit that is considered
desirable. The DRV for total fat, saturated fat, cholesterol, and sodium are:

- total fat: less than 65 g
- saturated fat: less than 20 g
- cholesterol: less than 300 mg
- sodium: less than 2,400 mg

i. **Daily values—RDIs**

"Reference Daily Intake" replaces the term "U.S. RDA," which was introduced in 1973 as a label reference value for vitamins, minerals and protein in voluntary nutrition labeling. The name change was sought because of confusion that existed over "U.S. RDAs," the values determined by FDA and used on food labels, and "RDAs" (Recommended Dietary Allowances), the values determined by the National Academy of Sciences for various population groups and used by FDA to figure the U.S. RDAs.

However, the values for the new RDIs remain the same as the old U.S. RDAs for the time being.

j. **Nutrient content claims**

The regulations also spell out what terms may be used to describe the level of a nutrient in a food and how they can be used. These are the core terms:

- **Free.** This term means that a product contains no amount of, or only trivial or "physiologically inconsequential" amounts of, one or more of these components: fat, saturated fat, cholesterol, sodium, sugars, and calories. For example, "calorie-free" means fewer than 5 calories per serving, and "sugar-
free" and "fat-free" both mean less than 0.5 g per serving. Synonyms for "free" include "without," "no" and "zero." A synonym for fat-free milk is "skim".

- **Low.** This term can be used on foods that can be eaten frequently without exceeding dietary guidelines for one or more of these components: fat, saturated fat, cholesterol, sodium, and calories. Thus, descriptors are defined as follows:
  - low-fat: 3 g or less per serving
  - low-saturated fat: 1 g or less per serving
  - low-sodium: 140 mg or less per serving
  - very low sodium: 35 mg or less per serving
  - low-cholesterol: 20 mg or less and 2 g or less of saturated fat per serving
  - low-calorie: 40 calories or less per serving.
Synonyms for low include "little," "few," "low source of," and "contains a small amount of."

- **Lean and extra lean.** These terms can be used to describe the fat content of meat, poultry, seafood, and game meats.
  - lean: less than 10 g fat, 4.5 g or less saturated fat, and less than 95 mg cholesterol per serving and per 100 g.
  - extra lean: less than 5 g fat, less than 2 g saturated fat, and less than 95 mg cholesterol per serving and per 100 g.

- **High.** This term can be used if the food contains 20 percent or more of the Daily Value for a particular nutrient in a serving.
• **Good source.** This term means that one serving of a food contains 10 to 19 percent of the Daily Value for a particular nutrient.

• **Reduced.** This term means that a nutritionally altered product contains at least 25 percent less of a nutrient or of calories than the regular, or reference, product. However, a reduced claim can't be made on a product if its reference food already meets the requirement for a "low" claim.

• **Less.** This term means that a food, whether altered or not, contains 25 percent less of a nutrient or of calories than the reference food. For example, pretzels that have 25 percent less fat than potato chips could carry a "less" claim. "Fewer" is an acceptable synonym.

• **Light.** This descriptor can mean two things: First, that a nutritionally altered product contains one-third fewer calories or half the fat of the reference food. If the food derives 50 percent or more of its calories from fat, the reduction must be 50 percent of the fat. Second, that the sodium content of a low-calorie, low-fat food has been reduced by 50 percent. In addition, "light in sodium" may be used on food in which the sodium content has been reduced by at least 50 percent. The term "light" still can be used to describe such properties as texture and color, as long as the label explains the intent—for example, "light brown sugar" and "light and fluffy."

• **More.** This term means that a serving of food, whether altered or not, contains a nutrient that is at least 10 percent of the Daily Value more than the
reference food. The 10 percent of Daily Value also applies to "fortified," "enriched" and "added" "extra and plus" claims, but in those cases, the food must be altered. Alternative spelling of these descriptive terms and their synonyms is allowed—for example, "hi" and "lo"—as long as the alternatives are not misleading.

- **Healthy.** A "healthy" food must be low in fat and saturated fat and contain limited amounts of cholesterol and sodium. In addition, if it's a single-item food, it must provide at least 10 percent of one or more of vitamins A or C, iron, calcium, protein, or fiber. Exempt from this "10-percent" rule are certain raw, canned and frozen fruits and vegetables and certain cereal-grain products. These foods can be labeled "healthy," if they do not contain ingredients that change the nutritional profile, and, in the case of enriched grain products, conform to standards of identity, which call for certain required ingredients. If it's a meal-type product, such as frozen entrees and multi-course frozen dinners, it must provide 10 percent of two or three of these vitamins or minerals or of protein or fiber, in addition to meeting the other criteria. The sodium content cannot exceed 360 mg per serving for individual foods and 480 mg per serving for meal-type products.

**k. Other definitions**

The regulations also address other claims. Among them:

- **Percent fat free:** A product bearing this claim must be a low-fat or a fat-free product. In addition, the claim must accurately reflect the amount of fat present in 100 g of the
food. Thus, if a food contains 2.5 g fat per 50 g, the claim must be "95 percent fat free."

- **Implied:** These types of claims are prohibited when they wrongfully imply that a food contains or does not contain a meaningful level of a nutrient. For example, a product claiming to be made with an ingredient known to be a source of fiber (such as "made with oat bran") is not allowed unless the product contains enough of that ingredient (for example, oat bran) to meet the definition for "good source" of fiber. As another example, a claim that a product contains "no tropical oils" is allowed—but only on foods that are "low" in saturated fat because consumers have come to equate tropical oils with high saturated fat.

- **Meals and main dishes:** Claims that a meal or main dish is "free" of a nutrient, such as sodium or cholesterol, must meet the same requirements as those for individual foods. Other claims can be used under special circumstances. For example, "low-calorie" means the meal or main dish contains 120 calories or less per 100 g. "Low-sodium" means the food has 140 mg or less per 100 g. "Low-cholesterol" means the food contains 20 mg cholesterol or less per 100 g and no more than 2 g saturated fat. "Light" means the meal or main dish is low-fat or low-calorie.

- **Standardized foods:** Any nutrient content claim, such as "reduced fat," "low calorie," and "light," may be used in conjunction with a standardized term if the new product has been specifically formulated to meet FDA's criteria for that claim, if the product is not nutritionally inferior to the traditional standardized food, and the new product complies with certain compositional requirements set by FDA. A new product bearing a claim also must have performance characteristics similar to the referenced traditional...
standardized food. If the product doesn't, and the differences materially limit the product's use, its label must state the differences (for example, not recommended for baking) to inform consumers.

l. 'Fresh'

Although not mandated by NLEA, FDA has issued a regulation for the term "fresh." The agency took this step because of concern over the term's possible misuse on some food labels. The regulation defines the term "fresh" when it is used to suggest that a food is raw or unprocessed. In this context, "fresh" can be used only on a food that is raw, has never been frozen or heated, and contains no preservatives. (Irradiation at low levels is allowed.) "Fresh frozen," "frozen fresh," and "freshly frozen" can be used for foods that are quickly frozen while still fresh. Blanching (brief scalding before freezing to prevent nutrient breakdown) is allowed. Other uses of the term "fresh," such as in "fresh milk" or "freshly baked bread," are not affected.

m. Baby foods

FDA is not allowing broad use of nutrient claims on infant and toddler foods. However, the agency may propose claims specifically for these foods at a later date. The terms "unsweetened" and "unsalted" are allowed on these foods, however, because they relate to taste and not nutrient content.

n. Health claims

Claims for 10 relationships between a nutrient or a food and the risk of a disease or health-related condition are now allowed. They can be made in several ways: through third-party references (such as the National Cancer Institute), statements, symbols (such as a heart), and vignettes or descriptions.
Whatever the case, the claim must meet the requirements for authorized health claims—for example, they cannot state the degree of risk reduction and can only use "may" or "might" in discussing the nutrient or food-disease relationship. And they must state that other factors play a role in that disease.

The claims also must be phrased so that consumers can understand the relationship between the nutrient and the disease and the nutrient's importance in relationship to a daily diet.

An example of an appropriate claim is: "While many factors affect heart disease, diets low in saturated fat and cholesterol may reduce the risk of this disease." The allowed nutrient-disease relationship claims and rules for their use are:

- **Calcium and osteoporosis:** To carry this claim, a food must contain 20 percent or more of the Daily Value for calcium (200 mg) per serving, have a calcium content that equals or exceeds the food's content of phosphorus, and contain a form of calcium that can be readily absorbed and used by the body. The claim must name the target group most in need of adequate calcium intakes (that is, teens and young adult white and Asian women) and state the need for exercise and a healthy diet. A product that contains 40 percent or more of the Daily Value for calcium must state on the label that a total dietary intake greater than 200 percent of the Daily Value for calcium (that is, 2,000 mg or more) has no further known benefit.

- **Fat and cancer:** To carry this claim, a food must meet the nutrient content claim requirements for "low-fat" or, if fish and game meats, for "extra lean."

- **Saturated fat and cholesterol and coronary heart disease (CHD):** This claim may be used if the food meets the
definitions for the nutrient content claim "low saturated fat," "low-cholesterol," and "low-fat," or, if fish and game meats, for "extra lean." It may mention the link between reduced risk of CHD and lower saturated fat and cholesterol intakes to lower blood cholesterol levels.

- **Fiber-containing grain products, fruits and vegetables and cancer**: To carry this claim, a food must be or must contain a grain product, fruit or vegetable and meet the nutrient content claim requirements for "low-fat," and, without fortification, be a "good source" of dietary fiber.

- **Fruits, vegetables and grain products that contain fiber and risk of CHD**: To carry this claim, a food must be or must contain fruits, vegetables and grain products. It also must meet the nutrient content claim requirements for "low saturated fat," "low-cholesterol," and "low-fat" and contain, without fortification, at least 0.6 g soluble fiber per serving.

- **Sodium and hypertension (high blood pressure)**: To carry this claim, a food must meet the nutrient content claim requirements for "low-sodium."

- **Fruits and vegetables and cancer**: This claim may be made for fruits and vegetables that meet the nutrient content claim requirements for "low-fat" and that, without fortification, for "good source" of at least one of the following: dietary fiber or vitamins A or C. This claim relates diets low in fat and rich in fruits and vegetables (and thus vitamins A and C and dietary fiber) to reduced cancer risk. FDA authorized this claim in place of an antioxidant vitamin and cancer claim.

- **Folic acid and neural tube defects**: Folic acid and neural tube defects: This claim is allowed on dietary supplements
that contain sufficient folate and on conventional foods that are naturally good sources of folate, as long as they do not provide more than 100 percent of the Daily Value for vitamin A as retinol or preformed vitamin A or vitamin D. A sample claim is "healthful diets with adequate folate may reduce a woman's risk of having a child with a brain or spinal cord defect."

- **Dietary sugar alcohols and dental caries (cavities):** This claim applies to food products, such as candy or gum, containing the sugar alcohols xylitol, sorbitol, mannitol, maltitol, isomalt, lactitol, hydrogenated starch hydrolysates, hydrogenated glucose syrups, or a combination of any of these. If the food also contains a fermentable carbohydrate, such as sugar, the food cannot lower the pH of plaque in the mouth below 5.7. Besides the food ingredient's relationship to dental caries, the claim also must state that frequent between-meal consumption of foods high in sugars and starches promotes tooth decay. A shortened claim is allowed on food packages with less than 15 square inches of labeling surface area.

- **Soluble fiber from certain foods, such as whole oats and psyllium seed husk, and heart disease:** This claim must state that the fiber also needs to be part of a diet low in saturated fat and cholesterol, and the food must provide sufficient soluble fiber. The amount of soluble fiber in a serving of the food must be listed on the Nutrition Facts panel.

0. **Ingredient labeling**

Ingredient declaration is required on all foods that have more than one ingredient. Because people may be allergic to certain additives and to help them better avoid them, the ingredient list
must include, when appropriate: FDA-certified color additives, such as FD&C Blue No. 1, by name sources of protein hydrolysates, which are used in many foods as flavors and flavor enhancers declaration of caseinate as a milk derivative in the ingredient list of foods that claim to be non-dairy, such as coffee whiteners.

As required by NLEA, beverages that claim to contain juice must declare the total percentage of juice on the information panel. In addition, FDA's regulation establishes criteria for naming juice beverages. For example, when the label of a multi-juice beverage states one or more--but not all--of the juices present, and the predominantly named juice is present in minor amounts, the product's name must state that the beverage is flavored with that juice or declare the amount of the juice in a 5 percent range--for example, "raspberry-flavored juice blend" or "juice blend, 2 to 7 percent raspberry juice."

p. **Resources**

For more information, contact:

FDA
General Inquiries: Call toll-free 1-888-INFO-FDA (1-888-463-6332).
Food Safety Hotline: 1-800-332-4010
FDA's food label information on the Web:
www.cfsan.fda.gov/label.html.

USDA
Food Safety Education and Communication Office
1400 Independence Ave., S.W., Room 1180
Washington, DC 20250
BG 99-5
D. **The Universal Product Code**

The Universal Product Code (UPC) is an international numeric symbol for a processed good that is identified by a digital code. The UPC was designed as a common identification tool for bills of lading, invoices, accurate pricing, and collection of sales data. The UPC is composed of a machine readable symbol. This symbol is the basic element that has promoted a revolutionary advance in retail marketing. The symbol promotes scanner-equipped check stands which speeds up a customer checkout operation, reduce item price-marking requirements, and enables the retailer to collect complete and accurate information on all aspects of sales transactions.

1. **The traditional UPC appearance**

   The Universal Product Code is an 11-digit numeric code that will identify the consumer package. The code consists of a number system character, a 5-digit manufacturer identification number along with a 5-digit item code number. In combination with your 5-digit manufacturer number, this will form the 10-digit UPC number for each product. The 11-digit UPC is represented by bars and spaces that enables a scanner to immediately identify the consumers’ package.

2. **Manufacturer identification number**

   The 5-digit manufacturer code is assigned by the Uniform Code Council, Inc.

   Uniform Code Council, Inc.
   8163 Old Yankee Rd., Suite J
   Dayton, Ohio 45459
   Telephone: (513) 435-3870

3. **Item code number**

   The 5-digit manufacturer code is a number assigned and controlled by a designated company member. This person will assign a specific product a specific code number from the Number System Charter.
4. **Coding system criteria**

Every individual product requires a unique identification coding system that should meet certain criteria:

- The product should have unique number for identification of items and shipping packages.
- The number should be concise and have a constant number of digits.
- Packaging and shipping containers numbering should be essentially random.
- There should not be any numbered portion of the code that stands for an assigned characteristics such as size, weight, color, etc.
- There must not be any duplication of numbers on container or packages. This aids in file retention.
- The system should be economical and easy to learn requires a non-extensive personnel training program.

5. **Getting started**

In order to successfully acquire a UPC here are three suggestive steps to help you and your business:

a. Apply for your Universal Product Code manufacturer identification number. This is a critical step. With your membership in the Uniform Code Council, you will be assigned a 6-digit manufacturer’s number that is unique to your company. This number is to be used on all of your products.
b. Assign an item number to your product(s). You should assign a 5-digit number to each of your products. This number must be different for every item. The number you assigned to each product must be unique for store inventory, recording keeping, and pricing purposes.

c. Provide information for your staff and retailer. All employees (production, distribution, marketing, and accounting personnel) should be familiar with your UPC number codes and UPC policies.

6. **Uniform Code Council**

The Uniform Code Council, Inc. is not a governmental agency, rather a central management and information center for manufacturers and retailers participating in the system. This is an administrative council which functions to issue standard shipping and container codes, control the issuing of company identification codes, provide detailed information and to coordinate the efforts of all participants. The cost of membership is based on sales volume, this is the only time that you will pay. The Uniform Code Council also maintains the standards for product and shipment marking for higher levels of packaging.

7. **Standard packaging**

A “Standard Pack” is a term used for a package that has been coded by the UCC. The UCC assigns standard coding structures and bar code symbologies. This term also encompasses important secondary information like weight, date, batch, lot, postal code, serial number, purchase order number, and other product and shipment attributes.
8. **Produce electronic look-up code (PLU)**

Fresh produce may be labeled with a code number that identifies the Uniform Product Code for a specific produce item. PLUs are generally used for food retailing. For more information, please contact:

Produce Electronic Look-up Board  
Produce Marketing Association  
1500 Cash Mill Road  
Newark, DE 19714-6036  
(302) 738-7100
E. Legal liability risk management and ranch recreation enterprises: an overview

1. Introduction

Just as recreationists must prepare for likely contingencies on their travels, so too must farm and ranch owners carry out a risk analysis when deciding whether to establish a ranch recreation business.

This three step process will make each journey more satisfying and prevent both from serious harm:

a. assessing potential risks;
b. evaluating and selecting among various risk management tools; and

c. implementing, evaluating, and revising as new information and issues arise--

The purpose of this article is to assist readers in helping their customers in carrying out this three-step risk management process to deal to potential legal liability exposures. The article is based upon a recently revised extension bulletin for ranch recreation businesses in Wyoming. [A] It first describes selected legal liability risks for ranch recreation enterprises. It then outlines several risk management tactics that the readers' customers might employ. It ends with recommendations, a brief discussion of who should be part of the enterprise's risk management team, and a checklist readers can go through with their customers in addressing the issues raised in the article.

2. Step one: identifying potential legal liability exposures faced by ranch recreation enterprises (a selected list)

Like any business, ranch recreation enterprises must routinely follow the general laws of their state, comply with specific governmental regulations applicable to their businesses, and make and complete
contracts with customers and service providers. Each of these interactions creates potential legal liability exposures. We will limit our attention to legal risks associated with specific services provided to ranch recreation customers. Table 1 summarizes selected legal liability exposures these interactions create. [A]

a. **Duties owed entrants**
Ranch recreation for many Wyoming farmers and ranchers consists primarily of charging an access fee to recreationists to hunt, fish, sightsee, or otherwise recreate on their agricultural lands.

Historically the common or judge-made law imposed different duties on landholders depending upon whether entrants were on the land without permission (trespassers), with "naked" permission not benefiting the landholder (licensees), or with permission for the purpose of benefiting the landholder (business invitees). A photographer who inadvertently enters onto posted private land is a trespasser. An individual given permission to fish for free on a stream running through a farm is a licensee. A hunter paying a "trespass fee" would be a business invitee. Under the historic common law rules landholders owed the lowest duty of care to trespassers and licensees. Landholders were not to willfully or wantonly harm trespassers or licensees. In many states landholders were also obligated to notify licensees of any hidden dangers that the landholders knew of. Similarly, many states adopted the attractive nuisance doctrine, obligating landholders to protect trespassing children from artificial conditions that posed significant dangers to them and whose danger the children, because of their age or maturity, might not fully comprehend. Landholders owed the highest degree of care to business invitees. Landholders were required to exercise reasonable care in inspecting and maintaining the property and in warning business invitees of any hidden dangers.