Behind the Label: Federal Food Standards

All over the United States, if you buy evaporated milk, you can be sure you’re getting essentially the same product. And if you buy USDA Choice beef, you can be sure it’s the same quality.

The various kinds of food standards set by the Federal Government make this possible.

Just as Federal standards for weights and measures established by the National Bureau of Standards define how long a foot is (so measurements of distance are the same from coast to coast), standards of identity set by the Food and Drug Administration (FDA) define what certain food products are, and U.S. Department of Agriculture (USDA) grade standards define levels of quality for various foods.

FDA food standards of identity are mandatory or regulatory. They set requirements which products must meet if they move in interstate commerce. They protect against deception, because they define what a food product must consist of to be legally labeled “mayonnaise,” for example.

USDA grade standards for food are voluntary. Federal law does not require that a food processor or distributor use the grade standards. The standards are widely used, however, as an aid in wholesale trading, because the quality of a product affects its price. The grade (quality level) also is often shown on food products in retail stores, so consumers can choose the grade that best fits their needs.

Food standards established by the Federal Government usually fall into these two general classes—voluntary or mandatory.

In addition to USDA’s voluntary grade standards for various food products, similar standards for fishery products have been established by the U.S. Department of Commerce.

FDA’s standards of identity for food products have their counterpart in standards of identity and composition established by USDA for meat and poultry products. FDA has also set standards of minimum quality and fill of container.

A third class of Federal standards consists of those recommended for adoption by State and local governments. The most familiar of these food standards is for “Grade A” milk. In contrast to USDA quality grade standards for food, the standard for Grade A milk, developed under the U.S. Public Health Service Act, is largely a standard of wholesomeness.

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Egg cartons usually show the grade and size of eggs.
All of the various kinds of Federal food standards have some effect on what a food may be legally labeled—its name, contents, grade or quality, or other factors. Here's some information to help you figure out what those listings on the label actually mean.

Under authority of the Agricultural Marketing Act of 1946 and related statutes, USDA has issued grade standards for some 300 food and farm products.

Food products for which grade standards have been established are: beef, veal and calf, lamb and mutton; poultry, including turkey, chicken, duck, goose, guinea, and squab; eggs; manufactured dairy products, including butter, cheddar cheese, and instant nonfat dry milk; fresh fruits, vegetables, and nuts; canned, frozen, and dried fruits and vegetables and related products such as preserves; and rice, dry beans, and peas. U.S. grade standards are also available for grains, but not for the food products, such as flour or cereal, into which grain is processed.

USDA provides official grading services, often in cooperation with State departments of agriculture, for a fee, to packers, processors, distributors, or others who wish official certification of the grade of a product. The grade standards also are often used by packers and processors as a quality control tool.

Products which have been officially graded may carry the USDA grade name or grade shield, such as the familiar “USDA Choice” shield seen on cuts of beef or the “U.S. Grade A” on cartons of eggs. Grade labeling, however, is not required by Federal law, even though a product has been officially graded. On the other hand, a packer or processor may not label his product with an official grade name such as Grade A (even without the “U.S.” prefix) unless it actually measures up to the Federal standard for that grade. Mislabeling of this sort would be deemed a violation of the Federal Food, Drug, and Cosmetics Act.

USDA grade standards define the requirements of each grade of a product—they separate USDA Prime from USDA Choice beef and U.S. Grade A from U.S. Grade B canned peas.

To develop these standards, standardization specialists study a product to determine the quality factors involved and the range of quality produced. Nature doesn’t stamp out plastic balls with the same size, shape, and bounce as can be done in a manufacturing plant. As anyone who’s climbed an apple tree can testify, apples on the same branch vary in size, shape, color, and number or size of blemishes.

But any one product generally can be divided into two or three grades, and that is what the standards do—they set the requirements and limits for each grade. As the chapter on USDA Grades explains, the quality factors for different foods—meat, eggs, canned or frozen vegetables, poultry—may differ, because what is considered “quality” in a food depends on the product itself.

The National Marine Fisheries Service of the U.S. Department of Commerce (USDC) has established grade standards for such products as fish fillets and fillet blocks; raw fish portions and fish steaks; raw breaded and precooked fish portions and fish sticks; raw headless and raw breaded shrimp; raw and precooked breaded scallops; and raw headless whiting. A total of 18 grade standards are in effect. The fishery product standards are also established under authority of the Agricultural Marketing Act.

Many of the USDC grade standards also specify the amount of fish component required in the product. For example, raw breaded fish portions and precooked fish sticks must contain 75 percent and 60 percent fish flesh respectively in order to be identified as U.S. Grade A.

USDC’s grade standards, like USDA’s, are for voluntary use. In fact, the fishery product standards originated in USDA years ago. USDC also provides a voluntary inspection and grading service for fishery products. The grading service is similar to USDA’s, and fishery products that have been officially graded may be labeled U.S. Grade A, B, or C.
Products that consumers are most likely to find the U.S. grade name on are frozen fish sticks, breaded shrimp, fish portions, and fish fillets.

The Commerce grading program also provides for official inspection for edibility and wholesomeness of fishery products. If an official U.S. grade name or grade shield is used on a fishery product, that product must have been officially inspected and graded. If the fishery product bears a Federal inspection mark, but no grade designation, it means that the product was produced under official inspection and may also have been graded. Any fishery product, whether it has official grade standards or not, may be inspected for wholesomeness under the Commerce program.

Under the Federal Meat Inspection Act and the Poultry Products Inspection Act, USDA establishes minimum content requirements for many meat and poultry products (usually canned or frozen) and regulates the labeling of all meat and poultry products.

All labels on Federally inspected meat and poultry products must be truthful and accurate and must be approved by USDA before they can be used. To be labeled with a particular name—"Beef with gravy," for example—a Federally inspected meat or poultry product must be approved by USDA as meeting specific product requirements. USDA sets the standards for such products. These standards or requirements describe what is to be in the product—such as the minimum amount of meat, maximum amount of water, and what other ingredients are allowed.

In USDA test kitchens, home economists and food technologists examine similar products processed by various manufacturers to learn what current practices are and acquire information on ways used to prepare foods. Cookbooks and other reference sources reveal information about the standard definition of a product.

Consumer feedback is especially important. Taste panels are used. Technical work is done in laboratories to establish how much fat or moisture may be in a product. If a manufacturer markets a product which is similar to one for which requirements are set, but which does not comply exactly with the standard, then he must call his product by another name.

The standards assure that you're getting what the label says. They do not, however, keep different companies from following distinctive recipes. For instance, to be labeled "Brunswick Stew," a product must contain at least 25 percent of at least two kinds of meat and/or poultry and corn as one of the vegetables.

Knowing USDA's standards can help you in your menu planning, not to mention making comparisons between products.

To be labeled "Beef with gravy," the product must contain at least 50 percent cooked beef. On the other hand, a product labeled "Gravy with beef" must contain at least 35 percent cooked beef.

To set these standards for meat and poultry products, and to be sure that a label is appropriate for a product, USDA requires processors to submit the label, container, formula, method of manufacture, and frequently a sample of the product. Technical personnel check the contents and cooking instructions to make sure they conform to the label.

Labels of meat and poultry products must have an accurate name and description of the product. If an ingredient is not traditionally expected to be found in the product, it must be shown as part of the product name.

If a picture is used, it must accurately represent the product. For instance, if six slices of meat are shown on the label, there must be at least six slices of meat inside the package. If the picture shows the product with a garnish or in a serving dish, it must be marked "Suggested Serving" or "Serving Suggestion."

Each label must contain a list of ingredients, beginning with the item weighing the most, and continuing to the item weighing the least.

Labels must also show the net weight
of the contents, not including the pack-
aging; the packer's or distributor's name
and address; and the round mark of
inspection. If the product is imported,
the name of the country of origin must
be on the label. All imported products
must be inspected for wholesomeness.

Moreover, a minimum amount of
meat or poultry must be in a prod-
uct before it can be called a beef
or chicken product. Chicken Noodle
Soup, for example, must contain at least
2 percent chicken on a "ready-to-eat"
basis. A soup which contains less must
be called something like Chicken-
Flavored Noodle Soup, and would not
be considered a poultry product.

USDA regulations for meat and poul-
try products also require that additives
—ingredients aimed at improving physi-
cal qualities such as flavor, color, and
shelf-life of a product—must be ap-
proved by USDA before they are used
in inspected meat and poultry products.
USDA sees that additives used are ap-
proved by the Food and Drug Adminis-
tration and are limited to specified
amounts; meet a specific, justifiable
need in the product; do not promote
deception as to product freshness, qual-
ity, weight, or size; and are truthfully
and properly listed on the product
label.

In January 1974, USDA proposed
prohibiting use of terms such as "all,""pure," and "100 percent" on labels of
meat and poultry products containing
more than one ingredient. In the past,
USDA has approved labels for products
such as "Pure Pork Sausage," "Pure
Pork Luncheon Meat," "All White Meat
Turkey Roll," and others, in which
small amounts of seasoning or curing
ingredients, or both, were included in
the formula.

USDA made the proposal in view of
a court order against use of such terms
on frankfurter labels. In the court's
opinion, "all" means "wholly, com-
pletely, exclusively, and solely." Most
processed meat and poultry products
contain small amounts of seasoning and
curing agents, so they do not comply
with the court's interpretation of the
descriptive term.

The Food and Drug Administration
establishes food standards for the pro-
motion of honesty and fair dealing in
the interest of consumers.

From a consumer protection point of
view, FDA food standards fit in well
with USDA standards. They tend to
supplement each other. The law that
authorizes FDA food standards exempts
from FDA jurisdiction meat and meat
food products to the extent that the
meat and poultry inspection Acts are applicable.

Also, by the significant choice of the article "a" in the phrase granting authority to establish "a reasonable standard of quality," the law limits FDA standards of quality to a single level of quality below which the food is substandard in quality and is required by law and regulations to be conspicuously labeled "Below Standard in Quality."

USDA standards of identity for those articles of food exempted from FDA food standards, and the USDA standards for multiple grades for many food products, extend consumer protection to areas not reached by FDA food standards.

Perhaps one of the most significant features of FDA standards is that they are mandatory. If a manufacturer's food product purports to be or if it is represented as being one for which an FDA food standard has been established, he must make certain, before he introduces it into interstate commerce, that it complies with the compositional and labeling requirements of the applicable standard. If it fails to comply, it will be deemed to be misbranded and subject to seizure. Moreover, he will make himself subject to criminal penalties. In the terminology of lawyers, FDA food standards have the force and effect of law.

There are three categories of FDA food standards. They are standards of quality, standards of fill of container, and standards of identity. The designations fairly well explain the differences. However, it is not invariably obvious into which kind of standard a given attribute of a food will have been placed.

You might suppose that the use of artificial color in canned peas would be an identity factor, but the standard of quality prescribes that the use of artificial coloring in canned peas is a factor of quality and requires the label declaration "Below Standard in Quality—Artificially Colored."

In the case of raw shucked oysters, you might anticipate that the attribute of size, whether the oysters are "standards," or "selects," or "very small," would be considered a quality factor, but actually each separate size classification is covered by a separate standard of identity. (This may have been done to circumvent the legal limitation of a single standard of quality.)

But instances such as treating artificial coloring in canned peas as a quality factor and the size of shucked oysters as an identity factor are unusual. Most compositional attributes appear in standards of identity, and factors such as blemishes and lack of uniformity of units are in standards of quality.

As an example of a quality standard, let us examine the one for canned tomatoes. This standard sets out four factors of quality: 1. The weight of the tomato units, when the contents of a can are drained on a one-half inch mesh screen, is not less than 50 percent. 2. Redness of color is not less than that measured by a prescribed testing procedure. 3. Amount of peel per pound is not more than one square inch. 4. The total blemishes per pound are not more than one-fourth square inch.

The label declaration prescribed for canned tomatoes failing to meet the standard of quality is "Below Standard in Quality," coupled with one or more of the statements: "Excessively Broken Up," "Poor Color," "Excessive Peel," or "Excessive Blemishes," as appropriate.

Tomato canners strive to avoid producing any packs that will require the below-standard label declaration. This is equally true for producers of other food products for which FDA quality standards or fill of container standards have been established. You may rarely encounter food with a label saying "Below Standard in Quality" in your food store. The incentive that the quality standard exerts on packers to avoid the necessity for such labeling is beneficial to consumers.

Only a limited number of fill of container standards have been established, and some of them are not particularly effective. For example, the fill standard for canned cherries states that it "is the
maximum quantity of the optional cherry ingredient that can be sealed in the container and processed by heat to prevent spoilage, without crushing such ingredient.” The fill of container standards for canned peaches, apricots, and pears are analogous.

A fill of container standard that can be better enforced for the benefit of consumers is the one for canned fruit cocktail. It prescribes that “the total weight of the drained fruit is not less than 65 percent of the water capacity of the container . . .” and it prescribes in detail the procedure for ascertaining compliance.

The label declaration for showing substandard fill is quite comparable to the one for showing substandard quality. It is worded “Below Standard in Fill.” You may never encounter a product in your store so labeled, but the fact that there is a standard of fill of container for the product will have promoted your interests by stimulating packers to avoid permitting the fill to fall below the requirements in the standard.

Aside from the provisions in the law concerning standards of fill of container, there is a general provision, applicable equally to standardized and nonstandardized foods, which deems foods in package form to be misbranded unless labels bear an accurate statement of their quantity of contents.

Questions have arisen about this provision in the law. Let us consider our instance of canned fruit cocktail again. Some have urged that the statement of quantity of contents should be the drained weight of the fruit. But you do not ordinarily drain off and throw away the liquid in a can of fruit cocktail. You regard it as part of the food you bought and you use it. On the other hand, when you buy a can of wet pack shrimp you drain off and discard the brine packing medium.

These examples illustrate the way FDA construes the quantity of contents label requirement. In the case of the canned fruit cocktail, the statement includes both the fruit and liquid. In the case of canned shrimp, the statement is for the drained weight of the shrimp and excludes the brine packing medium.

Most FDA food standards are standards of identity. It is difficult to set a precise number on the foods for which identity standards have been established. For example, the single section for fruit jelly lists 27 fruit jellies, and this does not count the permitted combinations. Rather than undertaking to name all foods covered by standards of identity, it is more feasible to list them by categories.

The categories of foods with standards are:

Cacao (cocoa bean) products
Wheat flour and related products
Corn flour and related products
Rice and related products
Macaroni and noodle products
Bakery products
Milk and cream products
Cheeses, processed cheeses, cheese foods, cheese spreads, and related foods
Frozen desserts
Food flavorings
Dressings for food
Nutritive sweeteners
Canned fruits and fruit juices
Fruit pies
Fruit butters, fruit jellies, fruit preserves and related products
Nonalcoholic beverages
Shellfish
Fish
Eggs and egg products
Oleomargarine
Nut products
Canned vegetables
Tomato products

No doubt the compositional requirements in identity standards are the most significant characteristic of such standards, but the labeling requirements are also important to consumers.

The law furnishes a basis for considering the ingredients specified in identity standards as falling into two classes, mandatory ingredients and optional ingredients.

Perhaps the standard for mayonnaise will serve to illustrate our point. This standard requires that mayonnaise must
contain not less than 65 percent of edible vegetable oil and a sufficient quantity of egg yolks to produce a stable emulsion. It permits salt, sweetening ingredients, spices (with some exceptions), and non-imitation seasonings and flavorings, except ingredients that impart to the mayonnaise the yellow color of egg yolks. The vegetable oil and egg yolks are mandatory; all the others are optional ingredients.

This distinction is important because the law furnishes no authorization for requiring in standards that labels shall name mandatory ingredients. It does authorize designating optional ingredients to be named on labels where making such a requirement promotes honesty and fair dealing in the interest of consumers.

Those optional ingredients that are spices, flavorings, or colorings may be declared as such, but all other optional ingredients designated in the standard for label declaration must be named on labels by their common names.

Some of the standards of identity that were first proposed many years ago do not include extensive requirements for ingredient label declaration. However, those standards more recently established fully exercise the authority to designate optional ingredients for label declaration. Quite recently the Commissioner of Food and Drugs has urged that food packers voluntarily name mandatory ingredients on the labels of their foods covered by identity standards.

As standards come to require all optional ingredients to be named on labels and packers are agreeable to listing mandatory ingredients, there will be no difference as regards ingredient labeling between foods covered by FDA identity standards and those not standardized.

Some of you may wish to send for copies of the standards for certain foods to learn what ingredients are required and what are optional. You may address your request to: U.S. Food and Drug Administration, Office of Consumer Information, Washington, D. C. 20204. You should specify by food category, from those listed in this chapter, the foods for which you wish standards.

A general provision in the law administered by FDA states, “A food shall be deemed to be misbranded if it is an imitation of another food unless its label bears . . . the word ‘imitation’ and, immediately thereafter, the name of the food imitated.” Another provision holds a food to be misbranded if it purports to be one for which a standard of identity has been prescribed unless it conforms to such standard.

An identity standard was established for fruit preserves. This standard required strawberry jam to contain not less than 45 percent strawberries. A preserver shipped a product labeled “Imitation Strawberry Jam” that contained significantly less than 45 percent fruit. The FDA initiated a seizure charging the jam to be misbranded because it purported to be a food for which there was a standard of identity but that it did not conform to the fruit requirement in the standard.

Litigation ensued and the case was ultimately decided in the Supreme Court. In effect the Supreme Court decision held that a food that purports to be one for which there is an identity standard is not required to conform to the compositional requirements of the standard provided it is labeled “imitation.”

Following this ruling we began seeing more and more foods in our grocery stores labeled “imitation.” Some of these products were nutritionally inferior to the foods imitated. Others were nutritionally equivalent to foods conforming to standards, and it is possible that some may have been superior. However, including the word “imitation” in the names for these variant foods has not aided consumers in choosing between the foods that are inferior and those that are at least nutritionally equivalent to the foods imitated.

A White House Conference on Food, Nutrition and Health recommended that “oversimplified and inaccurate terms such as ‘imitation’ should be
abandoned as uninformative to the public.” To implement this recommendation, FDA has proposed that the word “imitation” be used only on foods nutritionally inferior to an imitated food.

For variant products that are not less than nutritionally equivalent to an imitated food, it was proposed that different common or usual names, names fully descriptive and informative to consumers, be established.

As a starter, FDA proposed to rescind its 1955 statement of policy calling for labeling frozen desserts made in semblance of ice cream, but containing vegetable fats in substitution for milk fat, with the name “Imitation Ice Cream.” Instead, FDA proposes that an identity standard should be established for vegetable fat frozen desserts under the name Mellorine.

Mellorine is not a new name. Some 25 states have sanctioned distribution of vegetable fat frozen desserts labeled Mellorine in their intrastate commerce. A new standard was also proposed under the name Parevine for frozen desserts made in semblance of ice cream but containing no milk, meat, or ingredients derived from milk or meat.

The proposals for Mellorine and Parevine remind us of the identity standard for oleomargarine. As is well known, oleomargarine originated in France in 1870 as a butter substitute. It was first marketed in our country in 1874. Here dairymen and food regulatory officials were diligent in preventing the word butter from appearing on the labels of oleomargarine.

When the standard was established in 1941, it was declared that the common and usual name for this food was oleomargarine. Corporations engaged in marketing butter challenged the standard in court. They argued that the standard should have prescribed the name “Imitation Butter.”

The court rejected this argument, saying “Oleomargarine is a well-known food product with an identity of its own . . .”

Congress recognized that consumers are interested in being dealt with honestly and fairly in their purchases of food. The FDA proposals for more complete ingredient declarations and more informative labeling on standardized foods are intended to promote these consumer interests.

FOR FURTHER READING:


USDA Grade Standards for Food—How They Are Developed and Used, PA-1027, for sale by Superintendent of Documents, Washington, D.C. 20402.

U.S. Department of Commerce, Federal Inspection Marks for Fishery Products, Food Fish Facts 50, 100 E. Ohio St., Chicago, Ill. 60611.

U.S. Grade Standards for Fishery Products, Food Fish Facts 51, 100 E. Ohio St., Chicago, Ill. 60611.

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Nutrient Labeling And Guidelines

The food and drug administration has completed a major rearrangement of regulations dealing with food labeling. “Nutrition Labeling,” the most important of these regulations, involves a whole new concept—the direct listing of nutrient contents of a food on the label.

Formerly, when vitamins were added to foods the products carried “Special Dietary” labels. Now, common foods, including most of those that contain added nutrients, can be labeled under Nutrition Labeling.

The Special Dietary Foods label will be restricted to foods that really are special, such as those used for sole items of the diet or under the supervision of a physician.

Nutrition labeling is voluntary, with a few major exceptions. The exceptions are foods to which nutrients are added or about which nutrition claims have