



Food Labelling : An Important Aspect of Marketing

Yashwant Kumar Patel^{a}, Soumitra Tiwari^a and Aastha Vithalkar^b*

^aAsstt. Prof. and Head, Dept of FPT, Atal Bihari Vajpayee Vishwavidyalaya, Bilaspur-495009 (C.G.), India

^bGuest Faculty, Dept of FPT, Atal Bihari Vajpayee Vishwavidyalaya, Bilaspur-495009 (C.G.), India

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ABSTRACT

Food labels are the first educational resource that customers come across while shopping, and they provide information about the product's ingredients, nutritional value, and allergen status. However, food labelling also functions as a marketing tool and may affect how customers perceive the quality of the food, which may in turn affect their dietary preferences. Because of this, research on food labelling is expanding, as is analysis of how it affects consumers, food producers, and the market. This is corroborated, for instance, by a wide range of publications that have been recently published with the aim of better examining how certain information on food packaging may affect food purchases, consumption, and, generally, dietary behaviour.

A packaged product's prologue is its food label. The Nutrition Facts Panel (NFP), a crucial part, precisely provides the macro- and micronutrient amounts per 100g or one serving. It was discovered that although consumers read them, they do not change their buying habits as a result. Thus, the goal of this study is to discover the characteristics that prevent consumers from using food labels. Articles on the Indian population that were completed between 2013 and 2021 and published on PubMed, Research Gate, Google Scholar, and other independent Indian and international journals were evaluated. Reading and food purchases were influenced by a number of variables, including education, gender, income, and place of living. Knowledge of the purchasers was another important element that was discovered to be impeding the use of food labels.

Keywords: Food label, Packaged foods, Food label knowledge, Consumer need and marketing aspects.

1. INTRODUCTION TO SHELF LIFE

The word "shelf life" is commonly used yet has several diverse meanings. Consumers are typically interested in how long a food product may be stored at home before it becomes unusable. To maximise sales, a retailer is particularly concerned with how long a product may remain on the shelf. The time frame following production or packaging during which a food product will be safe and suitable for usage is referred to as the shelf life in this context. In other words, when kept in accordance with the advised circumstances for this time, it should maintain the required sensory, chemical, physical, functional, or microbiological qualities and, where relevant, comply with any label statement of nutritional information (IFST, 1993). Therefore, it follows that shelf life is a crucial and complex criterion for all products.

Who is responsible for determining shelf life?

In general, the maker or packer is in charge of figuring out shelf life. While concepts for brand-new goods and enhancements to current products can come from both internal and external sources, such as a present or potential consumer, shelf-life evaluation and testing are fundamental components of any product development programme. Consequently, it is consistent with the accepted GMP standards that a food maker should have its own internal shelf-life testing and assessment capacity (Blanchfield, 1998). Nowadays, prominent merchants nearly always independently assess the shelf life of food goods, especially those under their own labels. The duty of a food manufacturer or processor, however, to assign the proper shelf life to their goods based on carried out scientific work, should not be negated or diminished by this.

* Corresponding author: Yashwant Kumar Patel
E-mail address: profykpate@gmail.com

What do the dates on food packages means?

Only baby food, infant formula, and over-the-counter medicines are required by federal law to have expiration dates. Any medication that has beyond its expiration date shouldn't be supplied. Most infant food that has beyond its expiry date is not distributed by the Food Bank. However, some items made specifically for babies, including juice and cookies or biscuits, can be sold after their expiration date and are still safe to consume.

The shelf life of frozen and refrigerated goods can be prolonged if they are treated properly, and many canned and boxed products are safe to consume far after the date on the container. It doesn't matter if a perishable item's expiration date after it's been frozen; goods maintained frozen constantly are safe eternally, however their quality gradually degrades over time. You could notice the following code dates on food packages:

a) **Expiration Date** (Examples: Expires 15/03/11 or do not use after 15/03/11)

• **Look for it on:** Baby food and formula, medicines, vitamins, yeast, baking powder.

• **What it means:** Do not distribute infant formula, baby food, vitamins, or medicines after the expiration date. Yeast and baking powder work less well after expiration but are safe to eat.

b) **Pack Date** (Examples: Packed on 03/01/2012 or 22:5306412 or KL064)

• **Look for it on:** Canned food, crackers, cookies, spices.

• **What it means:** The meal was packed on the date listed above. It is common to utilise a code that is incomprehensible to the general public, counting days in such a way that January 1 is day 001 and December 31 is day 365. (366 in leap years). Typically, this food is of high quality and may be consumed much after its expiration date.

Sell-By Date (Example: Sell by January 12, 2012. Also called Pull Date)

• **Look for it on:** Refrigerated foods such as milk, yogurt, cottage cheese, eggs, lunch meat, packaged salad mixes.

• **What it means:** These items must be sold by the retailer before the indicated code date, and as that day is approaching, these foods are frequently donated. The food is still safe to consume and of excellent quality if it has been treated appropriately. Staff at the food bank keep an eye on this food to make sure the quality is still high.

c) **Use-By or Quality Date** (Examples: Best if used by 1/1/12 or Use Before 1/1/12)

• **Look for it on:** Crackers, cookies, cold cereals, and other dry, shelf-stable food.

• **What it means:** The manufacturer suggests using the food by this time period to ensure maximum freshness. The food is still safe to eat after the quality date, but it gradually starts to lose nutrients and become of lower quality.

2. GENERAL REQUIREMENTS

1. Unless otherwise specified, every pre-packaged food must have a label with the information required here.

2. The information of the statement that must be provided on the label in accordance with these Regulations must be written in either English or Hindi using the Devanagari script: In addition to the languages authorised by this rule, nothing in this clause prohibits the use of any other language.

3. Pre-packaged food may not be portrayed or presented on labels or in other labelling materials in a way that is untrue, deceptive, or likely to induce consumers to form the wrong impressions about it in any way.

4. Pre-packaged food labels must be applied in a way that prevents them from coming loose from the container.

5. Under typical circumstances of purchase and usage, the label's contents must be legible by the customer and clear, conspicuous, indelible, and clear.

6. The label on the container must be easily readable through the outer wrapper if the container is covered by one, or the wrapper must convey the relevant information.

7. The licence number must be displayed on the main display panel in the following format: - Provided that the unit's current goods conform with this clause's requirements on and after the six-month mark after the start of the Food Safety and Standards Act (packaging and labelling).

Labelling of Pre-packaged Foods

Every food package must have the following information on the label in addition to the General Labelling Requirements: —

1. The name of the food must include the brand name or a description of the item that is within the packaging.

2. Except for items with a single ingredient, a list of ingredients must be presented on the label in the following ways: -

a) A suitable title, such as "Components," must appear next to the list of ingredients.

b) When a product is manufactured, the names of the ingredients employed must be recorded in descending order of their volume or weight composition.

c) For ingredients listed under "Substances," a particular name must be used; however, the class names listed below may be used for ingredients falling within those classes: —

Classes	Class Titles
Edible vegetable oils.	Give name of the specific edible oil such as mustard oil, groundnut oil, etc.
Edible vegetable fat	Give a form of vegetable fat (margarine and fat spreads, such as mixed fat spreads and vegetable fat spreads, edible vegetable fats, hydrogenated oils, partly hydrogenated oils, and interestingified vegetable fats).
Animal fat / oil other than milk fat	Give name of the source of fat. Pork fat, lard and beef fat or extracts thereof shall be declared by specific names.
Starches, other than chemically modified starches.	Starch
All species of fish where the fish constitutes an ingredient of another food and provided that the labelling and presentation of such food does not refer to a species of fish	Fish
All types of poultry meat where such meat constitutes an ingredient of another food and provided that the labelling and presentation of such a food does not refer to a specific type of poultry meat	Poultry meat
All types of cheese where cheese or mixture of cheeses constitutes an ingredient of another food and provided that the labelling and presentation of such food does not refer to a specific type of cheese	Cheese
All spices and condiments and their extracts	Spices and condiments or mixed spices/ condiments as appropriate
All types of gum or preparations used in the manufacture of gum base for chewing gum	Gum Base
Anhydrous dextrose and dextrose monohydrate	Dextrose or Glucose
Caseinates	All types of Caseinates.
Press, expeller, or refined cocoa butter	Cocoa butter
All candied, crystallized, and glazed fruit or vegetable or rhizome or fruit peel	Crystallized fruit
All milk and milk products derived solely from milk	Milk solids
Cocoa bean, Coconib, Cocomass, Cocoa press cakes, Cocoa powder (Fine/Dust).	Cocoa solids

3. NUTRITIONAL INFORMATION

The product's label must include the following nutritional information or nutritional data per 100 g, 100 ml, or per serving:—

- (i) energy value in kcal;
- (ii) the amounts of protein, carbohydrate (specify quantity of sugar) and fat in gram (g) ;
- (iii) any other nutrient's content for which a nutrition or health claim is made: If a claim is made about the amount or type of fatty acids or the amount of cholesterol, it must also state the amount of saturated, monounsaturated, and polyunsaturated fatty acids in grammes (g), the amount of cholesterol in milligrammes (mg), and the amount of trans fatty acids in grammes (g), in addition to the other requirements outlined above.
- (iv) Wherever, numerical information on vitamins and minerals is declared, it shall be expressed in metric units
- (v) Where the nutrition declaration is made per serving, the amount in gram (g) or milliliter (ml) shall be included for reference beside the serving measure; Provided that the food claimed to be enriched with nutrients, such as, minerals, proteins, vitamins, metals or their compounds, amino acids or enzymes shall give the quantities of such added nutrients on the label. Provided that —

(a) the nutritional information may not be necessary, in case of foods such as raw agricultural commodities, like, wheat, rice, cereals, spices, spice mixes, herbs, condiments, table salt, sugar, jaggery, or non –nutritive products, like, soluble tea, coffee, soluble coffee, coffee-chicory mixture, packaged drinking water, packaged mineral water, alcoholic beverages or fruit and vegetables, processed and prepackaged assorted vegetables, fruits,

vegetables and products that comprise of single ingredient, pickles, papad, or foods served for immediate consumption such as served in hospitals, hotels or by food services vendors or halwais, or food shipped in bulk which is not for sale in that form to consumers.

(b) The amount of nutrients disclosed on the label must be in conformity with accepted norms.

(c) Every package of edible oils, hydrogenated or partially hydrogenated oils, interesterified vegetable fat, edible fats, margarine, and fat spreads (vegetable and mixed fat spreads), as well as every package of food containing fats, oils, or fat emulsions as an ingredient, must list the amount of trans fat and saturated fat on the label. Furthermore, a "trans-fat free" or "saturated fat free" health claim may be made if there is less than 0.2 grammes of trans fat per serving and less than 0.1 grammes of saturated fat per 100 grammes or 100 millilitres of food, respectively.

4. DECLARATION REGARDING VEG OR NON VEG –

(i) In order to identify a product as "non-vegetarian food," every packaging of "non-vegetarian" food must include the symbol and colour code specified below. The sign must consist of a circle filled with a brown colour that is at least the minimum size required, surrounded by a square with a brown outline that has sides that are twice as wide as the circle, as seen below:



(ii) The maker, packer, or seller may include a statement to the effect that any article of food contains egg only as a non-vegetarian component in addition to the sign.

(iii) Every packaging of vegetarian food must have a declaration to this effect together with the symbol and colour code shown below to serve as a visual cue that the food is vegetarian. The sign consists of a square with a green outline that is double the diameter of the circle inside a circle filled with green colour that is not less than the minimum size given in the table below, as seen below:

S. No.	Area of principal display panel	Minimum size of diameters in mm
1.	Upto 100 cms. Square.	3
2.	Above 100 cms. square upto 500 cms square	4
3.	Above 500 cms square upto 2500 cms square.	6
4.	Above 2500 cms. Square.	8

5. DECLARATION REGARDING FOOD ADDITIVES-

(i) The following class titles, along with the particular names or accepted international numerical identifications, must be used for food additives belonging to the appropriate classes and appearing in lists of food additives typically approved for use in foods:

Acidity Regulator, Acids, Bulking Agent, Color, Color Retention Agent, Emulsifier, Emulsifying Salt, Firming Agent, Flour Treatment Agent, Flavor Enhancer, Foaming Agent, Gelling Agent, Glazing Agent, Humectant, Preservative, Propellant, Raising Agent, Stabilizer, Sweetener, Thickener:

(ii) Addition of colours and/or Flavours—

(a) Extraneous addition of colouring matter to be mentioned on the label – Where an extraneous colouring matter has been added to any article of food, there shall be displayed one of the following statements in capital letters, just beneath the list of the ingredients on the label attached to any package of food so coloured, namely:

CONTAINS PERMITTED NATURAL COLOUR(S)

OR

CONTAINS PERMITTED SYNTHETIC FOOD COLOUR(S)

OR

CONTAINS PERMITTED NATURAL AND SYNTHETIC FOOD COLOUR(S)

6. NAME AND COMPLETE ADDRESS OF THE MANUFACTURER

(i) The name and entire address of the manufacturer and the production unit, if these are located at different locations, as well as the name and complete

address of the packing or bottling unit, if the manufacturer is not also the packer or bottler, must be disclosed on every package of food.

(ii) The name and complete address of the manufacturing, packing, or bottling unit, as applicable, as well as the name and address of the manufacturer or the company for and on whose behalf it is manufactured, packed, or bottled, must be listed on the label of any food item manufactured, packed, or bottled under the written authority of another manufacturer or company.

(iii) When food is imported into India, the food package must also include the name and full address of the importer in India. Furthermore, if a food product made outside of India is packaged or bottled in India, the package containing the product must also display the name of the country of origin of the food product, the name and complete address of the importer, and the location of the packing or bottling facility in India on the label.

7. NET QUANTITY

(i) The net quantity by weight, volume, or number must be stated on every food product; and

(ii) A food packaged in a liquid medium must also include a declaration of the food's drained weight in addition to the declaration of net amount.

(iii) When a package includes a lot of small confectionery items, each of which is individually wrapped, and it is not reasonably practicable to exclude from the net weight of the commodity, the weight of such immediate wrappers of all the confectionery items contained in the package, the net weight declared on the package containing such confectionery or on the label thereof might include weight of such instant wrapper if the total weight of such immediate wrappers (a) 8%, if the immediate wrapper is made of waxed paper or another paper with an under-strip of aluminium foil.; or

(b) 6% of the net weight of all the confectionery items in the package, less the weight of the immediate wrapper, in the case of other paper.

8. LOT/CODE/BATCH IDENTIFICATION

On the label, there must be a batch number, code number, or lot number that serves as a mark of identity and allows the item to be tracked back to its manufacturing and recognised during distribution. In products containing bread and milk, including sterile milk, however, the information needed by this article need not be included on the label.

9. DATE OF MANUFACTURE OR PACKING: -

A batch number, code number, or lot number that acts as a mark of identity and enables the product to be traced back to its manufacture and recognised during distribution must be printed on the label. However, the details required by this article need not be printed on the label of bread and milk products, including sterile milk.

10. BEST BEFORE AND USE BY DATE

(i) the month and year in capital letters when the product is at its peak for consumption, as follows: -

“BEST BEFORE.....MONTHS AND YEAR

OR

“BEST BEFORE MONTHS FROM PACKAGING

OR

“BEST BEFORE MONTHS FROM MANUFACTURE

(ii) In the event that a box or bottle contains sterile or UHT-treated milk, soy milk, flavor-infused milk, bread, dhokla, bhelpuri, pizza, doughnuts, khoa, paneer, or any uncanned container of fruits, vegetables, meat, fish, or any other comparable product, the following declaration must be made: -

“BEST BEFORE DATE/MONTH/YEAR”

OR

“BEST BEFORE. DAYS FROM PACKAGING”

OR

“BEST BEFORE DAYS FROM MANUFACTURE”

(iii) Use by, advised last consumption, and expiration dates, all of which must be no more than three years from the date of packing, should be printed on Aspartame packaging in place of the best before date;

(iv) When substituting baby meals and replacement milk for Best Prior to date, use by date, suggested last consumption date, and expiration date must be included.,

Additionally, the statement of the best before date for consumption must not apply to I wines and liquors and (ii) alcoholic drinks with a volume alcohol content of 10% or above.

Furthermore, the provisions above regarding net weight/net content, nutritional data, the name and address of the manufacturer, the date of manufacture, and "best before" shall not apply to carbonated water (potable water impregnated with carbon dioxide under pressure and regular soda) packed in recyclable glass bottles..

11. COUNTRY OF ORIGIN FOR IMPORTED FOOD:

(i) Food imported into India must have a label indicating its country of origin.

(ii) For the purposes of labelling, the country in which the processing is carried out is deemed to be the country of origin when a food undergoes processing in a second country that alters its nature.

Expiry date: The end of the critical limit, where food items become inappropriate for eating and may therefore be toxic, poisonous, or lethal to human health, is a crucial criterion for food quality standards. It may change according on the product type, quality, storage situation, and physical condition of the food items. Food labels must include the expiration date. Informational labels on food packaging are crucial for consumers. There must be information about the manufactured details, packer details, marketer of the production, Net weight batch number, manufacturing date, expiry date, and MRP.

The packaging must include the licence number, the ingredients' nutritional values, the quality grade standard for the packaging materials, and any other pertinent information.

Table: **Products and their shelf life.**

S. No.	Name of product	Shelf life
1.	Amul gold milk	180 days when stored in cool and dry place
2.	Amul taaza	180 days when stored in cool and dry place
3.	Amul calci	120 days when stored in cool and dry place
4.	Amul slim n trim	180 days when stored in cool and dry place
5.	Amul moti	90 days when stored in cool and dry place
6.	Amul buffalo milk a ₂	90 days when stored in cool and dry place
7.	Lactose free milk	180 days when stored in cool and dry place
8.	Amul camel milk	72 hours from date of packing if kept under refrigeration at 4° c or below
9.	Camel long life milk	180 days. Once pack is open keep in refrigerated condition and consume within 24 hrs of opening
10.	Desi a ₂ cow milk	48 hrs from date of packing if kept under refrigeration at 4° c or below
11.	Amul cow milk	48 hrs from date of packing if kept under refrigeration at 8° c or below
12.	Amul chai maza	48 hrs from date of packing if kept under refrigeration at 8° c or below
13.	Amul shakti	48 hrs from date of packing if kept under refrigeration at 8° c or below
14.	Amul diamond	48 hrs from date of packing if kept under refrigeration at 8° c or below
15.	Amul t-special milk	48 hrs from date of packing if kept under refrigeration at 8° c or below
16.	Amul butter	12 months from date of packing if kept under refrigeration at 4° c or below
17.	Amul choco buttery spread	12 months from date of packing if kept under refrigeration at 4° c or below
18.	Amul lite	9-month refrigeration
19.	Amul delicious fat spread	9-month refrigeration
20.	Amul unsalted butter	6 months when stored at 0° c or below
21.	Amul garlic butter	6 months when stored at 4° c or below
22.	Amul safedmakkhan	6 months when stored at 0° c or below
23.	Amul processed cheese	9 months for cheese tins and cheese chiplets and 6 months for cheese blocks and cheese slices
24.	Amul emmental cheese	45 days from date of packaging

25.	Amul gouda cheese	6 months from date of packaging
26.	Amul cheese yummy plain spread	9 months from date of packaging
27.	Amul punchy pepper spread	9 months from date of packaging
28.	Amul spicy garlic spread	9 months from date of packaging
29.	Amul jeera spread	9 months from date of packaging
30.	Amul red chilli flakes spread	9 months from date of packaging
31.	Amul oregano pickle spread	9 months from date of packaging
32.	Amul creami spread	6 months from date of packaging
33.	Amul tropical fruit spread	6 month from date of packaging
34.	Amul tikka spread	6 month from date of packaging
35.	Amul diced mozzarella cheese	12 months from date of packaging
36.	Amul diced mozzarella cheese	12 months from date of packaging
37.	Amul blend cheese	12 months from date of packaging
38.	Amul diced cheddar cheese	Best before 12 months from date of packaging
39.	Amul processed pizza cheese	6 months from date of packaging
40.	Amul malai panner	6 months at -18° c or below
41.	Amul fresh panner	45 days at 4° c or below
42.	Amul malai panner-sterilized	270 days
43.	Amul fruit dahi	15 days from packaging at 4° c
44.	Amul mastidahi	Cup/matka: 15 days; poly pouch: 7 days (from date of manufacturing)
45.	Amul mishtidoi	Cup/matka: 15 days; poly pouch: 7 days (from date of manufacturing)
46.	Amul meethadahi	Cup/matka: 15 days; poly pouch: 7 days (from date of manufacturing)
47.	Amul premium dahi	Cup/matka: 15 days (from date of manufacturing)
48.	Amul low fat dahi	Cup/matka: 15 days; poly pouch: 7 days (from date of manufacturing)
49.	Amul pizza sause	6 months
50.	Amul jalapeno sause	6 months
51.	Amul mexican salsa sause	6 months
52.	Amul green chutney sause	6 months
53.	Amul flavoured milk	180 days when stored in cool and dry place
54.	Britannia tiger glucose	6 months from manufacturing date
55.	Milk bikisbritannia	6 months from manufacturing date
56.	Maggi masala-e-magic nestle	9 months from manufacturing date
57.	Maggi seasoning nestle	12 months from manufacturing date
58.	Maggi ketchup nestle	12 months from manufacturing date
59.	Maggi pasta nestle	9 months from manufacturing date
60.	Maggi oats nestle	12 months from manufacturing date
61.	Nestea nestle	12 months from manufacturing date
62.	Nescafe latte	12-18 months from manufacturing date
63.	Nescafe gold nestle	12-18 months from manufacturing date
64.	Nescafe classic nestle	12-18 months from manufacturing date
65.	Nescafe sunrise nestle	12-18 months from manufacturing date
66.	Kitkat nestle	9 months from manufacturing date
67.	Munch nestle	8 months from manufacturing date
68.	Milkybarwhite chocolate	11 months from manufacturing date

	nestle	
69.	Milky bar doubled decker	8 months from manufacturing date
	nestle	
70.	Milky bar Twix nestle	17 months from manufacturing date
71.	Milkmaid nestle	1-2 years from manufacturing date
72.	Nesplus nestle	onths from manufacturing date
73.	Peanut butter	18 months
74.	Popcorn, kernels	2 years
75.	Popcorn, commercially popped and bagged	2-3 months
76.	Popcorn, microwave packets	1 year
77.	Potato chips	2 months
78.	Potatoes, mashed, instant flakes	1 year
79.	Pretzels	6-8 months
80.	Pudding, prepared/shelf- stable	1 week
81.	Rice, brown	1 year
82.	Rice, white	2 years
83.	Rice-based mixes	6 months
84.	Shortening, vegetable	8-12 months
85.	Spices	Up to 4 years, whole spices Up to 2 years, ground spices. Lose flavour over time but remain safe to use indefinitely
86.	Stuffing mix	9-12 months
87.	Sugar, brown (light or dark)	18 months
88.	Sugar, confectioners	18 months
89.	Sugar, white	2 or more years
90.	Sugar substitute	2 years
91.	Toaster pastries	6 months, fruit 9 months, no fruit
92.	Tortillas	3 months, shelf or refrigerator 6 months, freezer Do not use if they develop mold or harden
93.	Baking mixes: brownie, cake, muffin.	12-18 months
94.	Baking powder	18 months
95.	Baking soda	Indefinite if kept dry
96.	Beans, dried	1 year
97.	Bouillon, beef or chicken	12-24 months
98.	Bouillon, vegetable	12-24 months
99.	Bread, commercially prepared (Including rolls)	3-5 days at room temp 3 months stored frozen
100.	Cakes, commercially prepared	2-4 days at room temp Several months frozen
101.	Candy (all, including chocolate)	9 months, caramel 18 months, chocolate 36 months, hard candy
102.	Casserole Mix	9-12 months
103.	Cereal, cold	1 year

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