#### European exigencies concerning the food products nutritional labelling

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**Abstract** The main purpose of the labeling of food product is offering the consumers sufficient information thus the consumer can take a fundamental buying decision, after which he will act, deposit and prepare, respectively consume the aliments in an adequate and safe mode. The foods must not be presented in a manner that will confuse the consumer in what concerns the nature, composition or quality. When we say this thing, we refer to the "label", as well as to the shape of the product's package, the way it is presented in order to sell it.

The paper presents the main exigencies concerning the producers and traders preoccupations in order to answer to the increasing exigencies of the consumers.

Keywords: food; nutritional labelling; package; European exigencies.

### 1. Introduction

In our society, the label of merchandise represents a main instrument of the releasing of the buy-sell act, being at the same time a simple and fast information means. The increase of the processing grade, the diversification of the merchandise assortment, the evolution of packaging and advertisement, has increased the role of the label.

Generally, the conditions concerning the content, label information detail grade, language and certain aspect concerning the form/mode of presentation of the information, are regulated by the government/institutions at national level; the producers of alimentary goods, respectively of labels, have a low control concerning the label and labeling. At the end of the XX<sup>th</sup> century, the concerns on the labeling of the alimentary merchandise on global level are intensified, which leads to the elaboration and publication of numerous regulations with international character (in commercial codes, international or regional standards, other law acts) [1].

In what concerns the EU regarding the labeling of food products, we can affirm that it have been elaborated numerous Regulation and Directives with obligatory or recommendation character. These make reference to the labeling of the foods in a general mode, as well as the labeling of the food products of animal origin.

The EU regulations do not need to be legislated; they are directly applicable to all the member states. As content, in these regulations are presented recommendations, opinions and/or decisions of the Justice European Court which are important for the interpretation of the law at EU member state.

In the directives there are presented the objectives that must be implemented in the national law of each EU member state.

The main normative rules concerning the labelling of food products are [2]:

- Directive CEE 90/496 concerning models of nutritional labelling;
- Directive 2000/13/EC:
- Directive 2003/89/EC;
- Directive 26/2005/EC;
- Regulations 1830/2003/EC.

## 2. Food products labelling - general considerations

The merchandise label represent in our society a main instrument of the purchase release, in the mean time, being a fast and simple way of information. The increased manufacturing degree, the merchandise range diversification, the packaging development and the need of advertising, multiplied the label role [3].

Consequently, step by step, in the commercial codes issued different reglementation concerning the label and the labelling, afterwards standards and specific legislative documents in different countries and at the world level.

It must be underlined the trend that the foods label and labelling to become object of special reglementations, near like exigency to the content, information about use, consumption and keeping.

The most detailed, precised and comprehensive reglementations are considered those adopted by the EU, elaborated in the international rules concerning the food labelling spirit, recommended by Codex Alimentarius under the aegis of FAO/OMS.

In conformity of these dispositions, no food product could be commercialised or distributed if the labelling or presentation doesn't correspond to references [2, 4].

With some exceptions, the following information is obligatory:

- The product denomination;
- The ingredients list;
- The netto weight:
- The limit date to keep unchanged the specific proprieties, including the conservation conditions;
- Name and address of producer, condition or sale;
- The provenience place in the situation when the absence of this mention could create confusion in what concerns the real origin of the food product;
- Indications of use, in the situations when the absence of this information could brake the full product or in case of necessary prudence in using;
- Other compulsory mentions provided by reglementations referring to certain food products;
- The alcoholic titre (in % of volume) for alcoholic beverages up to 1.2 % ethylic alcohol;
- Fabrication costs (by exception).

In case of the prepacked food products, before their appearance on the market must be labelled in order to furnish information about the identification of their fabrication (manufacturing) group.

The labelling system used must not create confusion regarding the food products properties, especially in what concerns the nature, the chemical content, the quality level, quantity, technology, resistance, provenience or origin, consumption manner. Except dietetic products and natural mineral waters, a food product label must not indicate curative or therapeutic properties and no indications in this regard (the package included).

There are some rules to be followed concerning the food products labelling [3]:

- All mentions to be easy to remember, without abbreviations un-prescribed by international conventions;
- Any mention to be inscriptional visible, obviously;
- Mentions must not be dissimulated, veiled or separated by other indications or images;
- Inscription of some letters, like "UHT" (for sterilized milk), "EMB" or " KG" must by provided by specific reglementations;
- Sigles used to name the origin country are accepted in the measure there are easy to understand (USA):
- Mentions referring to: product name, netto weight, validity terms, other supplementary indications concerning preservation, the alcoholmetric titre for beverages up to 1.2 % alcohol must be regrouped in the same visual field.

Observation: in the case of pre packed products must be used the same compulsory mentions, registered on the pre package or on a separated attached label.

If the pre-package systems use a surface fewer than 10 cm, the labelling must contain only information about: name of product, netto weight, validity terms and preservation specific conditions.

In case the pre-packed food products commercialised before the sell to final consumer in order to be manufactured or transformed, the compulsory mentions could be inscriptioned only in commercial documents accompanying the food products and visible on the exterior package.

When food products are sold by mail, catalogues, brochures or prospects must contain references about: the commercial name of the product, list of ingredients, provenience or origin place, other compulsory mentions for food products [5].

The commercial denomination of a food product is that settled by valid reglementations concerning the repression of frauds or other representation or commercial practices (not applicable in promotional prospects or information advertising). In the absence of reglementations or practices concerning, the food product and if necessary of its use, sufficient for consumer to know the real nature of the product and to differentiate from other similar products. In any case, the commercial denomination must be independent from the trade or producer brand or from a fantasy denomination.

In European reglementation there are specific references about [2, 4]:

- Indication of quantity varying with the nature of product or situation (liquid or solid products, promotions, conditioning in liquid etc.);
- Indication of content explanation about the ingredient category, list of ingredients, composed ingredient, modalities to be indicated;
- Indication of a date the limit date of the optional utility, validity term, limit date of consumption, particularities;
- Compulsory mentions concerning the responsible factor:
- Alcoholmetric titre indications, tolerance;
- Manufacturing lot indication modalities, the list of food products excepted from this indication;
- Mentions about recipients.

In this respect, there are some mentions applicable to food products, as follows:

#### "Light"

The use of "light" name is admitted in the denomination of a food product for usually nourishment only if this "diminuation" doesn't change the product nature and doesn't include it in the category of products destinated to a specific alimentation.

Consequently, in the presentation of these current consumption products are not admitted references to any diet.

The commercial name of a product considered "light" must be completed in the same visual field with the expression "light in ...... " (the component nature), written in lisible characters.

The label must contain:

- ◆ Indication concerning the percentage of the constituent reduction;
- ♦ Nutritional information concerning the global energetic value when the lack of it's could generate confusion about the real properties of the product; in this case is recommended to indicate the energetic value of the respective product.

From a product to another, the "light" level is variable, as, on the other hand, the borders between diet and curative products also.

In any case, the consumer must not be induced into an error with reference to the real properties of the product.

#### "Fresh products"

A food product, to be considered like "fresh" must satisfy 3 conditions:

- ◆ To have, in the moment of sell, the same essential characteristics, especially sensorial and hygienically ones, like at the end of their fabrication:
- ◆ To be manufactured with maximum 30 days before:
- ♦ To be preserved by using a treatment or the addition of certain substances to stop the microflora and enzymes activity, except the refrigeration and pasteurization.

Products being the object of a reglemented definition could be considered: fresh cheese, fresh eggs, cream, milk, meat products, fruit juice and the frozen ones if in the moment of freezing were in a perfect stage of freshness.

The above mention doesn't refer to the suggestion of "freshness" beyond some characteristics of the product (like the coffee freshness).

A special case is that of the reference to vitamins in the presentation of a food product, in conformity with valid rules for nutritional information, as follows:

- ♦ Any reference to vitamins suppose the existence of a justificative foundation, and the labelling to certain indications concerning the content for 100g or 100mg of glucides, lipids, proteins and energetically value.
- ♦ There are certain expressions to describe these product:
  - $\sqrt{}$  For food products without additives and synthesis vitamins:
  - "natural content of vitamins" if 100 kcal from the respective product cover 5-15% of the recommended nutritional contribution or 5-15% of the medium daily contribution if doesn't exist any defined value for the recommended contribution of one or many vitamins;
  - "natural content rich in vitamins" if 100 kcal of the product cover at least 15% of the recommended nutritional contribution if doesn't exist any defined value for the recommended contribution of one or many vitamins.

√ In case of food products with reconditioned content\* are admitted expression like: "with guaranteed value of vitamins" or "with reconditioned vitaminic content" in order to describe this products.

Observations: \*Reconditioning supposes addition of vitamins lost in technological processing, stockage or manipulation in normal conditions, to correspond of values before transformation.

√ In case of food products enriched\*\* in vitamins in the commercial name could be used expression like: "rich in ..." or "enriched in ....".

Observations: \*\*Enrichment means the addition of vitamins so that for 100 kcal of the final product the content of added vitamins to represent 15-40% from the recommended contribution in that vitamin.

#### "Home products (handicraft products)"

The denomination "home" or "handicraft" must be defined and delimited very carefully: a product could be considered like that only if it is elaborated by an artisan; as well, it could be presented like that only if it is manufactured at the place of commercialisation, with ingredients specific for the respective recipe [6].

#### 3. The nutritional labelling

# 3.1. Determining factors in the nutritional label appearance and use

The special attention given to the nutritional value of food products explains the variety of factors determining the appearance and evaluation of the nutritional label. These factors are to be taken into attention upon the moment of action, the domain (social, economic, educational and scientific, hygiene etc.) and the way of action (preventive, normative, corrective) and are as following:

- The evaluation of food products industry;
- The foundation on scientific base of the food production:
- The intensification of efforts to offer the possibility of a healthy and adequate nourishing;
- The necessity of consumer protection in order to ensure healthy food products, corresponding to the metabolic requirements;
- The continuous improvement of nutrition norms at the national and international level [2];

- The increasement of consumer information and education;
- The development of the marketing role of nutritional information for both consumers and producers.

**Table 1.** Daily recommended contribution of the main nutrients [6]

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Vitamins and mineral	Daily recommended
salts	contribution (DRC)
A Vitamins	800 micrograms
D Vitamins	5 micrograms
E Vitamins	10 mg
C Vitamins	60 mg
Thiamine	1.4 mg
Niacin	18 mg
B6 Vitamins	2 mg
Riboflavin	1.6 mg
Folacina	200 micrograms
B12 Vitamins	1 micrograms
Biotin	0.15 mg
Panthotenic Acid	6 mg
Calcium	800 mg
Phosphor	800 mg
Iron	14 mg
Magnesium	300 mg
Zinc	15 mg
Iodine	150 micrograms

#### 3.2. Nutritional informations

In this respect, information to be unscripted on the label could refer to:

- Energetical value;
- The following nutrients: proteins, lipids, food fibres, sodium, vitamins, mineral salts, with the respecting of two conditions:
  - Vitamins and mineral salts to be those mentioned in the **Table 1**;
  - Vitamins and mineral salts must cover at least 15% from the specific daily necessary for 100g or 100mg of the considered food product (writhen on the package if the product is presented in a single position).

Information must be unscripted in a visible place, with lisible characters and expressed at 100g or 100mg; complementary, information could be expressed like percentage on label or portion if the number of portion is mentioned.

The energetically value declaration and the content of nutrients must be presented in a numerical manner, using the following measurement units [7]:

- Energy: kj or kcal;
- Proteins: g;
- Glucides: g;
- Lipids (except the cholesterol): g;
- Food fibres: g;
- Sodium: g;
- Cholesterol: mg;
- Vitamins and mineral salts: mg.

In conformity with the UE rules, there are several models to be used in the nutritional labelling, structured in two groups (A and B) [4, 8]:

#### A. Model 1

- ♦ Energetically value;
- ♦ Quantities of: protides, glucides, and lipids.

#### B. Model 2

- ♦ Energetically value;
- ♦ Quantities of: protides, glucides, lipids, saturated fat acids, fibres, and sodium.

#### Model 3

♦ Optional substances: amidon, polyols, fat acids mono saturated, fat acids polyunsaturated, cholesterol, vitamins and mineral salts.

**Model 4** – in case of carbohydrates content declaration

◆ Glucides ... g, among which: sugar ... g; polyoli ... g; amidon ... g.

#### Model 5 – in case of total fats declaration

◆ Lipids ... g, among which: saturated ... g; mono saturated ... g; polyunsaturated ... g; cholesterol ... mg.

Model 6 – to evidence the measure units used

- ♦ Energetically value ... kj / kcal;
- ♦ Protides ... g;
- ♦ Glucides ... g;
- ♦ Lipids (except the cholesterol) ... g;
- ♦ Food fibres ... g;
- ♦ Sodium ... g;
- ♦ Cholesterol ... mg;
- ♦ Vitamins and mineral salts ... mg or micrograms.

#### 4. Conclusions

In conformity with the E.U. legislation, the food products will not by accompanied by labels which describe them in a wrong or confusing manner in what concerns the nature, composition or the quality of these foods.

The information with a compulsory character on the labels must be visible, clear, readable, translated in the language in which the product is dispatched (in case it is dispatched in another country), easily understandable by the consumer.

The labeling must not confuse the consumer through he suggestion that the respective product has special characteristics, which, in fact, are found in all the other products similar to it, through the attribution of properties it does not have.

The establishment of regulations concerning the nutritional labeling represent a priority for each country major interested in the nutritional education of consumers in order to make the nutritional label understandable and ready to be used to improve the health status of consumer.

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