

GUIDELINES ON NUTRITION LABELLING

CAC/GL 2-1985

PURPOSE OF THE GUIDELINES

To ensure that nutrition labelling is effective:

- In providing the consumer with information about a food so that a wise choice of food can be made;
- in providing a means for conveying information of the nutrient content of a food on the label;
- in encouraging the use of sound nutrition principles in the formulation of foods which would benefit public health;
- in providing the opportunity to include supplementary nutrition information on the label.

To ensure that nutrition labelling does not describe a product or present information about it which is in any way false, misleading, deceptive or insignificant in any manner.

To ensure that no nutrition claim is made without nutrition labelling.

PRINCIPLES FOR NUTRITION LABELLING

A. Nutrient declaration

- Information supplied should be for the purpose of providing consumers with a suitable profile of nutrients contained in the food and considered to be of nutritional importance. The information should not lead consumers to believe that there is exact quantitative knowledge of what individuals should eat in order to maintain health, but rather to convey an understanding of the quantity of nutrients contained in the product. A more exact quantitative delineation for individuals is not valid because there is no meaningful way in which knowledge about individual requirements can be used in labelling.

B. Supplementary nutrition information

- The content of supplementary nutrition information will vary from one country to another and within any country from one target population group to another according to the educational policy of the country and the needs of the target groups.

C. Nutrition labelling

- Nutrition labelling should not deliberately imply that a food which carries such labelling has necessarily any nutritional advantage over a food which is not so labelled.

1. SCOPE

- 1.1 These guidelines recommend procedures for the nutrition labelling of foods.
- 1.2 These guidelines apply to the nutrition labelling of all foods. For foods for special dietary uses, more detailed provisions may be developed.

2. DEFINITIONS

For the purpose of these guidelines:

- 2.1 **Nutrition labelling** is a description intended to inform the consumer of nutritional properties of a food.

- 2.2 Nutrition labelling consists of two components:
(a) nutrient declaration;
(b) supplementary nutrition information.
- 2.3 **Nutrient declaration** means a standardized statement or listing of the nutrient content of a food.
- 2.4 **Nutrition claim** means any representation which states, suggests or implies that a food has particular nutritional properties including but not limited to the energy value and to the content of protein, fat and carbohydrates, as well as the content of vitamins and minerals. The following do not constitute nutrition claims:
(a) the mention of substances in the list of ingredients;
(b) the mention of nutrients as a mandatory part of nutrition labelling;
(c) quantitative or qualitative declaration of certain nutrients or ingredients on the label if required by national legislation.
- 2.5 **Nutrient** means any substance normally consumed as a constituent of food:
(a) which provides energy; or
(b) which is needed for growth, development and maintenance of life; or
(c) a deficit of which will cause characteristic bio-chemical or physiological changes to occur.
- 2.6 **Sugars** means all mono-saccharides and di-saccharides present in food.
- 2.7 **Dietary fibre** means carbohydrate polymers¹ with ten or more monomeric units², which are not hydrolysed by the endogenous enzymes in the small intestine of humans and belong to the following categories:
- Edible carbohydrate polymers naturally occurring in the food as consumed,
 - carbohydrate polymers, which have been obtained from food raw material by physical, enzymatic or chemical means and which have been shown to have a physiological effect of benefit to health as demonstrated by generally accepted scientific evidence to competent authorities,
 - synthetic carbohydrate polymers which have been shown to have a physiological effect of benefit to health as demonstrated by generally accepted scientific evidence to competent authorities
- 2.8 **Polyunsaturated fatty acids** means fatty acids with cis-cis methylene interrupted double bonds.
- 2.9 **Trans Fatty Acids**³: For the purpose of the Codex *Guidelines on Nutrition Labelling* and other related Codex Standards and Guidelines, trans fatty acids are defined as all the geometrical isomers of monounsaturated and polyunsaturated fatty acids having non-conjugated, interrupted by at least one methylene group, carbon-carbon double bonds in the trans configuration.

3. NUTRIENT DECLARATION

3.1 Application of nutrient declaration

- 3.1.1 Nutrient declaration should be mandatory for foods for which nutrition claims, as defined in Section 2.4, are made.
- 3.1.2 Nutrient declaration should be voluntary for all other foods.

3.2 Listing of nutrients

- 3.2.1 Where nutrient declaration is applied, the declaration of the following should be mandatory:
- 3.2.1.1 Energy value; and
- 3.2.1.2 The amounts of protein, available carbohydrate (i.e., carbohydrate excluding dietary fibre) and fat; and

¹ When derived from a plant origin, dietary fibre may include fractions of lignin and/or other compounds when associated with polysaccharides in the plant cell walls and if these compounds are quantified by the AOAC gravimetric analytical method for dietary fibre analysis : Fractions of lignin and the other compounds (proteic fractions, phenolic compounds, waxes, saponins, phytates, cutin, phytosterols, etc.) intimately "associated" with plant polysaccharides are often extracted with the polysaccharides in the AOAC 991.43 method. These substances are included in the definition of fibre insofar as they are actually associated with the poly- or oligo-saccharidic fraction of fibre. However, when extracted or even re-introduced into a food containing non digestible polysaccharides, they cannot be defined as dietary fibre. When combined with polysaccharides, these associated substances may provide additional beneficial effects (pending adoption of Section on Methods of Analysis and Sampling).

² Decision on whether to include carbohydrates from 3 to 9 monomeric units should be left to national authorities.

³ Codex Members may, for the purposes of nutrition labelling, review the inclusion of specific trans fatty acids (TFAs) in the definition of TFAs if new scientific data become available.

- 3.2.1.3 The amount of any other nutrient for which a nutrition or health claim is made; and
- 3.2.1.4 The amount of any other nutrient considered to be relevant for maintaining a good nutritional status, as required by national legislation or national dietary guidelines.
- 3.2.2 When a voluntary declaration of specific nutrient, in addition to those listed in section 3.2.1, is applied, national legislation may require the mandatory declaration of the amount of any other nutrients considered relevant for maintaining a good nutritional status.
- 3.2.3 Where a specific nutrition or health claim is applied, then the declaration of the amount of any other nutrient considered relevant for maintaining a good nutritional status as required by national legislation or national dietary guidelines should be mandatory.
- 3.2.4 Where a claim is made regarding the amount and/or the type of carbohydrate, the amount of total sugars should be listed in addition to the requirements in Section 3.2.1. The amounts of starch and/or other carbohydrate constituent(s) may also be listed. Where a claim is made regarding the dietary fibre content, the amount of dietary fibre should be declared.
- 3.2.5 Where a claim is made regarding the amount and/or type of fatty acids or the amount of cholesterol, the amounts of saturated fatty acids, monounsaturated fatty acids and polyunsaturated fatty acids and cholesterol should be declared, and the amount of trans fatty acid may be required according to national legislation, in addition to the requirements of Section 3.2.1 and in accordance with Section 3.4.7.
- 3.2.6 In addition to the mandatory declaration under 3.2.1, 3.2.3 and 3.2.4 vitamins and minerals may be listed in accordance with the following criteria:
- 3.2.6.1 Only vitamins and minerals for which recommended intakes have been established and/or which are of nutritional importance in the country concerned should also be declared.
- 3.2.6.2 When nutrient declaration is applied, vitamins and minerals which are present in amounts less than 5% of the Nutrient Reference Value or of the officially recognized guidelines of the competent authority per 100 g or 100 ml or per serving as quantified on the label should not be declared.
- 3.2.7 In the case where a product is subject to labelling requirements of a Codex standard, the provisions for nutrient declaration set out in that standard should take precedence over but not conflict with the provisions of Sections 3.2.1 to 3.2.6 of these Guidelines.

3.3 Calculation of nutrients

3.3.1 Calculation of energy

The amount of energy to be listed should be calculated by using the following conversion factors:

Carbohydrates	4 kcal/g – 17 kJ
Protein	4 kcal/g – 17 kJ
Fat	9 kcal/g – 37 kJ
Alcohol (Ethanol)	7 kcal/g – 29 kJ
Organic acid	3 kcal/g – 13 kJ

3.3.2 Calculation of protein

The amount of protein to be listed should be calculated using the formula:

$$\text{Protein} = \text{Total Kjeldahl Nitrogen} \times 6.25$$

unless a different factor is given in a Codex standard or in the Codex method of analysis for that food.

3.4 Presentation of nutrient content

- 3.4.1 The declaration of nutrient content should be numerical. However, the use of additional means of presentation should not be excluded.
- 3.4.2 Information on energy value should be expressed in kJ and kcal per 100 g or per 100 ml or per package if the package contains only a single portion. In addition, this information may be given per serving as quantified on the label or per portion provided that the number of portions contained in the package is stated.
- 3.4.3 Information on the amounts of protein, carbohydrate and fat in the food should be expressed in g per 100 g or per 100 ml or per package if the package contains only a single portion. In addition, this information may be given per

serving as quantified on the label or per portion provided that the number of portions contained in the package is stated.

- 3.4.4 Numerical information on vitamins and minerals should be expressed in metric units and/or as a percentage of the Nutrient Reference Value per 100 g or per 100 ml or per package if the package contains only a single portion. In addition, this information may be given per serving as quantified on the label or per portion provided that the number of portions contained in the package is stated.

In addition, information on protein may also be expressed as percentages of the Nutrient Reference Value⁴.

The following Nutrient Reference Values should be used for labelling purposes in the interests of international standardization and harmonization:

Protein	(g)	50
Vitamin A	(µg)	800 ⁵
Vitamin D	(µg)	5 ⁶
Vitamin C	(mg)	60
Thiamin	(mg)	1.4
Riboflavin	(mg)	1.6
Niacin	(mg)	18 ⁶
Vitamin B ₆	(mg)	2
Folic acid	(µg)	200
Vitamin B ₁₂	(µg)	1
Calcium	(mg)	800
Magnesium	(mg)	300
Iron	(mg)	14
Zinc	(mg)	15
Iodine	(µg)	150 ⁶
Copper	Value to be established	
Selenium	Value to be established	

- 3.4.5 In countries where serving sizes are normally used, the information required by Sections 3.4.2, 3.4.3 and 3.4.4 may be given per serving only as quantified on the label or per portion provided that the number of portions contained in the package is stated.

- 3.4.6 The presence of available carbohydrates should be declared on the label as "carbohydrates". Where the type of carbohydrate is declared, this declaration should follow immediately the declaration of the total carbohydrate content in the following format:

"Carbohydrate ... g, of which sugars ... g".

This may be followed by the following: "x" ...g

where "x" represents the specific name of any other carbohydrate constituent.

- 3.4.7 Where the amount and/or type of fatty acids or the amount of cholesterol is declared, this declaration should follow immediately the declaration of the total fat in accordance with Section 3.4.3.

The following format should be used:

⁴ In order to take into account future scientific developments, future FAO/WHO and other expert recommendations and other relevant information, the list of nutrients and the list of nutrient reference values should be kept under review.

⁵ For the declaration of β-carotene (provitamin A) the following conversion factor should be used: 1 µg retinol = 6 µg β-carotene

⁶ Nutrient Reference Values for Vitamin D, Niacin and Iodine may not be applicable for countries where national nutrition policies or local conditions provide sufficient allowance to ensure that individual requirements are satisfied. See also section 3.2.6.1 of the Codex Guidelines on Nutrition Labelling.

Total Fat	...	g
of which	saturated fatty acids	g
	trans fatty acids	g
	monounsaturated fatty acids	g
	polyunsaturated fatty acids	g
Cholesterol	...	mg

3.5 Tolerances and compliance

- 3.5.1 Tolerance limits should be set in relation to public health concerns, shelf-life, accuracy of analysis, processing variability and inherent lability and variability of the nutrient in the product, and, according to whether the nutrient has been added or is naturally occurring in the product.
- 3.5.2 The values used in nutrient declaration should be weighted average values derived from data specifically obtained from analyses of products which are representative of the product being labelled.
- 3.5.3 In those cases where a product is subject to a Codex standard, requirements for tolerances for nutrient declaration established by the standard should take precedence over these guidelines.

4. SUPPLEMENTARY NUTRITION INFORMATION

- 4.1 Supplementary nutrition information is intended to increase the consumer's understanding of the nutritional value of their food and to assist in interpreting the nutrient declaration. There are a number of ways of presenting such information that may be suitable for use on food labels.
- 4.2 The use of supplementary nutrition information on food labels should be optional and should only be given in addition to, and not in place of, the nutrient declaration, except for target populations who have a high illiteracy rate and/or comparatively little knowledge of nutrition. For these, food group symbols or other pictorial or colour presentations may be used without the nutrient declaration.
- 4.3 Supplementary nutrition information on labels should be accompanied by consumer education programmes to increase consumer understanding and use of the information.