



SFDA.FD 2233 / 2018

Requirements of nutritional labeling

ICS: 67.040

Preface

The Authority is an independent body whose primary purpose is to organize and control the food, medicine, medical devices. Its functions include the development of technical regulations and specifications in the fields of food, medicine, medical devices and products whether imported or manufactured locally. The authority food sector has updated (Requirements of nutritional labeling) number (2233) after reviewing the relevant specifications. The Technical Regulation was adopted at the meeting of the Board of Directors of the Authority (17) held on 16/09/1439H corresponding to 31/05/2018G.

Requirements of nutritional labeling

1. Field:

1.1. This Regulation is concerned with the procedures of developing explanatory nutritional labeling on the food products label.

1.2. This Regulation applies to all packaged food products and the following foods are excluded from applying this Regulation:

1.2.1 Foods in which the amount of calories, protein, carbohydrates, fats, saturated fats, salt or sodium, and the total number of sugars are too small (Which can be expressed as zero) such as spices.

1.2.2. Fresh vegetables and fruits include any mixture of fresh vegetables or fruits, whole or cut, without any additives (such as salad without toast) and without dried vegetables and fruits.

1.2.3. Fresh, chilled and uncooked meat, poultry, and fish without spices and water.

1.2.4. Foods that are marketed directly to the consumer from the location of preparation such as salads, baked goods, sweets or ready meals.

1.2.5. Food products consisting of a single nutrient such as rice, tea, coffee or sugar.

1.2.6. Bottled water and mineral water, provided that it is required to explain its mineral content.

1.2.7. Packaged food in small packaging (the package size is less than 25 cm²).

1.2.8. Food additives.

1.2.9. Foods that need to be packed or further processed and not sold directly to the consumer.

1.2.10. External packagings for self-service food that carry nutrition labels on an accompanying plate or on the original packaging.

2. Supplementary References:

2.1 GSO 9 SFDA.FD\ "Packaged food labels".

2.2 GSO 2333 SFDA.FD\ requirements of food with nutritional and health claims.

2.3 GSO 2539 SFDA.FD\ Allowed vitamins and minerals in food.

3. Definitions:

- 3.1 Nutrition declaration data: A declaration description directed at the consumer to inform him with the characteristics of nutrients and nutritional information of a food. Nutrition declaration data consists of two components:
- 3.1.1 Declarations about the nutrient - Declaration of nutrients.
- 3.1.2 Additional\Supplementary nutritional information.
- 3.2 Nutrition declaration: A standardized statement or list of nutrients contained in food.
- 3.3 Nutrition claim: Any statement, announcement, tip or presentation stating, suggesting or claiming that a particular food contains certain nutritional properties, including but not limited to the energy value, food content of protein, fat or carbohydrate, as well as its content of vitamins and minerals.
- 3.3.1 Mentioning the materials included in the manufacturing of food in the list of ingredients or contents.
- 3.3.2 Mentioning nutrients that are a mandatory part of nutrition declaration data.
- 3.3.3 Quantity and quality data of certain nutrients or components on the label if required by national legislation.
- 3.4 Nutrient: Any substance normally consumed as a primary ingredient of food aims to:
- 3.4.1 Supply the body with power.
- 3.4.2 The body needs it for growth, development and preservation of life.
- 3.4.3 Its lack leads to changes in the biochemical and physiological characteristics of the body.
- 3.5 Sugars: All Monosaccharides and Disaccharides sugars in the food.
- 3.5.1 Added sugars: Sugars added during the processing of foods or packaged as such, including sugars (Monosaccharides and Disaccharides), sugars from honey, sugars from fruit juice or concentrated vegetables that exceed the expectations of the same quantity of 100% of fruit or vegetable juice of the same type.
- 3.6.1 Compound or complex carbohydrates that are edible and naturally presented in food.
- 3.6.2 Compound or complex carbohydrates extracted from raw food by physical or chemical methods or by enzymes, which have been shown to have a physiological effect beneficial to health as described in scientific evidences accepted by the competent authorities.
- 3.6.3 Manufactured compound or complex carbohydrates that have been shown to have a physiological effect beneficial to health as described in scientific evidences accepted by competent authorities.
- 3.7 Polyunsaturated fatty acids: They are fatty acids containing contiguous conjugated bonds (Cis-Cis) separated by non-reciprocating methylene units.
- 3.8 Trans Fatty Acids: All isomers of monounsaturated and Polyunsaturated fatty acids with unconnected double carbon bonds are separated by at least one set of methylene.
- 3.9 Nutrient reference value: it is a set of numerical values that are based on scientific data for the purpose of labeling the relevant food. It includes the following two types of the national reference values:
- 3.9.1. Nutrient reference value related to the needs: It refers to the reference value of the nutrient component based on nutrient level.

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Saudi Food & Drug Authority

3.9.2. Nutrient reference value related to chronic diseases: It refers to nutrient levels associated with reducing the risk of diet chronic diseases and does not include nutrient deficiencies or disorders.

4. General Requirements:

4.1 Nutrition declaration shall be mandatory for all packaged food products except for those mentioned in item 1.2.

4.2 List of nutrients:

4.2.1 When using a nutrition declaration, the following data are required:

4.2.1.1 The amount of energy.

4.2.1.2 The available amount of protein, carbohydrates (such as carbohydrate nutrients and dietary fiber), fat, saturated fat, trans fat, cholesterol, sodium, total of sugars and added sugar.

4.2.1.3 The amount of any other nutrient that is claimed to have nutritional or health effects.

4.2.2 If there is an optional declaration of a specific nutrient element in addition to what mentioned in term 4.2.1, national legislation may require the necessity to declare the amount of any other nutrient relevant to maintaining a good nutritional status.

4.2.3 When applying a specific nutritional or health claim, the declaration of the amount of any other nutrient related to maintaining a good nutritional status as required by national legislation or national food requirements is mandatory.

4.2.4 The quantities and / or the type of saturated fatty acids, monounsaturated fatty acids, polyunsaturated fatty acids, cholesterol and trans fatty acids should be declared in addition to the requirements in item 1.2.4 and in line with item 7.4.4.

4.2.5 In addition to the mandatory declarations in items 4.2.1, 4.2.3 and 4.2.4, vitamins and minerals can be inserted according to the following criteria:

4.2.5.1 The vitamins and mineral elements that have been recommended by the competent authorities or listed as requirements in the food product specification to be added based on the health or nutritional needs of a particular country or region.

4.2.5.2 When a declaration of a nutrient is applied, vitamins and minerals that are less than 5% of NRV or official guidelines for national legislation that pertain to values for every 100 g or 100 ml or amounts should not be mentioned on the label.

4.3 Calculation of nutrients:

4.3.1 Calculation of energy:

The amount of energy recorded on the label is calculated using the conversion factors as shown in the following table (Table 1):

Carbohydrate	4 kcal / g - 17 kJ
Protein	4 kcal / g - 17 kJ
Fats	9 kcal / g - 37 kJ
Organic Acid	3 kcal / g - 13 kJ

The amount of energy is calculated for every gram of nutrient

4.3.2 Protein calculation:

To calculate the amount of protein, the following equation should be used:

$$\text{Protein} = \text{total Nitrogen (Kjeldahl method)} \times 6.25$$

Unless another conversion factor is mentioned in a Saudi standard or methods of analysis for that food product.

4.4 Display the content of nutrients:

4.4.1 Nutrition content shall be declared, as shown in the following table (Table 2):

Nutrition Facts	
Number of rations in the package: 8	
Size of rations:	2/3 cups (55 gm)
Quantity per each ration or 100 ml or 100 gm	
Calories:	230
*Daily requirement ratio %	
Total fat: 8 gm	10%
Saturated fats 1 gm	5%
Trans fats	0 gm
Cholesterol 0 mg	0%
Sodium 160 mg	7%
Total carbohydrates 37 gm	13%
Dietary fiber 4 gm	
Total sugar 12 gm	
Includes 10 gm of added sugar	20 %
Protein	3 gm
* Daily requirement ratio indicates Nutrients in one ration bases on diet containing 2000 calories	

2.4.4 Information on the power level shall be expressed in kilocalories per 100 g or 100 ml or per package if the package if it contains one piece or quantity / ration. Information may also be provided for each portion of the food as indicated quantitatively on the label or per piece of the package based on the number of pieces in the package.

3.4.4 Information on protein, carbohydrate and fat content shall be expressed in grams per 100 g or 100 ml or per package if it contains one piece or quantity / ration. Information may also be provided for each portion of the food as indicated quantitatively on the label or per piece of the package based on the number of pieces in the package.

4.4.4 Digital information for vitamins and minerals shall be expressed in grams per 100 g or 100 ml or per package if it contains one piece or quantity / ration. Information may also be provided for each portion of the food as indicated quantitatively on the label or per piece of the package based on the number of pieces in the package.

5.4.4 Information on daily requirement values shall be expressed as percentages for all information on the card as in Table 2.

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The following dietary reference values are used for nutrition labeling in line with international standards (Table 3).

Component	Reference value	Unit
energy	2000	Kilocalories
Protein	50	Grams
Fats	70	Grams
Saturated fatty acids	20	Grams
Cholesterol	300	Milligrams
Carbohydrates	260	Grams
Fiber	28	Grams
Sugar	50	Grams
Salt	6	Grams
Vitamin (A)	800	Micrograms
Vitamin (D)	5-15	Micrograms
Vitamin (C)	100	Milligrams
Vitamin (K)	60	Micrograms
Vitamin (E)	9	Milligrams
Thiamine	1.2	Milligrams
Riboflavin	1.2	Milligrams
Niacin	15	Milligrams
Vitamin (B6)	1.3	Milligrams
Folic acid (folate)	400	Micrograms
Vitamin (B12)	2.4	Micrograms
Pantothenic acid	5	Milligrams
Biotin	30	Micrograms
Calcium	1000	Milligrams
Magnesium	310	Milligrams
Iron	14 (15% of food absorption; varied diets, rich in fish, poultry, and / or rich in fruits and vegetables). 22 (10% of food absorption; diets rich in grains, roots and tubers, with some meat, fish and poultry and / or containing some fruits and vegetables).	Milligrams
Zinc	11) 30% of food absorption; mixed diets; plant diets in which cereal products are consumed or high extraction rate (more than 90%); 14 (22% of food absorption; cereal-based diets with a total calories of more than 50% of cereals or pulses and a small amount of animal protein).	Milligrams
Iodine	150	Micrograms
Potassium	2000	Milligrams
Phosphorus	700	Milligrams

Copper	900	Micrograms
Selenium	60	Micrograms
Manganese	3	Milligrams
Molybdenum	45	Micrograms

6.4.4 Carbohydrate shall be declared on the label (carbohydrate). In the case of clarification of the type of carbohydrates, it is necessary to follow the statement of the total content of carbohydrates as follows:

"Carbohydrates grams where polysaccharides ... grams".

This may be followed by: (x) grams.

Where (x) represents the specific name of any other carbohydrates.

7.4.4 The amount and / or type of fatty acids or the amount of cholesterol shall be stated immediately following the statement of total fat content according to item 4.4.3.

The statement is as follows (Table 4):

Total fat content	...	Grams
Includes	Saturated fatty acids	Grams
	Trans Fatty Acids	Grams
	Monounsaturated fatty acids	Grams
	Polyunsaturated fatty acids	Grams
Cholesterol	...	Milligrams

8.4.4 The amount of conversion of calories per nutrient (carbohydrate, protein, fat) is optionally added in the final part of the label (fat 9 grams, carbohydrates 4 grams, protein 4 grams).

9.4.4 The daily intake of the nutrient shall be calculated based on the diet containing 2000 calories per average person plus the addition of the phrase (daily consumption ratio is based on diet containing 2000 calories). Therefore, the bottom part of the nutrition label shall include on the ratio of the daily requirement of nutrients per ration.

10.4.4 If the product contains very small amounts of nutrients to be written in nutritional data and can be expressed as "0" or "<X" as shown in (Table 5), give values for "X" for the specific nutrients. The phrase "contains very small amounts of" where "X" is the value that can be expressed as zero or as stated in the rounding column in Table 5.

4.4.11 The values rounding of the dietary explanations on the food label shall be as follows in (Table 5):

Food ingredient	Quantity	Rounding
Energy		To the nearest 1 kcal / kJ. (Without decimal point)

Minerals	- 35 %	+ 45 %
Carbohydrates, Sugars, Proteins, Fiber	If the product content per 100 grams is: < 10 grams: 10-40 grams: > 40 grams:	± 2 grams ± 20 % ± 8 grams
Fats	If the product content per 100 grams is: < 10 grams: 10-40 grams: > 40 grams:	± 1.5 grams ± 20 % ± 8 grams
Saturated fats	If the product content per 100 grams is:	
Monounsaturated fatty acids,	< 4 grams:	± 0.8 grams
Polyunsaturated fatty acids	≥ 4 grams:	± 20 %
Sodium	If the product content per 100 grams is: < 0.5 grams: ≥ 0.5 grams:	± 0.15 grams ± 20 %
Salt	If the product content per 100 grams is: < 1.25 grams: ≥ 1.25 grams:	± 0.375 grams ± 20 %

** The upper tolerance of Vitamin (C) in liquids can be accepted.

5. Principles and criteria for clarity of nutrition data on the label

5.1 GENERAL PRINCIPLES: The principles contained in items 7.1.1, 7.1.2, 7.1.3 and 7.2 of the specification mentioned in item 2.1.

5.2 Offer Authority:

5.2.1 The purpose of the recommendations of the offer Authority is to enhance the clarity of nutrition data on the label. The competent authority may identify any other means of presenting nutritional data, taking into account the methods and issues applied at the national level and based on the needs of the consumer.

5.2.2 Design Nutritional content shall be stated in numbers and in table form. If there is not enough space to write data in a table, it can be displayed as linear lines.

5.2.3 Nutrient shall be listed in a specific order by the competent authority so that they are homogeneous for food products.

5.2.4 Line - The competent authority shall take into consideration the type, style and minimum size of the line - the size of the line (the amount of energy) (size of the ration) shall be increased and clarified using a broad line to highlight this information.

5.2.5 Contrast - A specific contrast between writing and background shall be maintained to ensure the clarity of nutrition data.

5.2.6 Digital presentation - The digital presentation of nutritional content shall be in accordance with item 4.4.

6. Supplementary (additional) nutritional information:

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- 6.1 Supplementary nutritional information is intended to increase consumers' awareness of nutritional value in foods to help in understanding nutritional explanations. There are many methods to provide that information that may be suitable for use on food labels.
- 6.2 The use of Supplementary nutritional information on food labels is optional and shall be in addition to the nutritional indication and shall not be replaced, unless the target sample of population is highly illiterate or they have little nutrition information, in which case, food group codes or displays color and images can be used without nutritional clarification.
- 6.3 Supplementary nutritional information on the food product label shall be accompanied by consumer education programs that increase consumer awareness and an understanding of the use of such information.

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Technical Terms

Polyunsaturated fatty acids.....	أحماض دهنية متعددة غير مشبعة
Nutrition claim	ادعاء تغذوي
Monounsaturated fatty acids	أحماض دهنية أحادية غير مشبعة
Trans Fatty Acids.....	أحماض دهنية متحولة
Nutrition declaration.....	إيضاح تغذوي
Dietary fibers.....	ألياف غذائية
Label	بطاقة
Nutrition labeling	بيانات تغذوية على البطاقة
Nutritional	تغذوي
Nutrition	تغذية
Fats	دهون
Sugars	سكريات
Energy	طاقة
Nutrient	عنصر مغذي
Unsaturated	غير مشبع
Carbohydrates	كربوهيدرات
Saturated	مشبع
Added Sugar	السكر المضاف
Nutrient reference value	القيمة المرجعية للعنصر التغذوي

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References:

- CODEX Specification "CAC / GL 2: 2017" Guidelines for Nutrition labeling.
- U.S. Food and Drug Administration (2016-11867): Changes to nutrition labeling. Food Labeling: Revision of the Nutrition and Supplement Facts Labels, CFR:21 CFR Part 101, Federal Register Number: 2016-11867
<https://www.fda.gov/food/guidanceregulation/guidancedocumentsregulatoryinformation/labelingnutrition/ucm385663.htm#highlights>
- Guidance document for Competent Authorities for the control of compliance with EU Regulation No. 1169 (December 2016).
Guidance document for competent authorities, tolerances for the control of compliance of nutrient values declared on a label with EU legislation No 1169/2011.
https://ec.europa.eu/food/sites/food/files/safety/docs/labelling_nutrition_vitamins_minerals_guidance_tolerances_1212_en.pdf
- EU Regulation No. 1169/2011.
<https://eur-lex.europa.eu/legal-content/en/ALL/?uri=CELEX%3A32011R1169>
- A food-labeling guide, guidance for industry, FDA
<https://www.fda.gov/downloads/Food/GuidanceRegulation/GuidanceDocumentsRegulatoryInformation/UCM265446.pdf>