OVERVIEW OF NATIONAL MOLDAVIAN REGULATIONS ON FOOD LABELING

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Abstract: This review of the global regulatory environment around food labeling, including nutrition labeling and health claims aims to provide an overview of existing national regulations and a description of past and future regulatory developments. It compiles, categorizes, and tabulates national regulations. It also reviews regulations on the quantitative declaration of ingredients (information which indicates to consumers the proportion of healthful and less healthful components of the food product).

Keywords: food labeling, national regulations, nutrition and health claims.

1. Food labeling

Consumers gather information about the foods they purchase from a wide variety of sources. Family knowledge, education, the media and advertising all convey messages about different food characteristics; information may also be found on the food product label. From a health standpoint, the information on those labels about the nutritional content and health benefits of food is particularly important. Two types of such information appearing on food products are "nutrition labels" and "health claims".

By providing information to consumers, nutrition labels and health claims on foods have the potential to contribute to the achievement of public health objectives. Labeling provides consumers with information about the nutritional properties of a food and health claims (statements connecting a food, food component or a nutrient to a state of desired health) provide information to consumers about the nutritional and health advantages of particular foods or nutrients. Health claims are also a marketing technique used by food companies.

In the Republic of Moldova food labeling is carried out in conformity with national regulations in the food industry. According to the national regulation No. 996/2003 "Norms on food labeling and labeling of household chemicals" food labeling means labeling or labeling of identification elements on foods or its

packing, which accompanies foods represented for realization.

According to another national regulation namely the Parliament Law of the Republic of Moldova nr. 78 as of 18.03.2004 "On foodstuffs", *labeling* (marking) is any words, trademarks, registered trademarks, signs, elements drawn or written, stamped, embossed or printed on, or attached to a container with foodstuffs and positioned on any packaging, accompanying document, notice, label, band or flange, which is accompanying or is referring to such foodstuff.

The label must be placed so as not to separate from a packing and information contained on it can not be erased. Information on food labels must be placed in a visible place so that consumers could read and understand it during normal conditions of use and purchase. It is prohibited to extend food's shelf life, including by label's substitution or repacking. It is not allowed to use such inscriptions whereby foods are assigned or consumer is suggested prophylactic or healing properties for some human diseases during labeling. There are some exception cases when these properties have been proved or confirmed by the Ministry of Health of the Republic of Moldova and also which mislead consumers about food properties by indication other properties, origin, identity, features, composition, suitability, method of production

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and manufacturer. The distribution of wrong labeling foods by any means is prohibited.

2. General regulations

Food labeling mustn't mislead consumers and must provide them with necessary, sufficient, reliable and easily amenable comparison information. It would allow to choose a product that corresponds to consumers' claims and their financial possibilities and also to receive the information about possible risks to which consumers may be exposed. General national regulations on food labeling in the Republic of Moldova are given in table 1.

Table 1. General national regulations on food labeling

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№	Number and title of regulation	Short review of regulation				
1.	Regulation No. 996/2003 . Norms on food labeling and labeling of household chemicals.	Norms on food labeling are mandatory sanitary and technical regulations and apply to all foods available on the market of the Republic of Moldova. These norms regulate the way of food labeling on the market for the final consumer and catering enterprises. The requirements of these rules also apply to certain aspects of food products' presentation and advertising.				
2.	Regulation No. 78/2004. The law on food products.	This law establishes a regulatory framework in the field of foods' production, processing and distribution. It also regulates basic trade's conditions of these foods, including its security with the purpose of human's health protection, protection of consumer interests concerning foods, ensuring conscientious practices in the food trade. This law applies to all foods intended for placement on the domestic market.				
3.	Regulation No. 196/2011. Sanitary regulation on nutritional content and health claims on foods	This regulation establishes the rules concerning nutrition labeling and health claims on foods with the purpose of ensuring the effective functioning of the domestic market and a high level of consumer protection.				
4.	Regulation No. 01-04/2004. Sanitary norms on nutrition labeling, food labeling for special dietary use, food labeling genetically modified or food labeling that has been obtained from genetically modified organisms.	These rules regulate requirements and methods of nutrition labeling on foods; genetically modified foods; foods for special dietary use; mineral waters; food additives; foods enriched with missing nutrients.				
5.	Regulation No. 538/2009. Sanitary regulation on food additives.	This regulation establishes the standards for food additives used in foods with the purpose of ensuring a high level of public's health protection and a high level of consumer protection.				
6.	Regulation No. 105/2003. The law on consumer rights protection.	This law establishes a regulatory framework for people's state protection who acts as consumers.				

3. Food label requirements

According to the resolution of the Government of the Republic of Moldova No. 996/2003 labeling provides customers with necessary, sufficient, easily verifiable and comparable information. It allows him to choose the food product that corresponds to his

requirements from the standpoint of his needs and financial capabilities, as well as learn the possible risks to which he may be exposed by purchasing foods. Mandatory food label requirements are given in figure 1.

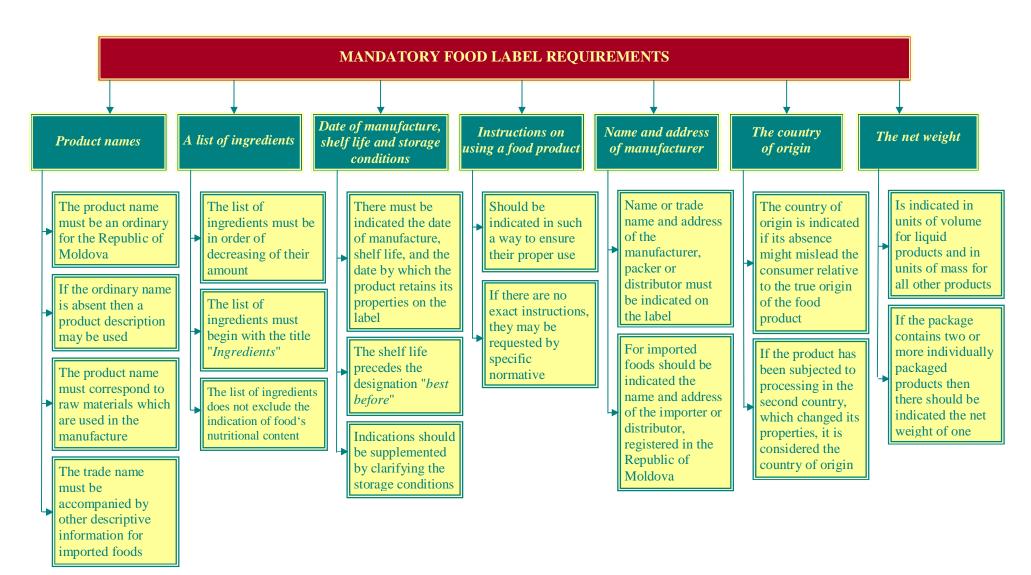


Fig. 1. Mandatory food label requirements in accordance with national food legislation

All marks made during labeling, should be clear, legible, indelible and easily understandable and placed in a visible place for consumers during normal conditions of use and purchase. Marks on the label mustn't be covered or separated by other instructions, inscriptions or drawings.

The information contained on the label mustn't mislead the consumer. Labeling and the methods by which it is carried out, mustn't assign foods with such properties as prevention, healing or curing diseases or make reference to such properties. This prohibition does not apply to natural mineral waters, as well as any foods for special dietary use, permitted for this purpose by the Ministry of Health of the Republic of Moldova.

Some foods require additional mandatory labeling. Such products include: milk, concentrated or powdered milk, fermented milk products, cheese, butter, margarine, meat and meat products, fish and fish products, eggs and egg products, vegetables and fruits, natural fruit and vegetable juices, cool drinks, canned fruits, chocolate and chocolate products, coffee, salt, spices, wine, alcohol products, vinegar, sugar.

Food labeling that has been treated with ionizing radiation is carried out with an indication on the label "Treated with ionizing radiation". Food labeling that has been obtained from genetically modified organisms is carried out with an indication on the label "Genetically modified food' or "The product obtained from genetically modified organisms". Food labels for special dietary use and food additives must

contain additional relevant information about their properties and characteristics. Food labels for special dietary use for babies and small children mustn't contain any information which would prevent or would not be favorable for breastfeeding. Food additives' labels mustn't be used for assign them prophylactic and healing properties and also it is not allowed to make any reference to such properties.

4. Nutrition and Health claims

The use of indications about nutritional content and health claims on foods is carried out in conformity with national regulation No. 196/2011 "Sanitary regulation on nutritional content and health claims on foods " and regulation No. 01-04/2004 "Sanitary norms on nutrition labeling, food labeling for special dietary use, food labeling genetically modified or food labeling that has been obtained from genetically modified organisms".

Nutrition labeling on foods is voluntary but it may be required in case of a food product appears on the label during its presentation or advertising to the declaration about nutritional content.

It is allowed to indicate the declarations about the nutritional content which relate to the energy value; nutritional substances such as proteins, carbohydrates, fats, fiber, sodium; vitamins and mineral salts, when they are present in significant amounts (more than 15 % of recommended daily allowance-RDA). Recommended daily allowance (RDA) for vitamins and minerals are given in Table 2.

Table 2. Recommended daily	z allowance ($\mathbf{D}\mathbf{V}$	\ for	witamine	and minerale
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No	Nutrient	Unit	RDA	No	Nutrient	Unit	RDA
1	Vitamin A	μg	800	10	Biotin	mg	0.15
2	Vitamin D	μg	5	11	Vitamin PP	mg	18
3	Vitamin E	mg	10	12	Vitamin C	mg	60
4	$Vitamin B_1$	mg	1.4	13	Calcium	mg	800
5	Vitamin B ₂	mg	1.6	14	Phosphorus	mg	800
6	Vitamin B ₆	mg	2	15	Magnesium	mg	300
7	$Vitamin B_{12}$	μg	1	16	Zink	mg	15
8	Folic acid	μg	200	17	Iron	mg	14
9	Pantothenic acid	mg	6	18	Iodine	μg	150

All information about nutritional content is grouped into one or two groups during labeling.

The first group includes the energy value, amount of proteins, fats and carbohydrates. The second group includes the energy value, amount of proteins, carbohydrates, sugars, fats, saturated fatty acids, dietary fibers and sodium. Nutrition labeling may also include amounts of one or more of the following substances: starch, polyols, monounsaturated fatty acids, polyunsaturated fatty acids, cholesterol and any of vitamin or mineral elements contained in significant amounts in foods.

Along with nutritional content there may be indicated some health claims which mean any indication whereby declares, supposes or from which follows the fact of a relationship category of food, food product or one of its components with health. Conditions for indications of health claims are given in figure 2.

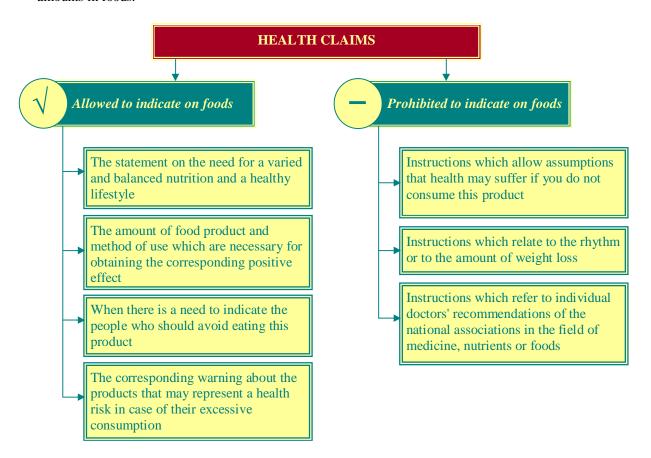


Fig. 2. Conditions for indications of health claims

It is allowed to indicate health claims which describe or refer to influence of a nutrient or other substance on the growth, development and organism's functions, as well as psychological and behavioral functions.

5. Conclusions

Food labeling can be an effective means of helping consumers to make healthful food choices, although existing evidence concerning the effect of health claims on diet and public health is insufficient. Regulations can play a crucial role in enhancing the potential for nutrition labeling and health claims to promote

health. This review shows that regulations have many the same approaches to select from when constructing a regulatory framework. To maximise the potential of nutrition labels and health claims to improve public health, regulations should be developed with long-term dietary improvements across populations as their underlying goal.

The effectiveness of nutrition labeling and health claims in improving national dietary patterns relies largely on a motivated and educated public to make healthful choices. This approach has limitations. If there is to be significant change, action on nutrition labels and health claims need to be part of an integrated

approach that tackles the increasing rates of dietrelated non-communicable diseases at a population level, as well as targeting individuals.

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