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Examination of front-of-packaged (FOP) labelling systems and nutrition-health statements on packaged foods in Türkiye

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ABSTRACT

There is a growing trend worldwide towards greater awareness of food labelling systems in the fight against global challenges such as unhealthy nutrition and obesity. Nearly 30 governments have approved various front-of-package (FOP) labelling systems, and many countries plan to adopt them. However, since there is no legal regulation regarding FOP labelling systems in Türkiye, nutrition and health-related statements appear on many packaged food products. Although these statements enable consumers to make healthy food choices, they also have the potential to mislead consumers by supporting the perception that foods lacking essential nutritional components or containing potentially harmful substances are healthy. This study examined FOP labelling systems used worldwide, and nutrition and health-related statements on the front of 1336 packaged foods in 6 categories in Türkiye were analysed. Although it varies in each category, the most common expressions are generally recommended daily amount (%14.5), fat (%16), sugar (%9.9), vitamin-mineral (%5.1), and protein (%9.4). Additionally, salt (%0,9), vegan (%2), additive (%11.6) and fibre content (%6.8) information is also commonly declared. As a result, the implementation of effective labeling regulations in Turkey can enhance public health and mitigate the adverse effects of unhealthy nutrition on society.

Keywords: Food security, Food labelling, Front of the package (FOP), Nutrition and health

Introduction

Labelling packaged foods is one of the most important tools that enable consumers to make healthier food choices in line with their expectations (Ndanuko et al., 2021). Nowadays, as consumers' concerns about food safety increase, interest in food labelling systems also increases, and the concept of 'nutrition and health-related statements' comes to the fore on labels. "Nutrition and health-related statements" are declarations that food has certain nutritional and/or health-promoting properties, including its energy value, protein, fat, carbohydrate, vitamin, mineral, etc., content. Labelling food products as “high calcium, enriched with vitamins, reduced salt, reduced sugar content, low cholesterol, etc.” is a nutrition statement. In addition, statements such as "it contains calcium, protects bone health or contains low calories, helps lose weight" can be given as examples of statements associated with health (de Boer & Bast, 2015; Singh et al., 2021). Nutrition and health-related statements have the potential to mislead consumers that nutritionally deficient foods are healthy. When it promotes the presence of a beneficial nutrient while not indicating the presence of less beneficial or potentially harmful nutrients in the same product, it has the potential to mislead the consumer. For example, a food with "reduced fat content" statements may contain higher levels of energy, sugar or sodium.

Ingredient information or related statements on packaged foods can be found on the front of the package (FOP) or the back of the package (BOP) (Bryła, 2020). Generally, information such as brand name, product name and design on the outer surface of the packaging is highlighted. In contrast, detailed information such as nutritional values, ingredient list and instructions for use are located on the back surface. BOP is regulated by each country's food labelling regulations and standards. This labelling method allows the front of the product packaging to have a cleaner and more minimalist appearance. On the other hand, FOP summarises the general nutritional profile of the product, which has recently been increasingly seen in packaged foods around the world (Sousa et al., 2023; Temple, 2020). Research shows that FOPs are easier to understand than nutrition fact sheets, provide faster and more accurate information processing, and help consumers better distinguish between healthier and less healthy products (Bayram & Ozturkcan, 2022; Bryła, 2020).

Although there are many types of categorisation of FOP labelling systems, they can generally be divided into "interpretive labels" and "non-interpretive labels". Examples of interpretive labelling systems are the Swedish keyhole, the Finnish Heart Symbol, the Nutri-score system, Warning labels, the Traffic Light Labels, and the Health Star Rating (Batista et al., 2023; Kanter et al., 2018). The Swedish keyhole labelling system has been used in northern European countries since 1989. Foods bearing this symbol have less fat, sugar and salt and more fibre and bran content. The Finnish Heart symbol has been used to indicate products with low fat, salt and sugar content since 2000. The Nutri-Score labelling system has been used in many European countries (France, Belgium, Germany, Spain, Netherlands, Luxemburg, and Switzerland) since 2017. According to literature studies, the Nutri-Score labelling system can be highly distinctive in packaged foods. Foods high in fruits and vegetables are correctly classified into the "healthiest" (A points) categories, while products rich in sugar and animal fats are classified into the "less healthy" (D-E) points" categories. Nutri-Score is a scoring system that takes into account negative qualities (energy, total sugar, saturated fatty acids, sodium content, etc.) as well as positive qualities (fruits, vegetables, nuts, fibre, protein and seed, walnut and olive oil content, etc.) (Muzzioli et al., 2022). The system has been criticised for focusing on the negative effects of nutrients and giving higher negative scores while giving lower scores for foods with positive effects. In this case, the system is thought to focus more on what should not be eaten and leaves what should be eaten as a secondary concern (Carruba et al., 2022). Multiple Traffic Lights have been used in the UK since 2004. In the Traffic Light labelling system, the nutrients in foods are visualised separately as high, medium and low (Bayram & Ozturkcan, 2022). The Warning label system has been used in Chile, Mexico, Israel, Uruguay and Peru since 2016. This system has warning labels on foods such as high calories, high sugar, and high salt (Temple, 2020). The Health Star Rating system it is stated that the summarises the nutritional quality of a product based on its fat, sugar, salt, fibre and energy content, with a rating from 0.5 to 5.0 stars (An et al., 2021). NutrInform Battery labelling system and Guideline Daily Amounts (GDA) can be examples of non-interpretive labelling systems. Each package indicates the energy, fat, saturated fat, sugar and salt content in grams. The "Battery" symbol on the label indicates the percentage of the serving relative to the recommended daily intake. The aim is to "fill up" the battery according to the daily intake recommended in the EU. This system tracks the total amount consumed without exceeding the recommended intake. The GDA system shows the amount of energy, fat, saturated fat, sugar and salt/sodium in a product serving. The reference for these data was to determine the portion size and recommended daily intake values, considering an average

healthy individual (Temple, 2020). Figure 1 shows the front-of-package (FOP) nutrition labelling logos used worldwide.

FOP regulations, in force in nearly 30 countries, play an important role in consumers' healthy food choices. Türkiye has limited regulations regarding certain label statements on some foods. In Türkiye, FOP systems are generally found in international brands' market food products. This study aims to examine the nutritional and health-related statements on the front of packaged foods offered for sale in Türkiye as FOP labelling systems become widespread worldwide.

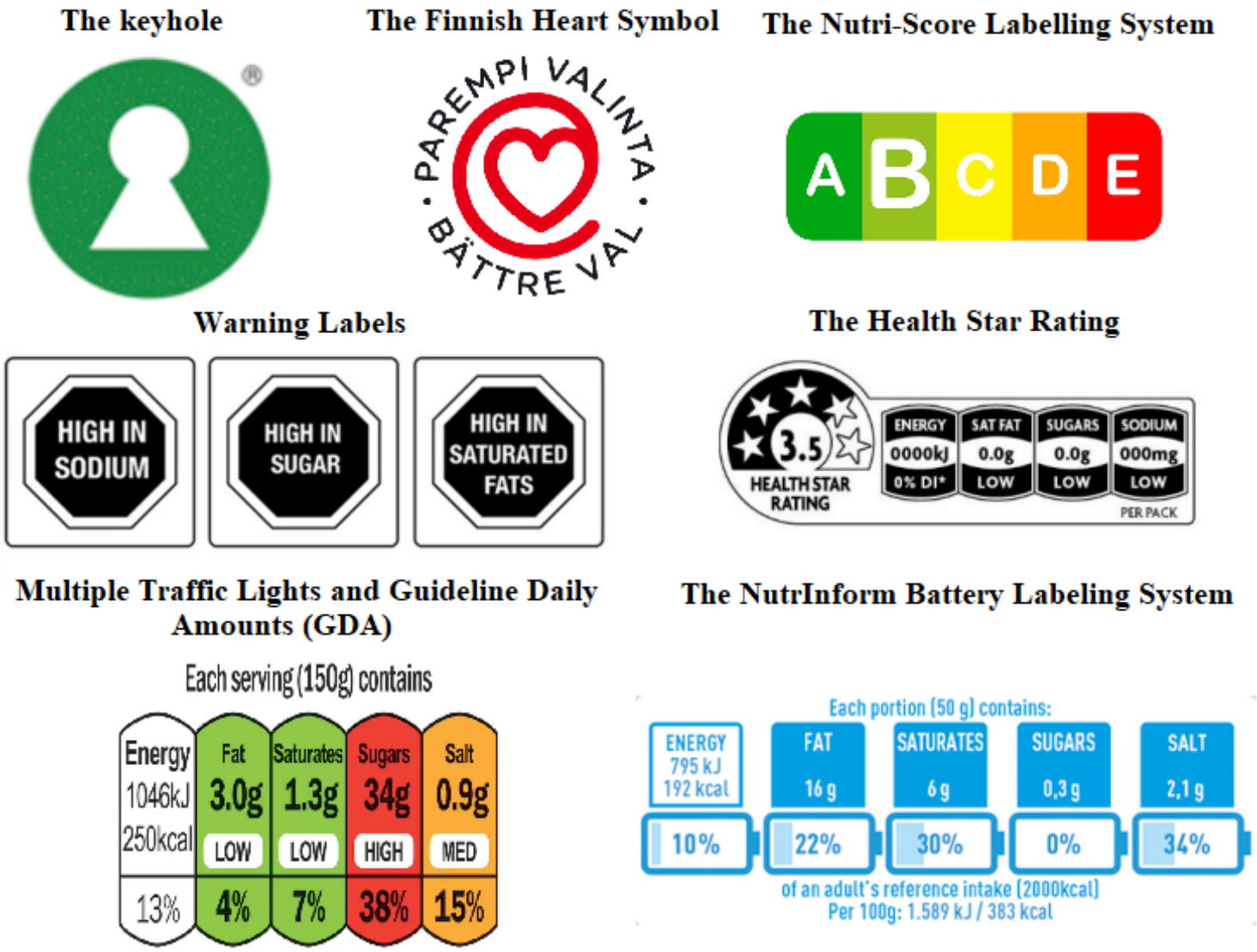

Figure 1. Front-of-package (FOP) nutrition labeling logos used worldwide

Materials and Methods

Data Collection

The research on nutrition and health-related expressions of packaged foods consumed in Türkiye was carried out through ten national supermarket chains determined by the preliminary study. In selecting ten national supermarket chains, the markets with the highest market share, the highest product variety, and the products they sell that reflect consumer preferences across the country were preferred. Official permission and ethics committee approval was obtained from all supermarket chains and administrative authorities in this study.

FOP label notifications of food products in supermarkets were examined under 6 food categories of 27 product groups. These categories include dairy products, beverages, spreadable breakfast products, ready-made foods, snacks, and meat products (Ricardo et al., 2019). Products such as honey, legumes, pasta, etc., without potential FOP label data were not photographed (Table 1).

Table 1. Six packaged food categories reviewed for FOP label notifications

Packaged food categories	Keywords
Dairy products	Milk and milk products (Milks-Flavored-Fruity milk products), yogurt and yogurt products (Yogurt-Buttermilk (Ayran)-Fruity yogurt-Kefir-Fruity kefir- Probiotic yoghurt) and cheeses
Beverages	Fruit juices, Mineral waters, Carbonated drinks-Cold teas, Powdered drinks
Spreadable-Breakfast Products	Hazelnut-Peanut-Pistachio butters, Jams-Marmalades, Halvahs Mulberry-Carob-Grape molasses, Vegetable margarine
Ready-made foods	Canned foods, Pickles Ready foods, Ready soups and bullion, Sauces
Snacks	Chocolates-Wafers, Biscuits, Chips, Ice creams, Breakfast cereals
Processed meat products	Sausages-Pastrami, Salami-Sausage, Döner-Roasting meat

At least 3 photographs were taken of the front of each package and the health statements, if any. In order to ensure the smooth progress of the data collection process, the photographs taken were quickly saved in the data pool. In order to avoid duplication, product information was entered in detail, and codes were entered for each product, taking into account the category to which it belongs. Photographing large-sized products for similar products where the packaging size varies is generally preferred. 2 field workers collected, classified and recorded data for this study. The first of the field workers has expertise in dietetics, and the second has expertise in food engineering. All field employees are trained in food composition and food labelling. The data collection procedure was conducted without disrupting the functioning of the supermarkets, and the photographs were captured during weekdays, specifically on Tuesdays, Wednesdays, and Thursdays, when there was comparatively lower customer traffic. Photographs of the products were taken during daylight hours and 30 minutes so as not to disturb the customers. All photographig operations were completed within 2 months. Field workers kept their identification cards (ID) cards during data collection. Field workers tried not to communicate with customers and emphasised, when necessary, that this was an 'ordinary labelling practice'. As a result of all these studies, 1336 samples were examined individually, and approximately 4551 photographs were taken. All methods used in collecting and classifying labelling data are implemented by adapting the working model developed by Kanter et al. (Kanter et al., 2017).

After the preliminary label information of the 1336 packaged foods examined was recorded in the data pool, the most common nutrition statements were created separately for each category. The most common nutrition statements are fat-free-reduced fat, salt-free-reduced salt, fibre source, protein source, vitamin mineral source, preservative-free, sugar-free-reduced sugar, trans-fat-free, etc. table was determined as common headings. The phrase "traditional" and slogans containing no nutrition statements were not included in the data analysis. The nutrition statements on the front label of each packaged food were examined individually, and the proportions in which they were used were determined according to their categories.

Results and Discussion

In the "Dairy Products" category, where a total of 178 samples were examined, 45% included cheese, and the remaining part included milk (23%) and yoghurt (31.5%) products (Table 2). It was observed that 60.7% of these products had a statement regarding their fat content on the FOP (e.g., light, % fat content, *trans-fat-free*, full fat and low fat). This percentage is 85.4% for milk and milk products, 66.1% for yoghurt and yoghurt products, and 44.4% for cheeses. While fat content statements are present in all milk, they cannot be said to be present in all flavoured and fruity milk products. The

presence of information on *trans* fatty acid content, which occurs naturally in dairy products and is negligible, draws attention as a statement to attract consumer attention. Expressions like full-fat and low-fat are frequently used for milk and yoghurt products. Noteworthy is that approximately one-quarter of dairy product packaging bears the statement 'school food,' which is not used in any other food category. 26.8% of milk and dairy products contain the phrase 'school food. The rate of statements regarding sugar content (e.g., no added sugar, unsweetened, sugar-free, % sugar content, lactose-free), especially seen in flavoured fruit milk and yoghurt products, is 18.5%. While this rate is 53.7% for milk and milk products, it is 19.6% for yogurt and yogurt products. Statements related to vitamin-mineral content (e.g., source of vitamin D, contains Ca, source of Ca, source of Zn, source of vitamin, source of mineral) are present in 14% of all dairy products. These statements are found in 26.8% of milk and milk products and 11.1% of yogurt products. Particularly, 60.7% of yoghurt and yoghurt products contain statements (source of protein, % protein content) regarding protein content. While the rate of statements indicating protein source in cheeses is 3.7%, it is 20.8% for all dairy products. Particularly in kefir and probiotic yoghurts, health statements (e.g., support the immune system, for strong immunity, support the digestive system, contains probiotic, probiotic source) are observed, which are not commonly found in other categories. The proportion of health statements to all dairy products is 9%. The salt content (reduced salt, less salty), which is not declared because it is not found in other dairy products, is declared as 6.2% in cheeses.

In the "Beverages" category, where 192 samples were examined, 38.5% included fruit juices, 12% included mineral waters, 27.1% consisted of carbonated drinks-cold teas, and 22.4% included powdered beverages (Table 3). 25.5% of the products in the beverage category have a %RDA (recommended daily amounts) statement. Approximately half of powdered beverages, 30.8% of carbonated drinks-cold teas, 21.7% of mineral water products and 6.8% of fruit juices have a %RDA statement. In general, these statements on the front label of the packages relate to energy, added sugar, Na, Ca, Zn minerals, C, B3, B6, and B12 vitamins. While powdered drinks generally make statements regarding vitamins and minerals, carbonated drinks-cold tea products make statements regarding their sugar and energy content. Statements regarding the %fruit content of all fruit juices appear in the FOP. In the beverage category, statements regarding vitamin and mineral contents are found in 34.8% of mineral waters, 9.5% of fruit juices and 19.2% of carbonated drinks-cold teas products. Statements such as no added sugar, unsweetened, sugar-free appear on the front of carbonated drinks-cold teas at a rate of 9.6% and on powdered drinks at 23.3%. When the statements regarding sugar beet content are examined, it is found in 60.9% of mineral waters and 17.3% of carbonated drinks-cold tea products.

In the "Spreadable-Breakfast Products" category, where a total of 163 samples were examined, 31.3% were hazelnut-peanut-pistachio butter, 38.7% were jams-marmalades, 9.2% were halvah, 11% were mulberry-carob- grape molasses and 9.8% vegetable margarine (Table 4). 33.1% of the products in this category have content statements such as hazelnut-peanut-pistachio-fruit ratio and fat ratio for margarine. Content information statements are available at different rates for products other than mulberry-carob-grape molasses products. Statements about sugar content on the front label of products in this category are present in 22.7% of all products. Sugar content statements such as No added sugar, Unsweetened, Sugar-free, % sugar content are found at a rate of 27.4% in hazelnut-peanut-pistachio butter products, 26.9% in jams-marmalades products, and 40% in halvahs products. While there are no statements about sugar content in mulberry-carob-grape molasses products, margarines are not expected to contain sugar. When the statements regarding sugar beet content are examined, it is used in 5.5% of all products. Since using glucose and fructose syrup is common in these products, statements such as "produced with sugar beet" are considered a healthier option. These statements are found in 26.6% of halvah products and 6.3% of jams-marmalades products. According to the front-label information in this category, 6.1% of all products have fibre content statements, such as the source of fibre and high fibre content. Halvah products especially have a 40% fibre content statement. When the statements regarding additive inclusion are examined, 15.9% of all products in this category contain statements indicating no preservatives. Mulberry-carob-grape molasses products declare an additive content of 55.5%. All margarines contain a statement regarding their *trans* fat content. The use of these statements in margarine is common because of the health hazards of partially hydrogenated vegetable oils, which are the main source of exposure to *trans* fatty acids. 18.7% of these margarines contain statements such as sources of vitamins and source of minerals.

In the "Ready-Made Foods" category, where a total of 316 samples were examined, 19.3% consisted of canned foods, 13.6% consisted of pickles, 25.3% consisted of ready soups and bullions, and 21.8% consisted of sauces (Table 5). 49.2% of the ready soups and bullion products and 13% of the sauces in this category have the recommended daily amounts statement. This statement usually relates to the energy content of the product. When examining the statements regarding the

protein content in these products, the protein content is found to be 37.7% in canned food products, 30% in ready food products, and 19% in ready soups and bullion products. Overall, 18.6% of all products contain a statement regarding protein content. 37.6% of the products in this category contain statements regarding additive content (no preservative, contains collagen, etc.). There are statements regarding the additive content in 39.3% of canned food products, 37.2% of pickles, 62.5% of ready food products, 26.9% of ready soups and bullion products and 17.3% of sauces. The vegan statement rate for products in this category is 8.5%. Vegan statements are found in 19.6% of canned food products, 16.2% of pickles, and 10% of ready-made products. 10.7% of ready-made foods contain fibre content statements such as the source of fibre and high fibre content. These statements included 21.1% of ready-food products and 19% of soups and bullion products. 2.2% of the products in this category contain statements about salt content, including reduced salt and less salty. Statements about salt content are seen in 6.9% of pickles and 6.3% of ready soups and bullion products. 6.3% of the products in this category contain statements regarding fat content such as light, % fat content, *trans-fat-free*, and high omega-3 sources. In particular, these statements are included in 24.5% of canned food products.

In the "Snacks" category, where 369 samples were examined, 27.6% consisted of chocolates-wafers, 26.5% biscuits, 14% chips, 14.9% ice cream and 16.8% breakfast cereals (Table 6). 28.4% of these products have a recommended daily amounts statement on their front labels. 20.5% of chocolates-wafers, 46.1% of chips, 56.3% of ice creams and 46.7% of breakfast cereals products in this category contain a recommended daily amounts statement. This statement usually relates to the energy content of the product. Among the products in this category, 2% of biscuits and 19.3% of breakfast cereals have statements regarding their protein content. Additionally, 17.7% of breakfast cereal products contain statements about additives such as no preservatives. 4.3% of the products in the snacks category contain statements regarding protein-mineral content. Statements such as the source of vitamins and minerals are found in 1.9% of chocolates-wafer products, 3.6% of ice creams and 19.3% of breakfast cereals products. 4.3% of the products in this category contain statements about sugar content, such as no added sugar or sugar-free. These statements are found mostly in 14.5% of breakfast cereals products. On the front labels of snack products, 13% contain statements about fibre sources and high fibre content. In particular, these statements were used in 51.6% of breakfast cereals products and 16.3% of biscuits. On the front labels of the products in this category, the statements of light, %fat content, and *trans-fat-free* are at 8.9%. However, this rate is found only in 63.4% of chip products.

In the "Meat Products" category, 59 samples were examined; 79.6% consisted of sujuk-pastrami-salami sausage, and 20.3% consisted of doner-roasting meat products (Table 7). The front labels of these products contain 6.7% fat content and 13.5% protein statements (such as source of protein and high protein). Sujuk-pastrami-salami-sausage products feature 8.5% fat content and 17% protein statements. Additionally, these meat products contain an 11.8% gluten statement. These statements make up 14.8% of sujuk-pastrami-salami-sausage products.

When all products in all categories were examined, 1336 products were examined. 14.5% of the products contained a statement of the recommended daily amounts, 16% contained a statement of the fat content, 9.4% contained a statement of the protein content, and 9.9% contained a statement of the sugar content. In addition, statements regarding vitamin and mineral content were found in 5.1% of the products, and statements regarding fibre content were found in 6.8%. At the same time, 11.6% of the products included statements about additives, and 8.9% contained content information. In addition, it was stated that 2% of the products contain vegan content, 0.9% contain salt, and 12.2% do not contain preservatives. Considering all these values, a labelling system such as the Swedish key symbol can be used for products considered to be healthy food. Standard warning statements for foods with relatively unhealthy ingredients or ingredients that may cause problems if consumed in excess are "excessive consumption may cause blood pressure imbalance, cause a rapid increase in blood sugar, etc." statements can be derived. The NutriScore application, which is used in many European countries, can be evaluated in the labelling of packaged foods in Türkiye.

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Table 2. Nutrition and health statements for the dairy products category

Dairy Products	Number of Products	Fat Content Statement	School Food Statement	Sugar Statement	Vitamin-Mineral Statement	Protein Statement	Health Related Statements	Salt Statements
Milk and milk products (Milks-Flavored-Fruity milk products)	41 (23%)	35 (85.4%)	11 (26.8%)	22 (53.7%)	11 (26.8%)	0	0	0
Yogurt and yoghurt products (Yogurt-Buttermilk (Ayran)-Fruity yogurt-Kefir-Fruity kefir- Probiotic yoghurt)	56 (31.5%)	37 (66.1%)	2 (3.6%)	11 (19.6%)	5 (8.9%)	34 (60.7%)	16 (28.6%)	0
Cheeses	81 (45.5%)	36 (44.4%)	0	0	9 (11.1%)	3 (3.7%)	0	5 (6.2%)
TOTAL	178	108 (60.7%)	13 (7.3%)	33 (18.5%)	25 (%14)	37 (20.8%)	16 (9%)	5 (2.8%)
		• Light • % fat content • *Trans* fat free • Full-fat, low-fat	• School food	• No added sugar • Unsweetened • Sugar-free • % sugar content • Lactose free	• Source of vitamin D • Contains Ca • Source of Ca • Source of Zn • Source of vitamin • Source of mineral	• Source of protein • % protein content	• Support immune system • For strong immunity • Support digestive system • Contains Probiotic • Probiotic source	• Reduced salt • Less salty

Ca: Calcium, Zn: Zinc

Table 3. Nutrition and health statements for the beverage products category

Beverages	Number of Products	Front Label RDA	Content Statement	Vitamin-Mineral Statement	Sugar Statement	Sugar Beet Statement
Fruit juices	74 (38.5%)	5 (6.8%)	52(70.3%)	7 (9.5%)	0	0
Mineral waters	23 (12%)	5 (21.7%)	0	8 (34.8%)	0	14 (60.9%)
Carbonated drinks-Cold teas	52 (27.1%)	16 (30.8%)	0	10 (19.2%)	5 (9.6%)	9 (17.3%)
Powdered drinks	43 (22.4%)	23 (53.5%)	0	0	10 (23.3%)	0
TOTAL	192	49 (25.5%)	52 (27.1%)	25 (13%)	15 (7.8%)	23 (12%)
		• % RDA per serve energy, added sugar, Na, Ca, Zn minerals, vitamin C, B3, B6, B12	• % fruit content	• Source of vitamin (C, B3, B6, B12) • Source of mineral (Na, Ca, Zn)	• No added sugar • Unsweetened • Sugar-free	• Produced from sugar beet • Sugar beet used

RDA: Recommended daily amounts (based on 2000 kcal diet), Na: Sodium, Ca: Calcium, Zn: Zinc

Table 4. Nutrition and health statements for the spreadable-breakfast products products category

Spreadable-Breakfast Products	Number of Products	Content Statements	Sugar Statement	Sugar Beet Statement	Fiber Content Statement	Additive Statement	*Trans* Fat Statement	Vitamin-Miner: Statement
Hazelnut-Peanut-Pistachio butter	51 (31.3%)	14 (27.4%)	14 (27.4%)	1 (1.9%)	3 (5.8%)	6 (11.7%)	3 (5.8%)	0
Jams-Marmalades	63 (38.7%)	17 (26.9%)	17 (26.9%)	4 (6.3%)	0	10 (15.8%)	0	0
Halvahs	15 (9.2%)	7 (46.6%)	6 (40%)	4 (26.6%)	6 (40%)	0	0	0
Mulberry-Carob-Grape molasses	18 (11%)	0	0	0	1 (5.5%)	10 (55.5%)	0	0
Vegetable margarine	16 (9.8%)	16 (100%)	0	0	0	0	16 (100%)	3 (18.7%)
TOTAL	163	54 (33.1%)	37 (22.7%)	9 (5.5%)	10 (6.1%)	26 (15.9%)	19 (11.6%)	3 (1.8%)
		• % Hazelnut-Peanut-Pistachio-Fruit ratio • % fat ratio (for margarines)	• No added sugar • Unsweetened • Sugar-free • % sugar content	• Produced from sugar beet • Sugar beet used	• Source of fiber • High fiber content	• No preservative	• *Trans* fat free	• Source of vitamin • Source of mineral

Table 5. Nutrition and health statements for the ready-made foods products category

Ready-Made Foods	Number of Products	Front Label RDA	Protein Statement	Additive Statement	Vegan Statement	Fiber Content Statement	Salt Statements	Fat Content Stat
Canned foods	61 (19.3%)	3 (4.9%)	23 (37.7%)	24 (39.3%)	12 (19.6%)	5 (8.1%)	0	15 (24.5%)
Pickles	43 (13.6%)	5 (11.6%)	0	16 (37.2%)	7 (16.2%)	0	3 (6.9%)	1 (2.3%)
Ready foods	80 (25.3%)	0	24 (30%)	50 (62.5%)	8 (10%)	17 (21.2%)	0	3 (3.7%)
Ready soups and bullion	63 (19.9%)	31 (49.2%)	12 (19%)	17 (26.9%)	0	12 (19%)	4 (6.3%)	2 (3.1%)
Sauces	69 (21.8%)	9 (13%)	0	12 (17.3%)	0	0	0	3 (4.3%)
TOTAL	316	40 (12%)	59 (18.6%)	119 (37.6%)	27 (8.5%)	34 (10.7%)	7 (2.2%)	20 (6.3%)
		• % RDA per serve energy	• Source of protein • % protein content	• No preservative • Contains collagen	• Vegan	• Source of fiber • High fiber content	• Reduced salt • Less salty	• Light • % fat content • *Trans* fat free • High omega-3 so

RDA: Recommended daily amounts (based on 2000 kcal diet)

Table 7. Nutrition and health statements for the meat products category

Meat Products	Number of Products	Fat Content Statement	Protein Statement	Content Statement
Sujuk-Pastrami-Salami-Sausage	47 (79.6%)	4 (8.5%)	8 (17%)	7 (14.8%)
Doner-Roasting meat	12 (20.3%)	0	0	0
TOTAL	59	4 (6.7%)	8 (13.5%)	7 (11.8%)
		• % fat content	• Source of protein • High protein	• No gluten • Gluten free

Conclusion

Examining pre-package (FOP) labelling systems for packaged foods in Türkiye and nutrition and health statements for packaged foods sheds light on the broader global trend of increasing transparency and awareness in food labelling. As consumers become increasingly concerned about food safety and nutrition, there is a growing need for clear and informative labelling systems that enable individuals to make informed and healthy food choices. Various FOP labelling systems worldwide have won approval from nearly 30 governments, signalling a concerted effort to address pressing public health problems such as unhealthy diets and obesity. These systems aim to provide consumers with easily understandable information about packaged foods' nutritional content and health effects, ultimately enabling them to make choices that align with their dietary preferences and health goals. However, despite the widespread adoption of FOP labelling systems internationally, there are no specific legal regulations regulating such labelling practices in Türkiye. This regulatory gap highlights the importance of establishing comprehensive guidelines and standards for FOP labelling in Türkiye to ensure consistency, accuracy and consumer confidence in information on packaged foods. Additionally, the presence of nutritional and health-related statements on packaged foods without a standardised FOP labelling system poses the risk of misleading consumers. Without clear guidance, these statements can inadvertently promote the perception that foods that lack essential nutritional components or contain potentially harmful substances are healthy choices. Therefore, Türkiye must enact robust regulations that address FOP labelling and ensure the accuracy and integrity of nutrition and health statements on packaged foods.

Compliance with Ethical Standards

Conflict of interest: The author(s) declares that they have no actual, potential, or perceived conflict of interest for this article.

Ethics committee approval: The authors declare that this study does not include experiments with human or animal subjects, so ethics committee approval is not required.

Data availability: Data will be made available on request.

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