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Front-of-Pack Nutrition Labelling: A Global Practice for Improving Consumer Food Choices

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Abstract

Globally, the marketing and consumption of prepackaged, processed foods and beverages are increasing at faster rate, which has increased the frequency of non-communicable diseases linked to diet, including diabetes, obesity, hypertension and other conditions. Additionally, fraudulent nutritional and health claims used on product packaging for marketing purposes deceive consumers about their nutritional quality. Front-of-pack nutrition labelling (FOPNL) systems for packaged foods have been advised by the WHO (World Health Organization) to assist consumers in selecting nutritious food items and to lower the incidence of diet-related NCDs. FOPNL are present in front of the food package through which consumers can easily access nutrition information about the food product at the moment of purchase. Around the world, various FOPNL systems, both voluntary or mandatory, such as Reference Intakes label, Nutri-Score, Warning symbols, Health Star Rating, Keyhole, Multiple traffic lights, and more, are used on the packages. In India, the Indian Nutrition Rating (INR) system has been proposed by the Food Safety Standards Authority of India (FSSAI) as a format for Front-of-pack labelling to help consumers make sound choices.

Keywords: Processed foods, Front-of-pack nutrition labelling, non-communicable diseases, health claims

Introduction

Non-communicable diseases (NCDs) associated with diet, such as overweight, obesity, heart disease, diabetes, cancer and hypertension, are major global health concerns. Worldwide, millions of people, particularly children are consuming non-alcoholic beverages and prepackaged processed foods that are loaded with calories, salt, sugar, saturated and trans fats and can have a disastrous effect on their health. This shift towards highly processed foods, unhealthy food environments has been fostered by the globalization of food systems, which

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has made these products more readily available, affordable, convenient, and heavily advertised than ever. Furthermore, in order to advertise their products, manufacturers often use deceptive nutrition and health claims on the packaging of unhealthy processed foods, such as claims about potential health benefits like 'healthy heart' as well as certain nutrients like 'high in fiber' or 'high in iron', along with eye- catching colours, designs, packaging and appealing brand characters. These fraudulent claims may mislead consumers about the nutritional value of unhealthy products by giving them a "health halo". To slow down the trend towards unhealthy processed foods, the WHO and other agencies has advised food industries to use Front-of-pack nutrition labels (FOPNL) on the front of packaged processed foods in order to decrease the rate of lifestyle diseases around the world and guide consumers to differentiate between healthy and unhealthy food items at the time of purchase. Several nations have already implemented the FOPNL systems for making healthy choices

What is Front-of-Pack Nutrition Labelling?

Front-Of-Pack Nutrition Labelling, or FOPNL, is a type of additional nutrition related information that is displayed on the front side of packaged foods through which consumers can easily and quickly find out the quantity of saturated fat, sugar, salt, calories and other nutrients present in foods. It is an easy-to-use and effective tool aimed at reducing the consumption of highly processed foods and encouraging consumers to make better, more informed food choices. FOPNL must be well designed in order to maximise its effectiveness in empowering consumers to make a healthy purchase. The FOPNL symbols were categorized into the following four groups by the FAO (Food and Agriculture Organization) and WHO:

b) Nutrient-specific food label system- it informs the customer regarding the amounts of a certain nutrient present in a food item

a) Summary indicator food label system- it helps the customer to distinguish between unhealthy and healthy food products

d) Food group information symbol system- tells the customer regarding the food groups that are incorporated in the food item

c) This category includes the hybrids of former three types of symbol scheme

In general, the FOPNLs can be categorised as reductive or interpretive labels based on the extent of consumer understanding. Reductive labels such as Guideline Daily Amounts, are

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the FOPNLs that provides nutrient information about the food product which consumers need to interpret by using their latent nutrition knowledge.

On the other hand, Interpretive labels are the FOPNLs which are easily understood by the consumers because they provide clear and simple information regarding the nutritional value of food items that can be understood even by those with limited education and nutrition knowledge. Interpretive summary indicator formats (like Health Star Rating and Nutri-Score) and Interpretive nutrient-specific formats (like Warning symbols and Multiple traffic lights,) are the subcategories of interpretive labels.

How do FOPNL systems work?

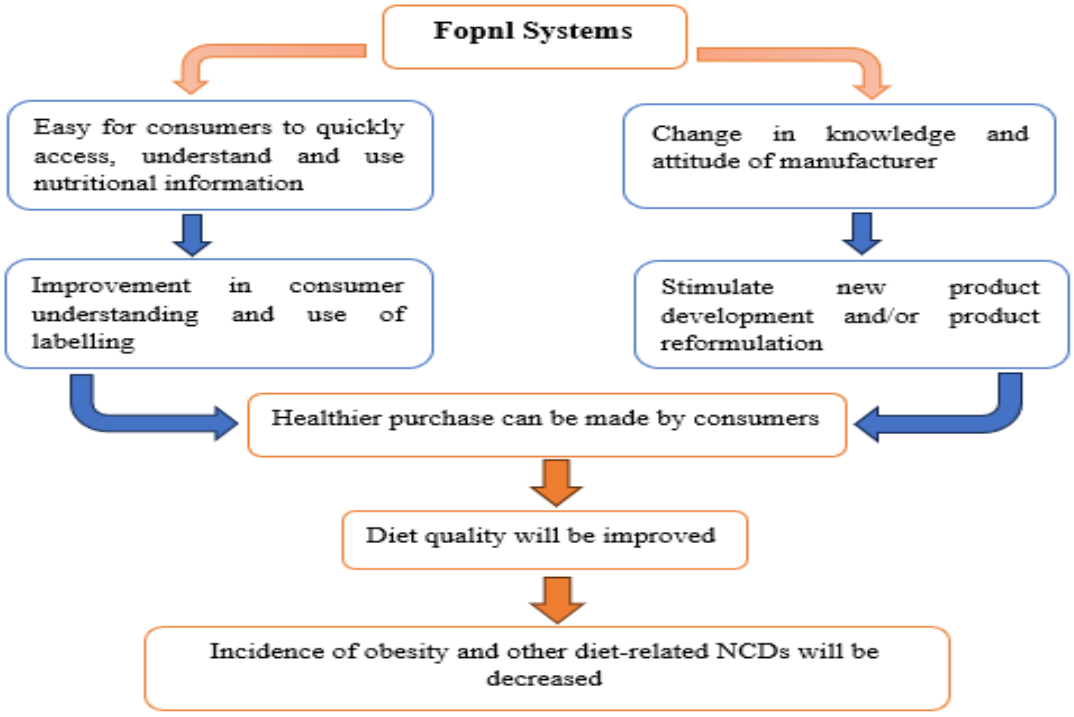
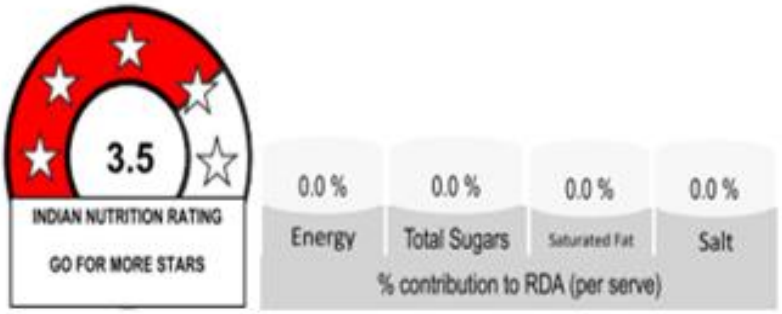


Figure 1: Working of FOPNL systems

Front-of-pack nutrition labelling in India



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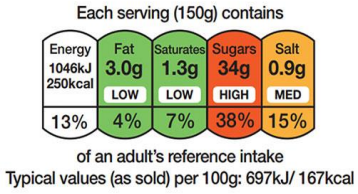
Food Safety Standards Authority of India (FSSAI) has released the Indian Nutrition Rating (INR) system as the FOPNL in a draft published on September 20, 2022, in response to the rising incidence of lifestyle diseases/NCDs in India. This rise is due to the expanding market, growing consumption of ultra-processed foods and evolving dietary habits in the country. The purpose of INR is to help consumers in purchasing healthful food items. Based on 5-star rating system, INR inform about the total nutritional quality of food by assigning a rating of ½ stars to the least healthy and 5 stars to the healthiest packaged food item. The more stars the product will receive more better the product will be considered in terms of nutritional quality. INR system is similar to the Health Star Rating (HSR) in New Zealand and Australia.

Table 1: Most common FOPNL systems used around the world

Name of FOPNL system	Type of FOPNL	FOPNL design and logo	Adopted by	
Multiple Traffic light labels	Nutrient-specific label		United Kingdom	Red, green and amber colours are used to represent the overall nutritional value of food products. The red (high), amber (medium) and green (low) indicate the percentage of salt, sugar, fat, calories and saturated

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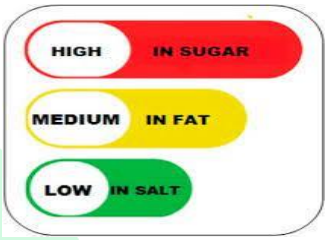
				fat present in the drinks and solid foods.
			Ecuador	The concentration of fat, salt and sugar in food and beverages is represented by three colours- red (high), yellow (medium) and green (low).
Reference Intakes label (also called Guideline Daily Amounts)	Nutrient-specific label		Across Europe	Shows the daily amount of nutrients (fats, saturated fats, sugar, salt and calories) in grams, present in portion of a food. It also indicates the percentage of the daily

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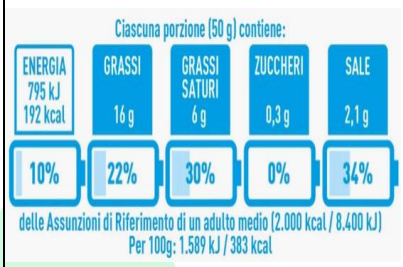
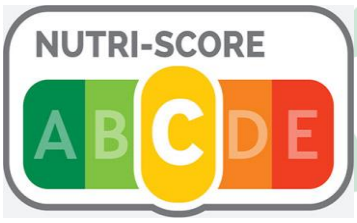
				reference intake.
NutrInform Battery logo	Nutrient-specific label		Italy	In this label the nutrients (fats, sugars, saturated fats, energy and salt) in the form of percentage present in each portion relative to the daily recommended intake is represented by the battery symbol.
Nutri-Score label	Summary label		France, Spain, Germany, Belgium, The Netherlands, Switzerland, Luxembourg	Uses letters from A (most healthy) to E (least healthy) and colours from green to red. Highlighted letter/colour

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				combination shows the overall healthiness and nutritional quality of food. The more sugar, salt, calories and saturated fat a food items contain, the less healthy they score (E/red colour).
Warning label	Nutrient-specific label		Chile	These simple warning labels (black & white in Chile; red & white in Israel) on packaged food items tells consumers about the excess of nutrients
			Israel	

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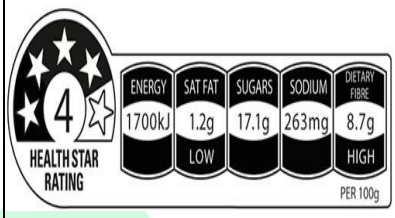
				(energy, salt, sugar and fat) in foods and drinks.
Health Star Rating (HSR) System	Nutrient-specific and summary label		Australia and New Zealand	Uses a rating scale of 0.5 to 5 stars and ranks a packaged food items on a scale from ½ star (least healthy) to 5 stars (most healthy) on the basis of salt, sugar, saturated fat, calorie and fibre content of the food. When comparing similar packaged foods, foods with more stars are more nutritious and heathier than

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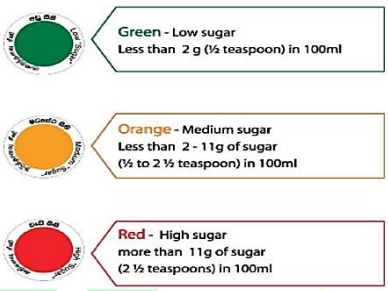
				foods with fewer stars.
Colour coding for sugar levels	Nutrient-specific label		Sri Lanka	This FOPL inform consumers about the quantity of sugar in foods and beverages. Three colours- red, orange and green represents high, moderate and low sugar levels respectively.
Nordic Keyhole logo	Summary labels (positive signpost)		Sweden, Norway, Denmark, Lithuania	These are the positive nutrition labels on the

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Healthy Choice logo	Summary labels (positive signpost)		Poland, Czechia	packaged foods which indicates that the particular food and beverage is overall healthy and can be consumed without any concern.
Healthier choice logo	Nutrient-specific (positive signpost)		Singapore	

Conclusion:

Front-of-pack labels is an effective strategy for preventing the risks of nutrition-related diseases in India as well as in other countries. There is a need to implement a well- designed front-of-pack label on food packets due to the expanding rate of consumption of processed foods and lifestyle diseases in India. They can guide the consumers to differentiate between 'healthy' and 'unhealthy' food items and can improve their eating habits by making healthy choices.

References

https://foodsafetyworks.com/insights/front-of-pack-labelling-what-the-world-is-using/

https://www.foodlabelsolutions.com/info-centre/FOPL/easiest-way-to-know-everything-about-front-of-pack-labelling-models-in-india/

https://www.igd.com/articles/article-viewer/t/front-of-pack-labelling-around-the-world/i/23126

ICMR-National Institute of Nutrition (2023). Assessing effectiveness of Front-Of-Pack Nutrition Labels (FOPNL) for pre-packaged processed foods in India- A study on formats, acceptability and potential use.

United Nations Children's Fund (2021). Policy brief: Front-of-pack nutrition labelling of foods and beverages.