

CURRENT UPDATE

Promoting healthier diets in India through “Front of Package Food Labeling”**Om Prakash Bera¹, Sheikh Mohd Saleem², Sudip Bhattacharya³**¹Lead Consultant (Policy), Global Health Advocacy Incubator (GHA), India, ²Independent Public Health Researcher, Jammu and Kashmir, India; ³Independent Public Health Researcher, Dehradun, Uttarakhand, India.

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Abstract

The rising NCDs are attributed to an epidemiological health transition resulting from rapid urbanization, sedentary lifestyle, and transforming nutritional preferences. The behavioral risk factors like the adoption of a sedentary lifestyle and changing dietary pattern have resulted in the consumption of an unhealthy diet, building up and less burning of calories. It has been observed that nutrition labeling has played a crucial role in shaping consumer level food behavior. Many labeling systems have been proposed and designed as per country specific needs. Consumers face many challenges while accessing the food packets, small fonts, labeling on the back side, not understanding its language, and unable to evaluate the nutritional information which is described on the packets. Our aim should be to improve the information available within the food package, increase food information accessible to the people, and more importantly, the use of this information must be brought into service by the consumers as to make healthy food choices. Chile's approach to warning labels is currently considered the gold standard in the FOPL system, which have significantly reduced the consumption of unhealthy foods by people. There is a need to introduce the replica of the same Chile's FOPL system in India. It's time to make the right move and make India a global leader in FOPL food systems by the introduction of strong and stringent FOPL laws that may help consumers with informed food choices and FSSAI may play a leadership role in this.

Keywords

Food Product Labeling; Nutrition Labeling; Non-Communicable Disease

Introduction

In India, non-communicable diseases (NCD) have replaced communicable diseases as the commonest cause of widespread morbidity and deaths because of pre-mature cause among the general population.(1) Globally, NCDs pose a serious impact on the economic stability of many nations, and about 80% of low-middle-income countries (LMIC) are badly hit.(1) It is reported that two major diseases among NCDs like cardiovascular disease (CVD) and

diabetes make up a major chunk responsible for affecting the global economy.(2) Common CVDs include ischemic heart diseases, stroke and peripheral vascular diseases which alone cause more premature deaths than HIV/AIDS, tuberculosis and malaria together.(2) Global contribution of NCD deaths is estimated around 68% of all deaths because of all causes and these figures are somewhat same for India where 60% or 5.87 million death occur each year because of NCDs. Adding to

the NCD burden are other disorders which include endocrine disorders and sleep apnea, which are also responsible for increasing morbidity and mortality and constitute an emerging public health problem.(3)

The cause behind the rising NCDs especially in LMIC like India is attributed to an epidemiological health transition among the people owing to the multiple factors like rapid urbanization, sedentary lifestyle, endocrine disruptions and also, due to rapidly changing nutritional preferences. All these transitional factors have overall led to the economic stability over these years, but they have also given rise to the so called “risk factors”.(4) A risk factor is defined as “An aspect of personal behavior or lifestyle, an environmental exposure, or a hereditary characteristic that is associated with an increase in the occurrence of a particular disease, injury, or other health condition”.(5) According to the World Health Organization (WHO), there are some biological and behavioral risk factors, which include alcohol and tobacco consumption, lack of physical activity, being overweight, excessive fat and salt intake, lower consumptions of vegetables and fruits, high levels of cholesterol, blood sugar and hypertension.(6)

Problem Statement: While discussing behavioral risk factors behind the rising trend of NCDs, the adoption of a sedentary lifestyle and changing dietary pattern among the population must be considered. Consumption of an unhealthy diet along with a sedentary pattern means less burning and building up of more calories within the human body and eventually landing up with NCDs-the ultimate consequence. Diets rich in fat, salts and sugar along with the lack of physical activity are regarded as the major contributing cause for NCDs. The global population has been exposed to unhealthy diets over the last few decades, and that has increased both the incidence and overall prevalence of being overweight. Someone has rightly said, “We are what we eat”. The calories obtained from foods containing high fat, salt and sugar, have been increasing in diets and those from the foods rich in fiber have been on a continuous decline. The trend of consumption of processed and easy to take away foods has seen a global upsurge. Such an unhealthy dietary menace has changed the food system with dramatic implication for NCD development. The impact of this change has influenced the quality of food’s nutritional content, availability, cost-effectiveness

and overall availability to the consumers. We suggest that it is critical to address this issue of rising NCDs in its all forms before it’s too late. To support the Government of India in their efforts to meet the recommendations set by WHO regarding the unhealthy foods, the Front of Package labeling (FOPL) regulatory objectives needs to be introduced which shall aim at allowing consumers to identify products containing excess sugars, trans-fats, oils, and sodium easily, quickly, correctly with no error.(7)

Front of Package labeling-The Window of Opportunity: As the global burden for unhealthy diets is increasing and have led to substantial increase in the NCD burden all over the globe,(8) the need for nutrition labeling has been found to be an important population-level intervention for communicating information related to the nutrient content of the foods to the consumers. Introducing front of pack (FOP) labels has helped to provide the required nutritional information to the people. FOP labels are a truncated form of the nutritional information on the front of the packed food, which can be in a varied form. Simpler format combinations along with their prominent position on the front of the food packets make FOP labels more noticeable than the traditional labeling [Back of pack labeling or Nutritional fact panel; (NFP)] which is usually present on the sides of the packed foods.

Many labeling systems have been proposed and well-designed but with one or another varied advantages.(7) These include:

- Endorsement system: Applying FOP logos and seals for the purpose of increasing procurement of endorsed products e.g., green key hole, choices logo etc.([Figure 1](#))
- Summary system: the overall summary score of the healthfulness of the dietary product is mentioned. ([Figure 2](#)).
- Monochromatic guideline for daily amounts (GDA) systems: A nutritional fact panel as FOPL is presented which contains calorie count. ([Figure 3](#))
- Color coded Guideline for Daily Amounts (GDA) or reference Intake (RI) FOPL system: Red color is used, amber for medium and for low nutrient content, green color is used. ([Figure 4](#))
- Traffic-light systems, it uses multiple textual information along with color codes to indicate the nutrient values.([Figure 5](#))
- “HIGH/EXCESSIVE” systems or Nutritional Warnings, it uses front-of-package text-based

seals to inform about the excessive amounts of critical nutrients to the consumers. (Figure-6) These labeling systems do have their own short comings. The interpretive information is missing in the monochromatic GDA system which does not fit the purpose. Similarly, consumers are not able to identify products containing high amounts of sugars, fat or sodium in endorsement systems and summary score systems. Furthermore, FOPL systems like nutrient specific textual and color-coded systems distracts consumers by adding unnecessary information's by use of bars and text within colors used.(7)

When we talk about India, the country with a diverse cultural, linguistic, and geographic divide, the short comings of different FOPL systems mentioned above are there. In addition, the use of FOPL in a single language over the food packets does not make complete sense. A single language countrywide makes it vulnerable to non-compliance by the consumers and eventually it loses its purpose. Yet again, we have observed that the size and fonts used in FOPL over the food packets are too small to be read by those with refractory errors and the nutrient value given in kilo calories (Kcal) is mentioned per 100 gm., even the food packets weigh more than that. Furthermore, it evident from the research that younger people are able to understand FOPLs better than those in older age.(8) Such disparities make the consumers less informed and confused about the real message FOPL wants to deliver.

It's quite evident from research that consumers face many challenges while accessing the food packets, understand their language and evaluate whether the nutritional label information is perfect for them to make a choice for that particular food.(9) This menace of FOPL is contributing to insufficient information and serves no purpose in its current form, thus growing to be a public health threat in coming future.

Now is the high time, when it becomes imperative to reconsider performing features of FOPL system which may include: - It's potential to capture consumers' attention, provoking the thought process, understanding, evaluating and use of FOPL information by the consumer easily and the influence of FOPL system while making decisions during purchase.(10)

Our aim should be improving the information availability to the food system, increase access to information by the people, and more importantly the

use of this information must be brought in use by the consumers as well as the food system to become more literate in terms of health literacy at all critical levels. Such initiatives will facilitate changes at individual levels, environmental level and system level to become more coherent with public health nutritional goals.(11)

Front of Package labeling can decrease the burden of NCDs: It is recognized through research that multiple intervention are required at various levels to combat the burden of NCDs. One such intervention is the use of effective FOPL strategies over the food products which will discourage the consumers to consume high-energy calorie dense products. The combination of health warnings, texts and warning images and total calorie count per serving can be used effectively in this cause. Most of this information is available at the back of the food products, yet very few products have introduced FOPL. In an online study conducted on the people of United Kingdom to investigate their reactions to various food labeling scenarios, it was revealed that consumers choose less products with energy dense food labeling over those without any labeling. Moreover, a combination of images and texts were alone sufficient to influence the consumers' choice in selecting energy dense food products compared to text only. Also, the information of calories on a food product without the use of health warning labels (HWL) were most picked by the consumers for use than those with the HWLs.(12)

Another study reports that the use of effective FOPL has reduced intake of calories by 6.6%, total fat by 10.6% and choosing unhealthy foods by the consumers by 13% respectively. However, effective FOPL has also helped in increased consumption of veggies by the consumers by 13.5% in their study.(13) From the above discussions it quite clear that effective FOPL has the potential to improve the dietary intake and reduce diet related chronic diseases like obesity, overweight, hypertension, diabetes etc among the population. Effective FOPL helps the consumers to effectively choose the healthier foods and this will eventually lead to healthy product reformulation and development by the manufactures.

Need for a stringent law on FOPL in India: As we know that India is current under a serious threat of rising deaths from NCDs and most The socio-economic, dietary, cultural, environmental and rising trend of urbanization have led to the transition

where the risk factors for NCDs are more prevalent in the community. Consumers have no doubt the right to know what they are being served in a food packet or a drink so that they can make effective food choices as per their health conditions. We believe that India has the opportunity to adopt the nutritional labels and health warning signs on food items to avert NCD deaths. In this regard, Food Safety and Standards Authority of India (FSSAI) have updated their governing rules for labeling of food items and required foods high in calorie content, sugars, salt and fats to carry FOPL warning labels for the effective use by the consumers.

Currently, Chile's approach to warning labels is considered the gold standard in FOPL system which is recommended by nutrition experts all over the globe. This system of FOPL was implemented in 2016, which was the first of its kind national regulation to mutually decree front-of-package warning labels, restrict the use of child-directed marketing on electronic media, and ban sales of all such products and beverages in schools which contain excess sugars, salt and fats that exceed set nutrient or calorie thresholds.⁽¹³⁾ In Chile's FOPL system, octagonal black labels are used which are printed with words "alto en" meaning (high in) along with the required nutritional information for better understanding of the consumers.^(Figure-7) This system of FOPL has drastically helped the consumers in selecting food items based on their health needs and have significantly reduced consumption of unhealthy foods by the people. There is a need to introduce the replica of the same Chile's FOPL system in India by FSSAI and introduce mandatorily FOPL warnings on foods and beverages to curb the menace of growing NCDs in general. The introduction of the Draft Food Safety and Standards (Labeling & Display) Regulations 2018 was a welcome step but it has some loop holes too. Weaknesses include improper information on serving sizes, daily recommended allowances for population groups and disparity in representation of saturated fats and trans-fats on health warning labels, selection in the perfect color scheme for foods high in sugars, fats or salt and overall, the right approach to target the consumers towards FOPL is quiet lacking. It's the time to make right move and make India a global leader in strong FOPL systems by introduction of strong and stringent FOPL laws and legislations that shall provide consumers with effective information which is right for them to

decide and choose healthy foods and FSSAI should take a lead in that.

Recommendations

- We recommend a stringent law on Food Labeling and advertising, in similar lines to Chilean model to be implemented in India which will provide the consumers with the right choice to choose healthy foods over unhealthy foods.
- We can make the effective use of FOPL, which will enable consumers to make effective food choices that will prevent or manage chronic diseases.
- We can introduce a stringent, effective yet simple FOPL labels for the consumers to understand. The need for clearer and impactful designs of FOPL must be considered widely.

Authors Contribution

The idea was conceptualized by OB and SB. Literature review was done by SB and SMS, First draft was written by SMS and editing was done by OB and SB. All the authors approved the final version of the manuscript.

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Figures

FIGURE 1 ENDORSEMENT SYSTEM OF LABELING



FIGURE 2 SUMMARY SYSTEM OF LABELING



FIGURE 3 MONOCHROMATIC GUIDELINE FOR DAILY AMOUNTS (GDA) SYSTEM OF LABELING

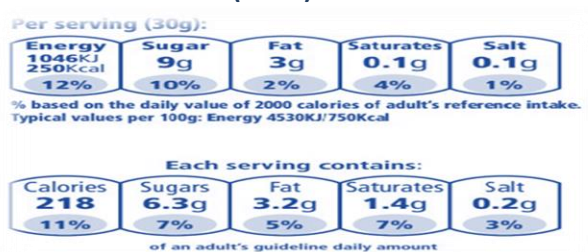


FIGURE 4 COLOR CODED GDA OR REFERENCE INTAKE (RI) FOPL SYSTEM:

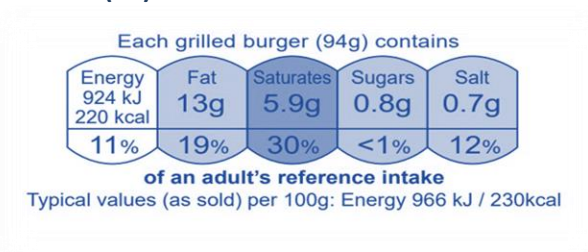


FIGURE 5 NUTRIENT-SPECIFIC TEXTUAL AND COLOR-CODED SYSTEM OF LABELING



FIGURE 6 "HIGH/EXCESSIVE" SYSTEM OF LABELING



FIGURE 7 CHILE'S FOPL SYSTEM OF LABELING

