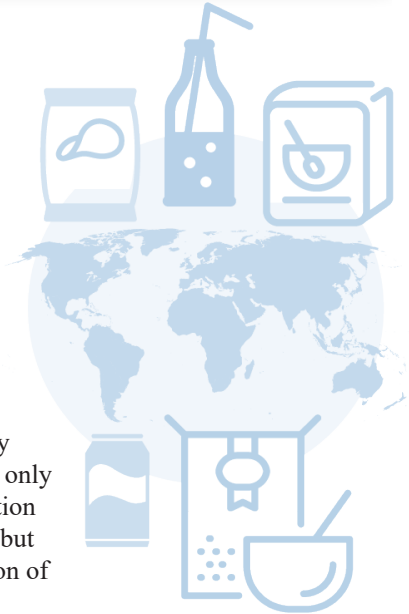


# Front-of-Package (FOP) Food Labeling:

## Empowering Consumers to Make Healthy Choices

### UNHEALTHY CHANGES IN THE FOODS WE EAT

- ▶ Increasingly, pre-packaged foods and beverages have become readily available in virtually every community across all parts of the globe, regardless of income-level or population density.<sup>1-5</sup> Combined with aggressive marketing of these products, this has dramatically changed the way people eat in many countries, resulting in diets that are much less healthy<sup>6-9</sup>.
- ▶ Many of these pre-packaged foods are processed with high levels of added sugars, sodium, saturated fats, and refined carbohydrates.<sup>10-14</sup> Research has found these nutrients of concern are connected to increased obesity and chronic nutrition-related diseases.<sup>15-20</sup>
  - Substantial evidence demonstrates that consuming excess sugar, from both beverages and foods, increases the risk of diabetes, liver and kidney damage, heart disease, and some cancers.<sup>21-28</sup> Global health experts now recommend limiting sugar consumption to less than 10% of total calorie intake.<sup>21,22,29-33</sup>
  - Excess sodium intake is associated with increased blood pressure,<sup>34,35</sup> as well as increased risk of cardiovascular disease (CVD), stroke, and death.<sup>36,37</sup>
  - While recent evidence on saturated fat has been mixed, randomized controlled trials have found that replacing saturated fat with polyunsaturated fat improves blood sugar regulation<sup>38</sup> and reduces CVD risk.<sup>39,40</sup> The World Health Organization (WHO) and United States Department of Agriculture (USDA) both recommend limiting intake of saturated fats<sup>41</sup> in addition to reducing sugar and sodium intake.
- ▶ The combination of these harmful nutrients (sugar, sodium, saturated fats, refined carbohydrates) into high calorie foods and beverages that offer few, if any, healthy vitamins or minerals is uniquely problematic. It not only increases consumption of unhealthy foods but reduces consumption of healthy ones.
- ▶ Increased consumption of these (ultra) processed products<sup>14,42</sup> has contributed significantly to the global health epidemic of obesity and overweight—an estimated more than 2.1 billion individuals as of 2013<sup>43</sup>—and the resulting increase in nutrition-related disease.<sup>19,20,42,44,45 46</sup>
- ▶ To improve diet and health, leading health organizations like the WHO recommend reduction in consumption of these energy-dense, micronutrient-poor foods as a critical measure to tackle the growing obesity epidemic.<sup>20,47-49</sup>



### CONSUMERS NEED HELP MAKING HEALTHIER CHOICES

- ▶ Not only have food and beverage products become less healthy over time, the sheer number of choices in stores make it difficult and confusing for consumers to select healthier foods.<sup>50</sup>
- ▶ Most shoppers spend fewer than ten seconds selecting each item — not enough time to review current nutrition labels, which are complicated and ineffective.<sup>51-53</sup> In essence, research has shown current back-of-the-pack nutrition facts panel systems do not work and simpler impactful options are needed.
- ▶ Adding to the confusion, unhealthy products may also feature misleading health and nutrition claims on their packages. Claims related to a particular nutrient (e.g., “high in calcium” or “low-fat”) and direct or indirect claims about a food’s potential health benefits can give an otherwise unhealthy product a “health halo effect,” leading consumers to misunderstand its nutritional quality.<sup>54-56</sup>

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## FRONT OF PACKAGE (FOP) WARNING LABELS EMPOWER CONSUMERS TO MAKE INFORMED AND HEALTHIER CHOICES

- ▶ Consumers need a clear and easy way to make healthier choices among the vast array of products available to them.
- ▶ Shoppers prefer simple FOP labels that are immediately visible and require less time to assess.<sup>57,58</sup> Labels that minimize effort allow customers to quickly see which products are healthier and actually increase the intention to purchase a healthier product or conversely decrease the intention to purchase an unhealthy product.<sup>53,59-62</sup>
- ▶ While several labeling approaches have been devised, simple negative warning labels that identify unhealthy products most effectively discourage junk food and ultra-processed food choices.<sup>63</sup>
- ▶ The FOP warning label format, such as the one used in Chile (*below*), requires processed foods that do not meet predetermined criteria for key nutrients to include warning labels on the front of the package, identifying the food as high in sugar, fat, salt, or total calories – whichever apply. These labels allow consumers to quickly identify those foods that are less healthy.
- ▶ FOP warning labels may also encourage manufacturers to improve the nutritional qualities of their food in order to meet the nutrition criteria and thereby avoid the negative FOP labels.<sup>64</sup>



Figure 1. Chilean Warning Labels

## FOP WARNING LABELS WORK TO ENCOURAGE HEALTHIER CHOICES AND ARE THE STRONGEST AND MOST EFFECTIVE LABELING SYSTEM TO DATE

- ▶ Experiments with FOP warning labels on sugary beverages found that warning labels are linked to decreased purchases of sugary beverages, decreased perceptions of their healthfulness,<sup>65</sup> and decreased purchasing intent.<sup>65,66</sup>
- ▶ A 2017 study comparing FOP warning labels to the industry endorsed guidelines for daily allowance (GDA) and traffic light label systems found that warning labels were better able to help consumers correctly identify products with high content of unhealthy nutrients and that consumers perceived products bearing warning labels as less healthy than the same products featuring GDA or traffic light labels.<sup>67</sup>
- ▶ Another 2017 study comparing children's perceptions of food products with warning labels vs. traffic light label found that warning labels had greater relative impact on children's food choices compared to the traffic light system.<sup>68</sup>
- ▶ The only traffic lights study to show positive impact combined financial incentives with the traffic lights system.<sup>69</sup>
- ▶ The Chilean-style warning label approach is the strongest to date. Preliminary evidence from a project conducted jointly by the Nutrition and Food Technology Institute (Instituto de Nutrición y Tecnología de los Alimentos – INTA) from Chile and the University of North Carolina (UNC) Chapel Hill found that consumers in Chile are aware of and understand the Chilean FOP warning labels, that they are using them to make decisions about food purchases, and that the labels are contributing to a shift in social norms and behaviors around purchasing more healthful food. Specifically, a study of adolescents and mothers of preschoolers found that in the first year of implementation, 43% of adolescents and 56% of mothers of preschoolers use the warning labels to decide if food (breakfast cereals) is healthy.
- ▶ In Brazil, a randomized controlled cross over experiment (using each participant as their own control) with 1,607 online participants (representative of the Brazilian population in age, education, sex, socio-economic class and geographic region) was conducted by the Center for Epidemiological Studies in Health and Nutrition at the School of Public Health, University of São Paulo (Núcleo de Pesquisas Epidemiológicas em Nutrição em Saúde /Universidade de São Paulo). This study compared warning labels to the traffic light model and to no label. It was found that compared to no label, warning labels influenced consumer perceptions of nutritional quality of a product to a greater extent than the traffic light labels. The warning labels format performed better than the traffic light model as it: (1) Draws the attention of the consumer; (2) Is easier to understand; (3) Is more useful at point-of-purchase; (4) Reduces the perception of healthiness of the unhealthy products; and (5) Reduces the intention to purchase unhealthy products.
- ▶ Other countries in Latin America (Peru and Uruguay) are already in the process of approving FOP warning labels, and two other countries (Canada and Israel) have already approved the adoption of FOP warning labels.<sup>70,71</sup>

Continued ▶



# Key Elements of an Effective FOP Labeling System

- ▶ A strong nutrient profiling model must be developed as a first step toward creating the FOP label.<sup>72,73</sup> This sets clear and meaningful criteria for the labels.
- ▶ Labels should be simple and immediately visible. The Chilean regulations set size limits for all types of packaging and are an ideal starting point for other countries on logo sizing for warning labels.
- ▶ Simple interpretive FOP labels enhance understanding and use of nutrition information, especially by those with less education and nutrition knowledge.<sup>80,74,75</sup>
- ▶ Interpretive FOP labels work by drawing attention to nutrition information through the use of simple formats, colors, and icons,<sup>76-78</sup> facilitating rapid comprehension, encoding into working memory<sup>75-79</sup> and easier discrimination between healthy and less healthy products.<sup>75,79</sup>
- ▶ A strong FOP label system must be mandatory and apply to all products. Evidence suggests that a label that applies to only some products can lead to misleading perceptions of the healthfulness of products.<sup>80</sup>
- ▶ Voluntary labeling systems can lead to multiple types of logos and labels, which increase confusion and decrease the usefulness of the logo.
- ▶ An FOP label with an endorsement by a government or scientific organization increases credibility.<sup>60</sup>
- ▶ The criteria for the logo should be made public in advance to encourage reformulation and educate consumers and manufacturers.<sup>81</sup> The industry should be allowed to comment publicly on the criteria but should not be permitted to intervene in its development.
- ▶ Ideally, FOP labels should be implemented alongside restrictions on health and nutrition claims since products containing both a warning label and a health or nutrition claim can be confusing to consumers.

## INDUSTRY-ENDORSED VOLUNTARY FOP LABELS CALLED GUIDELINES FOR DAILY AMOUNTS (GDA) ARE NOT EFFECTIVE

- ▶ In response to the growing recognition of the effectiveness and demand for FOP labels, the food industry has been aggressively promoting a voluntary Guideline for Daily Amounts (GDA) FOP label.
- ▶ A growing number of independent studies across the world show that GDAs perform poorly on a number of dimensions compared with other existing FOP labeling systems, and that GDAs are the least impactful and effective globally.
- ▶ Moreover, since GDAs are voluntary, they are often used in combination with other claims on the food packaging such as nutrient or health claims, which further confuses consumers.<sup>54-56,96</sup>
- ▶ A study from Mexico found that consumers do not use the GDAs in their food choices; even nutritionists could not understand them.<sup>82</sup>
- ▶ Qualitative research in Mexico found that GDAs were the hardest to understand and least accepted FOP label, due to the technical terms and overall lack of comprehension of nutrition information.<sup>83</sup>
- ▶ Consumers require more time to assess GDAs and have much less success understanding them than they do other labeling approaches.<sup>84,85</sup>
- ▶ GDAs do not reduce consumption of unhealthy products.<sup>86</sup>
- ▶ All non-industry funded studies comparing GDAs with any other system (multiple traffic lights, the French Nutriscore system, the positive Choices International, HealthStar Rating, and warning labels in Chile and Brazil) show that GDAs are the least effective system in encouraging consumers to make healthier choices.<sup>85,87-89</sup>
- ▶ Studies conducted in Uruguay,<sup>90</sup> Ecuador, and Brazil all found GDAs to be the least impactful of any system in Latin America.<sup>68,90,91</sup> Similar results were found in Mexico.<sup>92</sup>
- ▶ Australian and New Zealand studies found that GDAs (termed Daily Intake Guide [DIG] there) were most confusing and least impactful on food purchasing behavior.<sup>93-95</sup>

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