

Comment on “Nutrition Labelling Policies: WHO Guideline”

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We commend the WHO for developing a Guideline to support its Member States in formulating and implementing effective nutrition labeling policies. Our primary recommendation is to strengthen the Guideline by explicitly recommending **mandatory** front-of-package labeling (FOPL) systems comprised of **nutrient warning labels**. The Guideline should also explicitly recommend against the use of positive endorsement labels and of non-interpretive labels presenting raw numeric information as a standalone policy. Lastly, we suggest presenting the Guideline's recommendations as a **unified policy strategy** that includes nutrient declarations, FOPL, and nutrition and health claims guidelines as complementary components, rather than present them as independent policies.

Specific Recommendations

1. The Guideline should **explicitly recommend mandatory FOPL systems**. The current recommendation that FOPLs should be applied “universally” is unclear, as it does not specify what actions are necessary for achieving universal application. Real-world evidence consistently demonstrates that **voluntary FOPL systems fail to achieve universal application and are less effective**. Thus, to ensure adequate public health impact, the WHO should explicitly advise Member States to **adopt mandatory FOPL systems and recommend against the use of voluntary systems**.
 - Evidence from countries that have adopted voluntary FOPL systems, such as Belgium, France, Germany, Australia, and New Zealand, shows that labels are not consistently applied across all packaged products.¹⁻⁶ In contrast, Chile’s mandatory FOPL system has resulted in near-universal compliance, with 93% of all products designated as ‘high in’ nutrients of concern displaying the required FOPLs.⁷
 - Evidence from countries that have adopted voluntary FOPL systems also shows that voluntary labels are more frequently displayed on healthier products.^{1,3,4,8} This selective application can mislead consumers⁹⁻¹¹ and undermine the goal of providing accurate, easily comparable nutritional information across products.^{12,13}
 - Unlike mandatory systems, voluntary FOPL systems adopted throughout the world have not been shown to lead to meaningful levels of product reformulation by the food industry.¹²⁻¹⁶ For example, within a few years of the voluntary implementation of the Health Star Rating system, the sodium content of labeled products was reduced by only 1.4% in Australia and 4% in New Zealand, and the sugar content in New Zealand decreased by only 2.3%.¹⁷ In contrast, within a few years of Chile’s mandatory implementation of nutrient warning labels, the number of products across the food supply classified as ‘high in sodium’ dropped by 63%, and those classified as ‘high in sugar’ dropped by 25%.¹⁸
2. The Guideline should be **more specific about the types of interpretive FOPLs recommended**. Our assessment of the scientific literature is that **nutrient warning labels are supported by the strongest evidence base to date**.

- Nutrient warning labels are the only type of interpretive FOPL supported by real-world evidence demonstrating an association with improvements in the healthfulness of food purchases and dietary intake.^{19,20} Policy evaluations from countries like Chile, Peru, Uruguay, and Israel reveal that nutrient warning labels are used by a large portion of consumers,^{21–24} lead to improvements in the nutritional quality of consumers’ food purchases,^{19,25–27} and prompt manufacturers to reformulate a meaningful portion of their products to reduce amounts of nutrients of concern, including added sugars, sodium, and saturated fat.^{18,28,29}
 - While nutrient warning labels may not always outperform other types of interpretive FOPLs across every outcome measured in experimental studies, they perform the best on the most critical outcomes for the prevention of diet-related diseases – i.e., reductions in the intake of the unhealthiest foods. Experimental studies show that nutrient warning labels are the most effective at reducing the amounts of added sugars, saturated fats, and sodium in products selected by consumers.^{9,30–34} Additionally, experimental studies consistently show that nutrient warning labels are easier for consumers to understand compared to other types of front-of-package labels (FOPLs), such as multiple traffic lights labels and summary indicator labels that provide a single metric for a product (e.g., overall numeric score, letter grade).^{35–45}
 - While there is ample experimental evidence demonstrating that other types of interpretive labels, including multiple traffic lights and summary indicator labels, are an improvement compared to the absence of any interpretive FOPLs, real-world evidence of their effectiveness remains extremely limited. Additionally, experimental studies show that summary indicator labels can create health-halo effects for higher-scoring products,^{34,35,46} while multiple traffic lights labels can send mixed messages (e.g., when a single product shows green for certain nutrients and red for others) and confuse consumers.^{9,39,42,47} For these reasons, we strongly recommend that the WHO not equate these labeling systems with nutrient warning labels in the Guideline.
3. The Guideline should **explicitly recommend against the use of endorsement labels** that signal products as “healthy” and only present positive information. While the Guideline references evidence showing that endorsement labels can create health-halo effects and mislead consumers, it stops short of clearly recommending against their use, and stronger guidance is necessary.
- Compared to other types of FOPL, there is very limited evidence showing that endorsement labels can have a positive impact on consumers’ understanding of products’ nutritional content or on the healthfulness of consumers’ product selection.^{11,48–55}
 - In general, positively framed labels may be interpreted as blanket endorsements to consume as much of a product as desired or to exclusively consume such product.^{11,46}
 - Endorsement labels are applied to pre-packaged products, and thus do not encourage consumption of unpackaged products such as most fruits and vegetables,⁵⁶ which are the foundation of healthy dietary patterns.

4. The Guideline should provide **more detailed guidance on the importance of label design**. Member States should be informed that certain **graphic and linguistic elements** have been shown to enhance the salience and interpretability of FOPLs. Moreover, it is crucial to emphasize the importance of **testing different design elements across diverse population groups** to ensure FOPLs are well-understood by all.
 - Experimental studies show that visual elements, such as icons and images, improve the effectiveness of FOPLs and are more easily understood by populations with lower literacy.^{32,57-61} The greater effectiveness of labels including visual elements is also supported by evidence from the tobacco field, in which there is a long history of using pictorial health warnings on cigarette packs, currently required in 138 countries.⁶²
 - In experimental studies from different countries, shapes and colors associated with warnings or danger, such as octagons, triangles, black, red, and yellow, outperform more neutral shapes and colors.^{40,60,63-66}
 - Attempts by food manufacturers to decrease the salience of FOPLs have been previously documented.⁶⁷ To prevent such attempts, governments can regulate FOPL size and placement. Experimental evidence suggests that placement in the top right corner of packages attracts the most consumer attention.^{68,69} Governments can also establish color-contrast requirements for a range of different types of packages or mandate a holding strip around labels to prevent manufacturers from trying to camouflage FOPLs.

5. The Guideline **should not state that FOPLs are not appropriate for foods directed at young children**. Commercially prepared baby foods and follow-up formulas are among the first foods high in added sugar introduced to young children, directly contradicting the WHO's recommendation that parents not feed foods with added sugar to children under two years old. FOPLs could help parents identify products high in nutrients of concern, reduce purchases of such products, and prompt manufacturers to reduce the amount of nutrients of concern added to products directed at infants and toddlers.
 - Evidence from several countries shows that many commercially prepared baby foods and follow-up formulas are high in added sugars and sodium.⁷⁰⁻⁷³ Between 2010 and 2021, there was a 45% increase in sales of added sugars through products directed at infants and toddlers, from 697 billion grams to 1009 billion grams.⁷⁴
 - Products directed at infants and toddlers commonly contain cosmetic additives whose effects on young children remain unknown. For instance, a study analyzing products sold in Southeast Asian countries found that around a third of products contained additives not permitted by the Codex Alimentarius' standards for foods suitable for children between 6 months and 3 years old.⁷⁵
 - Health claims are common in follow-up formula packages,^{76,77} and studies suggest that such claims can mislead parents and increase product appeal.⁷⁸⁻⁸⁰

6. The term "nutrient declarations," as defined in the Guideline, can refer to various types of labels, including both back-of-package (e.g., Nutrition Facts Panel) and front-of-package formats (e.g., Guideline Daily Amounts). This broad application can create confusion. Therefore, we recommend that the Guideline **more clearly define "nutrient declarations" as**

non-interpretive labels and emphasize that, although important for transparency about the product, such labels are **insufficient as a standalone policy** and should **be paired with interpretive FOPLs**.

- Interpreting food labels that display raw numeric nutrition information requires a high level of nutritional knowledge and mathematical skills. Thus, these labels are incompatible with evidence showing that consumers often make food purchasing decisions very quickly and without extensive “rational” processing.^{81–85} Additionally, these types of labels have been shown to be particularly challenging for individuals with lower education levels,^{86–91} and could ultimately contribute to health disparities.
 - Studies from many different countries show that use and understanding of non-interpretive labels are very low,^{31,33,36,38–41,43,44,46,47,86,88,92–104} and there is little to no evidence that such labels influence dietary behavior.
7. We strongly support the WHO’s recommendation to protect consumers from deceptive nutrition and health claims. We suggest expanding this recommendation to protect consumers from **any type of claim shown to be deceptive**. Additionally, we suggest recommending that **restrictions on nutrition and health claims be integrated into FOPL systems** such that claims, even if not deceptive, are not permitted on products that carry warning labels.
- Experimental studies show that consumers are more likely to choose foods when they contain health and/or nutrition claims compared to the same foods without claims.^{78,105–107}
 - Claims that are not directly or exclusively related to health and nutrition, such as “natural,” or “organic” claims, can still influence consumers’ perception of a product’s healthfulness in misleading ways.^{108–112}
 - Products high in nutrients of concern often possess other nutritional attributes that manufacturers may wish to highlight, such as protein or micronutrient content. While these claims are not inherently deceptive, they may lead consumers to form inaccurate perceptions of the product’s overall healthfulness.^{109,113–115} Therefore, in a unified and cohesive policy strategy, claims, even if not deceptive, should not be permitted on products that exceed the thresholds for nutrients of concern that would require such products to carry warning labels.

Thank you for considering these recommendations and for your commitment to developing a Guideline to support Member States in developing and implementing effective nutrition labeling policies.

Sincerely,

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