Comments to the “draft WHO guideline on Nutrition Labelling”

1. Overall clarity of the guideline

The draft guideline is generally clear and well-structured, providing useful insight into the role of different types of nutrition labels in promoting healthier food choices. However, a more detailed explanation of the rationale behind certain recommendations and stronger emphasis on evidence-based strategies could further improve clarity.

2. Considerations and implications for adaptation and implementation of the guideline

2.1 Mandatory Front-of-Pack Labelling (FOPL)

Evidence revealed that interpretive FOPLs have a beneficial effect by encouraging the purchase of healthier products, reducing the selection of less healthy options and improving the overall nutritional quality of purchases.[1] FOPLs also encourage food and drink companies to reformulate their products by reducing negative nutrients. Evidence shows that FOPLs, such as the colour-coded label in the UK, increase the demand for healthier foods, which in turn stimulates manufacturers to reformulate their products to achieve a healthier profile.[2]

Compared to mandatory FOPL systems, voluntary FOPL systems are adopted slowly in the marketplace regardless of the type of FOPL.[2] For example, in New Zealand only 5% of the packaged foods adopted the Health Star Ratings FOPL system within 2 years of its implementation.[3] In voluntary systems, the presence of a FOPL is more likely to have a “health halo” effect that increase the food choices independently from the actual information carried out by the FOPL.[4] Therefore, voluntary FOPL system can mislead consumers into purchasing labeled foods regardless of the nutritional quality. Evidence suggests that many food companies strategically label healthier products and avoid labelling unhealthy products,[2] which will undermine the effectiveness of FOPL in driving food industry reformulation. For policy makers and researchers, the absence or limited presence of monitoring and evaluation frameworks, which usually accompany the voluntary FOPL regulations, makes it challenging to assess the full impact and scope of the labels.[5]

Recommendation: We strongly recommend mandatory FOPL on all products, accompanied by a robust evaluation framework to ensure that FOPL is driving positive health outcomes.

2.2 Regulations of Nutrition and Health Claims

Permitted and authorised nutrition and health claims have the potential to mislead consumers into thinking products high in fat, salt and/or sugar are healthier than they are. For example, foods can be labelled ‘no added sugar’ despite containing free sugars from fruit juice, purée or paste, which are usually defined as naturally occurring sugars. When consumers see health and nutrition claims printed on packaging, this may stop them looking at other nutrition content information, under the assumption that the claims on pack means the product is ‘healthy’.

Additionally, many products use nutrition claims despite their food containing excessive unhealthy ingredients or nutrients. For example, a 2021 study by Bite Back 2030 surveyed over 500 different food and drink products in the UK that are commonly consumed by teenagers displaying health, nutrition, and marketing claims, and found more than half (57%) were high in either salt, saturated fat or sugar, and would get a red label on front of pack. Looking at drinks alone, the figure rises to two-thirds (62%).[6] Given the promotional effect of nutrition claims, this may mislead consumers, especially young people, into consuming food and drinks with excessive levels of fat, salt and sugars.

Recommendation: We recommend that nutrition and health claims should only be permitted on healthy products, as defined by evidence-based criteria (e.g, UK Nutrient Profiling Model, EU NutriScore) and monitored by the government, so as to prevent misleading consumers and promoting the consumption of unhealthy products.

2.3 Updating the Nutrient Profiling Criteria for FOPL and Nutrient Content Claims

Effectiveness of FOPL systems depends on a number of influential factors, including their ability to evolve with nutrition science, changing dietary patterns and nutrient formulation of manufactured foods.[7] Regular reviews of the thresholds of Nutrient Profiling Models (NPMs) for FOPLs and nutrient content claims can ensure they reflect the latest scientific data on nutrient-health relationships, and progressively guide consumers towards lower intake of unhealthy nutrients such as sugars, saturated fats, and salt.

The evaluation and update of Nutrient Profiling Criteria also motivates the food and drink industry to improve product formulations to stay aligned with public health goals. For example, evidence from countries like Chile, Israel, and Peru have included progressively lower nutrient thresholds to incentivise industry-wide reformulation efforts, and data shows that regularly refining the criteria for "healthy" products can lead to positive public health outcomes.[7] However, only one-third of current regulations have taken the process into consideration.

Recommendation: We recommend governments update the threshold of NPMs for FOPLs and nutrient content claims regularly based on literature review and public consultations. We recommend regularly monitoring and evaluating the population nutrient intakes and nutrient contents of manufactured food and drinks.

2.4 Replacing Total Sugars with Free Sugars in FOPL and Nutrient Declaration

Current sugar labelling is misleading, as it uses a reference intake for total sugars, which includes all sugars, including those which are naturally occuring. Free sugars, however, are not essential in the diet and are often consumed in excess. Labelling should reflect the free sugar content, which has a greater impact on health. For example, a can of soda that claims to contain 39% of the daily total sugar intake would actually provide 117% of the recommended daily intake for free sugars.[8]

Recommendation: We recommend replacing total sugars with free sugars in FOPL and nutrient declarations.

2.5 Labelling of Potassium-Enriched Salt Substitute

The use of potassium-enriched salt substitutes is one promising approach to help with food reformulation and reduce population salt intake, especially for selected food categories where salt reduction still proves to be challenging. However, the use of potassium chloride as a sodium substitute may need to be communicated clearly to the public, especially to those vulnerable populations with possible risk of hyperkalemia, e.g, those with chronic kidney disease.

There are also concerns about clean labeling and misconceptions among consumers that potassium salt is an undesirable chemical or additive in foods. To address this misunderstanding, more consumer-friendly terms should be used when labeling potassium-enriched salt substitute. For example, the US Food and Drug Administration has launched guidance for food manufacturers to label potassium-enriched salt substitute in a more consumer-friendly way, e.g, use of the term "potassium salt" on food labels as an alternative to "potassium chloride" to increase consumer recognition of potassium chloride as a salt substitute that contains potassium, which can reduce sodium intake in the population, and encourage the food industry to develop healthier food options.[9] Consumers are less likely to confuse "potassium salt" with "sodium chloride" (compared to "potassium chloride") because the word "potassium" indicates that the ingredient is distinct from salt.

Recommendation: We recommend governments follow the practice of the US FDA to provide guidance for clear but positive labelling of potassium enriched salt substitutes for prepackaged foods, including labelling potassium-enriched salt substitutes in the list of ingredients as the more consumer-friendly term "potassium salt" or "potassium-enriched salt substitute", and reporting total potassium in the nutrient declaration tables, for better communication of the nutrition information to populations with a higher risk of hyperkalemia.

2.6 Mandatory FOPL and No Claims on Packaged Foods for Young Children

It is important to introduce good nutrition in early life. For example, many dietary guidelines recommend children under two consume no added sugar, and older children consume less than 25 grams of free sugar every day. However, children today have exceptionally high sugar intakes, contradicting the dietary guidance, which puts children at increased risk of tooth decay and obesity, and compound the risk of developing chronic disease later in life, such as type 2 diabetes.

The absence of regulations for labelling baby and toddler foods might be one of the major reasons for the high sugar intakes. For example, product surveys reveal a third of baby and toddler sweet snacks receive a red colour-coded label (i.e, high) for sugars (based on adult's criteria).[10] The high level of sugar content has also been seen in other food categories, e.g, breakfast products intended for babies and toddlers, which contain more than 14 grams of sugar per serve.[11] Most of these high-sugar products feature nutrition claims on packs, e.g, "no added sugars" despite many containing sugars from fruit juices, concentrates and purees that are defined as naturally occurring sugars. Many products high in sugars also featured a claim that could be distracting and possibly misleading 'Packed with vitamins and minerals' or 'Made with real fruit'. These claims mislead

parents into purchasing baby foods that are not as healthy as perceived. The gap in legislation for labelling baby and children's food and drinks with FOPL which means these products are not required to display them, which may worsen the situation.

Recommendation: We recommend the government investigate the best way of labelling foods for babies and toddlers to provide better and more honest packaging for parents, e.g, mandating FOPL on baby and toddler foods using evidence-based nutrient profiling criteria designed for children. We also recommend removing misleading on-pack marketing claims, especially around 'no added sugar/refined sugar' when such ingredients are replaced by fruit concentrates (which are still a type of free sugars and should be limited), on baby and toddler foods. These policies could complement composition guidelines for baby and toddler products that guide manufacturers on how much sugars should be used to create a heathier food environment.

2.7 Comprehensive Strategy

The implementation of nutrition labelling policies like FOPLs not only improves health literacy by making nutrition information more visible and understandable, but also helps guide other food environment policies. For example, it can support product reformulation efforts, setting clear benchmarks for reducing harmful nutrients like sugar, salt, and saturated fat.

Additionally, NPMs underlying the FOPLs or nutrition claims serves as a foundation for policies like marketing restrictions, helping to define which products can be advertised to children. This holistic approach to nutrition policy creates a healthier food environment, encouraging consumers to make better choices and encourage industry to reformulate products, leading to an overall positive impact on public health.

Studies show multicomponent strategies that include both upstream and downstream interventions are generally more effective in reducing intakes of adverse nutrients (e.g, salt and sugar) and promoting healthier diet in the population.[12] Other policies may include restricted marketing and promotion of HFSS food (e.g, multibuy promotion, TV and online advertising, end-of-isle or check-out promotion); reformulation (e.g, salt, sugar and calorie reduction targets for processed food and drinks); public food procurement and service policies for healthy diets; mass media campaigns and behavioural change communications; and fiscal measures (e.g, sugar drink tax, or HFSS tax).

Recommendation: We recommend a comprehensive strategy that includes nutrition labelling as well as a number of other food environment policies as the population strategies to promote healthier diet.

3. Context and setting-specific issues that have not yet been captured

3.1 Online Food Retailers

Different grocery shopping habits may also influence the performance and exposure of nutrition labelling. For example, in-store grocery shoppers could be more likely to check and use nutrition

labels, compared to online shoppers.[13] There are many reasons for this difference in using nutrition labels. Nutrition information, especially FOPL, for packaged foods is not always available online, and when it is, it may be presented inconsistently. Consumers may pay less attention to detailed product information, including nutrition information, because of the insufficient visibility of nutrition information on many e-commerce platforms (small size and not positioned at the first sight), and many online shoppers may prioritise speed and convenience over nutrition.

Recommendation: We recommend governments publish guidelines for nutrition labelling for online grocery stores or other e-commerce platforms to increase consumers use of nutrition labelling while shopping for groceries online.

3.2 Public Education

Demographics (e.g, family income, education) and health conditions also make a difference. People with higher education level and family income, or diet-related health conditions, may pay more attention to the nutrition labels. To narrow the health inequality, public and patient education are needed to improve awareness, understanding and use of nutrition labels in the population, e.g, mass media campaign, primary school curriculum, and lifestyle prescription/dietary counselling.

Recommendation: We recommend public education programmes to improve awareness, understanding, and use of nutrition labels in all populations.

4. Errors of fact or missing data

4.1 Consumers' Perceptions of Different FOPL Types

One aspect of implementing an FOPL policy that was not mentioned in the draft is the impact on consumers' perceptions (e.g, salience, credibility of the labels, and perceived difficulties in understanding them). For example, according to our previous meta-analysis on colour-coded FOPLs and warning labels,[1] Nutri-Score and nutrient warning labels are perceived as easier to understand, whereas the UK colour-coded model are considered to provide a greater amount of nutrient information. Warning labels are more noticeable, while Nutri-Score is more likely to be correctly recalled. Nutri-score, UK colour-coded model, and warning labels are all considered credible and effective among consumers. In general, FOPLs that is easily noticeable, informative, understandable, and credible, without significantly increasing the cognitive burden during grocery shopping, would be more acceptable to consumers.

Recommendation: we recommend policy makers take the perceptions of consumers towards these FOPLs into consideration when choosing the FOPL. A simple but precise label will be more acceptable to consumers and thus will guide their food purchases.

4.2 Interaction Between FOPL and Health/Nutrition Claims

It remains unclear how FOPL interacts with nutrition/health claim and impact food choices. Compared to the nutrient declaration table that is usually present on the back of pack, FOPL is easier to notice, checked, and used when people are shopping for groceries. A number of countries have now adopted voluntary or mandatory FOPL policies, but the regulations for health or nutrition

claims are not in place for many countries. Therefore, it is important to know whether such health or nutrition claims on packs impede people from checking FOPL for unhealthy products (e.g, whether people will check FOPL when they see a breakfast product with "no added sugar" claims on pack, but could be high in free sugar). This information will inform future regulations on health or nutrition claims, as the "health halo" effect of claims have to be fully considered in the labelling consideration to achieve the maximum effectiveness of FOPL policies.

Recommendation: We recommend a review of the current evidence base on the interaction between FOPL and health/nutrition claims.

4.3 Interaction Between Nutrition Declaration/FOPL and Child Friendly Packaging

Marketing and advertising have a marked influence on parents' and children's selection and consumption of discretionary products and marketing on product packaging impacts parent and child choice at the point of purchase. Elements of packaging, such as the use of animation and imagery, communicate to consumers that the product is suitable for children. Except for nutrient information panels and ingredients lists, companies and marketers control most information on packaging. Cartoon characters and animations are powerful communication tools, especially for children who can process visual images more easily than verbal messages. Before children learn to read, they can recognise brands.[14]

Many unhealthy products feature child-friendly packaging. A survey of 126 breakfast cereal products available at supermarkets across the UK with child-friendly packaging found that 92% contained high or medium levels of sugar and 60% were high or medium in salt (criteria for high and medium are based on the adults recommendations).[15] Similarly, of the 100 yogurts with child-friendly packaging across the UK, just 5% had low levels of sugar and 63% contained a third or more of a 4–6-year-olds maximum daily intake for added sugar per serve.[16]

In addition, appealing packages to children such as using familiar cartoon animals may mitigate the effect of FOPL or nutrition declaration on discouraging people to choose unhealthy products.[17] Therefore, the inappropriate presence of child-appealing packaging may mislead children into purchasing more unhealthy products and undermines the effectiveness of FOPL and nutrient declaration in promoting healthier food choices.

Recommendation: We recommend introducing strict and mandatory nutrition criteria for the use of child-friendly packaging, defined by a standardised tool (e.g, child-appealing packaging coding tool[18]), to encourage healthier choices right from the start.

5. General comments

In addition to the recommendations in the draft, we recommend the following regarding adaptions and implementation of nutrition labelling policies worldwide:

- Mandatory FOPL on all manufactured products accompanied by a robust monitoring and evaluation mechanism
- Regulations on nutrition claims and health claims to avoid misleading consumers
- Updating the nutrient profiling criteria for front-of-pack labels and nutrient content claims.

- Replacing total sugars with free sugars in front-of-pack labels and nutrient declarations
- Provision of clear and consumer-friendly labelling of potassium-enriched salt substitute in the list of ingredients and nutrient declarations.
- Improve the nutrition labelling for baby and toddler foods
- Multicomponent strategies that include nutrition labelling as well as other food environment policies to promote healthier diet

For the context and setting specific issues, we recommend government take the following factors into account when developing their own nutrition labelling policies:

- Consider the online food environment (e.g, online grocery stores), including guidelines on how to present nutrition information on e-commerce platforms, how to monitor the adoption of nutrition labels, and how to check the consistency of nutrition information in store and online.
- Public education to improve the population's awareness, understanding, and use of nutrition labels

We also look forward to seeing additional summaries of the current evidence regarding the following topics to strengthen the guideline as a reference for policy makers worldwide to develop their own nutrition labelling policies:

- Consumers' perceptions of different FOPL types
- Interaction between FOPLs and health/nutrition claims
- Interaction between FOPL/nutrient declaration and child-appealing package

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