What's in Our Food?

A guide to introducing front-of-package nutrient labels

For policymakers, researchers and civil society organizations

O'NEILL INSTITUTE GEORGETOWN LAW CENTER FOR HEALTH & HUMAN RIGHTS
GLOBAL CENTER FOR LEGAL INNOVATION ON FOOD ENVIRONMENTS
Global Health Advocacy Incubator
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Front cover: HEALA conducted the "Wire Kids" activation to advocate for front-of-package warning labels in South Africa, 2023.

Overview

Foods that have excess saturated fat, salt and sugar and are often ultra-processed have been replacing healthier foods globally, propelled by a powerful food and beverage industry that pours billions into marketing its brands and products.[1-4] High consumption of these products has contributed to rising rates of diet-related noncommunicable diseases (NCDs) around the globe.[5] Front-of-package labels have emerged as an effective tool to counter food and beverage industry marketing and provide consumers with clear information about the nutritional content of the foods they purchase.

Replicating the practices of the tobacco and alcohol industry, the food and beverage industry has historically used package designs and displays at the point of purchase to influence consumer behavior. This includes using misleading health or environmental claims, cartoon characters, vivid colors and appealing imagery. These tactics appeal to emotions and aspirations, encouraging the consumption of unhealthy products.[6-10]

Governments have begun counteracting such strategies with front-of-package labels that offer at-a-glance nutritional information. Labels that alert consumers to harmful ingredients and discourage the purchase of unhealthy products are an especially effective way to regulate how the food and beverage industry communicates with consumers and are a strong policy measure to address rising rates of diet-related noncommunicable diseases. The practice of warning consumers of health-harming content has also been used with other industries. For instance, many countries mandate graphic health warnings on tobacco products.

Specifically, front-of-package warning labels cut through the noise on food and beverage packages to clearly and quickly signal to consumers when a product is unhealthy, helping consumers to identify and avoid the foods and beverages that are the worst for our health.[9,11-13] A growing number of countries have implemented or have proposed to implement front-of-package warning labels to communicate the (un)healthfulness of foods and beverages and discourage consumption of unhealthy products.[14]

While front-of-package nutrition labels can take different forms reflecting different policy objectives, this guide focuses on those that *convey accurate, easily understandable, transparent and comprehensible information on products, seeking to* discourage unhealthy dietary choices and making healthy choices the best and preferred option. In embodying these qualities, front-of-package nutrient warning labels have been shown to effectively discourage less healthy dietary choices and contribute to the enjoyment of human rights, compelling governments across the globe to act.

The strategies and resources in this guide are offered to help countries develop, implement and evaluate effective, mandatory front-of-package labels. The strategies are meant to be planned and implemented simultaneously and reiteratively rather than sequentially. While mandatory labeling regulations must be led by the government, civil society and academia also play an important role in the policy process. The guide offers information that is relevant to each of these stakeholder groups. Developing a trusting working relationship among these three groups, free from conflict of interest, will enhance the likelihood of successful policy design and implementation.

Strategies include:

Review

Define the public health problem, identify the policy objective and assess the food policy landscape.

Research

Test label designs and identify the label most effective in achieving the policy objective.

Strengthen

Involve civil society and expert advisors, free from conflict of interest, to strengthen the policy case.

Counter

Anticipate and counter industry opposition to the policy, including through litigation.

Engage and build

Engage the public, political leaders and other stakeholders to support policy adoption.

Draft and consult

Develop the policy and consult key stakeholders for feedback, putting appropriate safeguards in place.

Manage implementation

Develop guidelines for implementation and monitoring.

Monitor and evaluate

Assess policy impact.

STEP 1
Review

Define the public health problem, identify the policy objective and assess the food policy landscape.

1.1 The public health problem

Diets in many regions and nations have drastically changed over the last several decades as they enter the stage of the nutrition transition characterized by a shift in dietary patterns toward high consumption of foods with excess fat, salt, sugar and ingredients of public health concern that are often ultra-processed and low in micronutrients and fiber.[15] Examples include packaged chips, cookies, instant soups, soft drinks, packaged noodles, candy and other similar products.[16]

At the same time, the prevalence of overweight and obesity is rapidly rising, as are other diet-related noncommunicable diseases (NCDs), including 13 of the 15 major cancers, Type 2 diabetes, hypertension and other forms of coronary heart disease. Over 40% of the world's population is overweight or obese, including more than 37 million overweight children under five.[17] More than 93% of countries have observed increases in obesity among youth over the last 30 years, emphasizing the urgent need to address this pattern.[18] Based on current trends, very few countries have met or will meet The World Health Organization's global nutrition targets by 2030: As of 2021, only three countries have met the target for overweight among children.[19]

The shift toward ultra-processed products and the rise in diet-related noncommunicable diseases are closely intertwined. Increased consumption of foods and beverages with excess fats, sodium and sugar, which are often ultra-processed, has been directly tied to increased risk of obesity, cancer, heart disease, Type 2 diabetes and poor mental health outcomes.[5] In fact, poor diets contribute to an estimated 11 million preventable deaths globally each year, placing an unsustainable burden on people, governments and society.[20] Thus, reductions in unhealthy diets, particularly avoiding ultra-processed products, is key to reducing obesity and rates of NCDs and improving population health.[21]

There currently exists a "triple burden" of malnutrition where over-nutrition, or excess consumption of nutrients and energy that can lead to overweight and obesity, and under-nutrition, or a lack of nutrients and insufficient energy supply that can lead to stunting and wasting, coexist alongside micronutrient deficiencies at normal weight ranges.[22,23] As people increasingly consume cheap, convenient ultra-processed products, which lack essential nutrients but are dense in nutrients of concern, their consumption of healthier nutrient-rich foods is displaced.[5] This triple burden is especially pronounced in low- and middle-income countries, where obesity rates are now surpassing those in industrialized nations and more people suffer from micronutrient deficiencies.[18,23] As many nations have decreased the prevalence of underweight, the prevalence of overweight and obesity has increased significantly among adults, adolescents and children.[18]

WHO advises countries to adopt front-of-package labeling as a key policy to promote healthier food environments and help lower the prevalence of diet-related noncommunicable diseases. Reducing consumption of foods and beverages with excess fat, sodium or sugar is a global priority that provides impetus for governments to adopt front-of-package labels and other complementary policies.

Country-level considerations:

1. What does the typical diet consist of in your country?
2. What are the top nutrients, food groups and dietary patterns of public health concern?
3. How have population dietary patterns changed over time in your country?
4. What are the rates of diet-related noncommunicable diseases, such as Type 2 diabetes, obesity, hypertension and heart disease in your country?
5. Have the rates of diet-related diseases changed over time?
6. Do disease rates vary by population subgroups, such as race, gender, education, income, etc.?
7. Are undernutrition and/or food insecurity an issue?

Resources:

A. Ultra-processed foods: a global threat to public health by Global Food Research Program at UNC-Chapel Hill.[16]
B. Invisible numbers: the true extent of noncommunicable diseases and what to do about them by the WHO.[24]
C. Front-of-package labeling to empower consumers and promote healthy diets by Global Food Research Program at UNC-Chapel Hill.[25]
D. Evidence Sheet: Front-of-Package Labeling by the Global Health Advocacy Incubator.[26]
E. Guiding principles and framework manual for front-of-pack labelling for promoting healthy diets by the WHO.[27]
F. State of play of WHO guidance on Front-of-the-Pack labelling by WHO.[28]
G. Find country-specific statistics through the Global Health Data Exchange (GHDx) by the Institute for Health Metrics and Evaluation.[29]

The "Protect Our Children's Health" campaign was implemented to advocate for front-of-package warning labels in Jamaica by Heart Foundation Jamaica and partners, 2022.

1.2 The consumer environment

Prepackaged ultra-processed products have become readily available in virtually every community across the globe, regardless of income level or population density.[30-34] This trend has drastically changed the way people eat by replacing traditional healthier foods and ingredients with those that are more processed and less healthy.[1-4] In some countries, ultra-processed products now make up more than half of the calories people consume.[35,36] In other countries that have lower overall intake of ultra-processed products, consumption is rapidly increasing, particularly in food-scarce environments because of their lower cost.[4,37]

Ultra-processed products are generally developed to be shelf stable, ready-to-eat or ready-to-heat and highly palatable. Yet, they are also high-in energy density, added fats, sodium, sugar and refined carbohydrates and low in beneficial nutrients (e.g., fiber), all of which have been linked to rising obesity and chronic diseases.[38-43] Ultra-processed products also typically contain nonsugar sweeteners, flavors, colorants and other additives that may be harmful to health.

Not only have food and beverage products become less healthy over time, but also the sheer number of choices in stores makes it difficult and confusing for consumers to select healthier foods.[44] Typically, shoppers take just seconds to select grocery items—not enough time to read and interpret complicated nutrition information.[45-47] Back-of-pack nutrition panels, which many countries now have, can be complicated to interpret and, as a result, do not enable quick, informed decision-making.[27,48] Simpler, more effective options are needed.[49,50]

Adding to the confusion, the food and beverage industry has increasingly made misleading health and nutrition claims on product packaging. 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" that leads consumers to misunderstand its nutritional quality.[6–10] This is where front-of-package warning labels can add value and clearly communicate to consumers which foods contain high levels of nutrients of concern, aiming to decrease purchases and consumption.

Country-level considerations:

1. How and where do people shop for food in your country?
2. How accessible are ultra-processed products?
3. How are ultra-processed products marketed and priced relative to healthy foods?
4. Is healthy food easily accessible and affordable?
5. How prevalent are ultra-processed products in people's diets?
6. How does consumption of ultra-processed products vary by demographic group?
7. What research do you need to further understand these issues in your context?

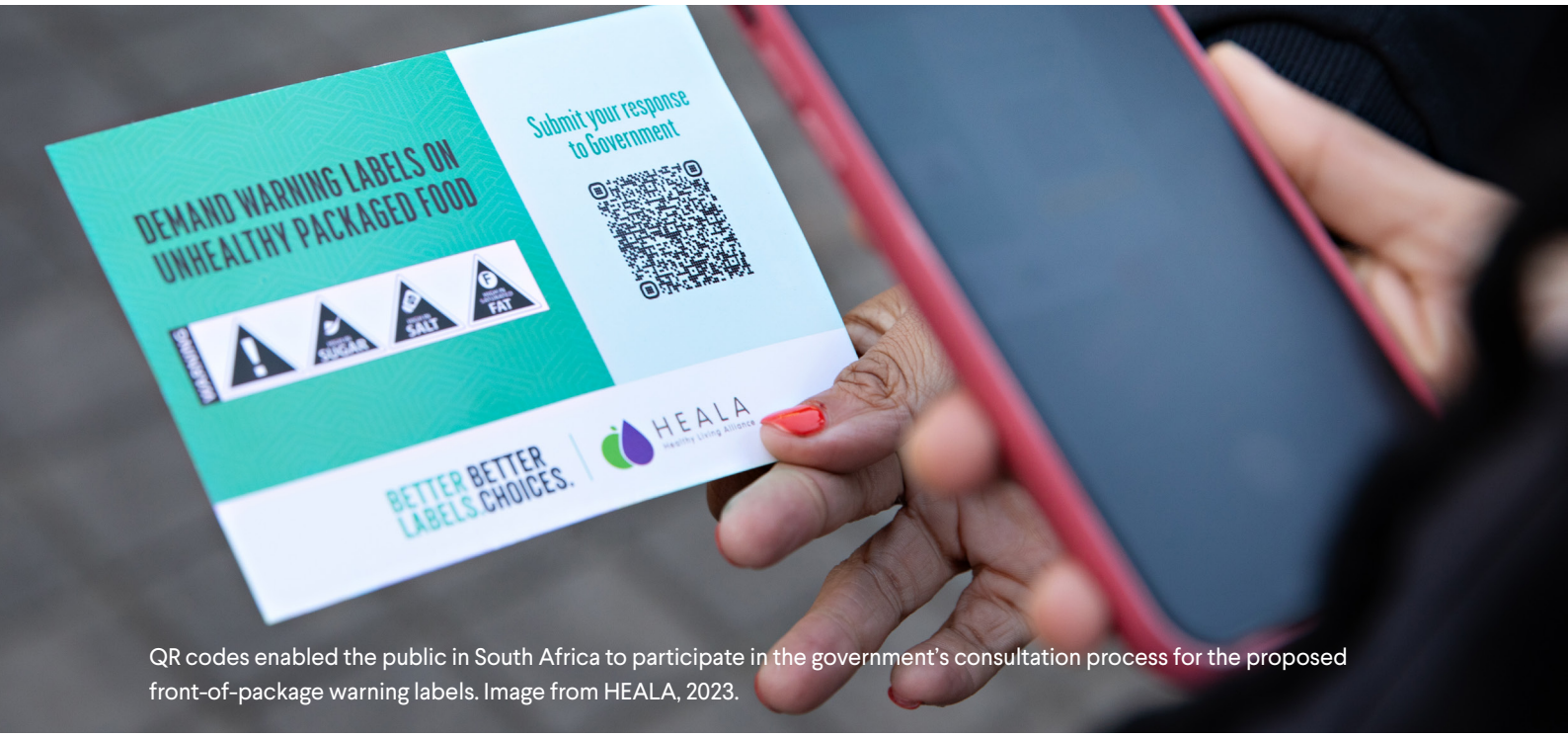
Resources:

Information on ultra-processed products

- **A.** Ultra-processed foods: A global threat to public health by Global Food Research Program at UNC-Chapel Hill.[16]
- **B.** The nutrition transition: an overview of world patterns of change by Barry Popkin.[15]
- **C.** Ultra-processed foods: what they are and how to identify them by Carlos A Monteiro, et al.[51]

Examples of country-level research on ultra-processed product consumption

- **D.** The share of ultra-processed foods and the overall nutritional quality of diets in the US: evidence from a nationally representative cross-sectional study by Euridice Martinez Steele, et al.[52]
- **E.** Ultra-processed food consumption among US adults from 2001 to 2018 by Filippa Juul, et al.[53]
- **F.** Ultra-processed foods and excessive free sugar intake in the UK: a nationally representative cross-sectional study by Fernanda Rauber, et al.[54]
- **G.** Dietary intake of low-income adults in South Africa: ultra-processed food consumption a cause for concern by Tamryn Frank, et al.[55]
- **H.** The increasing trend in the consumption of ultra-processed food products is associated with a diet related to chronic diseases in Colombia—Evidence from national nutrition surveys 2005 and 2015 by Gustavo Cediel, et al.[56]
- **I.** Public Perceptions of Ultra-Processed Products Findings from Studies of Adults in Brazil and Colombia by Vital Strategies.[57]



QR codes enabled the public in South Africa to participate in the government's consultation process for the proposed front-of-package warning labels. Image from HEALA, 2023.

1.3 Define the policy objective and review existing labels and policies

Define the policy objective

Establishing a clear, evidence-based policy objective is a foundational step in designing and implementing effective front-of-package labeling policies. This objective is critical to:

1. Communicate the policy's intended public health purpose.
2. Limit the food and beverage industry's opportunities to advocate for labeling formats that serve commercial rather than public health interests.
3. Lay the groundwork for robust policy evaluations and sustained implementation.

In countries where policy objectives have been vaguely defined or include multiple conflicting goals, industry actors can exploit this ambiguity. For instance, some countries use labeling systems that prioritize product comparisons (e.g., Nutriscore) rather than guiding consumers away from unhealthy foods. Without a strong, singular objective grounded in public health evidence, governments risk adopting ineffective labeling systems that fail to achieve meaningful dietary improvements.

To help ensure the proposed front-of-package labeling system contributes to better health outcomes, countries should consider the following while developing the policy objective:

1. **Identify the core public health issue**: Front-of-package labels are a tool to address the growing burden of diet-related noncommunicable diseases, which are driven by high consumption of foods and beverages with excess added fat, salt and sugar, that are often ultra-processed.
2. **Define a specific, evidence-aligned goal**: The World Health Organization recommends reducing consumption of foods and beverages with excess fat, salt or sugar as a global priority.[27]
3. **Determine the intended policy outcome**: The intended function of front-of-package labels is to influence consumer behavior to enable them to make informed choices about the food they consume.
4. **Avoid conflicting or ineffective objectives**: Objectives such as enabling product comparisons or encouraging healthy choices often open the door to weaker labeling models that fail to reduce harmful consumption. See more below.

Existing labels and policies

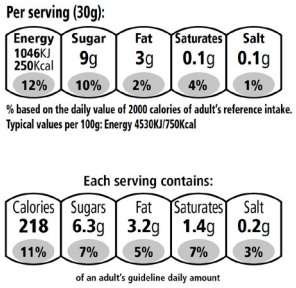
There are now many published studies on the different types of front-of-package labels and their varying ability to improve consumer understanding of a product's nutritional quality and influence purchasing behavior. See Figure 1 for different types of front-of-package labeling systems.

Figure 1: Typology of front-of-package labels (FOPL) related to health and nutrition

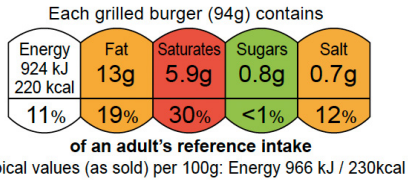
Endorsement systems

Summary systems

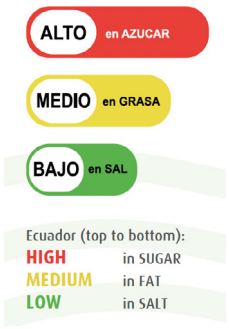
Monochromatic guideline for daily amounts (GDA) systems



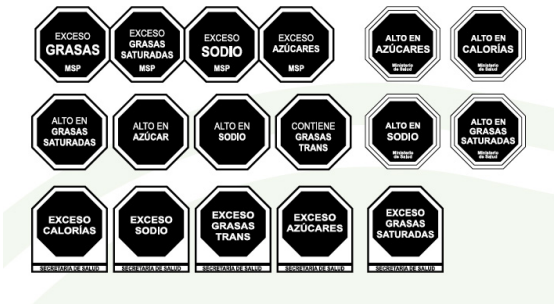
Color-coded GDA or Reference Intake (RI) FOPL systems



Nutrient-specific textual and color-coded systems



"HIGH/EXCESSIVE" systems, also known as nutritional warnings



Note: The pictured labels are examples and not an exhaustive list of formats. Adapted from source: Pan American Health Organization (PAHO). Front-of-package labeling as a policy tool for the prevention of noncommunicable diseases in the Americas. Washington, D.C.: PAHO; 2020. Available from: https://iris.paho.org/handle/10665.2/52740

Non-interpretive (or reductive) nutrient-specific labels provide nutrient-level information with little to no interpretation.[27] Examples include calorie labels, Facts Up Front and Guidelines for Daily Allowance. The Guidelines for Daily Allowance labels were developed by the food and beverage industry and are implemented voluntarily. These types of labels have been found to be unhelpful and confusing for consumers.[25] Similarly, the non-interpretive nutrition facts panel is infrequently used by consumers, indicating a need for more accessible, user-friendly nutrition information.[59,60]

There are also a wide range of interpretive labels. This category includes nutrient-specific models (multiple traffic lights, nutrition content claims, health claims and warning labels) and summary indicator models such as health logos and rating labels (e.g., Healthy Choices, Health Star Rating, Nutriscore).

Not all labels are equally effective in reducing the purchase of unhealthy foods. For example, research shows that Australia's Health Star Rating system, a summary front-of-package labeling system that assesses the healthiness of foods on a scale of 0.5 to 5 stars based on their content of "risk" and "positive" nutrients, has technical weaknesses, design flaws and governance limitations that have enabled packaged, ultra-processed foods to be misinterpreted as "healthier."[61] For example, various snack bars that contained added sugar as well as nuts and seeds led to a higher Health Star Rating, allowing the company to advertise its products as healthy despite the added sugar.[61]

In contrast to Australia's Health Star Rating system, nutrient warning labels are designed to give one type of information so these types of discrepancies in perceived healthfulness do not occur. Warning labels alert consumers to excess levels of nutrients of concern to discourage them from choosing these products, and do not make any positive claims about the product to help consumers easily identify unhealthy products without confusion.[62]

Of all interpretive and non-interpretive front-of-package labels, warning labels are the only labels that have shown a real-world impact on reducing consumption of unhealthy foods and beverages.

Consumers respond differently to different types of labels, and these responses can influence diet-related health outcomes.[62] Research to date indicates that interpretive front-of-package labels are more effective than non-interpretive (reductive) front-of-package labels in facilitating healthier choices and are more likely to be used and understood by consumers.[59,60,63-64] Interpretive nutrient-specific labels, and warning labels in particular, are more effective in discouraging purchases of ultra-processed products than other labeling systems.[62,65-66] On the other hand, summary labeling systems (see Figure 1) categorize products as "healthier" and "less healthy," which raises the risk that consumers will try to choose "healthier" options from an array of unhealthy products.

Best practices: front-of-package warning labels

Front-of-package warning labels help consumers identify products high-in nutrients and ingredients of concern, discouraging their consumption.

The policy objective of front-of-package warning labeling policies is to reduce the purchase and consumption of foods high-in nutrients and ingredients of concern. Warning labels perform better than other front-of-package labeling systems at alerting consumers about excess levels of nutrients of concern in products and discouraging their purchase, which makes them an effective measure against diet-related NCDs.[62,67] Evidence also demonstrates that front-of-package warning labels are more visually attended to by consumers and easier to understand than other labels.[9, 11-13]

Emerging debate: ultra-processed warning labels

Another consideration for the future of front-of-package warning labels is the adoption of an "ultra-processed warning label" that alerts consumers when a food or beverage product has been heavily processed. This is characterized by the product containing specific additives, colors, sweeteners, etc.[16] While it is not yet clear which specific processing techniques, additives or ingredients contribute to poor health outcomes, given the strong tie between ultra-processed foods and poor health outcomes, ultra-processed labels may be the next step to increase consumer knowledge and decrease consumption of these products.[16] The NOVA Classification system, which groups foods according to the extent and purpose of processing they've undergone, can serve as a tool to define ultra-processed foods for labeling policies.[51]

A recent formative research study demonstrated that including an ultra-processed warning label alongside nutrient warning labels captured consumers' attention, encouraged them to think about the risks associated with consuming products with these labels and dissuaded them from purchasing the product.[68] The ultra-processed label builds on the efficacy of front-of-package nutrient warning labels by clearly identifying chemically transformed, lab-developed products and communicating their risk.

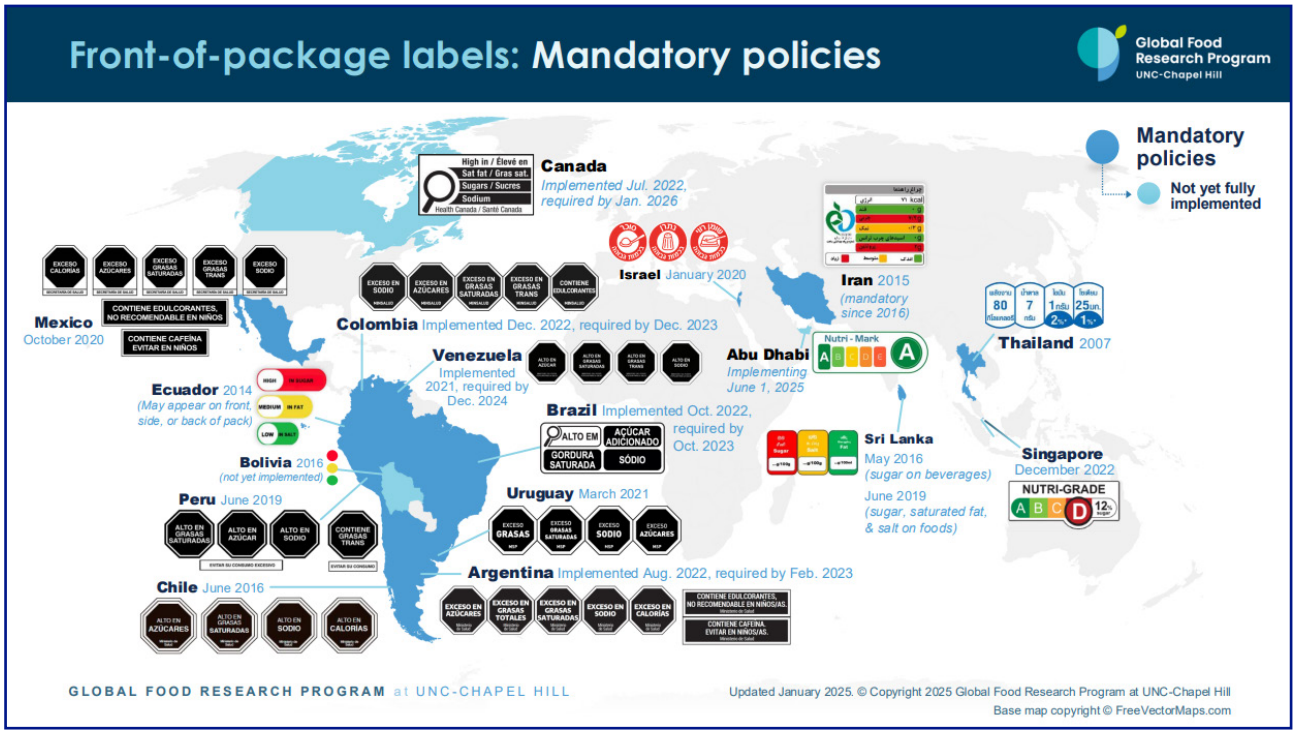
In addition, a BMJ Global Health commentary offers an ultra-processed warning label design and elucidates the potential effects of these labels if paired with substantial effort to inform the public about the harms of ultra-processed products.[69] Ultra-processed warning labels increase consumer knowledge on ultra-processed products and allow consumers to identify an additional sign of unhealthfulness of specific food and beverage products.[69]

A pilot study to evaluate the effects of incorporating an ultra-processed warning label alongside nutrient warning labels would be an important next step to determine if this label should be integrated into existing warning label policies.

Country examples

There are now 16 countries around the globe that have legally mandated front-of-package labeling policies (Figure 2). Of these, 10 countries have adopted front-of-package warning labels. As of the end of 2024, at least nine other countries are exploring front-of-package warning labeling systems or will soon introduce regulations.

Figure 2: Countries with mandatory front-of-package labeling policies



Source: Global Food Research Program at UNC-Chapel Hill. Front-of-package labels: Mandatory policies. 2024.[14]

Chile was the first to develop and implement nutrient warning labels and has introduced the most comprehensive food policy package of any country to date. Following a 2014 tax on sugary drinks, Chile introduced the Law of Food Labeling and Advertising in 2016, which mandated front-of-package warning labels, regulated marketing and restricted foods in schools based on nutrient thresholds.[70] Once the world's leading consumer of sugary drinks, Chile has reduced purchases of sugary drinks by 24%, representing a greater reduction in consumption than other countries across Latin America where standalone policies were implemented.[62] A study published in PLOS Medicine found that after three years of implementation of Chile's warning label and marketing restrictions law, Chileans bought significantly less high-in food and food with warning labels—consuming 37% less sugar, 22% less sodium, 16% less saturated fat and 23% fewer total calories.[71] Chile's warning label policy is a model that is now influencing policy discussions and decisions across the world. Similar models have since been introduced in countries of varied income levels, including Argentina, Canada, Colombia, Israel, Mexico, Peru and Uruguay.[14] Countries throughout Asia and Africa are also considering implementing warning labels.

Mexico and Argentina built upon the Chilean labeling regulations to also include warning statements on products that contain any amount of sweetener or caffeine, noting that the products are not recommended for children (see Figure 3). Colombia has also added a warning label for products that contain any amount of sweetener.[72]

Figure 3: Evolution of front-of-package warning labels in Chile, Mexico and Argentina

Chile (2016)

English translation (left to right): 1) "High in calories." "High in saturated fat." "High in sodium." "High in sugars." Each also includes "Ministry of Health."

Source: Lindsey Smith Taillie et al. An evaluation of Chile's Law of Food Labeling and Advertising on sugar-sweetened beverage purchases from 2015 to 2017: A before-and-after study. 2020.[70]

Chile introduced the first front-of-package warning label, which highlighted foods "high-in" calories, saturated fat, sodium and sugar.

Mexico (2020)

English translation (top to bottom, left to right): 1) "Contains sweeteners. Avoid in children." 2) "Contains caffeine—Avoid in children." 3) "Excess calories." "Excess sugars." "Excess saturated fats." "Excess trans fats." "Excess sodium." Each also includes "Ministry of Health."

Source: Mariel White & Simon Barquera. Mexico Adopts Food Warning Labels, Why Now?. 2020.[73]

Mexico and Argentina adopted front-of package warning labels to highlight foods with "excess" calories, sugar, saturated fat, trans fat and sodium based on a nutrient profile model. In addition, Mexico and Argentina both added labels alerting consumers when products contain sweeteners and caffeine. Also of note is that Mexico and Argentina use the phrase "excess" rather than "high-in" to clarify that the amount of these ingredients or nutrients of concern exceed recommended amounts, leaving little room for misinterpretation.

Argentina (2022)

English translation (top to bottom, left to right): 1) "Contains sweeteners. Not recommended for children." 2) "Contains caffeine. Avoid in children." 3) "Excess in sugars." "Excess in total fat." "Excess in saturated fat." "Excess in sodium." "Excess in calories." Each also includes "Ministry of Health."

Source: Ministerio de Salud Argentina. Anexo II: Normative Grafica of Promocion de la Alimentacion Saludable. Decreto 151/2022.[74]

According to the Global Food Research Program at University of North Carolina-Chapel Hill, key elements of an effective front-of-package labeling policy that aims to reduce purchases and consumption of foods high-in nutrients and ingredients of concern include:[62]

- Making the policy mandatory, which requires placing front-of-package labels on all relevant packaged products based on a nutrient profile model. Voluntary labels should be discouraged (see section 4 on industry interference).
- Using a strong nutrient profile model to set clear and meaningful criteria for the labels (see section 1.4). The policy objective for the nutrient profiling model should be to discourage consumption of unhealthy products with excess nutrients and ingredients of concern as detailed in the nutrient profile model.
- Employing warning label designs that are interpretative, simple and immediately visible, with set size limits for all types of packaging. This also includes using simple formats, colors and icons.
- Ensuring the policy is government-led.
- Restricting health and nutrition claims on products containing warning labels, since products containing both a warning label and a health or nutrition claim can be confusing to consumers.

Country-level considerations:

1. What labels or claims are currently visible on food and beverage packages in your country?
2. Which labels or claims are allowed or restricted?
3. What policies are there regarding food packaging and labels?
4. Does your country have back-of-package labeling requirements?
5. How are nutrition labeling requirements verified? E.g., does the government conduct verification analysis on the nutrient content of foods?
6. What are consumers' perceptions of packaged foods? Ultra-processed foods?

Resources:

Details about front-of-package warning labels globally:

A. Front-of-package warning label (FOPWL) regulations around the globe by the Global Health Advocacy Incubator.[75]

B. Front-of-Package Labeling as a Policy Tool for the Prevention of Noncommunicable Diseases in the Americas by the Pan American Health Organization.[67]

C. Evidence Sheet: Front-of-Package Labeling by the Global Health Advocacy Incubator.[26]

D. Front-of-package labeling to empower consumers and promote healthy diets by Global Food Research Program at UNC-Chapel Hill.[25]

E. NOURISHING (diet-related policy database) by World Cancer Research Fund International.

Experimental and exploratory studies on front-of-package labeling:

F. Experimental Studies of Front-of-Package Nutrient Warning Labels on Sugar-Sweetened Beverages and Ultra-Processed Foods: A Scoping Review by Lindsey Smith Taillie, et al.[76]

G. South African consumers' perceptions of front-of-package warning labels on unhealthy foods and drinks by Makoma Bopape, et al.[77]

H. Perceived effect of warning label on parental food purchasing and drivers of food selection among South African parents–An exploratory study by Makoma Bopape, et al.[78]

I. Nutrient warning labels work in South Africa: Results from a randomized controlled trial by Global Food Research Program at UNC-Chapel Hill.[79]

J. Conflicting Messages on Food and Beverage Packages: Front-of-Package Nutritional Labeling, Health and Nutrition Claims in Brazil by Ana Clara Duran, et al.[80]

K. Sugary drink warnings: A meta-analysis of experimental studies by Anna H Grummon and Marissa G Hall.[81]

L. Impact of nutrient warning labels on Colombian consumers' selection and identification of food and drinks high-in sugar, sodium, and saturated fat: A randomized controlled trial by Mercedes Mora-Plazas, et al.[82]

Evaluation studies for front-of-package warning labels:

M. Decreases in purchases of energy, sodium, sugar, and saturated fat 3 years after implementation of the Chilean food labeling and marketing law: An interrupted time series analysis by Lindsey Smith Taille, et al.[71]

N. Changes in food purchases after the Chilean policies on food labelling, marketing, and sales in schools: a before and after study by Lindsey Smith Taillie, et al.[83]

O. An evaluation of Chile's Law of Food Labeling and Advertising on sugar-sweetened beverage purchases from 2015 to 2017: A before-and-after study by Lindsey Smith Taillie, et al.[70]

P. Responses to the Chilean Law of Food Labeling and Advertising: Exploring knowledge, perceptions and behaviors of mothers of young children by Teresa Correa, et al.[84]

Q. Changes in the amount of nutrient of packaged foods and beverages after the initial implementation of the Chilean Law of Food Labelling and Advertising: A nonexperimental prospective study by Marcela Reyes, et al.[85]

Examples of labeling regulations:

R. Law of Food Labeling and Advertising (Ley 20.606) in Chile: English and Spanish.

S. General labeling specifications for prepackaged foods and non-alcoholic beverages-Commercial and health information (Norma Oficial Mexicana NOM-051-SCFI/SSA1-2010) in Mexico: English and Spanish.

T. Promotion of Healthy Eating (PROMOCIÓN DE LA ALIMENTACIÓN SALUDABLE - DCTO-2022-151-APN-PTE) in Argentina: Spanish.

U. Law for Promotion of Healthy Food Environments and NCD Prevention (Ley 2120 - Ley Comida Chatarra) in Colombia: Spanish. Resolution Number 2492 from December 2022 regulating Law 2120 in Colombia: English and Spanish. (Additional information about the law can be found here.)

Billboard pressing the government to approve warning labels in Brasília, Brazil. Image from IDEC/Aliança pela Alimentação Adequada e Saudável.

1.4 Nutrient profile models

The World Health Organization describes nutrient profiling as "the science of classifying or categorizing food and drink products according to their nutritional composition for reasons related to preventing disease and promoting health."[86] Nutrient profile models categorize food and drink products to establish thresholds of nutrients of concern. Nutrient profile models should also include sweeteners and potentially other ingredients and additives that are harmful to health when consumed in excess and therefore should be limited in standard diets.[86-92]

Nutrient profile models can either be adapted from existing nutrient profile models from WHO regional offices or other countries or developed from scratch. Nutrient profile models should all be adapted or developed using a systematic, transparent and logical process. Further, classification of foods and beverages should be comprehensive, clear and consistent to ensure all intended products are targeted.[93] Clear nutrient profile models can be used to underpin multiple food policies, such as food labeling systems, food taxes, school nutrition policies, food procurement regulations on health or nutrition claims and restrictions on marketing.

An effective nutrient profile model should align with WHO recommendations by setting clear thresholds for nutrients and ingredients of concern based on the WHO Population Nutrient Intake Goals.[93] When a food or beverage product exceeds these thresholds, the model should classify the product as having excess amounts of a nutrient(s) of concern. A well-designed nutrient profile model should be applicable across the general population, not just specific subgroups such as children, and should distinguish between solid and liquid products using a single threshold per category. Front-of-package labels based on such a model would mean that products exceeding these thresholds trigger the use of a label, such as a warning label—supporting the policy objective of informing consumers of excess nutrients or ingredients of concern to reduce their consumption of unhealthy products. It is worth noting that the nutrient profile model should apply exclusively to processed and ultra-processed products to prevent unnecessary restrictions on unprocessed or minimally processed foods.

The nutrient profile models developed by the Pan American Health Organization (PAHO), World Health Organization South-East Asia Region (SEARO) and World Health Organization Regional Office for Africa (AFRO) include caloric denominator thresholds that can be applied to the entire population, including children, and they are consistent with WHO's recommended intake limits for nutrients of concern.[93] This approach is clearer and more consistent when compared to nutrient profile models that define the cut-off as a percent of daily value, grams per serving or serving, since companies can easily manipulate serving sizes on packages to avoid labels.

Figure 4: Recommended criteria for identifying food and drinks with excess nutrients and ingredients of concern curated from PAHO, SEARO and AFRO regional nutrient profile models[93]

Sodium	Free sugars	Non-sugar sweetners	Total fat	Saturated fat	Trans fat
≥ 1 mg of sodium per 1 kcal OR ≥ 300 mg/100 g of product OR ≥ 40 mg/100 ml in beverages that do not provide any energy	≥ 10% of total energy from free sugars in solids and ≥ 5% of total energy from free sugars in liquid	Any amount of non-sugar sweeteners	≥ 30% of total energy from total fat	≥ 10% of total energy from saturated fat	≥ 1% of total energy from trans fat

*While the PAHO, SEARO and AFRO nutrient profile models recommend including total fats, it is not essential, as the priority nutrients of concern are saturated fats and trans fats.

Some countries, such as Argentina, have also added an "excess in calories" label in addition to specific nutrient and ingredient labels. However, an "excess in calories" label requires a different denominator. Whereas a product may be labeled as "excess in sugar" if its total sugar makes up 10% or more of the total energy, the "excess in calories" label should be detailed by a certain number of calories per 100g of a product. For example, in Argentina, the threshold for the "excess in calories" label is 300 calories per 100g of a product.

See the Global Health Advocacy Incubator's Nutrient Profile Models Position Paper for additional information.[93]

A robust, evidence-based nutrient profile model should be designed to effectively identify which products contain excess nutrients or ingredients of concern and should be subject to regulations. To achieve this, an appropriate nutrient profile model should: [93]

- Adopt regional WHO nutrient profile models (e.g., PAHO, SEARO or AFRO) and make necessary country-specific adaptations. These models represent the highest standard for identifying products with excess amounts of nutrients and ingredients of concern and are more re-source-efficient than developing a new nutrient profile model.
- Include all nutrients and ingredients of concern (e.g., sodium, sugar, saturated fat, trans fat and nonsugar sweetener) to align with international guidelines such as those from WHO. This list may expand as scientific evidence evolves.
- Establish a single numeric threshold per nutrient or ingredient of concern that differentiates between solids and liquids, to ensure clarity in classification and enforcement.
- Apply a strict threshold criterion based on the PAHO, AFRO and SEARO nutrient profile models, such as at least 5% of total calories from sugar in liquids.
- Limit the model to only two categories—solids and liquids—to facilitate implementation and enforcement.

- Ensure that the nutrient profile model remains free from industry influence during its development and implementation process to maintain its integrity.
- Monitor emerging scientific evidence and lessons learned from implementation to refine and strengthen the nutrient profile model, ensuring it effectively protects the right to adequate food.

Table 1 below details studies that test existing nutrient profile models to identify which model is most effective at capturing ultra-processed products with excess nutrients or ingredients of concern in a specific country context.

Table 1: Examples of existing nutrient profile models tested in country food markets.[94] Adapted from "Nutrient Profile Models: A critical tool to enable policy interventions" by Resolve to Save Lives.

An adapted SEARO Model: Researchers in **India** conducted a study to compare the WHO South-Asia Region (SEARO) nutrient profile model to that used under Chile's labeling law. They used a database of over 10,000 food items available on the Indian market, ultimately concluding that the SEARO nutrient profile model is most appropriate for their context.[95]

The PAHO Model: Researchers in **Brazil** compared the Pan American Health Organization (PAHO) nutrient profile model to the Chilean nutrient profile model and a third model proposed by the Brazilian National Health Surveillance Agency (Anvisa). Using nutrition data from over 11,000 packaged products in Brazil, the researchers concluded that the PAHO nutrient profile model covered a higher proportion of products than the other two tested nutrient profile models.[102]

Researchers in **Colombia** who compared the PAHO nutrient profile models to the Chilean nutrient profile model using over 6,700 products in the Colombian market also concluded that the PAHO model covered a higher proportion of products that exceed nutrient criteria.[101]

A similar approach was applied to the **Jamaican** market, where front-of-package labeling has not yet been implemented but is being researched. Researchers also found that the PAHO nutrient profile model covered a higher proportion of packaged products in Jamaica than the Chilean model.[96]

A Chile-adjusted nutrient profile model: Researchers in **South Africa** compared the PAHO, Chilean and Food Standards Australia New Zealand nutrient profile models to propose a fit-for-purpose nutrient profile model to adapt to the local context. Researchers considered important criteria such as nutrients of concern, a base unit on which to compare foods and the numeric thresholds to apply. Researchers concluded the Chile nutrient profile model was the best fit to adapt for the South African market.[97]

Country-level considerations:

1. What does a healthy diet or dietary pattern look like in your country? (Consider your country's dietary guidelines.)
2. What are the main dietary sources of nutrients of concern in your country?
3. What is the in-country research capacity to complete a nutrient profile model study?
4. Which nutrient profile models would you be interested in testing (e.g., WHO proposals, government proposals, etc.)?
5. What is the availability of packaged food supply data in your country to test different nutrient profile models?

Resources:

Guides and fact sheets about nutrient profile models:

- **A.** Nutrient Profile Models: A valuable tool for developing healthy food policies by the Global Health Advocacy Incubator, et al.[93]
- **B.** Nutrient Profile Models: A critical tool to enable nutrition policy interventions by Resolve to Save Lives.[94]
- **C.** Pan American Health Organization Nutrient Profile Model by the Pan American Health Organization.[98]
- **D.** Front-of-package labeling by the Pan American Health Organization.[99]
- **E.** Evidence Sheet: Front-of-Package Labeling by the Global Health Advocacy Incubator.[26]

Examples of nutrient profile model testing research:

- **F.** Applying and comparing various nutrient profiling models against the packaged food supply in South Africa by Tamryn Frank, et al.[100]
- **G.** The WHO South-East Asia Region Nutrient Profile Model Is Quite Appropriate for India: An Exploration of 31,516 Food Products by Chandra Pandav, et al.[95]
- **H.** Nutrition Quality of Packaged Foods in Bogotá, Colombia: A Comparison of Two Nutrient Profile Models by Mercedes Mora-Plazas, et al.[101]
- **I.** Applying Nutrient Profiling Systems to Packaged Foods and Drinks Sold in Jamaica by Suzanne Soares-Wynter, et al.[96]
- **J.** Role of different nutrient profiling models in identifying targeted foods for front-of-package food labelling in Brazil by Ana Clara Duran, et al.[102]
- **K.** A Fit-for-Purpose Nutrient Profiling Model to Underpin Food and Nutrition Policies in South Africa by Tamryn Frank, et al.[97]

1.5 Human rights foundation for the adoption of front-of-package warning labels

Human rights can be a powerful legal and advocacy tool for countries seeking to adopt and implement front-of-package labeling, including for countering industry interference. While the food and beverage industry often threatens to sue governments that take action to prevent noncommunicable diseases (NCDs), rights-based frameworks not only allow but in fact require governments to act. Under international human rights law, governments have an obligation to prevent NCDs by tackling risk factors, including unhealthy diets.[103] This requires taking measures that are effective toward that end, including regulating the food and beverage industry.

The right to health is broadly recognized in international human rights law. This right extends to the underlying determinants of health, which require governments to take effective measures to tackle social, commercial, legal or other conditions shaping people's daily lives in ways that can hamper their achieving the "highest attainable standard of physical and mental health."[104-109] This requires promoting conditions that foster the enjoyment of a good level of health, while modifying those that undermine it.

Under international human rights law, governments have three levels of obligations: to *respect, protect* and *fulfill* human rights. The obligation to *respect* requires governments to refrain from interfering either directly or indirectly with the enjoyment of human rights, which includes, for example, incentivizing the consumption of unhealthy foods and beverages.[110]

Second, under the obligation to *protect*, governments must take legislative and other measures to prevent nongovernment actors, including corporations, from interfering with the enjoyment of human rights.[111-113] In the context of nutritional labeling, this entails an obligation to regulate the activities of nongovernment actors, including food and beverage companies, to ensure that they convey accurate, easily understandable, transparent and comprehensible information on their products.[113] Equally, it requires preventing the food and beverage industry from using labels that create misconceptions about the nutritional quality of foods, such as nutrition and health claims, as well as from using labels as a mean to promote products that present risk factors for NCDs.[113]

Barbados youth advocate leading a call to action for front-of-package warning labels. Image from Heart and Stroke Foundation of Barbados Inc.

Lastly, under the obligation to *fulfill*, governments must adopt legislation and national health policies to advance the full realization of human rights. In the context of the right to health, this includes providing information that encourages and supports healthy decisions, particularly as it relates to foods with excess quantities of nutrients linked to disease (generally sugar, fats and sodium), which are often ultra-processed.[113-115] This includes taking into account that food that is not adequately labeled may be harmful, as it prevents consumers from making healthy and informed choices.[113]

The right to health is interdependent, interrelated and indivisible with other human rights, including the rights to adequate food, to information, to equality and nondiscrimination, and to benefit from scientific progress, among others.[114,116] These human rights equally support the need for government action and could underpin efforts to adopt and implement front-of-package warning labels.

For instance, the right to adequate food encompasses food quality, not just quantity; therefore people require relevant information to understand the content and quality of food so they can make more informed, healthier food choices.[110,113,117]

Regarding the right to equality and nondiscrimination, NCDs disproportionately affect people and communities that have been historically disadvantaged. The food and beverages industry deliberately and aggressively targets marginalized racial, ethnic and socioeconomic groups, thus increasing their exposure to products that put their health at risk.[118-119] Therefore, front-of-package warning labels that provide easy to understand and clear information on unhealthy foods and beverages can be a means to promote equality and nondiscrimination, in addition to health and adequate food.

Country-level considerations:

1. Are human rights in your context protected under international treaties or a constitution?
2. Are different branches of government open to incorporating rights-based considerations in their decision-making processes (e.g., legislative or executive motivation, judicial decisions, etc.)?
3. Are there laws or regulations addressing conflicts of interest in policymaking?

Resources:

- **A.** Brief on the Report, "Food, nutrition and the right to health," Issued by the United Nations Special Rapporteur on the Right to Health, Dr. Tlaleng Mofokeng by The O'Neill Institute for National and Global Health Law.[120]
- **B.** Brief on the Report, "Noncommunicable diseases and human rights in the Americas," Issued by the Inter-American Commission on Human Rights by The O'Neill Institute for National and Global Health Law.[121]
- **C.** Statement by the UN Special Rapporteur on the right to health on the adoption of front-of-package warning labelling to tackle NCDs from the United Nations.[122]
- **D.** A human rights-based approach to noncommunicable diseases: mandating front-of-package warning labels by Andrés Constantin, et al.[123]

STEP 2

Research

Test label designs and identify the label most effective in achieving the policy objective.

Identifying effective label designs is crucial for countries both with and without existing labeling policies. Both new label designs and any proposed adaptations to current label designs should be based on research that demonstrates their effectiveness among the target population. Since the objective of front-of-package labels should be to make consumers aware of what is in their food and discourage them from purchasing unhealthy products, the primary research question to answer is: "**which label will help consumers avoid unhealthy food?"** Research should not focus on which labels consumers like best or which labels encourage healthy choices.

Research phases to answer this question include **exploratory research** to understand public knowledge on food, food ingredients, and decision-making; **qualitative research** to test perceptions about the design, which can be used to adjust the label design, phrasing, size, location, etc.; and **randomized controlled trials** (RCTs) to test the effectiveness of the label.

It is also important to note that based on the type of label selected and experience from the region, the type of research needed and the research order may change. If there is strong evidence from the region that consumers easily understand front-of-package warning labels and perceive them as effective, you might move to the RCT stage to test it more robustly.

2.1 Public knowledge and understanding

To ensure that labels resonate with the public, it's vital to first understand how people will respond to a proposed label. Conducting exploratory research—such as focus groups—can reveal which images and messages are most meaningful, as well as identify barriers to comprehension, especially for people with lower literacy. A quantitative-qualitative mixed-method of study is the preferred methodology for this testing: the quantitative rating exercise allows for an objective assessment of the label's effectiveness, while the qualitative discussion allows for a deeper understanding of the types of messaging that resonate with the audience and the audience's perception of the design. Please note that focus groups are not the best method to determine which label is most effective.

Key areas to explore should include:

- **A** people's decisions around purchasing food, particularly ultra-processed packaged food
- **B** their knowledge of the food's ingredients
- **C** the influence of product packaging and promotion on their knowledge and decisions

In addition, the research should aim to uncover if people use existing labels (and other nutritional information) to make decisions, and to what degree they are influenced by potentially conflicting health claims and other forms of endorsements made by product manufacturers. This information will also help policymakers and civil society organizations build public knowledge and support since it tells them what consumers know about what is in their food and what more they need to know about labels and ingredients.

Country-level considerations:

1. Is there existing published research on front-of-package labeling in your region or country?
2. Are there ongoing surveys that can help you gain a broader understanding of the food environment, people's purchasing behavior and knowledge of specific nutrients and ingredients (e.g., sodium, saturated fat, sweeteners, etc.)?
3. Is there any existing exploratory research about people's food knowledge or preferences?
4. What type of exploratory research might need to be conducted to fill in gaps?

2.2 Label designs

Labels can be newly developed or adaptions of existing labels; it may be possible to replicate an existing label from another jurisdiction. For either case, it is useful to test the effectiveness of a proposed label in the local context before it is proposed for implementation. This local evidence can be used for advocacy purposes to demonstrate that the label achieves its objectives among a specific country population. However, if it is not possible to conduct research within a country due to resource and other constraints, evidence from similar countries in the region can be analyzed to determine how a label might work in the country in question.

To test the new or adapted label, focus group discussions—or other suitable research approaches—should be used. Findings from this phase of research can guide the selection of the most effective design option or design features. Further insights from the research can be used to strengthen the label design as necessary.

A qualitative study in PLOS One assessed the perceptions of South African consumers toward different front-of-package warning label designs.[124] This study also includes a comprehensive design testing protocol that has a focus group moderator guide, recruitment screener, design elements to test and other useful guidance for this process.

Country-level considerations:

1. What type of research will help identify the images and messages that carry the most meaning and identify any barriers to comprehensibility?
2. Which existing labels from other jurisdictions might be appropriate to test?

Resources:

A. South African consumers' perceptions of front-of-package warning labels on unhealthy foods and drinks by Makoma Bobape, et al.[124]
B. "Warning: ultra-processed": an online experiment examining the impact of ultra-processed warning labels on consumers' product perceptions and behavioral intentions by Aline D'Angelo Campos, et al.[125]
C. Designing an Effective Front-of-Package Warning Label for Food and Drinks High in Added Sugar, Sodium, or Saturated Fat in Colombia: An Online Experiment by Lindsey Smith Taillie, et al.[126]

Civil society groups in South Africa protesting for better regulations on how unhealthy packaged food is labeled. Source: Health-e News Service.

2.3 Label effectiveness: Randomized controlled trial

Once a label design is selected based on the consumer perceptions captured through qualitative research, the next step is conducting a rigorous RCT to assess its effectiveness compared to other labels. Effectiveness is defined as the label that: most influences the consumer's ability to correctly, objectively identify unhealthy foods; most reduces their intention to purchase the product; or actually prevents them from purchasing the product. This step is critical, as it is sometimes the case that the label consumers say they prefer is not the label that necessarily translates into behavior change.[127] As noted above, when conducting an RCT is not feasible due to resource and other constraints, evidence from similar countries in the region can be analyzed.

An RCT might test the effects of a warning label to reduce the intended purchase of unhealthy products compared to other labels being considered in the context. Researchers may consider whether to include either a no-label option or a neutral label, such as a barcode or a neutral statement like "always recycle," as a control label in the study design. For example, a study published in Nutrients compared five front-of-package labels—a control label, warning label, Health Star Rating, Guideline Daily Amounts and the traffic light label—among a representative sample of adults in India to identify the label that most effectively alerted consumers of foods high-in nutrients of concern and discouraged their consumption.[128] Researchers concluded that the most effective labeling system tested among consumers was the warning label.[128]

There are a number of other considerations that must be carefully weighed when designing an RCT, including the number and type of products to be used in the study and their order of presentation. It is important that the research is driven by local data on food and beverage products and study design considerations. The guidance of research experts is crucial to making these decisions, such as:

- **Sample power**: A formal power calculation process is essential to ensure that there are enough participants in each arm of the trial to detect differences between arms. Learn more here.[129]
- **Sample size**: A larger sample size will be needed to test differences between label designs, whereas a smaller sample size will be able to detect differences between a label design and neutral or no-label controls.
- **Representative sample**: The study sample in an RCT must be representative of the population in which the label will be implemented to ensure the results can be generalized beyond the study. This may mean representative of the entire population or representative of a subset of the population that is inequitably affected by ultra-processed product consumption.

Based on the conceptual model presented by Taillie, et al., it is recommended that an RCT assess the following measures:[76]

- *Label comprehensibility,* including measures of visibility, attention-catching ability and accuracy of information communicated.
- *Message acceptance,* including perceived message effectiveness, attitudes toward the product, negative affect and perceptions of risk. It is also important to measure reactance or feelings of annoyance toward the label and perceptions that a label is too harsh.
- *Behavioral intentions and behaviors*, including intentions to purchase or consume products and actual purchase and consumption of products.
- *Pre-existing influences,* including prior nutritional knowledge, use of the back-of-package nutrition facts panel where it exists and attitudes toward the front-of-package labeling policy.

- Demographics that represent the population in which the label will be adopted, such as sex, age, education level, etc.
- Differences by product type, including evaluating whether the effects of labels differ by product category (e.g., drinks vs. foods, certain food categories), since labels tend to be most effective in categories where there is more confusion about healthfulness (e.g., breakfast cereals, yogurts and savory snacks).

Country-level considerations:

1. How will you assess the effectiveness of the selected labels to help consumers avoid unhealthy products?
2. Which research groups could be tapped to conduct an RCT to test label effectiveness in your setting?
3. Which constructs should be included in this study (e.g., behavioral intentions, influences, comprehensibility, acceptance, knowledge, etc.)?
4. How can you ensure the study is generalizable to the wider population?

Resources:

Randomized controlled trial study design guidance:

A. Pre-registration for Developing Warning Messages about Ultraprocessed Food in Colombia by Lindsey Smith Taillie, et al.[130]

B. See Appendix A for the mock label designs and Table A1 for construct measures for Designing an Effective Front-of-Package Warning Label for Food and Drinks High in Added Sugar, Sodium, or Saturated Fat in Colombia: An Online Experiment by Lindsey Smith Taillie, et al.[126]

Randomized controlled trial research examples:

C. Front-of-Package Labels on Unhealthy Packaged Foods in India: Evidence from a Randomized Field Experiment by S.K. Singh, et al.[128]

D. Are Front-of-Package Warning Labels More Effective at Communicating Nutrition Information than Traffic-Light Labels? A Randomized Controlled Experiment in a Brazilian Sample by Neha Khandpur, et al.[131]

E. Impact of nutrient warning labels on Colombian consumers' selection and identification of food and drinks high-in sugar, sodium, and saturated fat: A randomized controlled trial by Mercedes Mora-Plazas, et al. [82]

F. Applying and comparing various nutrient profiling models against the packaged food supply in South Africa by Tamryn Frank, et al.[132]

G. Effectiveness of Three Front-of-Pack Food Labels in Guiding Consumer Identification of Nutrients of Concern and Purchase Intentions in Kenya: A Randomized Controlled Trial by Shukri F Mohamed, et al.[133]

H. Exploring Consumer Understanding and Perceptions of Front-of-Pack Labelling of Foods and Non-Alcoholic Beverages in Kenya by Caliph Kirui, et al.[134]

STEP 3

Strengthen

Involve expert advisors and civil society, free from conflict of interest, to strengthen the policy case.

3.0 Expert advisors

Governments can establish an advisory committee to leverage expertise for the front-of-package labeling policy from experts in related fields, including communication, design, marketing and nutrition research. This committee can provide guidance on label design, public campaigns and legislative frameworks. Members' commitment to the committee should be governed by terms of reference that specify, among other things, that they have no conflict of interest or direct or indirect affiliations with food and beverage companies. The following are some suggestions for fields of expertise to engage for the committee:

- Health and nutrition
- Nutrition education
- Design and communication
- Behavioral science
- Human rights, public policy and food systems
- Law
- Trade experts
- Other initiatives to create warning labels (e.g., for tobacco or alcohol)

Country-level considerations:

1. Who should be on the advisory committee in your country? Consider what skills and expertise you need to create a diverse and effective committee and whose opinions/expertise policymakers might value.
2. How will you assess potential conflicts of interest?
3. Who will be responsible for reviewing conflicts of interest?
4. How will potential conflicts of interest be managed?

3.1 Civil society

International experience indicates that a civil society-led broad stakeholder/coalition group can bring more voices and legitimacy to the call for a strong front-of-package labeling policy. However, it is important that the civil society groups are committed to protecting public interest and not affiliated directly or indirectly with the food and beverage industry. This applies to any nominated spokespeople, who should be trained in managing the opposition narrative and prepared to speak at various fora, including engagements with media.

Ideally, civil society would organize as a broad and diverse group of allies that not only represent public health issues but also food systems, human rights (including children's rights, water rights, etc.), labor rights and agroecology as well as social movements, such as consumer movements, local food movements and small-scale farmers movements. These stakeholders will also have the credibility to counter industry opposition.

Civil society can play a key role in building community knowledge, generating public debate, highlighting the need and right for clear labels, demonstrating the weight of community and public health support to policymakers (see section 5 on building support), anticipating industry tactics to oppose or dilute the policy and holding the government accountable to pass a strong policy free of conflict of interest. Civil society can also convey local and global research on labeling to policymakers, explaining how labels can be implemented and articulating their public health benefits. As a group, they would play a role in shaping and driving the policy advocacy strategy, providing guidance on when to exert pressure or provide support for policymakers to implement an effective policy.

Members of the Alliance for an Adequate and Healthy Diet (Aliança pela Alimentação Adequada e Saudável) pressure Brazil's National Health Surveillance Agency to approve food warning labels. Source: Jéssica Ribeiro.

Country-level considerations:

1. What examples of civil society engagement have you seen in your country?
2. What platforms can you use to consult with policymakers?
3. Who should be involved in the civil society coalition group?

   Consider the following:

   - Researchers in population/public health, nutrition and marketing/ communication
   - Public health and nutrition experts
   - Credible health associations (e.g., dental, diabetes, heart and cancer associations)
   - School nutrition representatives
   - Food policy advocates, consumer rights advocates and parent groups
   - Representatives of consumers most likely to benefit from front-of-package labels (e.g., parents, people with Type 2 diabetes and other NCDs)
   - Social, behavior change and communication specialists
   - Legal experts who work closely with regulators or can scrutinize policy proposals

Resources:

Websites for civil society organizations' front-of-package labeling campaigns:

A. South Africa: What's In Our Food? Better Labels. Better Choices by HEALA.
B. South Africa: Front of Packaging Warning Labels by HEALA.
C. Brazil: Alto Em Atenção by Instituto de Defesa de Consumidores (idec)
D. Brazil: Rotulagem Adequada Já by Instituto de Defesa de Consumidores (idec).
E. Brazil: Petition for proper labeling by Aliança pela Alimentação Adequada e Saudável.
F. Jamaica: Mass media campaigns by the Heart Foundation of Jamaica.
G. Caribbean: Preventing Childhood Obesity in the Caribbean – Civil Society Action Plan 2017-2021 by Healthy Caribbean Coalition.
H. Colombia: No comas más mentiras by Red PaPaz.
I. Colombia: Dulce Veneno by CAJAR.
J. Argentina: EtiquetadoClaroYa by Fundación Sanar.

Advocacy toolkit:

A. Advocacy Action Guide Four Phases to Health Policy Success by Global Health Advocacy Incubator.[135]

Case studies highlighting civil society engagement:

A. How Media Helped Build the Case for Front-of-Package Warning Labels in Brazil by idec and Vital Strategies.[136]
B. How Communications is Used to Support Advocacy and Mobilization Strategies to Advance Healthy Food Policies by Global Health Advocacy Incubator.[137]

3.2 Government and policymakers

A front-of-package labeling system must go through a government process and be adopted as either regulation or legislation. Civil society and academia can help make sure policymakers are prioritizing front-of-package labels by providing them with scientific justification and demonstrating public support. It is critical to only rely on credible data sources to support front-of-package labeling advocacy efforts. This includes using scientifically rigorous data and avoiding industry-funded studies and other data that might be influenced by the food and beverage industry.

In turn, governments and policymakers can leverage civil society and academic expertise on front-of-package labeling to help build the case for labels across government departments or ministries, such as the Department of Education, Department of Finance, Department of Agriculture and the Department of Labor, among others.

Many governments have processes that require a public consultation phase. Some regulatory standards, in line with trade treaties and local laws, mandate a consultation phase during the policymaking process in which any person, including associations, industries, etc., can participate in providing comments. The government should consider which stakeholders should be engaged in the public consultation process.

Country-level considerations:

1. Does front-of-package labeling require regulation or legislation in your country?
2. Which government departments or stakeholders must you consult with to build support for the policy?
3. What information will each of the different government departments need to build a case to support the front-of-package labeling policy?
4. Which government departments are likely to support the front-of-package labeling policy and which are likely to oppose it?
5. How can you work with the government departments that oppose the policy to support it?
6. Are existing government public consultation processes accessible and equitable?
7. Does the government have adequate resources to consult widely and to collect and synthesize public comments?

Resources:

A. Key Legal Factors For Developing Front-of-Package Warning Labeling Regulations by Global Health Advocacy Incubator.[138]
B. Health Minister welcomes Heart Foundation's new FOPL [front-of-package labeling] campaign by the Jamaica Observer.[139]

STEP 4
Counter

Anticipate and counter industry opposition to the policy, including through litigation.

Policymakers and civil society groups must be aware of the tactics that the food and beverage industry use to influence decision-makers. It is of utmost importance that policymakers avoid conflicts of interest. Conflicts of interest take place when the food industry has a role in determining how its products are regulated that extends beyond standard government consultations.[140] Conflicts of interest can undermine public trust, prevent transparent decision-making and even generate legal consequences.

There are well-documented cases of the food and beverage industry delaying, delegitimizing and diluting healthy food regulations. Industry tactics fall into several categories:[141]

1. Attack legitimate science: This often plays out as the industry accusing institutions and the government of acting against corporate interests or exaggerating the uncertainty inherent in any scientific endeavor. The industry will also fund its own studies or fund or influence researchers sympathetic to its corporate causes.
2. Attack and intimidate scientists: The industry will try to sow seeds of doubt by infiltrating scientific groups, threatening litigation or claiming there is not sufficient evidence for the policy and calling for self-regulation.
3. Create arms-length front organizations: Through front groups, industry associations or by funding other projects or institutions, the industry will try to demonstrate that its position has broader support than it does.
4. Manufacture false debate and insist on balance: Typically the industry will try to whip up a storm of controversy to divert attention from a healthy food regulation toward its own corporate social responsibility programs or toward other health issues such as physical activity. They insist on journalists having balance in their coverage by representing both sides of the false debate.
5. Frame key issues to fuel uncertainty: The industry may argue that the problem is less severe than it is, that the costs of regulating it are too high or that other options have not been considered. The industry may use powerful or emotive language to fuel uncertainty about the policy.
6. Fund disinformation campaigns: This may include advertising directly, paying influencers or celebrities or aligning with other issues such as antitax groups.
7. Influence the political agenda: The industry may do this by donating to political parties, insisting on representation at the policymaking table, paying influential lobbyists or "making friends" with politicians by providing access to high-profile, sought-after events. This can also include exploiting weaker governance systems that lack conflict-of-interest and access to information policies or legislation, as well as documented protocols and procedures, allowing the industry to drive interest through power rather than clear policymaking processes.
8. Threaten litigation: This may occur throughout the policy process in hopes that decision-makers will oppose, delay or water down healthy food policies.

Other examples specific to industry interference in front-of-package labeling policies include:[26]

1. Offer to introduce voluntary front-of-package labels: Voluntary industry agreements have been proven not to work. The proposal of such agreements by the industry is a deliberate strategy to water down or delay a government-proposed policy.
2. Promote alternatives that are less effective: This may include promoting label designs that have not tested as well, such as scoring systems or the traffic lights label, when the government chooses front-of-package warning label systems.
3. Weaken the nutrient profile model: Weakening the nutrient profile model will lead to fewer products requiring front-of-package labels, therefore undermining the potential impact of the label.

In addition, common food and beverage industry arguments against front-of-package labeling include concerns about job losses, store closures and the costs of relabeling. These claims may invoke legal or international trade issues, necessitating both proactive and reactive legal strategies and a rights-based defense of labeling initiatives. The industry may also argue that front-of-package warning labels are ineffective, that they aim to scare consumers and that they do not provide consumers with sufficient information.[26] This resource by Global Health Advocacy Incubator offers extensive evidence-based counter-messages to combat industry claims against front-of-package labeling.[26]

A campaign by La Alianza por la Salud Alimentaria—an alliance of civil associations, social organizations and professionals in Mexico—advocated for front-of-package labels through a campaign that reads: "Let's find out the health risks."

Country-level considerations:

1. What does food and beverage industry interference look like in your country?
2. How can you map the industry's political influence?
3. How do these findings relate to the regulatory process in your country?
4. How would you counter or expose these connections?
5. What strategies will you use to anticipate and counter industry opposition to a front-of-package labeling policy in a well-coordinated manner?
6. How can the government make its engagements with the industry and the public transparent during the policy process?
7. Are there any legal avenues available to expose or challenge industry interference in the policymaking process?
8. How can you monitor and be prepared to counter the industry's legal arguments and strategies, both in the policymaking process and potentially in court?

Resources:

Tools to combat industry narratives and tactics to oppose front-of-package labeling:

A. Front-of-package labeling - preparing for and responding to international trade law arguments by Global Health Advocacy Incubator.[142]
B. Evidence Sheet: Front-of-Package Labeling by the Global Health Advocacy Incubator.[26]

More information on food and beverage industry interference:

A. Behind the labels: Big Food's War on Healthy Food Policies by Global Health Advocacy Incubator.[143]
B. Global Industry Tactics to Weaken Front-of-Package Labeling Policies by Global Health Advocacy Incubator.[144]
C. Industry Alerts by Global Health Advocacy Incubator.[145]
D. Industry Interference Policy Briefs No. 1: Industry Interference in Food Policy by Global Health Advocacy Incubator.[146]
E. Colombia: Dulce Veneno website by El Colectivo de Abogados José Alvear Restrepo (CAJAR), highlighting work to combat industry interference in front-of-package labeling efforts.
F. Colombia: No comas más mentiras website by Red PaPaz, highlighting industry tactics to influence front-of-package labeling policies.

STEP 5

Engage and Build

Engage the public, political leaders and other stakeholders to support policy adoption.

Front-of-package labeling regulations or legislation are more likely to be passed when the public voices its support and stakeholders present a strong case that builds political support. Consider mapping key stakeholders to identify allies that may be engaged throughout the policy process.

Civil society could support governments to implement front-of-package labeling by developing a comprehensive communication strategy to gather support, engage the public and illustrate the level of community support. The strategy should use three key phases: building the case for front-of-package labels and advocating for the passage of labeling legislation, introducing the labels to stakeholders and the public, and implementing and evaluating the labels. The strategy framework below (Figure 5) outlines how communication tactics can be deployed at every phase of policy development to raise awareness about the need for labels and give them prominence on the policy agenda.

During each phase, messages are curated to suit specific policy and advocacy needs and are informed by what the audience needs to know. For instance, messages that inform the public about the need to scrutinize food packages are applicable during every campaign phase, whereas information about how and when labels will be implemented is only relevant from phase 2 onward, after the labeling policy has been adopted.

This framework can support effective communication campaigns that build public knowledge and support for front-of-package labels. This framework is specific to **communication activities surrounding front-of-package labeling.** This framework is not representative of the entire policy process. Please also note that certain steps are applicable to some organizations but not others.

Figure 5: Communication strategy framework for front-of-package labels

<table>
<tr><th>PHASE 1
Building the case for labels and advocating for the passage of labeling legislation</th><th>PHASE 2
Introducing labels</th><th>PHASE 3
Implementing and evaluating labels</th></tr>
<tr><td colspan="3">Public and policy maker education about contents of unhealthy packaged food and negative impacts on health</td></tr>
<tr><td colspan="3">Encourage consumers to scrutinize food packages and demand clear information on contents of unhealthy packaged food</td></tr>
<tr><td colspan="3">Highlight benefits of simple, informative warning labels to support consumers to make healthier choices and warn them about foods high-in salt, sugar and saturated fat as compared to other labels</td></tr>
<tr><td>Highlight inadequacies of current package labeling methods</td><td>Highlight how proposed package labeling method will address inadequacies</td><td>Inform consumers, stakeholders of the observed impact of labels and maintain support for and defend the policy</td></tr>
<tr><td>Announce plans to introduce labels</td><td>Communicate that labels are sanctioned by government and inform consumers, stakeholders of how and when labels will be rolled out</td><td>Continue discussing implementation of labels and defend legislation from interference that attempts to weaken regulations</td></tr>
<tr><td colspan="3">Encourage consumers and allies to demonstrate their support of legislation and leverage stake-holder voices to reach more people</td></tr>
<tr><td>Label development process, including research (formative, randomized controlled trials), consultations with indepen-dent expert committee</td><td>Share labeling regulations and details on how labels should be displayed</td><td>Conduct impact evaluation of labeling policy and share with stakeholders, policy-makers, and the public</td></tr>
<tr><td colspan="3">Monitor public discourse and media narratives; counter industry messaging with support from stakeholder group</td></tr>
<tr><td colspan="3">Draft policy or regulations: re-draft, publication of draft, public consultations, consultations with CSOs and industry groups, promulgation of final policy or regulation</td></tr>
</table>

5.1 Public support

The communication messaging aims to:

- inform people about a problem or issue in a way that is new, personally relatable and relevant, *motivating them to become...*
- engaged and involved in a way that provides an outlet for their concerns *about...*
- perceptions of risk to their own health and that of their family or community. *When they see the risk as intolerable, they are...*
- motivated toward action, such as by joining a group, signing a petition, protesting, attending an event, etc. For policymakers, action may take the form of supporting a bill, speaking publicly on the issue or voting to pass a regulation or legislation.

Set the agenda (building the case)

Building public knowledge on an issue and support for solutions to address it helps set the policy agenda. At this stage, focus on diet-related noncommunicable diseases such as increasing rates of obesity, Type 2 diabetes, heart disease and some cancers. Messages centered on people's susceptibility to a poor diet high-in ultra-processed products and the severity of its consequences challenge narratives promoted by the food and beverage industry. Making audiences aware of the problem and who it affects helps them better understand why labels are needed. If the messaging resonates, people may also be encouraged to seek further information.

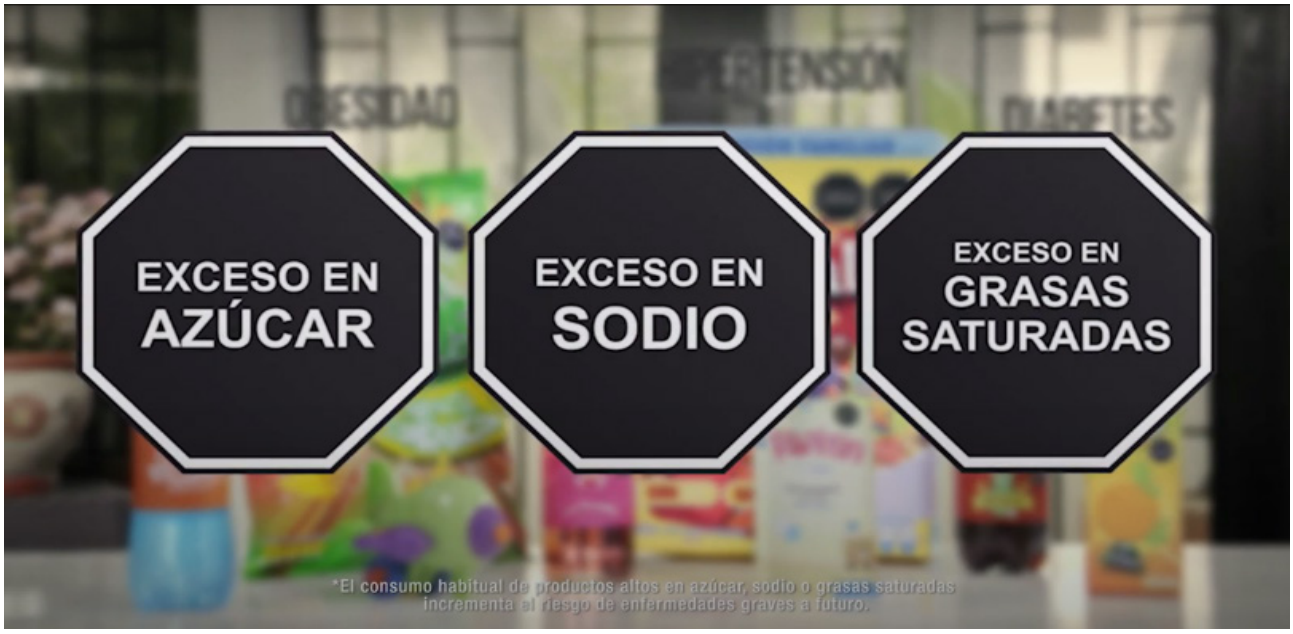
Consider timing for building support around the issue. Key political or advocacy dates, such as elections, debates, international recognition days (e.g., World Food Day), and other days that draw public attention to issues of diet-related noncommunicable diseases, can serve as a catalyst for greater public engagement.

The following are real-world examples of how civil society organizations built the case for front-of-package warning labels in various countries.

Brazil: "You Have the Right to Know What You Eat" by Aliança pela Alimentação Adequada e Saudável

English translation: You have a right to know.

Colombia: "Don't eat more lies" by Red PaPaz



English translation: Excess in sugar; Excess in sodium; Excess in saturated fat. The regular consumption of products high-in sugar, sodium or saturated fat increases risk of serious diseases in the future.

Identify the cause of the problem and advocate for the policy

Once the agenda-setting approach establishes the nature of the problem, add messaging that identifies the cause of the problem. In the context of a front-of-package labeling campaign, the cause of the problem is the lack of clear information on packages that enables consumers to make healthier choices. It is also important that messaging does not blame consumers for their choices but rather that it emphasizes the need for them to have more information about the unhealthy nature of products so they can make their own informed choices.

The following are real-world examples of how civil society organizations built support for front-of-package warning labels in various countries.

Caribbean (Barbados, Trinidad and Tobago, Jamaica, and Antigua and Barbuda): "See the Truth" by Healthy Caribbean Coalition, Jamaica Youth Advocacy Network, Heart & Stroke Foundation of Barbados, and The Heart Foundation of Jamaica

Colombia: "Better Labeling, Better Choices" by Red PaPaz

English translation: Help us demand better labeling for better information.

South Africa: "What's in my food?" by HEALA

Brazil: "When you open your mouth, don't close your eyes" by Aliança pela Alimentação Adequada e Saudável, instituto de defensa de consuidores (idec) and UNICEF

English translation: When you open your mouth, don't close your eyes.

Articulate the pathway for change and propose the solution

In this stage, the solution is clearly articulated. Messages are specific, such as: "we need clear warning labels on unhealthy food packages." The call to action combines specificity with a sense of urgency, such as asking people to "sign a petition now." The problems raised in the earlier part of the campaign are reiterated here as a reminder of the seriousness of the issue. In addition, it may be necessary to add messaging to expose industry actions or interference, e.g., "don't let the unhealthy food industry tell you only part of the story" (as seen in the campaign from South Africa below).

South Africa: "Do we know what we are really eating?" by HEALA

Jamaica: "Help Us Protect Our Children's Health! Give us Octagonal Warning Labels on Food Packages!" campaign by The Heart Foundation of Jamaica

Argentina: "Etiquetado Claro Ya" by a coalition including Consciente Colectivo, Fundación InterAmericana del Corazón Argentina, Fundación para el Desarrollo de Políticas Sustentables, Consumidores Argentinos, Federación Argentina de Graduados en Nutrición and Sociedad Argentina de Nutrición y Alimentos Reales.

English translation: Don't keep covering your eyes. Representatives: prioritize health.

Country-level considerations:

1. What themes related to diet-related noncommunicable diseases and front-of-package labeling may motivate the public in your country?
2. What is the best way to reach the public with your messages?

Resources:

- **A.** Communications & Media Advocacy Action Guide by Global Health Advocacy Incubator.[147]
- **B.** How Media Helped Build the Case for Front-of-Package Warning Labels in Brazil by idec and Vital Strategies.[136]
- **C.** Key Messages on Front-of-Package Warning Labels by Global Health Advocacy Incubator.[148]
- **D.** Front-of-package labeling Advocacy – Experiences from India, Argentina, Mexico and Colombia [Webinar] by Global Health Advocacy Incubator.[149]
- **E.** Guide to Writing Op-Eds on Front-of-Package Warning Label Policies by Global Health Advocacy Incubator.[150]
- **F.** Colombia: "This government did not prioritize the #JunkFoodLaw. Candidates, when will we have the octagonal labels?" by Red PaPaz, a campaign calling on the new government to prioritize front-of-package labeling.
- **G.** For more campaign examples, see Vital Strategies' Food Policy campaign hub.

5.2. Stakeholder support

Civil society organizations can play a key role in coordinating broader stakeholder support. To engage stakeholders, civil society may consider producing resources such as toolkits, social media posts or text and images for websites, drafting submission documents and developing pathways for their members and communities to participate in events and sign petitions.

Members of the expert advisory committee may also be helpful in coordinating stakeholder support, as many will represent or support civil society organizations.

Consider engaging the following types of stakeholders from across topic areas for support:

- Nutrition groups
- Medical societies
- Small scale farmer groups
- Consumer rights groups
- Parent groups
- Environmental groups
- Labor rights groups
- Human rights groups
- Individuals within influential organizations (e.g., media)

Country-level considerations:

1. Which civil society organizations or groups' interests align with front-of-package labeling policies?
2. Which people or organizations could be allies in advocating for front-of-package labeling policies?
3. What resources might you want to develop to engage stakeholders?

Resources:

A. Guide to Writing Letters of Support for Font-of-Package Warning Label Policies by Global Health Advocacy Incubator.[151]
B. Letter of global support for Peruvian front-of-package labeling regulations by a group of global experts in the field.[152]
C. Framing a New Nutrition Policy: Changes on Key Stakeholder's Discourses throughout the Implementation of the Chilean Food Labelling Law by Fernanda Mediano, et al.[153]

5.3 Political support

Understanding which policymakers are influential in front-of-package labeling policies and what type of messaging may sway them is key to rallying political support. Present arguments that speak to politicians' portfolios of responsibility. For example:

- **Health portfolio** will be swayed by strong health arguments based on evidence and the cost of inaction in terms of population health. Arguments should be rights-based, focusing on the right to health, the right to information and the right of every person to access healthy food.
- **Finance portfolio** will be swayed by arguments illustrating cost savings, such as reductions in the healthcare cost of treating noncommunicable diseases as a result of reduced consumption of foods high-in fat, salt and sugar that are often ultra-processed.
- **Trade and employment portfolio** will be swayed by economic arguments. They will want to be sure the policy does not damage trade relationships or lead to job losses. Note: it is this area where industry lobbyists strongly use their existing relationships with this sector of government.
- **Advertising/communication portfolios** will align with equity requirements that enable all people to quickly and clearly understand the contents of food and beverage packages.
- **Individual policymakers or politicians**: Due to their own personal circumstance or backgrounds some politicians will be more inclined to support policy. For example, a politician may have personal or family experience of a diet-related noncommunicable disease, and others could have a public health or nutrition background.

Country-level considerations:

1. What is the political landscape in your country? Is there political support for food policy?
2. What current nutrition policies or strategies can you use to frame front-of-package labeling as a means to deliver on government commitments (e.g., a national obesity prevention policy or the Sustainable Development Goals)?
3. Whose constituents will benefit if the front-of-package labeling policy is implemented?
4. Have any individual politicians been elected on a particular platform of reform that a front-of-package labeling policy can help deliver on?
5. How can you build sufficient political will to support your policy goals?

Resources:

A. Key Legal Factors For Developing Front-of-Package Warning Labeling Regulations by Global Health Advocacy Incubator.[138]
B. Guide to Writing Letters of Support for Font-of-Package Warning Label Policies by Global Health Advocacy Incubator.[151]
C. Framing a New Nutrition Policy: Changes on Key Stakeholder's Discourses throughout the Implementation of the Chilean Food Labelling Law by Fernanda Mediano, et al.[153]

STEP 6

Draft and Consult

Develop the policy and consult key stakeholders for feedback, putting appropriate safeguards in place.

Drafting front-of-package labeling requirements involves a comprehensive approach that prioritizes clarity, transparency and evidence-informed decisions. The relevant legal framework must include:[138]

1. Evidence supporting the need for front-of-package labels
2. Selected nutrient profile model and thresholds for nutrients/ingredients of concern
3. Approved label design, including images
4. Implementing authority
5. Authorities in charge of monitoring and supervising implementation of the policy
6. Enforcement mechanisms, including consequences for noncompliance
7. Any exceptions to the policy

Engaging stakeholders, including nutrition experts and consumer advocacy groups, is crucial during the process. Food manufacturers and retailers, as implementers of the policy, may want to be alerted about potential policy changes. Hosting workshops and focus groups can gather diverse perspectives and ensure the labels meet the needs of—and rallies support from—key stakeholders.

In addition, holding a public consultation is of utmost importance since it adds legitimacy to the policy development process. By releasing a draft of the labeling requirements and inviting comments from the general public, the government can gain valuable insights into how labels may be perceived and whether they effectively communicate important health information. The public comment phase should be open for enough time to allow people and organizations to submit questions and feedback on the proposed policy. Public comments can be gathered and posted publicly on a website to promote transparency.

While keeping space for open consultations with broad participation, the government must adopt specific safeguards to guarantee that the regulation or legislation is designed, adopted, implemented and evaluated prioritizing public health and human rights over other considerations. As part of this process, conflicts of interest should be properly disclosed, and rules should be put in place to guarantee that any conflicts of interest do not unduly interfere in policy.

Country-level considerations:

1. How will you communicate the draft front-of-package labeling policy with stakeholders and the public?
2. How will you capture and collate their comments?
3. What criteria will you use to assess comment submissions?
4. How will you ensure transparency throughout this process?

Resources:

Additional information and toolkits:

A. Key Legal Factors For Developing Front-of-Package Warning Labeling Regulations by Global Health Advocacy Incubator.[138]

B. Labeling Regulations by Global Food Research Program at UNC-Chapel Hill.[154]

C. Search for human rights recommendations and arguments as they relate to front-of-package labeling on the Right to Health Policy Hub.[155]

Examples of policies and regulations:

A. FULL Database of global food laws by the Global Center for Legal Innovation for Food Environments at the O'Neill Institute at Georgetown University and Global Health Advocacy Incubator.

B. Law of Food Labeling and Advertising (Ley 20.606) in Chile: English and Spanish.

C. General labeling specifications for prepackaged foods and non-alcoholic beverages-Commercial and health information (Norma Oficial Mexicana NOM-051-SCFI/SSA1-2010) in Mexico: English and Spanish.

D. Promotion of Healthy Eating (PROMOCIÓN DE LA ALIMENTACIÓN SALUDABLE - DCTO-2022-151-APN-PTE) in Argentina: Spanish.

STEP 7

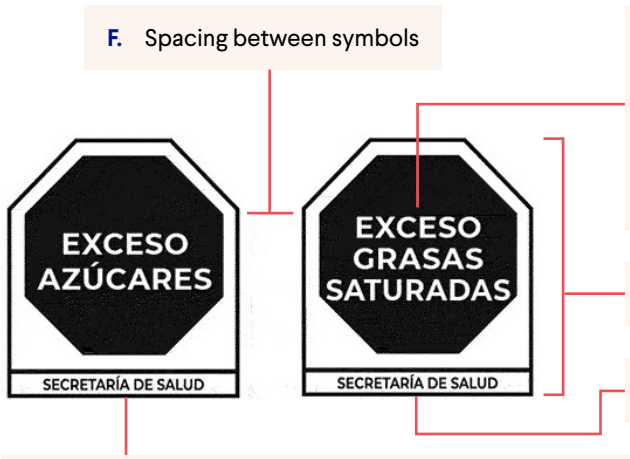
Manage Implementation

Develop guidelines for implementation and monitoring.

Once the final label is decided and defined within the regulation, a document detailing graphic design guidelines will need to be developed to guide the implementation phase (if they were not clearly detailed in the regulation itself). The guidelines document must describe the graphic characteristics of the label, specifying how the label design appears on the packaging and detailing size, placement and color. The guidelines clearly outline requirements to be specified in the regulations. This task is separate from the design of the label.

The guidelines should ideally be developed with support from 1) legal experts and regulators and 2) a design agency. Working with a legal advisor is important as some specifications for implementing the proposed label (e.g. size, color and placement) may be legally challenged by the industry. Further, it is important to work with a design agency to develop graphic design guidelines that are specific, detailed and backed by research. Deliverables from the agency should include mockups of the package design on unrecognizable, unbranded products. Design guidelines may also become an annexure of the regulation, such as in Argentina's policy.

Consider the following design specifications for the guidelines:



F. Spacing between symbols

A. Language of text

B. Type, variant (bold/regular) and size of font

C. Alignment and positioning (horizontal/vertical) of content contained by/inside the symbol (icon and text) and symbol if in relation to a holding strap or label outline

D. Minimal size requirement

E. Use of outlines or borders

G. Size and shape of symbols (relative to holding strap/label outline and size of package), icons (relative to symbol) and holding strap (height, width) in centimeters/inches

H. Color of symbols, icons and holding strap for ideal printing (CMYK or RGB formula)

I. Ideal print settings for optimal label quality including file size, paper type and glue used to apply labels to packages

J. Position/placement of label on packages (based on legal guidelines) with gridlines

K. Considerations for different package shapes and sizes

In addition to the design specifications, the graphic guidelines should include the nutrients of concern included in the label (if a nutrient-specific label is used), type of research conducted to test the label and the demographics that were included in the studies. The guidelines may also include advice about mandatory placement on all packaged products and an endorsement by a government or scientific organization on the label to increase credibility.

This phase also involves ensuring that all stakeholders are well-informed and prepared to comply with the new labeling requirements. This includes rolling out communication materials and training for manufacturers, retailers and enforcement agencies that teach them about their roles and responsibilities. A reasonable yet streamlined implementation timeline will help move the policy forward while also giving smaller producers the time to make required adjustments.

In addition, establishing clear enforcement guidelines and monitoring mechanisms will help maintain the integrity of the labeling system. Any sanctions or penalties—whether they are financial or reputational—must be significant enough to promote compliance. Regular feedback loops will be critical to address any emerging challenges during policy rollout.

Country-level considerations:

1. Which legal and design experts will you consult for the label design guidelines?
2. How and where will you share the label design guidelines?
3. How will you communicate the new front-of-package labeling requirements to stakeholders?
4. What kind of sanctions or penalties will you use to help secure compliance?

Resources:

Details about the policy implementation process:

A. Implementing a Food Labeling and Marketing Law in Chile by Pablo Villalobos Dintrans, et al.[156]
B. Building momentum: lessons on implementing a robust front-of-pack food label by World Cancer Research Fund International[161]

Examples of design guidelines for policy implementation:

A. General labeling specifications for prepackaged foods and non-alcoholic beverages-Commercial and health information (Norma Oficial Mexicana NOM-051-SCFI/SSA1-2010) in Mexico: English and Spanish.
B. Promotion of Healthy Eating (PROMOCIÓN DE LA ALIMENTACIÓN SALUDABLE - DCTO-2022-151-APN-PTE) in Argentina: Spanish. See Annexes 1 and 2.

STEP 8

Monitor and Evaluate

Assess policy impact.

Monitoring of front-of-package labeling policies should be conducted through periodic market assessments, such as sampling products or retail environments, to understand policy adherence and make adjustments as needed.[27] These efforts can also help evaluate industry-driven shifts in response to the policy, such as cutting the level of sugar, sodium, sweeteners and saturated fat in foods or using alternative marketing techniques to distract from the label (e.g., increased use of nutrition or environmental claims).[157] Monitoring efforts should be centralized under the government entity responsible for implementing the front-of-package labeling policy, which can oversee the participation of other stakeholders.[27] Assigning government departments or agencies to monitoring efforts is part of a sound policy monitoring plan. Civil society organizations should also monitor implementation as well as the industry's response to the policy to ensure it is being implemented as intended. Violations observed during monitoring should trigger enforcement and the issuance of penalties for companies that are noncompliant.

It is critical to evaluate the effect of front-of-package labeling policies on consumer perceptions and behavior as it relates to the policy objective, as well as industry response to the policy.[27] Large datasets of food purchases are often collected by third-party consumer panel companies (e.g., Kantar Worldpanel) and these can be used to assess longitudinal changes in food purchasing behavior over time. Evaluations can reveal how labels are perceived and whether they assist consumers in reducing unhealthy choices, illustrating the more immediate effects of labeling.[27] Longer-term policy effects, such as reducing diet-related noncommunicable diseases, require more time to be evaluated. Evaluations can inform stakeholders about the effectiveness of the policy, alert the team to any necessary adjustments moving forward and identify trends in the industry's response that may need to be addressed. Lastly, it can be useful to evaluate whether there were micro- or macro-level economic effects of the policy, to provide evidence in response to industry concerns that the policies will lead to economic harm in the food and beverage sector.

It is important to note that the policy must be implemented well to be able to gauge the public health benefits—if a policy is not implemented as intended, evaluations will not accurately capture the potential effects of the policy on food supply and consumer outcomes.

The world's first mandatory front-of-package warning labels began appearing on packages in Chile in 2016 as part of a comprehensive law that included front-of-package labeling, marketing restrictions and school food policies.[70] This law was implemented in phases with increasingly strict regulations. The black octagonal shaped warning labels on products high-in saturated fat, sodium, sugar and calories have contributed to healthier shifts in eating social norms, purchasing behaviors and product reformulation.[83-85,158] Monitoring and evaluation efforts in Chile have contributed to a breadth of evidence supporting front-of-package warning labels.[158] For example, a study monitoring adherence through a market assessment in Chile found that 94% of assessed packaged products complied with warning label requirements, noting that categories like meats, soups and candies were most likely to be noncompliant.[159]

Real-world evidence from evaluations shows that Chilean consumers are aware of and understand the labels, and they are using them to make food purchasing decisions. A growing body of research now shows that the law has accomplished what it set out to do, offering proof of concept for comprehensive healthy food policies and a way forward for public health advocates addressing the rise in consumption of ultra-processed products around the world and the resulting health risks.

Phase 1 of the Law:

The purchase of "high-in" beverages decreased by 24% and calories from high-in beverages decreased by 28%.[70] In addition, there were observed reductions in purchases of high-in products, leading to declines in nutrients of concern: 24% fewer calories, 37% less sodium and 27% less sugar was purchased from high-in products.[83]

Phase 2 of the Law:

The purchase of high-in foods and beverages either further decreased or sustained the lower levels from the previous implementation phase; this included reductions in purchased sugar (27%), calories (23%), sodium (22%) and saturated fat (16%).[71]

In addition, there were no adverse effects of the regulation on the food and beverage economic sector, including to wages or employment.[160]

It is advisable that policymakers start planning for evaluation early on in the front-of-package labeling policy development process by:

- Defining the public health problem and explaining how labels could help address this issue.
- Defining the policy objective, which for front-of-package warning labels is reducing the purchase and consumption of foods high-in nutrients/ingredients of concern that are often ultra-processed.
- Identifying and allocating the necessary resources and datasets for evaluating the effectiveness of the labels after they have been on the market for a set period, e.g., by using household purchase data and reliable data sources.
- Designing the most suitable study methodology for the evaluation.

Country-level considerations:

1. Who should be involved in the evaluation process?
2. How will you assess and avoid conflicts of interest among researchers involved in the evaluation process?
3. When do you want to conduct the first evaluation?
4. What constructs will you assess in the evaluation (e.g., purchasing intention or behavior, perceptions of labels or knowledge about unhealthy foods, etc.)?
5. What datasets or sources can you use for the evaluation?

Resources:

Evaluation studies of front-of-package labeling policies:

- **A.** Changes in food purchases after the Chilean policies of food labelling, marketing, and sales in schools: a before and after study by Lindsey Smith Taillie, et al.[83]
- **B.** An evaluation of Chile's Law of Food Labeling and Advertising on sugar-sweetened beverage purchases from 2015 to 2017: A before-and-after study by Lindsey Smith Taillie, et al.[70]
- **C.** Responses to the Chilean Law of Food Labeling and Advertising: Exploring knowledge, perceptions and behaviors of mothers of young children by Teresa Correa, et al.[84]
- **D.** Decreases in purchases of energy, sodium, sugar, and saturated fat 3 years after implementation of the Chilean food labeling and marketing law: An interrupted time series analysis by Lindsey Smith Taillie, et al.[71]

Additional information and lessons learned:

- **A.** Chile's comprehensive food policy offers global lesson in tackling unhealthy foods **by** Francesca R Dillman Carpentier, et al.[158]
- **B.** Front-of-package Labeling to empower consumers and promote healthy diets by Global Food Research Program at UNC-Chapel Hill.[25]

Endorsements

- ACT Promoção da Saúde (ACT Health Promotion), Brazil
- Action for Economic Reforms (AER), Inc., Philippines
- Aliança pela Alimentação Adequada e Saudável, Brazil
- amandla.mobi, South Africa
- Ashley Gearhardt, Ph.D., Professor of Psychology, University of Michigan, USA
- Center for Indonesia's Strategic Development Initiatives (CISDI), Indonesia
- Center for Science in the Public Interest, USA
- CIAPEC-INTA University of Chile, Chile
- CLAS Coalition for Americas' Health/Coalición América Saludable, Latin America
- Coalición ContraPESO, Mexico
- Community of Practice for Latin America and the Caribbean in Nutrition and Health (Colansa), Latin America
- Colectivo de Abogados y Abogadas José Alvear Restrepo (CAJAR), Colombia
- Community Media Trust, South Africa
- Corporate Accountability and Public Participation Africa (CAPPA), Nigeria
- Costa Rica Saludable, Costa Rica
- Dejusticia, Brazil
- Dr. Carlos A. Monteiro, Emeritus Professor, School of Public Health, University of Sao Paulo, Brazil
- Dr. Jaime Miranda, Professor and Head of School, Sydney School of Public Health, University of Sydney, Australia
- Dr. Kelly Brownell, Robert L. Flowers Distinguished Professor Emeritus and Dean Emeritus of Public Policy at Duke University, USA
- Dr. Simón Barquera, Director of the Center for Research in Nutrition and Health of the National Institute of Public Health and President of the World Obesity Federation, Mexico
- El Poder del Consumidor, Mexico
- Federación Argentina de Graduados en Nutrición (FAGRAN), Argentina
- FIAN Brasil, Brazil
- Fundación Interamericana del Corazón Argentina (FIC Argentina), Argentina
- Fundación Movimiento de Alimentación Saludable, Panama
- Ghana NCD Alliance, Ghana
- Global Care Rescue Mission (GCRM), Nigeria
- HEALA (Healthy Living Alliance), South Africa

- Health Equalities Group (Food Active Programme), U.K.
- HealthBridge Vietnam, Vietnam
- Healthy Caribbean Coalition, Barbados
- Healthy Food America, USA
- Heart and Stroke Foundation of Barbados Inc., Barbados
- Idec (Institute for Consumers Defense), Brazil
- Instituto Desiderata, Brazil
- Interfaith Public Health Network, USA
- International Institute for Legislative Affairs (IILA), Kenya
- Joana Ankomaa Addey, SEND GHANA, Ghana
- Lake Health and Wellbeing, St. Kitts and Nevis
- Makoma Bopape, University of Limpopo, South Africa
- Mercedes Moraz Plaza, National University of Colombia, Colombia
- Mexican National Institute of Public Health (Instituto Nacional de Salud Pública de México), Mexico
- Non-communicable Diseases Alliance Kenya, Kenya
- NUPENS/USP (Center for Epidemiological Research in Nutrition and Health, University of São Paulo), Brazil
- Prof. Kingsley Kwadwo Asare Pereko, School of Medical Sciences, University of Cape Coast, College of Health and Allied Health, Ghana
- NYU Grossman School of Medicine, USA
- Organización Multidisciplinaria para la Integración Social (OMIS), Uruguay
- People's Health Movement Ghana, Ghana
- Professor Camila Corvalán INTA University of Chile, Chile
- Red PaPaz, Colombia
- Resolve to Save Lives, USA
- SAMRC/WITS Centre for Health Economics and Decision Science PRICELESS SA, South Africa
- SECTION27, South Africa
- The Center for Black Health & Equity, USA
- The Heart Foundation of Jamaica, Jamaica
- Vision for Accelerated Sustainable Development Ghana, Ghana
- World Cancer Research Fund International, U.K.
- World Obesity Federation, U.K.

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Vital Strategies

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