



Nutrition Policy: Taxation, Food Labeling, and Marketing Regulation

Findings and policy recommendations from the second round of the Health Promotion and Literacy Longitudinal Study (HPLS)



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Summary

The Health Promotion and Literacy Longitudinal Study will provide regular data to track trends in knowledge, attitudes, practices (KAP) and barriers to a healthy diet for a nationally representative sample of Filipino adults.

IDinsight conducted two rounds of nationally-representative data collection in Phase 1 of HPLS. While Round 1 (April-June 2023) included a standard module on KAP related to nutrition, Round 2 (October-November 2023) included a more extensive deep dive that aimed to inform potential policy decisions around taxation, food labeling, and marketing regulation.

Based on our findings, we make the following recommendations:

Taxation

- On top of the existing tax on sugar-sweetened beverages (SSB), DOH HPB may consider introducing taxation on high-sugar food.
- The implementation of a sodium tax may have potential equity implications on health outcomes, especially if lower income groups rely on low-cost, high-processed, high-salt food products for essential calories. Further research needs to be done to better understand the potential effects of a sodium tax.
- Policies on taxation should be complemented by other population-level policies on nutrition, including but not limited to subsidies for healthy foods, front-of-pack labeling, and regulations in marketing.

Front-of-packaging (FOP) and menu labeling

- Develop and test potential models for FOP nutrition labeling and menu labeling to bridge knowledge and comprehension gaps for nutrition information.
- For FOP labeling, follow recommended best practices from existing literature, which include interpretive labeling (i.e. labels that use meaningful symbols

and colors to signify healthfulness), the use of warning labels, and mandatory labeling requirements.

- Further research into effective models of labeling in the Philippine context, and potential pilot testing through HPLS.

Marketing regulation

- Consider implementing more stringent regulation on advertising towards children.
- Conduct further research to understand points of influence for consumers, and the pathway from exposure to purchase to consumption.

We note that the policy measures discussed in this brief are all policies that aim to reduce consumption of foods high in fat, salt, and sugar (HFSS). To ensure equitable health outcomes, policies that aim to reduce consumption of unhealthy food should go hand-in-hand with policies that increase access to healthier alternatives. This may include reforms in food supply, food procurement in public spaces, or subsidies for healthy foods like fresh produce.

Background

Poor diet and nutrition is a significant risk factor for non-communicable Diseases (NCDs), which pose a significant challenge to health systems in the Philippines. In 2019, 70% of deaths in the Philippines were from NCDs (World Bank, 2020). The growing burden of NCDs increases the stress on public health systems, and reduces their ability to provide primary health care to the population. Poor nutrition is a major contributing factor to the development of NCDs; diets high in salt, sugar, and fat are linked to risk of developing NCDs such as cardiovascular disease and Type 2 diabetes, among others. The 2021 Expanded National Nutrition Survey (eNNS) found that 4 in 10 Filipinos were obese or overweight, and 13.5% of Filipino adults have hypertension (DOST-FNRI, 2021).

In Round 1 of HPLS (April-June 2023), we found that there is low awareness among Filipino adults that intake of sugar, salt, and fatty foods can lead to increased risk of developing disease. At the same time, most Filipino adults had consumed high-sugar or high-sodium food and beverages within the past two days (IDinsight, 2023). We also found that most Filipino adults reported finding it easy to eat healthily, despite low knowledge of food groups to avoid, and frequent consumption of high-salt and high-sugar foods. This suggests that most Filipino adults have a limited understanding of the overall nutritional status of their diet. Increasing awareness about the risks of high salt and sugar consumption is an important first step to changing practices.

Awareness campaigns should be complemented by systems change that allows individuals to choose healthier food options when they want to; more research needs to be done to understand what complementary interventions are best suited to drive positive behavior change.

HPLS Round 2 included a set of deep-dive questions on nutrition, with the primary aim of providing data to inform decisions on potential nutritional policies being considered by DOH HPB. This policy brief discusses insights and recommendations from HPLS Round 2 on taxation, food labeling, and regulation of media and marketing.

The policy measures discussed in this brief are all policies that aim to reduce consumption of foods high in fat, salt, and sugar (HFSS) as part of DOH-HPB's thrust to reduce population-level consumption of these food groups. These policies can potentially lower consumption through different ways, such as restricting access, bridging knowledge gaps, or limiting exposure to advertising.

However, we note that **to ensure equitable health outcomes, policies that aim to reduce consumption of unhealthy food should go hand-in-hand with policies that increase access to healthier alternatives.** This may include reforms in food supply, food procurement in public spaces, or subsidies for healthy foods like fresh produce.

We note that public nutrition in the Philippines is complex because of the double burden of over nutrition and under nutrition. High levels of under nutrition persist, while issues associated with over nutrition (such as overweight, obesity, and NCDs related to diet) continue to rise (Gaupholm et al, 2023). We acknowledge both as relevant issues for nutrition in the Philippines; this policy brief focuses on high consumption of HFSS foods, and does not comment on under nutrition.

Taxation

Findings

In Round 1, we found that recent consumption of high-sugar or high-salt foods was high. The majority of respondents (85.4%) consumed high-sugar food or drinks and around half (55.8%) consumed high-salt food within 2 days from when they were interviewed.¹

In Round 2, we added additional questions exploring the most commonly consumed types of high-salt and high-sugar food products. The most common high-salt food products consumed include instant noodles (76.1%), chips or nuts (56.3%), dried fish (54.1%) and canned goods (51.9%). All of these foods (with the exception of chips or nuts) were mostly eaten as a major component of breakfast, lunch or dinner.

Among those who consumed high-sugar food products, chocolates and candies (73.5%), juices, sodas, and iced teas (61.7%), cookies and biscuits (52.8%) and 3-in-1 or sweetened coffee (50.1%) were the most common. Unlike salty food, the most consumed high-sugar food items are rarely consumed as a part of the major meals (except for instant / 3-in-1 coffee).

¹ While there was no significant difference between the consumption of salty foods between Rounds 1 and 2, we saw a significant decrease in the consumption of sugary foods and drinks. It is unlikely that this is based on a real trend – we attribute this difference to a change in how the question is asked where the Round 2 version under-reported the consumption of sugary drinks. For future rounds, we will retain the Round 1 version of the question.

Interpretation and Recommendations

DOH HPB has considered implementing “sin” taxes on unhealthy foods in order to achieve the goal of reducing population-level consumption of High Fat, Sugar, and Salt (HFSS). This has precedent in the recently enacted tax on sugar sweetened beverages. In 2018, through the Tax Reform for Acceleration and Inclusion (TRAIN) Law, a 12% value-added tax on sugar-sweetened beverages was implemented (Onagan et al., 2018). This led to a price increase for sugar-sweetened beverages, although the effect of the tax on consumption is yet to be determined. In general, evidence suggests that the taxation of sugar-sweetened beverages (SSB) is responsive to price (Paraje et al., 2023). In the Philippines, the taxation of other “sin” products such as tobacco and alcohol has yielded positive results towards reducing unhealthy consumption of these products (Abante et al., 2023).

Sugar tax

HPLS Round 2 found that the most consumed high-sugar food items were primarily consumed as part of a snack, dessert, or extra meal, and not as part of essential meals (with the exception of instant/3-in-1 coffee). Given the evidence that suggests that taxing sugar-sweetened beverages (SSBs) leads to changes in consumption, **DOH HPB may consider expanding the sugar tax to include not just beverages, but also food.** We recommend closely studying the effects of an expanded-scope sugar tax post-implementation.

Salt tax

Given the enactment of the SSB tax, DOH HPB has also been considering implementing a similar tax on sodium. Excessive sodium consumption often leads to increased blood pressure, accompanied by increased risk of developing cardiovascular issues. **However, we find that there is no clear consensus on the effects of sodium taxes on public health outcomes.** A 2020 evidence review found that modeling studies had shown varied results (Dodd et al., 2020). Most studies suggested that sodium taxes led to lower salt consumption, but with varying degrees of magnitude. Among studies that modeled health outcomes associated with reduced salt consumption, most found positive health gains. One study found that a tax on ‘less healthy’ foods could lead to negative health outcomes due to the crowding-out of spending on healthier foods (e.g. fruits or vegetables) due to higher food costs overall, unless taxes are implemented hand-in-hand with subsidies on healthier alternatives (Nnoaham et al., 2009). Real-world impact evaluations and experimental studies found mixed results – most had found some change in behavior, but are not able to ascertain the impact on salt consumption overall.

In general, there are a number of externalities to consider when it comes to sodium taxes. **One major consideration is the potential implication on equity of health outcomes.** High-salt processed foods such as instant noodles, dried fish, or canned goods, are usually also highly accessible and affordable. It is possible that low-income households may rely on these kinds of food items as part of essential meals or calories. In fact, HPLS Round 2 found that these were mostly consumed as a part of breakfast, lunch, or dinner, making them unideal candidates for taxation unless households are able to easily access and afford a lower-sodium alternative. There is limited evidence on the equity implications of a sodium tax.

Some models have considered implementing a sodium tax on specific products, rather than on sodium as a whole.

Based on our findings, snack foods like chips and nuts could be a potential target for taxation, because they are typically consumed as snacks rather than essential meals. This could be an effective way to reduce potential harms associated with the policy for low income families. However, it is worth noting that taxes on specific products may lead to smaller improvements in health outcomes versus taxing all foods based on their salt content (Dodd et al, 2020). Sodium taxes are complex, and more local research needs to be done in order to better understand the range of potential benefits and harms of such a policy in the Philippines. Even if a sodium tax were to be introduced, it is worth noting that **efforts to reduce salt consumption are more effective when they go hand-in-hand with a holistic set of population-level policy measures on nutrition.**

One study found that while taxing unhealthy foods could have unintended consequences due to crowding and substitution, this would be mitigated by using tax revenue from sin taxes to subsidize healthier food options like fresh produce (Nnoaham et al, 2009). Other policy levers may include reformulation policies, front-of-pack labeling, and marketing regulation among others.

What kind of information do you look for [in nutrition information? (N=1280)

Note: This is an open-ended, multiple response question

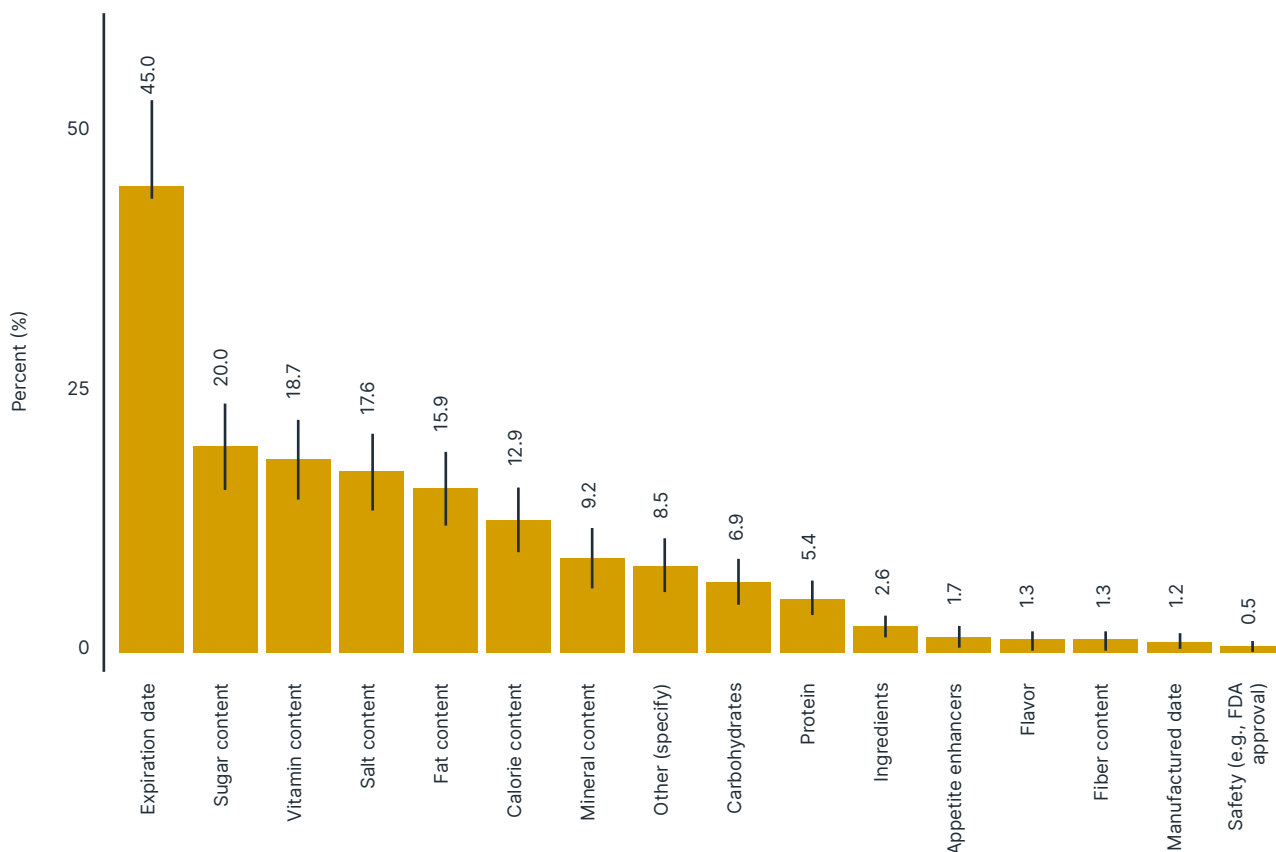


Figure 1: Information that respondents look (among those that said they look at nutrition information)

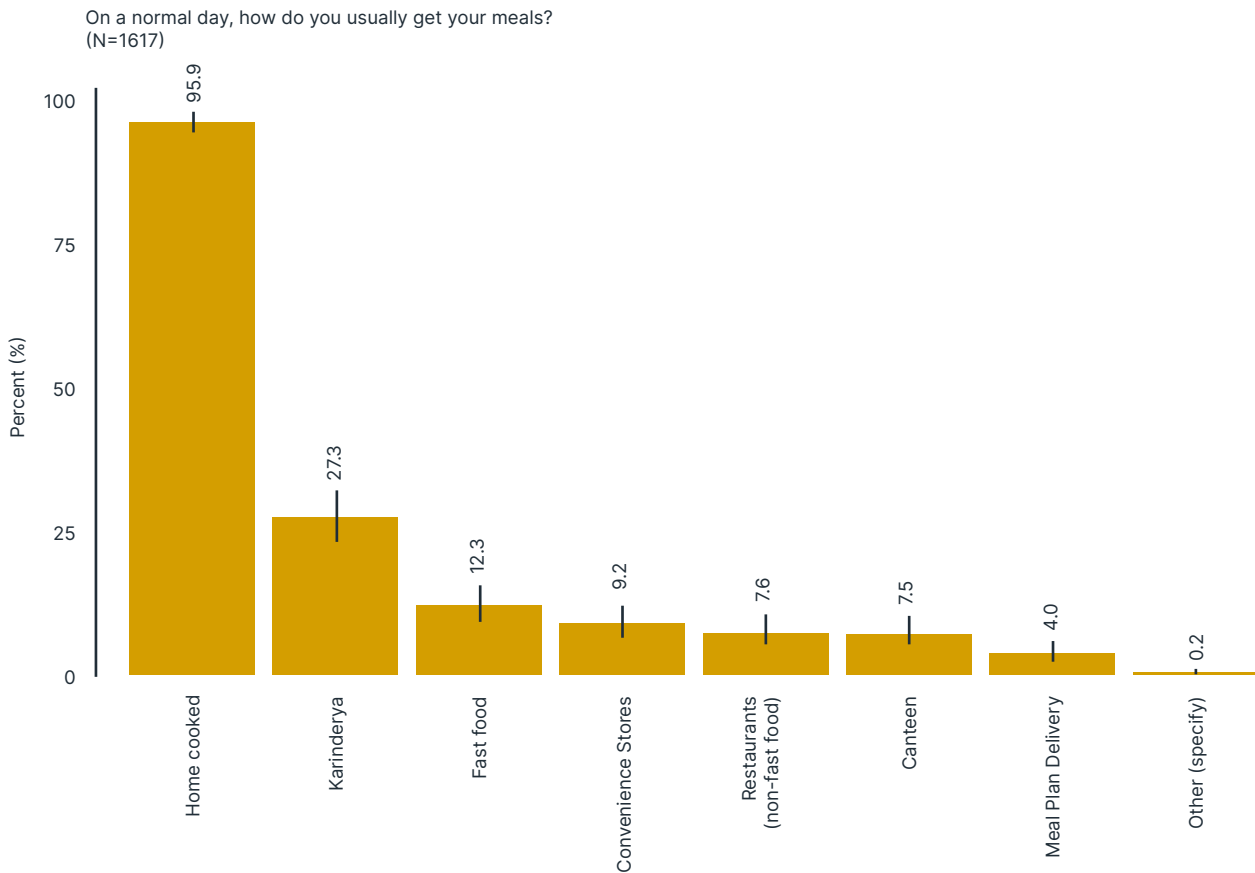


Figure 2. Where respondents get their meals on a regular day

Food labeling

Findings

3 in 4 Filipino adults say it's easy to find nutrition information. However, the most common information that individuals look at is the expiration date (45.0%, with around 1 in 5 looking only at the expiration date), with the rest of nutrition information being cited by less than 20% of respondents. When broken down by subgroups, younger, more educated and richer respondents are significantly more conscious of calories, minerals, and macro nutrients. Meanwhile, half (50.2%) of Filipino adults have seen the Sangkap Pinoy Seal² products they've purchased, but only 17.6% have heard of food fortification. Of those who have heard of it, the most commonly cited benefit to food fortification is that it prevents nutrient deficiency (39.1%).

HPLS Round 2 also included questions to understand where Filipinos get their meals on a regular day. The vast majority (95.9%) get their meals from home. Other common responses included karinderya (27.3%), fast food (12.3%), convenience stores (9.2%), restaurants (7.6%), canteens (7.5%) and meal plan deliveries (4.0%).

Interpretation and Recommendations

We recommend that DOH consider both front-of-package (FOP) labeling and restaurant (both fast food and non-fast food) menu labeling as potential interventions to address existing gaps in the comprehension of nutrition information.

² The Sangkap Pinoy Seal is a label that signifies that a specific food product is fortified with micro nutrients, such as vitamin A, iron, and iodine.

Front-of-package (FOP) labeling

Front-of-package (FOP) labeling is listed among the World Health Organization's (WHO) best-buy interventions to reduce non-communicable diseases (NCDs) (WHO, 2023). By making information more easily accessible and understandable to consumers, **FOP labeling can influence consumer purchasing habits and nudge buyers away from unhealthy food products and towards healthier alternatives.** There are different ways to approach FOP labeling, and there is a growing and evolving body of research on FOP labeling as a whole (Ikonen et al., 2020).

From HPLS Round 2, we found that Filipino adults are not taking away nutritionally-relevant information from existing nutrition panel labels. At the same time, although around half have been exposed to the current Sangkap Pinoy seal, only 2 in 5 understand its significance. This suggests limited understanding of nutrition information in general. Studies have generally found that identifying healthier options is easier with FOP labels, suggesting that effective FOP labels are a first step towards bridging knowledge and comprehension gaps (Ikonen et al., 2020).

There are a number of ways that FOP labeling can be implemented:

- **Mandatory vs. voluntary implementation by governments**

Mandatory means that all products covered under a specific policy are required to use the government-specified FOP labeling system. Voluntary implementation means that manufacturers may choose whether or not to use FOP labels.

- **Nutrient-specific systems vs. summary indicators**

Nutrient-specific systems show information about specific nutrients (e.g. calories, salt, sugar, fat). Examples include calorie labels and guideline daily amounts. Summary indicators, on the other hand, indicate the overall healthfulness of a product. Examples include rating labels or health logos (Ikonen et al., 2020).

- **Interpretive vs. non-interpretive labels**

Interpretive labels “use meaningful color, words and/or symbols to evaluate nutrient levels across broad categories (e.g., food, drink)” while non-interpretive labels “use numerical information to quantify nutrients as a proportion of recommended daily intake without making evaluation.” (UNICEF, 2021).

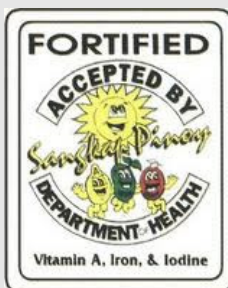


Figure 3: Sangkap Pinoy Seal

According to a report by UNICEF, at least 32 governments worldwide have endorsed some form of FOP nutrition labeling (UNICEF, 2021, p. 6). **The Philippines currently endorses a voluntary framework for FOP nutrition labeling** – meaning that food manufacturers may opt to use FOP labeling to drive consumers towards healthier choices, but FOP labeling is not mandatory. One example of an FOP label currently being used is the Sangkap Pinoy seal, which indicates that a food product has been fortified.

As the research on FOP labeling continues to evolve, evidence that supports different models of FOP labeling continues to emerge. The UNICEF 2021 report “Front-of-Pack Nutrition Labelling: A ‘How-to’ Guide for Countries” recommends the following best practices:

1. Interpretive labels, over non-interpretive versions

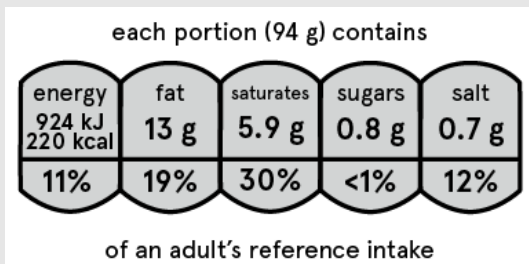


Figure 4: Non-interpretive reference intake label

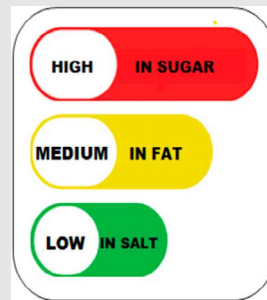


Figure 5: Interpretive traffic light labels from Ecuador, translated into English

Non-interpretive labels use numerical information to quantify nutrients as a proportion of recommended daily intake without making an evaluation. One example is the reference intake label. An example from the European Food Information Council is shown in Figure 4.

Interpretive labels provide evaluative judgements about foods using meaningful colors and/or symbols (UNICEF, 2021). Similarly, the 2019 meta-analysis of FOP labeling by Ikonen et al found that interpretive indicators are most easily understood by consumers (Ikonen et al, 2019). Examples of interpretive labels are shown in Figures 5 and 6.

2. A format that signposts product unhealthfulness



Figure 6: Interpretive warning labels from the Pan American Health Organization

This includes nutrient-specific warnings for products high in fat, salt, and sugar (HFSS) or other unhealthy food products. The meta analysis of Ikonen et al shows that warning labels had the strongest impact on consumer choices.³ Figure 6 is an example of a warning label.

³ When compared to reductive nutrient-specific labels, traffic light labels, nutrient content claim labels, and health claim labels

3. Mandatory implementation

Food manufacturers do not have incentives to implement FOP labeling – especially for warning-style labels, which discourage consumption. Even positively framed labels are selectively applied, which can mislead consumers. To fully reap the benefits of FOP labeling, DOH may consider pushing for a shift from the current voluntary model to a mandatory one.

In line with UNICEF recommendations and with the current research trends in FOP labeling, DOH may consider implementing a mandatory, interpretive warning label system for highly processed food products in the Philippines.

It is important to note that regulation of FOP labeling needs to be carefully thought out to avoid unintended negative consequences and to minimize loopholes or perverse incentives for food manufacturers. One thing to carefully consider is that regulation should ensure that labels do not become misleading to consumers. Because FOP labels take attention away from the more comprehensive nutrition information panel, this can lead buyers to overestimate the healthfulness of a product based on generalizations from the simplified FOP label.

To mitigate this risk, FOP labels must be closely reviewed, and regulating bodies should implement clear regulations against misleading or simple claims (Roe et al. 1999 and Burton et al. 2014, as cited in Ikonen et al., 2020).

Similar to taxation, FOP labeling is complex. It is worth noting that while we know that FOP labeling increases comprehension, it is still unclear if comprehension of nutrition information actually leads to an increase in healthy choices (Ikonen et al, 2020). The “unhealthy = tasty” intuition may lead consumers to avoid the healthy option and choose the unhealthy tasty option instead. (Mai and Hoffmann 2015; Raghunathan et al. 2006). At the same time, if FOP labeling does discourage consumption of certain food products, it is important to find out what consumers are substituting these food products with.

DOH may consider pilot testing FOP models through future rounds of HPLS.⁴

Menu labeling

Background

While most Filipinos get meals from home cooking, many also get their meals from various outside sources - *karinderyas*, fast food restaurants, convenience stores, among others. Generally, food purchased outside the home tends to be of poorer nutritional quality than home cooked meals; frequency of fast food consumption in particular is associated with greater levels of body fat.

⁴ E.g. A/B testing food labels. We can assess comprehension and interpretation of labels by randomly assigning respondents to different kinds of labels, and asking questions about the information conveyed through the label. We could also assess hypothetical choices, by presenting respondents with a display of 3-4 food packages, wherein one package contains excess calories. Respondents would be randomized into a treatment arm (where the package with excess calories has FOP labeling) and a control arm (the package is not labeled), then asked which product they would select for a snack. We will then gauge if there are significant differences in comprehension or choices made between groups.

Menu labeling is currently being considered in the PH congress through "An Act Mandating The Disclosure and Labeling of Nutritional Information on The Menus of Food Establishments." **This is an opportunity for DOH to shape menu labeling guidelines to ensure that labels clearly communicate nutritional information, and nudge consumers towards healthier choices.**

A number of studies have attempted to evaluate the effects of menu labeling, but results are inconsistent and sometimes contradictory (Sturm et al, 2018). Several studies have found that menu labeling reduces the calories ordered by customers (Bollinger, 2011, Wisdom et al. 2010, Pulos and Leng, 2010, as cited in Huang, 2018). A number of other studies have seen mixed or null effects (Krieger et al. 2013, Dumanovsky et al. 2011, Ellison et al. 2014, as cited in Huang, 2018). Generally, the effects of menu labeling vary depending on both the context of implementation and the specific types of labels used. One systematic evidence review found that most studies that showed positive outcomes due to menu labeling were conducted in cafeterias, suggesting that interventions are particularly effective in these settings (Fernandes et al, 2016).

We note again that knowing what is healthier does not directly translate into healthier behaviors (Ikonen et al, 2020). We recommend continuing to push for menu labeling in the legislature, and conducting further research and testing to better understand what type of labeling and in what food-establishment settings they would work best. In line with DOH's push towards healthy public food procurement and evidence pointing towards effectiveness in cafeterias, DOH may consider prioritizing canteens in schools and public offices for implementation.

We recommend that DOH leverage the power of A/B testing and field experiments in real-world settings to test any labels being considered as these can provide causal evidence on the effect of labeling on interpretation as well as revealed choices. As outcomes can also vary significantly from one location to another, experimentation can provide locally-relevant information on the contexts in which labeling can make the most difference.⁵

It is also important to note that while menu labeling can be an effective intervention for those that frequently eat out (i.e. higher income groups and those in urban areas), it is unlikely to substantially affect lower income individuals in rural areas, who primarily rely on home cooking or informal eateries like karinderyas.

To drive equitable health outcomes, menu labeling should be complemented with policies and interventions aimed directly at the rural poor to reduce consumption of HFSS and increase access to healthier alternatives. DOH is already taking steps to engage karinderyas in nutrition programs across the country – to take this a step further, DOH may consider targeting karinderyas for menu labeling as well.

5 E.g. This can be done using stylized A/B testing of menu designs by presenting different menu designs to different subsets of the HPLS sample. Respondents will then select an item to "order" from a menu. We will then gauge if there are significant differences in hypothetical choices made between groups. Additionally, conducting a field experiment in a real-world setting can effectively reveal the effect of labeling on actual choices; for instance, partnering with a restaurant for a short period of time to randomize the menu presented to customers, then analyzing data on the orders made (via the receipts), as has been done in Ellison, 2014.

In the past 7 days, did you see/hear any food and/or non-alcoholic beverage ads in any of the following media?
(N=1617)

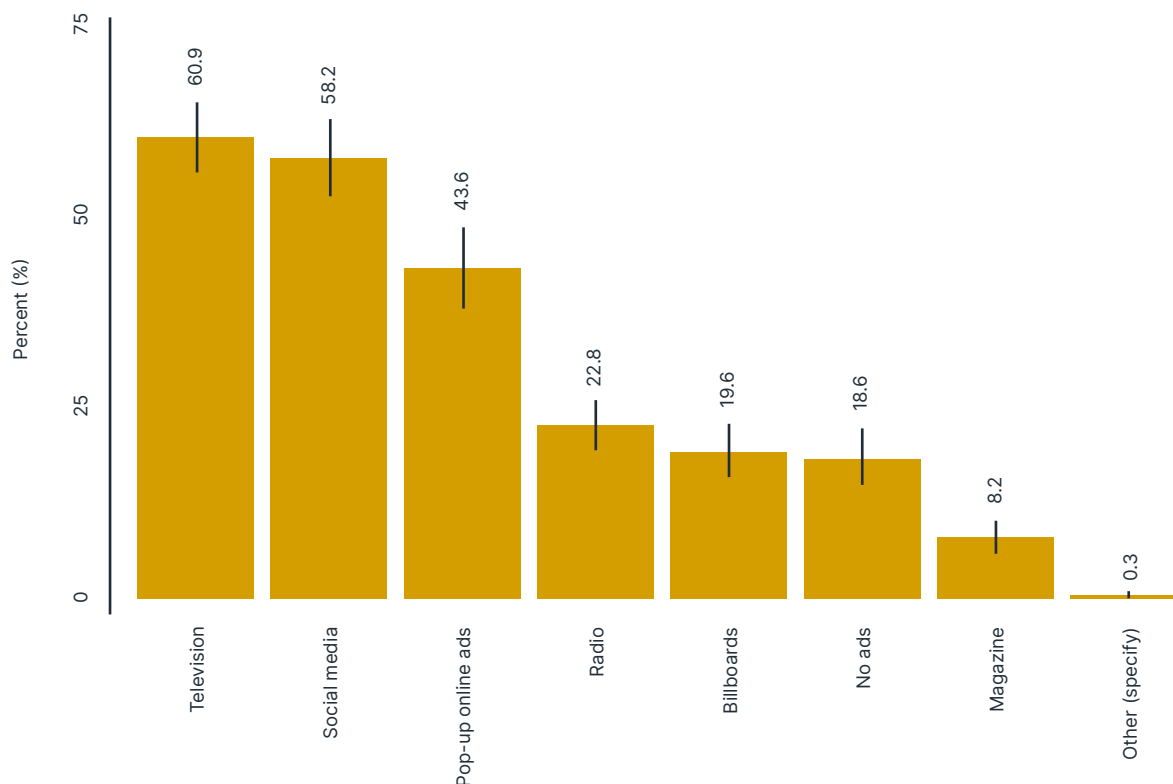


Figure 7: Channels where food and/or non-alcoholic beverage ads were seen/heard

Exposure to media and marketing

Findings

Television (60.9%), social media (58.2%) and pop-up online ads (43.6%) are the most common media channels where Filipino adults see/hear food and drink advertisements. Younger, more educated, and richer respondents are significantly more likely to be reached by food/drink advertisements.

Advertising targeting children remains prevalent. 74.0% of those that had seen food or beverage ads in the past 7 days reported that some of the ads that they had seen or heard were ads targeted towards kids. The most common food items that these respondents believe were promoted to children were sugary drinks (e.g., soda, juice, iced tea, etc) (60.1%), fast food (59.2%) and ice cream (59.0%). Among parents that saw or heard ads targeted to children, 69.0% reported that their children asked them to buy the food items from the advertisements.

Interpretation and Recommendations

Among respondents who had children, we found high exposure to food or beverage ads targeted towards children. The WHO recommends policies to protect children from the harmful impact of food marketing on diet as part of its list of NCD best buys (add citation here). DOH HPB is considering policies and programs related to the regulation of marketing towards children, specifically for unhealthy foods that are high in fat, sugar, and salt.

The literature on the effects of marketing regulation is still growing and evolving, but it seems to be reaching a consensus that stakeholders need to take action to address childrens' exposure to media and marketing. Food items that are advertised to children tend to be of low nutritional quality – the top cited food items that respondents cited as targeting children in HPLS included sugary drinks, fast food, and ice cream. Recent evidence shows that marketing affects food choice and influences dietary habits, with subsequent implications for weight gain and obesity (Hawkes, 2004).

In Chile, the prevalence of HFSS television ads dropped significantly after implementing additional regulations, suggesting that children are now less exposed to unhealthy food advertising (Correa, 2020).

Globally, there are various regulatory frameworks that address child-targeted advertising. In most cases, regulations also recognize that advertising towards children requires special consideration. Common frameworks that consider child-specific advertising include: statutory guidelines, self-regulatory guidelines, specific restrictions on advertising to children, and bans on child targeted advertising.

Like many other countries, the Philippines does not currently implement any mandatory guidelines on advertising to children.⁶ The Code of Ethics set by the Advertising Standards Council (ASC) serves as the Philippine marketing industry's basis for self-regulation (Advertising Standards Council, n.d.). However, evidence suggests that industry self-regulation is ineffective in improving the overall nutritional quality of foods marketed to children (Kunkel, 2015). This is consistent with findings from HPLS, which show that most households had been exposed to some form of marketing for unhealthy food items targeted towards children.

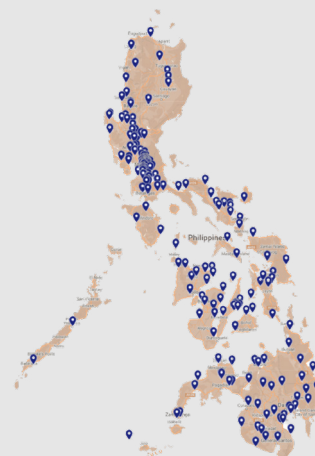
When regulation is left up to industries, it is likely that nutritional standards are lower, or that food marketers choose not to participate in self-regulation. **To effectively limit the influence of advertising on children's diets, DOH HPB may consider pushing for more stringent regulations on advertising to children, including government-issued statutory guidelines, specific restrictions on advertising to children, or bans on child-targeted advertising.** It is worth noting that even when regulation is implemented, gaps tend to emerge in compliance. We recommend additional efforts to monitor industry compliance, especially in early years of implementation of new regulations.

We note that, like taxation and FOP labeling, advertising regulation is only one piece of the puzzle. Policies for population-level nutrition need to work as a system, and further research is necessary to understand which policies will be the most effective in the Philippines. We recommend doing further in-depth research on the links between exposure, purchase, and consumption to understand where consumers are being influenced, and what leads them to make the decisions they make.

⁶ Other than Executive Order No. 51, which regulates the marketing of breast milk substitutes

Methodology

The HPLS survey is nationally representative of Filipino adults aged 18 years old and above. Data collection was conducted in-person across the Philippines from April to June 2023 (Round 1), and through a combination of phone and in-person surveys across the country in October-November 2024 (Round 2). We interviewed a total of 2074 adult Filipinos aged 18 years old and above ('adult Filipinos') in Round 1, and 1,617 adult Filipinos in Round 2.



Survey Design

The survey design for HPLS comprised the following modules: comprehensive health literacy (CHL), functional health literacy (FHL), Health-Seeking Behavior (HSB), Barangay Health Workers (BHW), and Knowledge, Attitudes, and Practices (KAP) modules for each of the seven (7) pillars of Healthy Pilipinas (diet and physical activity, environmental health, vaccinations, substance abuse, mental health, sexual and reproductive health, and violence and injury prevention). The questionnaire for Round 2 included a deep dive on nutrition based on policy priorities being considered by DOH HPB.

Sampling

The HPLS survey took a two-stage clustered sampling approach. In the first stage, we drew a random selection of Primary Sampling Units (PSUs) with probability proportional to estimated population size from a sampling frame comprising mutually exclusive and collectively exhaustive geographic clusters across the entire Philippines. This sampling frame was created from Meta's "Data for Good" publicly-available high resolution population density maps for the Philippines. Clusters that fall in Least-Accessible Barangays (LABs) and barangays with Peace and Order Problems (POPs) were excluded from the sampling frame. For second stage sampling, we conducted a full household listing of each selected PSU (cluster), then randomly selected households to survey from the prepared list. One respondent is then selected per sampled household.



Analysis and Weighting

Sampling weights are applied to all estimates and comprise: i) base weights reflecting probability of selecting household, ii) unit non-response weights to account for systematic non-response, iii) and post-stratification weights to allow our sample to reflect up-to-date population distributions along gender, age-group, region and city/municipality categories, based on Census 2020 data.



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POLICY BRIEF

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Findings and policy recommendations from the second round of the Health Promotion and Literacy Longitudinal Study (HPLS)

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