



Healthy Pilipinas IDinsight

Policy Brief

2023

Knowledge, Attitudes and Practices towards Diet across the Philippines

Summary

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

In the first round (completed in June 2023) we found that there is low awareness that intake of sugar, salt, and fatty foods can lead to increased risk of developing disease. Most Filipino adults had consumed high-sugar and high-sodium food and beverages within the past two (2) days. More young people consumed high-sugar and high-sodium food compared to older age groups.

We recommend that public health campaigns on nutrition focus on building knowledge of the risks of high-sugar and high-salt diets, while structural policy changes focus on increasing access to nutritious food groups in order to support dietary diversity.



Background

Noncommunicable Diseases (NCDs), for which diet is a significant risk factor, pose a significant challenge to health systems in the Philippines. In 2015, 68% of deaths in the Philippines were from NCDs (WHO, 2017). 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).

The Health Promotion and Literacy Longitudinal Study (HPLS) builds on existing national nutritional data from the (Expanded) National Nutrition Survey (eNNS), conducted by the Department of Science and Technology - Food and Nutrition Research Institute (FNRI). Their 2021 study gave in-depth analysis on a wide range of nutrition-related topics, such as anthropometric and biochemical measurements, deep dives on maternal health and nutrition, food security, participation in government programs, and overall consumption. Here, we build on that data with data focusing on the links between knowledge, attitudes, and high-level practices for nutrition, and data exploring the barriers to a healthy diet faced by the Filipino population. DOH HPB's current priority for nutrition is the reduction of population-level intake of salt, sugar, and fatty foods through food systems reform and food supply interventions. This policy brief discusses findings from round 1 of HPLS and the implication of these findings for nutrition policy and health promotion in the Philippines.

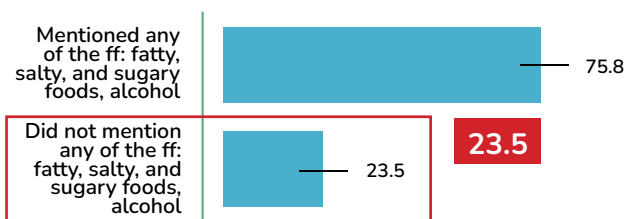
Findings

Knowledge and practices concerning sugar, salt, and fat consumption

The results of HPLS highlighted **the importance of improving awareness of the risks of consuming excess salt, sugar, and fat**. We found that most Filipinos over 18 years old (henceforth 'Filipino adults') have low knowledge of foods to limit to mitigate risk of disease. At the same time, most Filipino adults had recently consumed high-sugar and high-salt food and beverages. When asked about what food groups should be limited, about 1 in 4 Filipino adults (23.5%) did not mention any among sugar, fat, salt or alcohol.¹ More specifically, 54.1% of Filipino adults did not mention fatty food, 59.6% did not mention sugary food or drinks, and 71.7% did not mention salt or salty food. Only 17.1% mentioned limiting both sugar and salt, and only 8.4% mentioned limiting salt, sugar, and fatty foods.

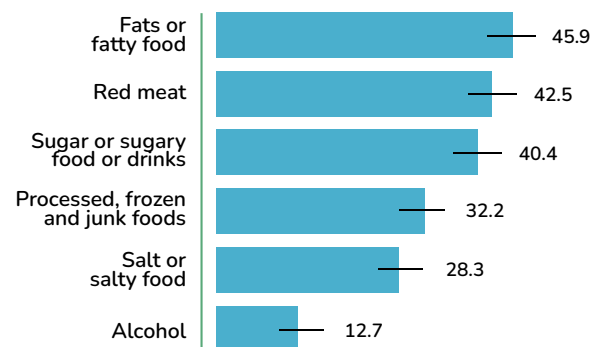
Respondent mention of recommended food groups to avoid

(N=2070)



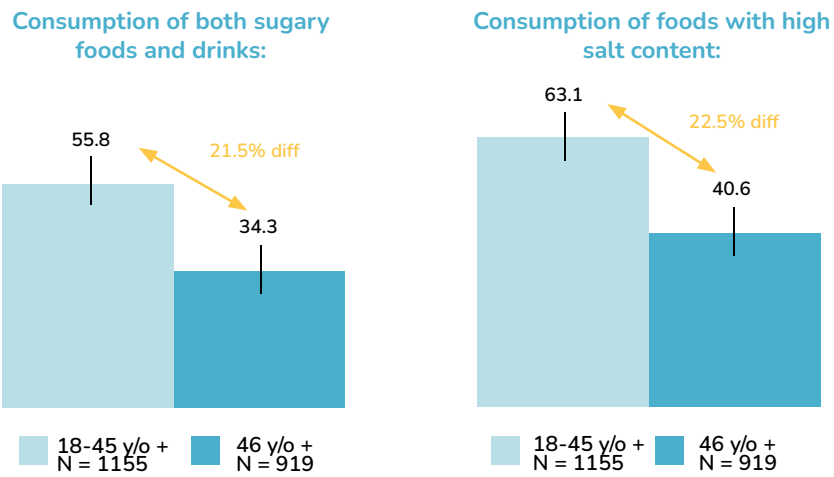
As far as you know, what types of food should you limit eating to reduce the risk of getting diseases?

(N=2070)



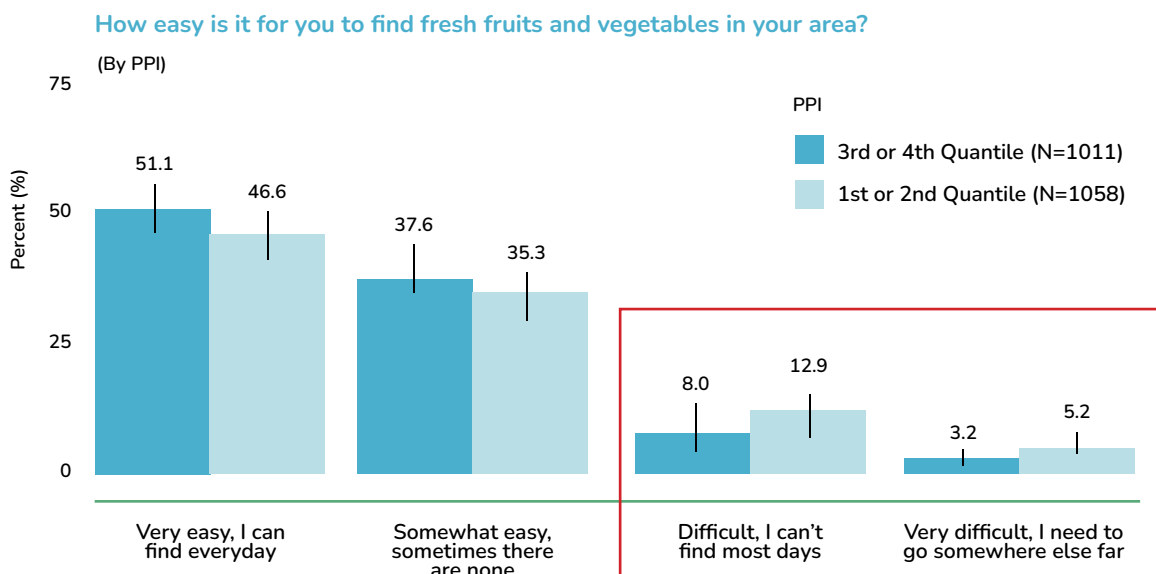
¹ These are the four major groups that should be limited as per the FNRI-DOST/FAO guidelines for the Philippines.

Together with low knowledge of health risks associated with sugar, salt, and fatty food consumption, we found that a **majority of Filipino adults had recently consumed high-sugar or high-salt foods**, based on their own self-report. Most (85.4%) Filipino adults had consumed sugary beverages and/or food within the 2 days prior to the survey, while over half (55.8%) had recently consumed high-salt foods.² Recent salt and sugar consumption is particularly prevalent in younger age groups (18-45 years old), as presented in the figure below.



Barriers to a balanced diet.

Knowledge and practices surrounding fruit and vegetable consumption are more in line with public health guidelines. Most Filipino adults (97.7%) know that eating fruits or vegetables lowers risk of disease (65% mention both), and most consume at least a small amount of fruits or vegetables regularly, although HPLS did not collect data on portion size. **However, access to fruits and vegetables remains a challenge for about 1 in 7 (14.6%) Filipino adults**, who find it difficult or very difficult to find fresh produce in their areas. This problem is slightly more pronounced among Filipino adults in lower income quartiles: in the 1st and 2nd income quartiles, 18.1% find it difficult or very difficult to find fresh produce.

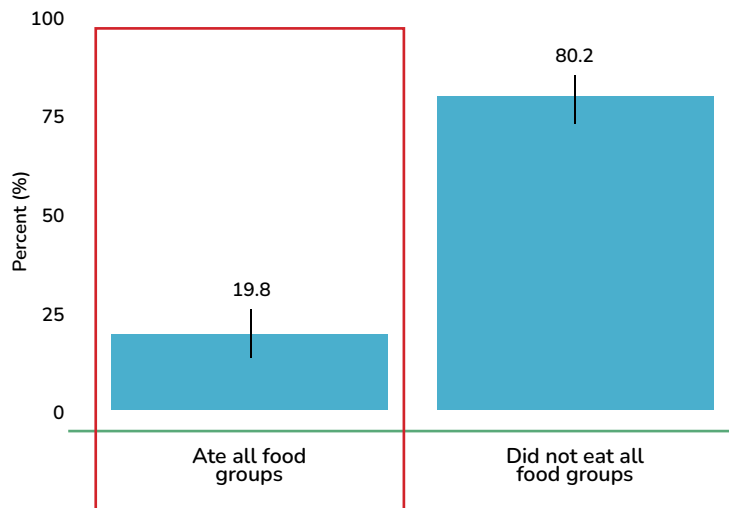


² While the HPLS survey is able to report on whether or not Filipino adults had recently consumed specific food groups, it is unable to draw conclusions on actual amounts of consumption. This data is collected in much more detail, but lower frequency through the enhanced National Nutrition Survey (eNNS).

Under the National Guidelines for Filipinos (NGF), DOST-FNRI recommends that Filipinos eat fruit, vegetable, meat, eggs, beans, milk, and carbohydrates as part of a healthy diet. Filipino adults are regularly consuming at least a small amount of fruit and/or vegetables.³ However, based on respondents' self-reported consumption, only 19.8% of Filipino adults had eaten all the recommended food groups in the past two (2) days. Round 2 of HPLS will include further research to understand how access or availability of food options may play a factor in the consumption of a diverse diet.

Respondent consumption of all recommended food groups in the past two days

(Aggregate, N=2071)



Most Filipino adults (83.8%) report finding it easy to eat healthily, despite low knowledge of food groups to avoid, frequent consumption of high-salt and high-sugar foods, and low consumption of complete food groups. This suggests that Filipino adults have a limited understanding of the overall nutritional status of their diet.

Out of the 16.2% of Filipino adults that reported finding it difficult to eat healthily, most reported that **their biggest barriers to healthy eating were money (57.3%), time (16.6%), and access (15.0%)**. Notably, poorer Filipino adults were more likely to cite money and access as barriers, whereas Filipino adults in higher income quartiles were more likely to cite time or other factors, such as being drawn to unhealthy foods.



³ 97.9% had at least one piece of fruit or vegetable in the 2 days prior to the survey (94.6% had at least one vegetable, while 79.5% had at least one fruit). Our survey is not as detailed as the extensive food diaries included in dedicated nutrition surveys, but rather tries to give a high-level overview across multiple topics over time. As such, we cannot make any further comment about portion size or whether respondents are truly eating 'enough' fruit and vegetables based on this survey alone.

Implications on policy and further research

1. Increasing awareness about the risks of high salt and sugar consumption is an important step to changing practices

Food systems reforms should be complemented with messaging to improve awareness of the risks of consuming excess salt and sugar. Interventions should aim to improve awareness of risks associated with salt and sugar consumption, provide guidance to help people identify commonly consumed items that are high in sugar and salt, and clearly communicate daily consumption guidelines and targets. One example of a potential intervention is to improve food labeling to be more transparent, understandable, and explicit about risks.

To support the development of potential interventions, HPLS Round 2 will include further research on food labeling and Filipinos' exposure to media and marketing of high-salt and high-sugar foods.

2. Interventions on salt and sugar reduction should specifically (but not exclusively) target younger age groups.

Younger age groups are significantly more likely to consume high-salt and high-sugar foods than older age groups. This is particularly important to address because the burden of NCDs on the health care system is growing, and continues to grow. The number of NCD cases in the Philippines is expected to double between 2020 and 2040 if no interventions are undertaken. (Ulep et al., 2020).

Targeting younger age groups is particularly impactful, because younger age groups have time to focus on preventative behavior. If preventative behavior starts now, this will improve health outcomes for individuals and reduce the burden on the healthcare system years down the line. This is a case where online or social media campaigns can be leveraged to target these high internet-usage groups.⁴

3. Conduct further research to better understand the food system and market landscape that affects access to and availability of food options in local communities

Awareness campaigns will not change behavior if significant structural barriers present challenges to the encouraged behavior. They 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.

One side of this is understanding the accessibility of healthy food options in local communities across the Philippines. HPLS Round 1 generated insights on the availability of fruits and vegetables; in HPLS Round 2, this will be expanded to cover all 7 healthy food groups under the NGF. With a clearer picture of what food items are or are not easily available across the country, DOH can explore interventions to improve the availability of specific products through ongoing food systems reforms or food supply interventions.

On the flipside is developing a deeper understanding of the accessibility of unhealthy food items, and how they are consumed by Filipino households. One potential intervention being explored by DOH is a tax on

4 The health literacy results from HPLS Round 1 indicate that younger age groups are more likely to get health information from online sources or social media.

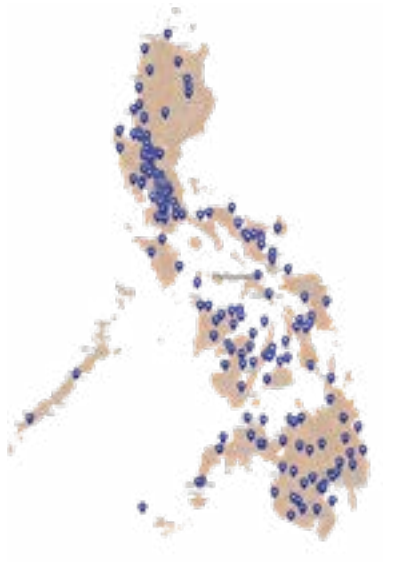
unhealthy food items. This has precedent in the recently enacted tax on sugar sweetened beverages. In 2018, through the Tax Reform for Acceleration and Inclusion (TRAIN) Law, a 12% value-added tax on sugar-sweetened beverages was implemented. (Onagan et al., 2018) This led to a price increase for sugar-sweetened beverages, although evidence has yet to be generated on the tax's effect on consumption.

To better understand the potential implications of taxation, it is important to find out how high-sugar and high-salt processed food items (such as instant noodles) are consumed by Filipinos. It is possible that these items could be staple foods in households at the subsistence-level, and thus taxation could unintentionally restrict these households' access to essential calories, with corresponding equity implications. In HPLS Round 2, further research will be done to understand which high-salt and high-sugar food items contribute the most to Filipinos' diets, and whether these food items are staples in essential meals.



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. We interviewed a total of 2074 adult Filipinos aged 18 years old and above, across all regions in the Philippines.



Map data ©Google, TMap Mobility

Survey design

The survey design for HPLS comprised the following modules: comprehensive health literacy (CHL), functional health literacy (FHL), and Knowledge, Attitudes, and Practices (KAP) modules for each of the seven (7) pillars of Healthy Filipinas (diet and physical activity, environmental health, vaccinations, substance abuse, mental health, sexual and reproductive health, and violence and injury prevention). KAP questions on diet were informed by prior WFP surveys on nutrition KAP and inputs from the nutrition team within HPB.



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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.



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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.

References

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4. World Health Organization. (2017). *Noncommunicable Diseases Progress Monitor 2017*.

