NUS National University of Singapore | Saw Swee Hock School of Public Health

Food-EPI Singapore Executive Summary 2018

Benchmarking policies in creating healthier food environments: Current policies and recommended actions

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EXECUTIVE SUMMARY

In March 2018, the Healthy Food Environment Policy Index (Food-EPI) workshop was conducted with a national panel of 20 independent, non-government public health experts specializing in nutrition, obesity, or chronic disease to (i) rate Singapore's policies related to food environments (ii) propose recommendations to address key policy gaps. For the rating process, international examples of current best practices were used as the benchmark.

The Food-EPI tool comprises of 47 good practice indicators related to specific government actions across 7 food policy domains (23 indicators) and 6 infrastructure support domains (24 indicators) (See **Figure 1**). Each indicator is supported by international examples of current best practices which serve as benchmarks for the rating process. This tool was developed by INFORMAS (International Network for Food and Obesity/Non-communicable disease Research, Monitoring and Action Support) and has been used in over 10 countries.

Evidence on extent of implementation by Singapore's government was compiled for each of the 47 indicators. With a comprehensive view of the food policy space in Singapore, the expert panel was able to systematically assess the level of implementation of these policies against international benchmarks and recommend important and timely government actions to address identified gaps of implementation.

Singapore's leadership in addressing chronic diseases with strong and visible political support to tackle diabetes, and a comprehensive plan (the Healthy Living Masterplan) to improve population nutrition and health was highly rated. The presence of a dedicated Health Promotion Agency with a secure funding stream, and robust systems to monitor the prevalence of chronic diseases such as diabetes, and associated risk factors including obesity, were also seen as areas of strength. Innovative and comprehensive programmes to promote healthy food choices in schools and other public settings were also highly rated.

Areas with the potential for further improvements were also recognized by the panel and specific actions were suggested. A key structural recommendation included the development of standards to define the healthfulness of foods, which can be used consistently across programmes. Other structural recommendations focused on monitoring of policy adherence and evaluation of programmes. Several policy recommendations centered on strategies to make healthier options less expensive. Strengthening current guidelines with regards to advertising to children and nutrition labelling were also seen as areas where meaningful progress could be made.

The systematic and timely monitoring of the food policy space is crucial for nurturing the vitality of our food environment. Creating food environments that encourage healthier dietary behaviors is an essential component of public health efforts to address the growing challenges of obesity and diabetes in Singapore. This work is one of the first efforts to systematically characterize the food environment policy space in Singapore, and can serve as the foundation for continuous monitoring of public sector food-environment policies to track progress in this area.

IMPORTANCE OF CREATING HEALTHIER FOOD ENVIRONMENTS

The food environment encompasses the physical, economic, socio-cultural and policy structures that can influence food choices and dietary behaviors [1]. Unhealthy food environments are characterized by a widespread availability of energy-dense and nutrient poor foods that are actively promoted and sold at affordable prices. Such food environments facilitate poor dietary choices and energy over-consumption, which in turn leads to excessive body weight and poor health [2]. Like many countries in South East Asia, Singapore is facing growing threats from obesity and type-2 diabetes. In Singapore, poor diet is the leading behavioral risk factor for premature death and ill health, including type-2 diabetes [3]. In 2016, the Singapore government launched a multi-year plan to systematically tackle type-2 diabetes. Creating healthier food environments to support better dietary choices is a fundamental component of ongoing national efforts to prevent obesity and diabetes [4].

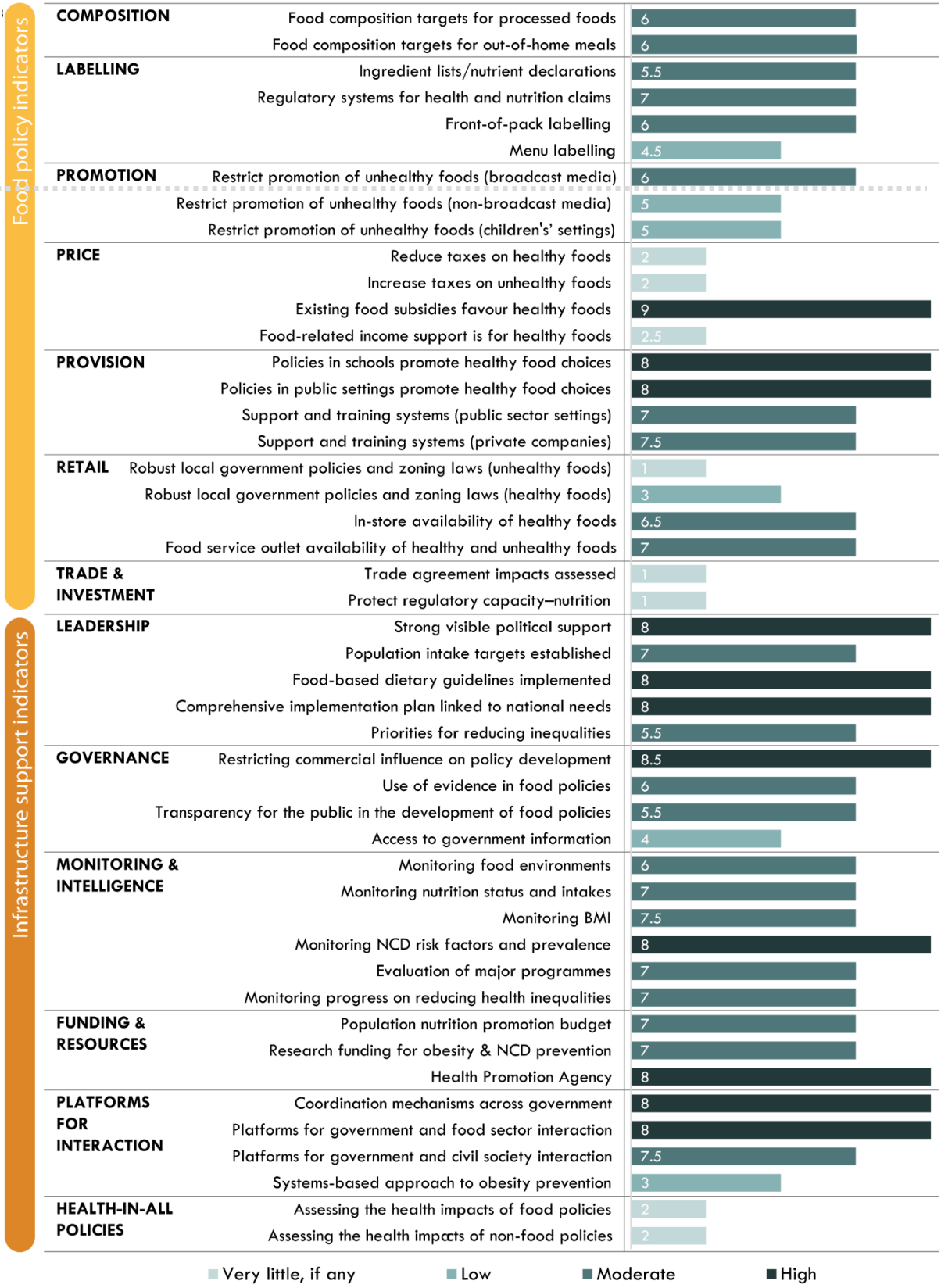
[1] Swinburn B et al. INFORMAS (International Network for Food and Obesity/non-communicable diseases Research, Monitoring and Action Support): overview and key principles. *Obesity reviews* 14 (2013): 1-12.
[2] Swinburn, Boyd A., et al. "The global obesity pandemic: shaped by global drivers and local environments." *The Lancet* 378.9793 (2011): 804-814.
[3] Institute for Health Metrics and Evaluation (IHME). GBD Compare. Seattle, WA: IHME, University of Washington (2015). Available from: http://vizhub.healthdata.org/gbd-compare. [Accessed 27 Dec 2018]
[4] Diabetes: The War Continues. [press release]. Ministry of Health, Singapore (2017). Available from: https://www.moh.gov.sg/content/moh_web/home/pressRoom/pressRoomItemRelease/2017/diabetes--the-war-continues.html.

LEVEL OF IMPLEMENTATION OF FOOD ENVIRONMENT POLICIES IN SINGAPORE BENCHMARKED AGAINST INTERNATIONAL BEST PRACTICES

During the workshop, the panel, comprising of 20 national experts, rated Singapore's policies and programmes for each of the 47 indicators against international benchmarks. The scale used for rating ranged from 1(no implementation) to 10 (high implementation). Each expert provided their own rating and a median score was computed for each of the 47 indicators. The median rating scores were categorized into 4 levels of implementation: '*very little, if any*' implementation (≤2.5), '*low*' implementation (2.6 – 5.0), '*moderate*' implementation (5.1 – 7.5) and '*high*' implementation (≥7.6) (see **Figure 1**). Majority of the indicators was rated at '*moderate*' implementation (46.8%), followed by '*high*' implementation (23.4%), '*very little, if any*' implementation (17.0%) and '*low*' implementation (12.8%). Many (75.0%) of the indicators which were rated at '*very little, if any*' implementation were from the food policy domain, and these were largely the ones prioritized for further government action.

Areas where Singapore demonstrated strength (median rating score ≥7.6), meeting the level of international best practice as well as areas where Singapore were rated as having limited policy implementation (median rating ≤2.5) are summarized in **Table 1** and **Table 2** respectively.

Figure 1 Expert panel's evaluation of Singapore's food environment policies to improve dietary quality and mitigate obesity and chronic diseases [5]



[5] Scores are color-coded based level of implementation. The value within the bar represents the median rating score received for each indicator.

Table 1 Indicators where Singapore was highly rated against international best practices.

	Food policy indicators	Infrastructure support indicators
High level of policy implementation	**Food Price** • Funding support for food manufacturers to develop healthier ingredients **Food Provision** • Programmes that limit provision of unhealthy foods, and promote healthier food choices in educational institutions and public settings	**Leadership** • Strong and visible political leadership from the Prime Minister and Minister of Health supporting policies to improve food environments and diet-related non-communicable diseases (such as diabetes) • Presence of evidence-based dietary guidelines established for different age groups • Implementation plans that are linked to national needs and priorities and aim to improve food environments through accessibility to and affordability of healthy food choices **Governance** • Policies to restrict commercial influence on policy development **Monitoring & Intelligence** • Monitoring non-communicable disease prevalence and related mortality, and surveillance of non-communicable disease risk-factors **Funding & Resources** • Statutory health promotion agency in place, with secure funding stream that oversees national health promotion and disease prevention programmes (such as through the improvement of population nutrition) **Platforms for interaction** • Inter-ministry working groups to support coordination and planning for food, obesity and diet-related non-communicable disease prevention policies on an ad-hoc basis, as well as formal platforms between government and food sector to support implementation of healthy food policies

Table 2 Indicators where Singapore was rated little or no policy implementation against international best practices.

	Food policy indicators	Infrastructure support indicators
Little or no policy implementation	**Food Price** • Food pricing policies or strategies that favor healthy foods over unhealthy foods (such as reduced taxes for healthy foods or increased taxes on unhealthy foods) • Policies or programmes that provide food-related income support for healthy foods in retail settings **Food Retail** • Zoning laws or policies to limit the density or placement of retail establishments that serve mainly unhealthy foods **Trade & Investment** • Policies or procedures to guide the assessment of trade and investment agreements on population nutrition and health, to minimize potentially negative impacts. • Measures to ensure that trade or economic agreements do not limit the capacity of the government to implement domestic policies to improve the food environment	**Health-in-all policies** • Assessing the health impacts of food policies and non-food policies.

RECOMMENDED ACTIONS BY THE EXPERT PANEL IN SUPPORT OF HEALTHIER FOOD ENVIRONMENTS

The panel reviewed the rating results, and prioritized 11 out of the 47 indicators for further discussion using a voting system. When prioritizing indicators, panel members were asked to consider the importance of the indicator area in improving the food environment and potential to propose achievable policy actions. The panel proposed 31 food policy and infrastructure support actions listed in **Table 3** (25 food policy actions) and **Table 4** (6 infrastructure support actions).

Table 3 List of food policy actions recommended to support healthy food environments

	Recommended Actions
FOOD COMPOSITION	1 **To establish minimum standards for nutrients of concern (e.g. energy, sodium, saturated fat, trans-fat, added sugar) across all food categories** (i.e. packaged foods and out-of-home meals) for the food to be considered "healthier" rather than have standards that are category specific. This definition of healthier can then serve as the basis for informing future programme actions (e.g. labelling or marketing restrictions).
	2 **To include guidance related to sodium, added sugar and portion size** for "My Healthy Plate", Singapore's food group based dietary intake recommendations.
FOOD LABELING	3 **To consider highlighting foods with high amounts of nutrients of concern** (e.g. warning labels) rather than highlighting healthier food options.
	4 **Adopt a nutrition labelling system** that considers minimum standards of nutrients of concern consistently across all food categories (*e.g. by using a nutrition profiling system*) that must be implemented for all packaged foods.
	5 **Menu labelling for energy and nutrients of concern** (e.g. sodium, saturated fat) at the point-of-sale should be made mandatory for certain types of food establishments (e.g. *chain-restaurants/eateries*).
	6 To consider the **use of healthier ingredients in food preparation as a regulatory requirement** in educational institutions.
FOOD PROMOTION	7 To introduce a **more systematic and robust process to monitor compliance with the Children's code,** with oversight by an independent body (instead of the Advertising Standards Authority of Singapore, the self-regulatory body of the advertising industry).
	8 To **extend the timing in the TV programming schedule under the Children's Code** to include family time (i.e. 5pm to 7pm) at the very least. It is recommended that the guideline is extended to cover prime time as well.
	9 To **extend the outdoor advertising regulations** to beyond 50 meters radius around schools as well as to other places where children and youth gather such as sports areas, parks, SCAPE, tuition centers and community centers.
	10 To introduce **regulations that only allow the promotion of meals or products that meet certain nutritional guidelines** with toys/games/incentives.

11 To consider **regulating product-placements in TV shows.** One suggestion is to consider a ratio-based restriction where a certain minimum proportion of product placements must be for healthy food options.

12 To commission studies that aim to characterize the nature and the extent of some of the newer methods of advertising to children (e.g. new media advertising using internet or social media)

FOOD PRICES

13 To consider a tiered system where commodities that are healthier are subsidized or not taxed. For example, the GST increase from 7% to 9% which is planned to be implemented between 2021 to 2025 should not be applied to healthier commodities. Some examples of healthier commodities may include foods such as wholegrain staples, cooking oils low in saturated fat and trans-fat free, fresh fruits and fresh vegetables. Processed foods are taxed but to varying extents based on their healthfulness. The panel recommended that a committee look into the definition of healthier and less healthier foods in more detail prior to implementation.

14 To commission studies that **assess the impact of fiscal measures on consumer behavior and potential health outcomes** in Singapore.

15 To commission studies **that characterize the relationship between price and willingness** to purchase foods.

16 Although constraints such as logistic feasibility and cultural acceptability are recognized, efforts must be made to ensure that **food rations for vulnerable populations meet a minimum criteria for healthfulness**.

17 To consider the mechanism of providing **food vouchers that subsidize the purchase of selected healthier foods** for low-income groups.

18 To establish **monitoring systems to evaluate the utilization of food rations** among lower income groups.

FOOD RETAIL

19 The **overall healthfulness of the food service mix in retail space should be considered and regulated**. For example, the number of "unhealthy restaurants" or the ratio of unhealthy to healthy restaurants should be limited in food service settings. A higher standard of healthfulness should be applied around settings that serve children and youth (e.g. SCAPE, community centers).

20 To **regulate the type of foods that can be made available in vending machine**s in educational settings such that unhealthy foods are not sold or at the very least their proportion is limited.

21 To consider **limitations on the discounts/promotions that quick service restaurants can offer** in certain locations (for example schools, campuses, universities)

22 To consider offering **rental subsidies and/or other benefits** (e.g. prime locations) **to stalls that sell healthier foods**.

23 To introduce **initiatives that facilitate setting up of Farmer's Markets** in Singapore (e.g. rental subsidy).

24 To consider **offering support** (e.g. space, tools and resources) **to encourage urban farming** with a view to sustainably increase access to, and engagement with, healthier foods.

OTHERS	25	To **offer a larger variety of comfortable settings** (e.g. *with wi-fi/aircon*) **for care-givers of young children** (e.g. *grandparents*) **and youth** to limit exposure to food advertising and cues to eat.

Table 4 List of infrastructure support actions recommended to support healthy food environments

		Recommended Actions
GOVERNANCE	1	To **increase accessibility to government data**. Some proposed examples include (i) to enhance access to data for certain types of agencies/institutions, and (ii) to tier data based on level of sensitivity such that data with low sensitivity could be made publicly available.
	2	To **improve transparency during policy decision-making processes in a timely manner** (e.g. scientific evidence and the rationale for developing and implementing a policy should be made publicly available).
	3	To be **transparent in the assessment of programmes or policies** with regards to both process evaluation and outcome/impact evaluation, including cost-effectiveness of such programmes/policies.
HIAP	4	To commission natural experiments to **observe the impact of policies implemented on population behavior and related health impact**.
OTHERS	5	To create more accessible and well-defined **platforms for data sharing, at both the inter-governmental level, and between government and academia/think-tanks/NGOs**.
	6	**Funding should be made available for rapid assessment of policies implemented** (for instance with regards to tax/subsidy policies) so that policy evaluation is done in a scientifically rigorous yet timely manner.

Full report is available at: https://blog.nus.edu.sg/sphpanda/files/2019/04/Food-EPI-Singapore-2018-Full-Report_final-5.pdf