



SICOM & AOCO 2024

SOMS International Conference on Obesity & Metabolism
in conjunction with Asia-Oceania Conference on Obesity

Hosted by

SOMS Society for Korean
Obesity and Metabolism Studies

Co-Hosted by



The Agenda for Obesity Reduction [AOR]- Policy directions for Public Health in Malaysia

by

Prof Dr Tilakavati Karupaiah, FASc, APD, AN

Sameeha Jamil, Fatimah Sulong, Hazizi Abu Saad,
Farah Fauzi, Hazreen Majid, Geeta Appannah &
Mohd Ismail Noor



1

Introduction

- 1a. Multi-sectoral Engagement (various related Ministries)
- 1b. Public-Private Partnerships



2

Economic Activities of Government

- 2a. Fiscal Policies of Government
- 2b. Enabling Healthy Food Access



3 Policies and Programs Influencing Obesogenic Environment

- 3a. Marketing of Unhealthy Foods and Beverages to Children
- 3b. Nutritional Labelling and FOP-NL
- 3c. The Malaysian Healthy Plate [*Suku Suku Separuh*]
- 3d. Physical Activity Policies



4

Monitoring and Surveillance

- 4a. National Surveys
- 4b. School Food Environment



5 Equity and Inclusivity (race, gender, income levels, food security)

- 5a. Equity
- 5b. Inclusivity



6

Summary of AOR

AGENDA for OBESITY REDUCTION [AOR]

1 – Policies & Commitments from Public and Private Sectors



Introduction

- High body mass index (BMI) alone constitutes 9.2% of the disability-adjusted life years (DALYs) from diet-related non-communicable diseases (NCDs) in Malaysia (IHME 2019).
- Obesity expectedly is a co-joint driver in public health policies tackling NCDs.
- In context Government Policies and Programmes should support :
 - a healthy **Food Environment** to address dietary risk factors from the Big 4 nutrients, namely *calories, fat, sodium* and *sugar*.
 - settings conducive to **Physical Activity**.
- The Ministry of Health (MoH) is the main stakeholder driving policies tackling obesity and NCDs:
 - *National Plan of Action for Nutrition of Malaysia (NPANM III) 2016-2025*.
 - The 4th strategy has 16 activities targeting prevention and control of obesity + diet-related NCDs.
 - *Reviewed Nutrition Policy Options to Combat Obesity in Malaysia 2022-2030* by Task Force to Combat Obesity
 - 44 policies in 5 main settings covering childcare center to general population
- Consultation with representatives from more than 24 Ministries, professional bodies, NGOs and industry

1a. MULTISECTORAL Action of Government for promoting a Healthy Food Environment as Agenda for Obesity Reduction [AOR]

Are relevant Ministries as stakeholders doing enough to enable healthy food choices?

- Food environment policy implementation [Food-EPI] assessment
 - 13 Ministries are stakeholders in the Food Environment of Malaysia
 - Sectors with a direct impact on AOR and with opportunities to strengthen actions :
Ministries of Health (MoH); Education; Domestic Trade and Consumer Affairs; International Trade and Industry; Housing and Local Government; Agriculture and Food Industry; Home Affairs; and Communications and Multimedia.
- Food-EPI examined seven 'policy' domains benchmarked to international best practices towards achieving a healthy food environment.
 - Food composition
 - Food labelling
 - Food promotion
 - Food prices
 - Food provision
 - Food retail
 - Food trade & investment

1a. MULTISECTORAL Action of Government

| Food-EPI Policy Domains* | RECOMMENDATIONS | Ministries Engagement |
|-------------------------------------|--|--|
| Food composition | <ul style="list-style-type: none"> • Setting mandatory targets for the nutrients of concern for packaged processed foods and beverages*. • Mandatory declaration of calories, fat and total sugar for menu labels for meals sold in public settings . • Ensure food industry compliant to nutrient targets consistent with WHO and/or MoH goals. • Update Food Composition Table -MyFCD –ongoing process <ul style="list-style-type: none"> • Dedicated fund needed. | <ul style="list-style-type: none"> • MOH; International Trade and Industry; Jabatan Perdana Menteri |
| Food labelling | <ul style="list-style-type: none"> • Declare ‘added sugars’ inclusion on food and beverage labels | <ul style="list-style-type: none"> • MoH; Domestic Trade and |
| Strategy to reduce/ prevent obesity | <ul style="list-style-type: none"> • <u>less Calories, less Sugar, less Fat</u> | |

1a. MULTISECTORAL Action of Government

| Food-EPI Policy Domains* | RECOMMENDATIONS | MultiSectoral Engagement |
|--|---|---|
| Food promotion | <ul style="list-style-type: none"> • Mandatory policies and governance need to be progressed for food marketing and advertising. • Regulatory framework involve multisectoral engagement for governance (e.g. control of billboard advertising by the local governments, broadcast TV advertisement approval by the Film Censorship Board, a Directive order to restrict in-school marketing to children) | <ul style="list-style-type: none"> • MoH; Communications & Multimedia; Ministry of Home Affairs; Housing and Local Government; Education |
| Strategy to reduce/ prevent obesity | <ul style="list-style-type: none"> • Reduce exposure to unhealthy food marketing and advertising to children | |

1a. MULTISECTORAL Action of Government

| Food-EPI Policy Domains* | RECOMMENDATIONS | MultiSectoral Engagement |
|--------------------------|---|---|
| Food prices | <ul style="list-style-type: none">• Increase duty excise of SSB to 20%.• Expand duty and excise to other food and beverage [premix, cordials, condensed milk, etc] products high in sugar.• Prioritize local agriculture to enable self-sufficiency, consumer access and affordability of fruits and vegetables.• Establish supply chain for fruit and vegetables to minimize cost bearing factors and taxes to ensure consumer affordability.• Provide subsidies to target fruit and vegetable consumption for B40 households. | <ul style="list-style-type: none">• MoH• Min of Finance• Domestic Trade and Consumer Affairs• Agriculture and Food Industry; |

**Strategy to reduce/
prevent obesity**

- **Discourage purchase of ‘sugary’ foods and beverages.**
- **Increase Access and Affordability of Fruits and Vegetables.**

1a. MULTISECTORAL Action of Government

| Food-EPI Policy Domains* | RECOMMENDATIONS | MultiSectoral Engagement |
|---------------------------|---|---|
| Food retail | <ul style="list-style-type: none"> • Stricter policies and zoning laws to support healthy Food Environment <ul style="list-style-type: none"> • 24-hr eateries • fast food outlets • license approval • Discourage discounts and bulk deals in purchasing unhealthy foods and beverages. [esp. online merchants] • Encourage discounts for healthy foods [e.g. Nutrihub at Aeon] | <ul style="list-style-type: none"> • Domestic Trade and Consumer Affairs; • Housing and Local Government; • City councils (Majlis Perbandaran) |
| Food trade and investment | <ul style="list-style-type: none"> • Trade agreements to align to population nutrition health agenda to minimise negative impacts (e.g. control unhealthy food imports) and maximise positive impacts (reduce tax tariff on healthy foods). | International Trade and Industry; Prime Minister's Department; MoH; Finance |

Strategy to reduce/ prevent obesity

- **Discourage access to cheap unhealthy foods.**
- **Discourage purchase of 'sugary' foods and beverages.**

1b. Public-Private Partnerships (PPP)

- The *Montevideo Roadmap 2018-2030* leveraged roles and contributions of PPPs in combatting obesity and NCDs [WHO 2017]
 - Scaling Up Nutrition (SUN) initiatives to tackle malnutrition.
- Eleventh Malaysia Plan 2016-2020 through the *Strategy of Improving Wellbeing for All* encouraged PPP involvement in health (EPU 2015).
- Food industry partnered government to support SDGs, through corporate social responsibility (CSR) activities
- Food corporations in public health lead to ↑ risk for conflicts of interest (Lie & Granheim 2018; Lie 2020):
 - [i] **Commercial determinants of health (CDH)** are '*strategies and approaches used by the private sector to promote products and choices that are detrimental to health*' (Kickbusch et al. 2016).
 - [ii] **Corporate Political Activity (CPA)** where industry attempts to shape policy by influencing decision making of stakeholders in government, academia and civil society.
 - [iii] **Corporate Social Responsibility (CSR)** became a structured component of listed companies in Malaysia for mandatory annual reporting since 2007, and with tax incentives for implementation.

Would PPPs work with regards AOR?

1b. Public-Private Partnerships (PPP)

| Domains of Food Environment | RECOMMENDATIONS | Positive PPP engagement |
|-----------------------------------|--|--|
| <p>Nutrition labelling</p> | <p>Commit to long term goals for achieving public health goals for obesity reduction/prevention.</p> <p>Set mechanisms to control the commercial determinant of health (CDH).</p> <p>Provide publicly available disclosure on corporate political activities (CPAs).</p> | <ul style="list-style-type: none"> • Compliance to nutrient targets consistent with WHO nutrient profiling systems and MoH direction. • Participate in FOPL and MyFCD • Nutrition claims for healthier products follow HCL and/or WHO criteria |

Strategy to reduce/prevent obesity

- Reformulate for less Calories, less Sugar, less Fat products.

1b. Public-Private Partnerships (PPP)

| Domains of Food Environment | RECOMMENDATIONS | Positive PPP engagement |
|--|--|--|
| <p>Promotion practices</p> | <ul style="list-style-type: none"> • Set mandatory governance with monitoring for promotion in all settings (including in-store, online, schools, playgrounds). • Guidelines for rewards programmes should be set. • Disallow CSR activities linking to strong branding on product promotions. • Encourage promotion of 'healthier products' (align to WHO nutrient profiling) | <ul style="list-style-type: none"> • Responsible marketing policies for all children's settings • Applicable to children up to 18yrs old • Time based restriction of unhealthy food advertising on children's TV channels • Accept children audience viewership of 15-25% • Application of WHO nutrient profiling systems |
| <p>Strategy to reduce/prevent obesity</p> | <ul style="list-style-type: none"> • Remove unhealthy food marketing to children of all ages | |

1b. Public-Private Partnerships (PPP)

| Domains of Food Environment | RECOMMENDATIONS | Positive PPP engagement |
|-----------------------------|--|--|
| Product accessibility | Control CDH linked to ultra-processed foods and beverages which are high in fat, sodium and/or sugar. | <ul style="list-style-type: none"> Increase availability of healthier food products as per WHO nutrient profiling. |
| Corporate strategy | Encourage portfolio of healthy food and beverage products target at least 25% or more of Core business. | <ul style="list-style-type: none"> Reference national and international recommendations (WHO obesity-NCD agenda, SDGs) to set company's nutrition targets and plans. |
| Product formulation | <ul style="list-style-type: none"> Reformulate ultra-processed food products as per sugar, fat, and/or sodium criteria to meet WHO nutrient profile models. Formulate healthy food and beverage products to at least 25% or more of Core business Request government assistance to help SMEs to reformulate unhealthy foods and beverages | <ul style="list-style-type: none"> Reformulate or reduce portion size of products to align with Healthy Choice Logo and WHO nutrient profiling. Introduction of healthy food and beverages in portfolio. Build capacity and skills of SME Corp through support of Ministries of Rural Devnt and Finance |

**Strategy to reduce/
prevent obesity**

• Increase availability of foods and beverages with less Calories, less Sugar, less Fat .



2 – ECONOMIC ACTIVITIES OF GOVERNMENT



2a. Fiscal Policies of Government

Government first imposed tax of RM0.40 per litre on sugar-sweetened beverages (SSB) :

- a one-litre SSB would cost RM0.40 more
- a 250-ml bottle would cost RM0.10 extra.
- applied to all ready-to-drink SSBs containing any form of sugar [total sugar content, whether natural or added]
 - Non-alcoholic beverages sugar exceeding 5gm/100ml
 - Milk-based flavored drinks sugar exceeding 7g/100ml
 - fruit and vegetable juices exceeding 12g/100ml

Taxing SSBs should work towards reducing sugar intake of the public.

- But Malaysia ranked 10th of 161 nations for sugar consumption per capita, despite sugar tax of 2019. ¹
- Annual per capita sugar consumption is 58.2kg (2018-2020) and projected to increase to 61.1kg by 2030

A systematic review showed low tax rates did not significantly impact weight outcomes.²

- Price elasticity modeling for SSBs (elasticity of -1.21) supported raising prices by 20% to reduce SSB consumption by 24%.

A Vietnam Montecarlo simulation study found a 5% price tax increase had little impact **but** going to 20% would impact overweight and obesity rates (↓12.7% and 12.4% respectively).³

- Greatest reduction would benefit the overweight and obesity class I.
- Predicted to save 27 million USD for direct medical cost.

1. OECD-FAO 2021 ; 2. Powell et al. 2013; 3. Nguyen et al. 2023

2a. Fiscal Policies of Government

| Food item | EVOLUTIONARY STEPS | Achieving Adequacy for AOR Goal | | | | | | | | | | | | | | | | | | |
|--------------------|---|---------------------------------|----------------------|------|----|------|----|------|----|------|----|------|----|------|----|------|----|---------------|-----|--|
| <h1>Sugar Tax</h1> | <p>2014-2017- Tax proposal involving intersectoral collaboration (Health, Royal Customs, Department Finance, International)</p> <table border="1"> <caption>Sugar Tax Rates (sen/Litre)</caption> <thead> <tr> <th>Year</th> <th>Tax Rate (sen/Litre)</th> </tr> </thead> <tbody> <tr><td>2019</td><td>40</td></tr> <tr><td>2020</td><td>40</td></tr> <tr><td>2021</td><td>40</td></tr> <tr><td>2022</td><td>40</td></tr> <tr><td>2023</td><td>40</td></tr> <tr><td>2024</td><td>50</td></tr> <tr><td>2025</td><td>90</td></tr> <tr><td>2025 (Target)</td><td>100</td></tr> </tbody> </table> | Year | Tax Rate (sen/Litre) | 2019 | 40 | 2020 | 40 | 2021 | 40 | 2022 | 40 | 2023 | 40 | 2024 | 50 | 2025 | 90 | 2025 (Target) | 100 | <ul style="list-style-type: none"> • Low tax rates below 20% do not significantly impact weight outcomes. • At least RM1 per litre tax rate would be in line with international benchmarks and the available evidence on the effectiveness of SSB taxes. • Sugar intake excessive in Malaysians. • Growing SSB intake patterns in adolescents. • Revenue is directed for health expenditure [SLGT-2, RRT] rather than disease prevention such as AOR. |
| Year | Tax Rate (sen/Litre) | | | | | | | | | | | | | | | | | | | |
| 2019 | 40 | | | | | | | | | | | | | | | | | | | |
| 2020 | 40 | | | | | | | | | | | | | | | | | | | |
| 2021 | 40 | | | | | | | | | | | | | | | | | | | |
| 2022 | 40 | | | | | | | | | | | | | | | | | | | |
| 2023 | 40 | | | | | | | | | | | | | | | | | | | |
| 2024 | 50 | | | | | | | | | | | | | | | | | | | |
| 2025 | 90 | | | | | | | | | | | | | | | | | | | |
| 2025 (Target) | 100 | | | | | | | | | | | | | | | | | | | |

Strategy to reduce/
prevent obesity

- A flat 20% SSB price tax increase desirable.
- Revenue should be directed to SMART behavior change management.

2b. Enabling healthy food access

The Ministry of Agriculture and Food Security (KPKM), recognizes one issue of food security in Malaysia is the rising childhood obesity trend.

KPKM collaborates with the Ministry of Domestic Trade and Consumer Affairs (KPDNHEP) and the Ministry of Agriculture and Food Industry (MAFI) to lead 2 clusters related to healthy food access.

- The **Accessibility Cluster (KBC)** -accessibility to food which is the ability to obtain healthy, safe food that meets the needs of the lifestyle either through purchase or subsistence economy.
- The **Availability Cluster (KTS)** - food supply determined by local production, buffer stocks and even trade.

How does Accessibility and Availability work?

Subsidies related to food security are quantified as financial aid by the government and given:

Do subsidies/ price control / schemes benefit (enabling access to healthy foods) AOR?

Price control through KPDNHEP targets price and supply of food or otherwise are under control- rice, chicken, eggs, milk

Cashless subsidy through *Sumbangan Asas Rahmah* (SARa) scheme:

- *Bakul Rahmah* (RM100/mo X6mo...NOW RM1200) to B40 households for rice, condensed milk, rice vermicelli and egg
- *Menu Rahmah* offering a plated meal for RM5

2b. Enabling Healthy Food Access

| Food items | IS THIS HEALTHY FOOD? | Recommendation |
|-------------------------------------|---|---|
| Sugar | NO Price control under the Control of Supply Act (1961) for refined white sugar. | Abolition of price control for sugar required. Consider limited food stamps for B40 group. Prime minister calls to review sugar subsidies on October 1 st 2023 saying the money can be channeled into health projects, especially treating diabetes. Budget 2025- subsidy to sugar manufacturers still not removed. |
| Cooking oil | NO <ul style="list-style-type: none"> Subsidy reached RM1.9 billion. | Abolition of price control for cooking oil required. Consider limited food stamps for B40 group. |
| Poultry and Eggs | YES Began in 2022 and stopped Nov 2023 Subsidy costed the government RM 3.8 billion | Subsidies for B40 households are required for both chicken and eggs. |
| Wheat Flour | NO | Abolition of price control for refined wheat flour is required. Consider limited food stamps for B40 groups. Consider subsidies of wholewheat flour to encourage replacing refined flour. |
| Sumbangan Asas Rahmah (SARa) | HIGH RISK FOR UPFs <ul style="list-style-type: none"> RM100 cash per month for groceries | Consider food stamps to differentiate essential food items [fruit and vegetables, dairy, rice]. |

Strategy to reduce/ prevent obesity

- **Subsidize B40 with food stamps specific to healthy foods [vegetables, fruit, chicken/ fish, wholegrain bread/flour]**
- **Abolish price controls for sugar and cooking oil**



3 – POLICIES AND PROGRAMS INFLUENCING OBESOGENIC ENVIRONMENT



3a. Marketing and advertising of unhealthy foods to children

| Policy Initiative 1 | Agency | Is this enough to meet AOR? | Recommendations |
|--|------------|---|--|
| Guideline on the Advertising and Nutrition Information Labelling of Fast Foods (2008) | BKKM (MoH) | <ul style="list-style-type: none"> Regulatory status is voluntary Age limit is insufficient to reduce exposure in | <ul style="list-style-type: none"> Change policy to mandatory status <ul style="list-style-type: none"> Apply to all media platforms. Should be extended to children until the age of 18 years old. Fast food advertising on TV should be restricted during family program/ not |

Strategy to reduce/ prevent obesity

Remove unhealthy food marketing and advertising to children of all ages

3a. Policies on marketing of unhealthy foods to children

| Policy Initiative 2 | Agency | Is this enough to meet AOR? | Recommendations |
|---|---|--|---|
| <p>Responsible Advertising to Children Pledge or The Malaysia Pledge</p> | <p>Malaysian Food and Beverage Industry</p> | <ul style="list-style-type: none"> Regulatory status is Voluntary Age limit is insufficient to reduce exposure in adolescents. | <ul style="list-style-type: none"> Change policy to mandatory status. <ul style="list-style-type: none"> Apply to all media platforms. Restrict advertising during peak viewing time (PVT) to 15-25 percent as per greater audience viewership of children. Apply WHO nutrient profiling system for criteria to determine 'permitted' and 'non-permitted' foods. Time based restriction on children's programming hours. Incentivize advertising for healthier 'permitted' |

Strategy to reduce/ prevent obesity

Remove unhealthy food marketing and advertising to children of all ages

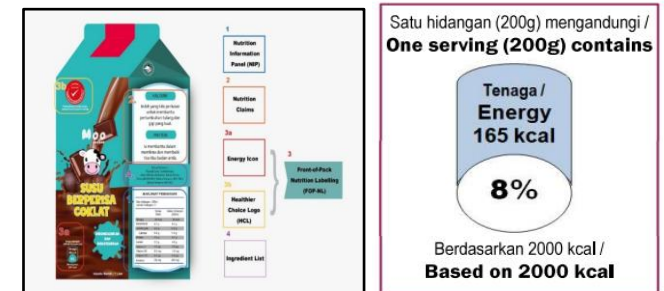
3b. Nutritional labelling and FOP-NL

- Systematic reviews positively identify **nutrition labelling** and **interpretative labels** to empower consumers to choose more nutritious foods, although the **adoption, accuracy** and **compliance** can be problematic.
- **Nutrition Information Panel (NIP)** is an important tool to help reduce the increasing incidence of obesity and chronic non-communicable diseases (NCDs) [WHO 2013].
 - Promotion of nutrition labelling for all pre-packaged foods as a proposed policy measure was highlighted in the **NCD Action Plan 2013 – 2020** in Malaysia to assist consumers in adopting healthy dietary practices.
 - The **Malaysian Dietary Guidelines (2020)** has a key message that nutrition information on food labels should aim to assist consumers to make informed healthier food choices.
- **Mandatory disclosure on the NIP of packaged food greatly impacts food processors and retailers, encouraging reformulation.**
 - This position is clear for declaration for energy, carbohydrate, protein, fat, and sodium for all prepackaged food and beverages and total sugars for ready-to-drink beverages.
 - BUT failing to separate 'added sugar' in this list is missing the 'cherry on the cake'

Interpretative label [FOPL] is another tool.

Can be problematical such as UK's traffic lights scheme:

- does not account for the amounts of food eaten, relative to the diet.
- unintended consequences. For eg, salmon negatively labelled as a high-fat food, when it is in fact an important source of essential fatty acids such as health-promoting long-chain polyunsaturated omega-3 fatty acids.



3b. Nutritional labelling

| NIP | Food –EPI rating | BIA-Obesity Evaluation | Recommendations |
|---|--|---|---|
| <p>Nutrition Information Panel (NIP) (MOH, 1985) <u>Food Regulation 1985</u></p> | <p>Ranked as medium implementation (highest score amongst all FE policies) by Experts for :</p> <ul style="list-style-type: none"> ingredient list and nutrient declarations regulatory systems for health and nutrition claims. | <p>Most companies (30/33) disclosed commitments related to nutrition labelling with some companies scoring highest for publishing nutrition information online (16/33).</p> <p>Approximately half of the companies included total/added sugars (13/28) or trans-fat (13/24) content</p> | <p>Provide for declaration of ‘added sugars’ in food and beverage products.</p> <p>Note- <i>Total sugars include both added sugars and natural sugars. Added sugars are the ones we need consumers to limit.</i></p> <ol style="list-style-type: none"> Move to comprehensive nutrition labelling online and on pack (sodium, trans-fat, added sugars) and QUIDs Encourage industry to participate in government-led initiatives for Malaysian Food Composition Database Permit only healthy product to carry nutrition claims. Encourage QSR and retailer sector to have nutrition displayed using the same size fonts as for the price tags on the menu board for |
| <p>Nutrition claims permitted (Ministry of Health, 2005).</p> | <p>Food labelling was ‘fairly comprehensive’ and ‘almost in line with international standards’.</p> | | |

**Strategy to reduce/
prevent obesity**

- **Inform for less Calories, less Sugar, less Fat .**

3b. FOP-NL

| Front-of-Pack Nutrition Labelling (FOP-NL) | Food –EPI rating | BIA-Obesity Evaluation | Recommendation |
|---|---|---|---|
| [i] Energy Icon Ministry of Health Malaysia (2012) | Experts rated FOPL application to menu board labelling at <i>Quick service restaurants</i> as low implementation in Malaysia. | Displaying energy on FOP labelling (17/28). | (1) Encourage industry to participate in government-led initiatives for FOP labelling programmes; |
| [ii] Healthier Choice Logo, 20th April 2017 (MOH, 2019b) <i>If product meets the nutrient criteria specified by the Ministry of</i> | | Approximately half of the companies used Healthier Choice Logo or their own FOP formats (14/28) such as numeric information of key nutrients. | (2) Commit at least 25% or more of products as ‘healthier’ products to carry Healthier Choice Logo. |

**Strategy to reduce/
prevent obesity**

- Inform for less Calories, less Sugar, less Fat .

3c. The Malaysian Healthy Plate [*Suku Suku Separuh*, SSSp]

The **Malaysian Healthy Plate** was launched in 2017 by the Min of Health and nicknamed 'Suku Suku Separuh' (SSSp).

- Balanced meal with healthier food choices = fruits and vegetables (half plate) + grains preferably wholegrain (quarter plate) + protein-based food (quarter plate) . It is also recommended to drink plain water or unsweetened beverages , with every meal.
- Portion control and adopting low fat food preparation techniques = desired behavior changes
- Key Recommendation 2 under Key Message 1 of Malaysian Dietary Guideline 2020 for a single meal (MDG 2020).

Uptake of SSSp according to NHMS 2019 dataset analyses [Cheong et al, 2023, Tan et al 2023; Hasnan et al 2023]:

- Poor awareness
- Expensive for low income groups
- Only chronic disease people pay attention

Yet some preliminary data indicates :

- SSSp concept understanding promotes adequacy of FnV intake
- Adequacy of fruit and vegetable intake by obese individuals (n=27) as per SSSp can lead to significant BMI reduction (P=0.001) (Muthuvadivelu et al 2023)



3c.The Malaysian Healthy Plate [*Suku Suku Separuh, SSSp*]

| Evaluation of SSSp | Indicators | Recommendation |
|-------------------------------------|---|--|
| Public uptake from NHMS 2019 | <ul style="list-style-type: none"> Lack of awareness in the majority Despite awareness- income, age and gender influenced the poor utilization of the food guide. achieving adequacy of intake of fruit and vegetables for reducing obesity. | <ul style="list-style-type: none"> Policymakers, healthcare professionals, and nutrition educators need to engage collaboratively in promoting the concept of SSP Integration of SSSp into public health education and promotional programmes should be long term and should be coordinated, consistent and sustainable |
| Implementation | Target groups | Outcomes (participant data, SSSp adequacy) should be Specific, Measurable, Achievable, Relevant, and Time-Bound (SMART). <ul style="list-style-type: none"> across all age groups support cultural diversity centered at the community level; In workplaces, hawker outlets and universities. |
| Chronic disease | BMI reduction | Access to counseling programmes incorporating SSSp at outpatient settings for |

Strategy to reduce/ prevent obesity

- Promote SSSp through SMART outcome-based programmes.**
- Increase Access and Affordability of Fruits and Vegetables.**

3d. Physical Environment and Activity

Government capacity to effectively combat the obesity epidemic, apart from nutritional policies and guidelines, is also through promoting physical activity in various settings via strategic policy frameworks, public education campaigns, and collaborative efforts from various sectors.

Exemplars:

- **Finland's** physical education curriculum in schools ensures **regular physical activity** is part of education [Yli-Piipari, S., 2014].
- **Netherlands** and **Denmark** have extensive cycling infrastructure and pedestrian-friendly city planning, encouraging citizens to use active modes of transportation like cycling and walking [Nello-Deakin, S. & Nikolaeva 2008].
- **Singapore** developed a comprehensive Park Connector Network, linking parks and public spaces to create a seamless network for walking, running, and cycling [National Park Board].

Multisectoral participation is evident in Malaysia:

- Ministry of Health through health promotion encouraging physical activity for the public, work settings and in schools
 - The National Strategic Plan for Active Living (NASPAL 2016-2025).
- Ministry of Education provides constructive programs [SEGAK and One Sport Policy] within schools.
 - "One Student One Sport" policy from 2011 mandates students' participation in at least one type of sports throughout the year, aiming to cultivate a sports culture and encourage a healthy, fit, and competitive lifestyle.
- Ministry of Urban Wellbeing; Housing and Local Government and Local Authorities target urban planning
- Ministry of Finance incentivizes through tax relief for purchase of sports equipment

3d.1. Multisectoral Policies Promoting Physical Activity

| Policies | Indicators for Promoting PA | Recommendation |
|---|--|--|
| Reviewed Nutrition Policy Options to Combat Obesity in Malaysia 2022-2030 replaced Policy Options to Combat Obesity in Malaysia 2016-2025 | <p>The new policy removed all components of physical activity and exercise. The old policy allowed for comprehensive indicators for promoting PA which aligned with AOR in population nutrition:</p> <ul style="list-style-type: none"> • Education and School Settings • Workplace Engagement • Health and Weight Management | <p>Multisectoral collaborations and public-private partnership needed for implementation of suggested programmes/ policies</p> <p>Beyond urban setting, need to reach to rural settings.</p> <p>Change policy options to mandatory status</p> <p>Implementation outcomes (weight</p> |
| National Plan of Action for Nutrition of Malaysia | Emphasizes the promotion of healthy eating and active living as enabling strategies to achieve its goals | |
| National Physical Activity Guidelines | Health promotion | |

Strategy to reduce/ prevent obesity

- Target healthy BMI status for population

3d.1. Multisectoral Policies Promoting Physical Activity

| Stakeholder Ministries/ City Councils | Indicators for Promoting PA | Recommendations |
|---------------------------------------|---|---|
| Ministry of Education | <p>School based surveillance / monitoring/ prevalence</p> <p>School based programme to increase physical activity and wellness of schoolchildren through exercise, sports and education</p> | <p>Introduce intervention programs for overweight/ obese schoolchildren</p> <p>Implementation outcomes (weight status) should be Specific, Measurable, Achievable, Relevant, and Time-Bound.</p> |
| Strategy to reduce/ prevent obesity | <ul style="list-style-type: none"> • Target healthy BMI status for population | |

3d.1. Multisectoral Policies Promoting Physical Activity

| Stakeholder Ministries/ City Councils | Indicators for Promoting PA | Recommendations |
|---|---|---|
| Ministry of Urban Wellbeing, Housing and Local Government and Local Authorities | Urban Planning for active population, health and wellness | Implementation outcomes (use of green space by public etc) should be Specific, Measurable, Achievable, Relevant, and Time-Bound. |

Strategy to reduce/
prevent obesity

- Target healthy BMI status for population

3d.1. Multisectoral Policies Promoting Physical Activity

| Stakeholder Ministries/ City Councils | Areas of action | Indicators for Promoting PA | Recommendation |
|---|--|---|---|
| Ministry of Finance | Tax reliefs for the purchase of sports equipment | To encourage involvement in sports and exercise | Implementation outcomes (equipment purchase) should be Specific, Measurable, Achievable, Relevant, and Time-Bound. |

Strategy to reduce/
prevent obesity

- Target healthy BMI status for population

3d.2 Programmes for Promoting Physical Activity

| Programmes | Scope | Recommendations |
|---|---|--|
| FIT Malaysia Launched in 2014 | <p>Enhance the health of Malaysians through active involvement in sports, exercise and physical activities</p> <ul style="list-style-type: none"> Organised separately for each state. Individual events scheduled throughout the year. Activities include marathons for various distances, ride, walking | <p>Implementation outcomes (frequency of participation) should be Specific, Measurable, Achievable, Relevant, and Time-Bound.</p> |
| Hari Sukan Negara Introduced in 2015 | <ul style="list-style-type: none"> Held annually on the second Saturday of October with National Sports Month (NSM) plan for October. Aims to promote a healthy lifestyle among the Malaysian population A range of activities is organized annually to encourage individuals to adopt a healthier lifestyle | <p>Dedicated PA programme required that is sustainable at community level.</p> |

**Strategy to reduce/
prevent obesity**

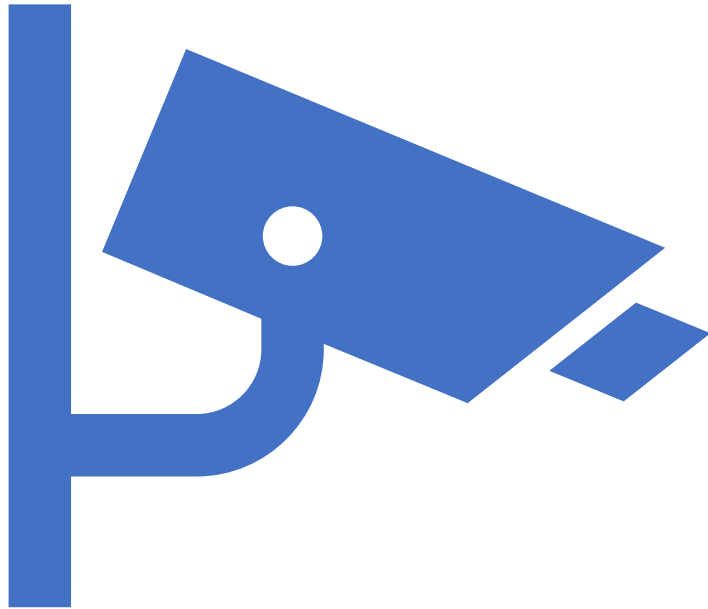
- Target healthy BMI status for population**

3d.2 Programmes for Promoting Physical Activity

| Programmes | Scope | Recommendation |
|---|--|---|
| KOmuniti Sihat PEmbina Negara (or KOSPEN) Launched in 2014 | <ul style="list-style-type: none"> Aims to empower communities to adopt and practice healthy lifestyles to prevent and control NCDs) . Active living is one of 5 main scopes (alongside healthy diet, smoke-free living, weight management, and NCD risk factor screening) . | Implementation outcomes (participant data) should be Specific, Measurable, Achievable, Relevant, and Time-Bound. |
| Young Doctor Club | School based Health promotion / Health Education activities Cocurricular activities for schoolchildren. | |
| Program Siswa Sihat (PROSIS) | University/ tertiary education setting -Health promotion / Health Education activities. | |

Strategy to reduce/
prevent obesity

- **Target healthy BMI status for population**



4 – Monitoring & Surveillance

4. Monitoring and Surveillance

Monitoring and surveillance of obesity prevention programs require assessing their effectiveness, identifying trends, and making data-driven decisions.

- These efforts provide critical information on the impact of interventions, reveal disparities, and offer early warnings of emerging issues.

Exemplars

- **Singapore**- A mobile app-based surveillance program was launched by the Health Promotion Board (HPB). The **Interactive Diet and Activity Tracker (iDAT)** provides real-time data feedback about diet and physical activity, which can be used by researchers and health professionals to understand individual behaviours and guide personalized interventions for obesity prevention. (Foo et al. 2013).
- **Thailand**- The Thai Health Promotion Foundation an autonomous state agency provides both financial and technical support (communication strategy and campaigning) to governmental and non-governmental partners to reach out to targeted government and stakeholders, as well as provide ongoing monitoring and evaluation. Coordinated strategizing (knowledge creation, social mobilization and advocacy) can be observed. (Osornprasop et al. 2018)

What is going on in Malaysia related to AOR?

Three critical areas related to government action require monitoring and surveillance :

- *Monitoring systems implemented by the government are in place to regularly monitor food environments (especially for food composition for nutrients of concern, food promotion to children, and nutritional quality of food in schools and other public sector settings), against codes/ guidelines/ standards/ targets.*
- *There is regular monitoring of adult and childhood nutrition status and population intakes against specified intake targets or recommended daily intake levels.*
- *There is regular monitoring of adult and childhood overweight and obesity prevalence using anthropometric measurements.*

4a. Monitoring and surveillance- National Surveys

| Survey Activities | Monitoring indicators for AOR | RECOMMENDATIONS |
|--|---|--|
| The National Health and Morbidity Survey (NHMS) | <ul style="list-style-type: none"> • High prevalence of overweight and obesity in adults and children below 18 (BMI for age $>+2SD$). • Low consumption of fruit and vegetable intake. • High consumption of SSBs. | Provide health intervention for obese. |
| Malaysian Adult Nutrition Survey (MANS) from 2003 | <ul style="list-style-type: none"> • MANS conducted once in 10 years. • Sugar intake not reported. • Underreporting for calorie and fat intake observed. | <ul style="list-style-type: none"> • Ensure MANS is conducted once in 5-years. • Capacity building of enumerators to ensure quality survey data collection |

Strategy to reduce/ prevent obesity

- **Target healthy BMI status for population.**
- **Target timely and quality data collection to enable identifying nutrition goals for intervention.**

4a. Monitoring and surveillance- National Surveys

| Survey Activities | Monitoring indicators for AOR | RECOMMENDATIONS |
|---|--|--|
| Global School-Based Student Health Survey 2012 (GSHS) | Most students have inadequate consumption of fruits and vegetables But high consumption of SSBs and fast foods. | Conduct healthy food education and promotion. |
| NHMS Adolescents Health Survey 2022 | <ul style="list-style-type: none"> • Overweight and obesity has increased . • Most students have inadequate consumption of fruits and vegetables. • Calorie and macronutrient intake data | <ul style="list-style-type: none"> • Conduct healthy food education and promotion. • Ensure nutrient data consumption reporting is optimal |

**Strategy to reduce/
prevent obesity**

- **Target healthy BMI status for population.**
- **Target timely and quality data collection to enable identifying nutrition goals for intervention.**

4b. Monitoring and surveillance- Schools Food Environment

| Policy | Monitoring commitments | Recommendation |
|--|--|---|
| <p>(Garis Panduan Pemakanan Sihat Di Sekolah) guidelines on healthy food intake in school</p> | <ul style="list-style-type: none"> School teachers and primary care clinics nearby to manage and monitor students with overweight or obesity problems | <p>Involvement and collaboration between the Ministry of Health and Ministry of Education required to advocate and monitor the implementation of these guidelines in schools.</p> <p>Student health record should be maintained with follow up monitoring and feedback should be given to parents for action.</p> <p>Implementation outcomes (BMI targets) should be Specific, Measurable, Achievable, Relevant</p> |

Strategy to reduce/ prevent obesity

- Ensure Access and Affordability of healthy foods and beverages to schoolchildren.**
- Target healthy BMI status for schoolchildren**

4b. Monitoring and surveillance- Schools Food Environment

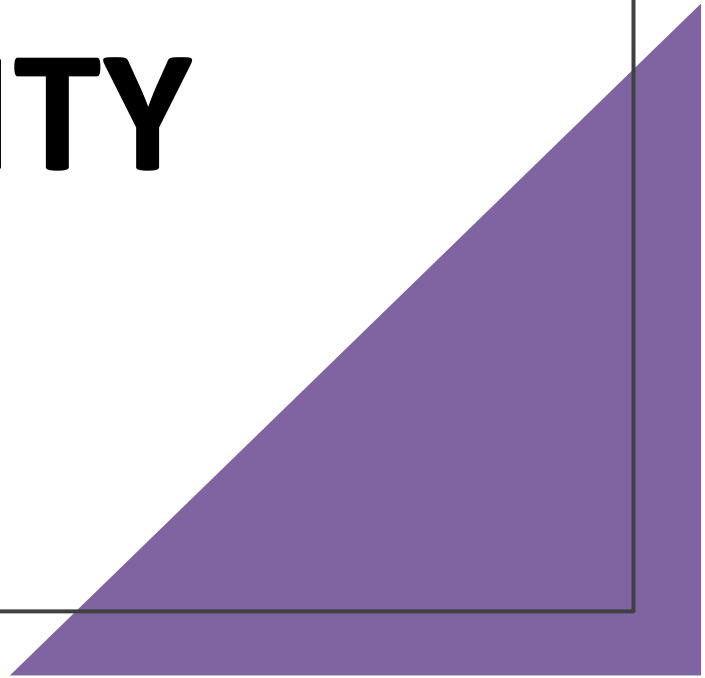
| Policy | Monitoring indicator | Recommendation |
|---|--|---|
| Guidelines on the prohibition of selling foods and drinks outside school | Applies to outside school within 40 m radius (law) | <p>Local authority council need to undertake continuous monitoring of sale of prohibited foods and drinks.</p> <p>The 2021 guideline need to be reinforced.</p> <p>Food canteen operators, food ko-operasi should not sell prohibited unhealthy foods.</p> <p>Implementation outcomes (unhealthy food sales) should be Specific, Measurable, Achievable, Relevant, and Time-Bound</p> |

**Strategy to reduce/
prevent obesity**

- **Discourage sale of unhealthy foods and beverages to schoolchildren.**



5 – EQUITY & INCLUSIVITY



5. Equity and Inclusivity

- The National Health and Morbidity Survey (NHMS) 2019 reported households with low SES are more likely to have members to be overweight or obese.
 - **For adults**, being female, Indian ethnicity, married, from urban area, in the middle and older age groups, without formal education or lower education status, government employee, and homemaker were more likely to be either overweight, obese or abdominally obese.
 - **For children and adolescents** aged between 5 and 17 years of age, males and those from urban areas were more likely to be overweight and obese.
 - Chinese and Indian children and adolescents were mostly overweight and obese, respectively.
 - Overweight was common among children and adolescents from B40 while obesity was prevalent among those from T20 income groups .

How will AOR deal with socioeconomic inequalities ?

5a. Equity

| Addressing Equity | Recommendation | Agency |
|---|--|--|
| Some inequalities can be addressed to ensure equitable exposure to obesity reduction/ prevention programmes . | <ul style="list-style-type: none"> Access to health services, healthy food and physical activity. | <ul style="list-style-type: none"> Ministry of Health Ministry of Youth and Sports Ministry of Agriculture Ministry of Finance Ministry of Women, Family and Community Development Ministry of Local Government Development Ministry of Education |
| Understanding socioeconomic inequalities | <ul style="list-style-type: none"> Inform planning | <ul style="list-style-type: none"> Ministry of Health Ministry of Women, Family and Community Development |
| <p>Strategy to reduce/prevent obesity Access to AOR programmes be equitable</p> | | |
| Dealing with health inequalities are contingent to policies on housing, welfare and safety nets, and labor market | <ul style="list-style-type: none"> Improving access to healthy foods through food subsidies | <ul style="list-style-type: none"> Ministry of Health Ministry of Finance Ministry of Agriculture Ministry of Women, Family and Community Development Ministry of Local Government Development Ministry of Rural Development |

5b. Inclusivity

| Addressing Inclusivity | Recommendation | Agency |
|---|--|---|
| <p>Principle of 'proportionate universalism'</p> <p>This approach considers people all over the SES gradient, and lowers the risk of broadening the socioeconomic inequalities and obesity linked health issues and economic burden.</p> | <ul style="list-style-type: none"> Obesity reduction/ prevention programmes to target all SES groups but in a proportional manner | <ul style="list-style-type: none"> Ministry of Health Ministry of Finance Ministry of Women, Family and Community Development Ministry of Youth and Sports Ministry of Education |
| <p>Understanding the differences in intervention responses, the barriers as well as the drivers of behavior change, particularly to healthy eating and increased physical activity across</p> | <ul style="list-style-type: none"> Ensure access to health services and multidisciplinary care is inclusive. | <ul style="list-style-type: none"> Ministry of Health Ministry of Finance Ministry of Youth and Sports |

Strategy to reduce/ prevent obesity

Access to AOR programmes be equitable and inclusive.

SUMMARY OF STRATEGIES FOR AOR

| Areas | Less HFSS | BMI | Unhealthy Food Marketing to children | Sugar | FnV Access & Affordability | Unhealthy Food access | Promotion | SMART | Regular Quality Data | Inclusivity & Equity |
|----------------------------------|-----------|-----|--------------------------------------|-------|----------------------------|-----------------------|-----------|-------|----------------------|----------------------|
| Multisectoral collaboration | ✓ | | ✓ | ✓ | ✓ | ✓ | | | | |
| Intersectoral partnerships | ✓ | | ✓ | | | | | | | |
| Civil society participation | | | | | | | ✓ | | ✓ | |
| Trade & FDI | ✓ | | | | | ✓ | | | | |
| Fiscal policies | | | | ✓ | | | | | | |
| Subsidies, Price control Schemes | | | | ✓ | ✓ | ✓ | | ✓ | | |
| Fast food marketing | | | ✓ | | | ✓ | | | | |
| Food Advertising | ✓ | | ✓ | | | ✓ | | | | |
| NIP | ✓ | | | ✓ | | ✓ | ✓ | | | |
| FOP-NL | ✓ | | | ✓ | | ✓ | ✓ | | | |
| Malaysia Healthy Plate | | ✓ | | | ✓ | | ✓ | ✓ | ✓ | ✓ |
| Food system/ Production | | | | | ✓ | | | | | ✓ |
| Food system/ Distribution | | | | | ✓ | ✓ | | | | ✓ |
| PA/ Policies | | ✓ | | | | | ✓ | ✓ | ✓ | ✓ |
| PA/ Programmes | | ✓ | | | | | ✓ | ✓ | ✓ | ✓ |
| Monitoring & Evaluation | | ✓ | | | ✓ | ✓ | | ✓ | ✓ | |





**Strategies for the
Prevention of Obesity
- Malaysia (2024)**



THANK YOU