

KHAZANAH  
RESEARCH  
INSTITUTE

# The State of Food Environment in Malaysia

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SEA-PHN Network Webinar on *Improving Food Environments in Southeast Asia Countries: Where Are We Heading?*

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# KHAZANAH RESEARCH INSTITUTE

## About us

We carry out research on pressing issues of the nation and, based on that research, recommend policies to improve the well-being of Malaysians.

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- rigorous impartial analysis founded on data;
- convening meetings and forums to illuminate understanding of the issues; and
- being advocates of the knowledge we acquire.

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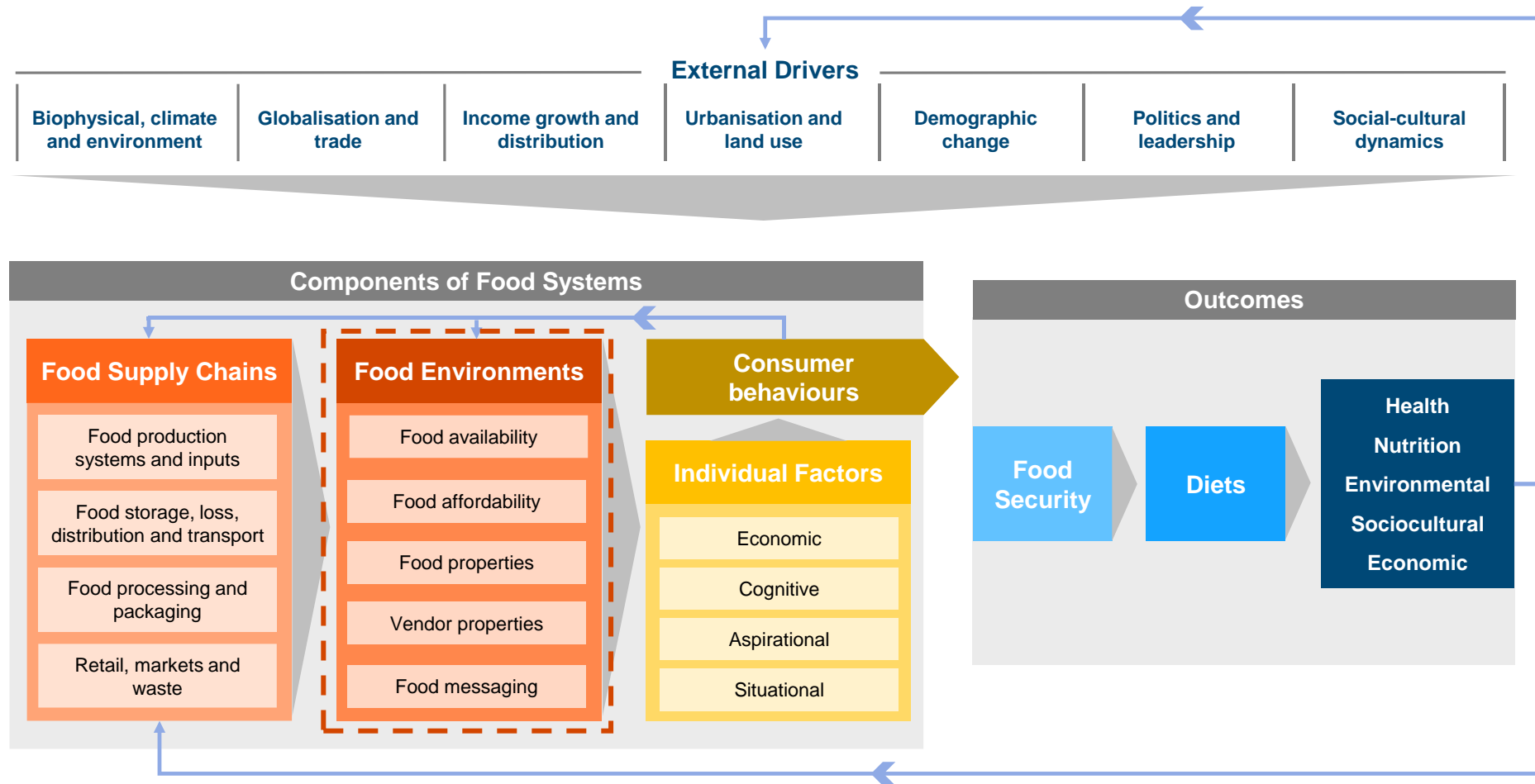
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# 1. The State of Food Environment in Malaysia

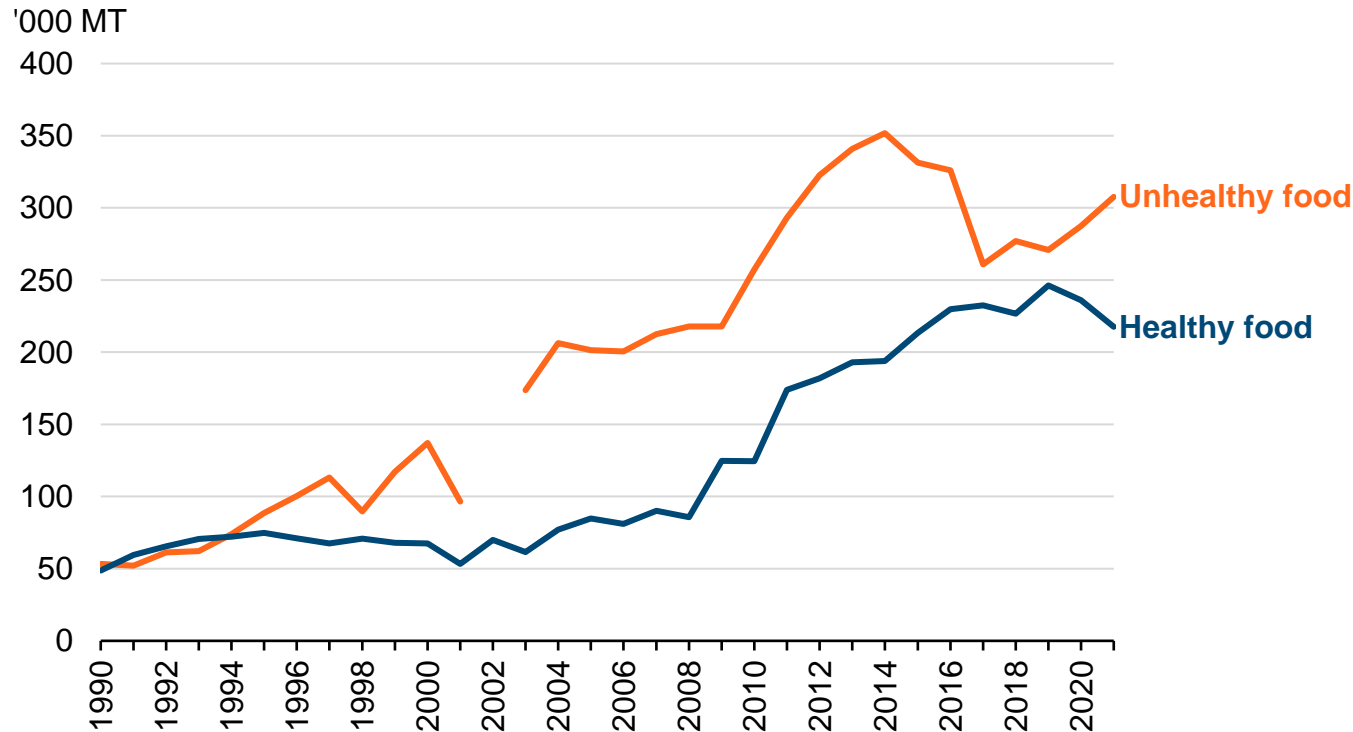
# The five dimensions of food environment



Source: Fanzo et al. (2020), HLPE (2017), Author's Illustrations

# Energy-dense and high-fat, sugar or salt foods are increasingly available

Weight of healthy food and unhealthy food imported into Malaysia, 1990 – 2021



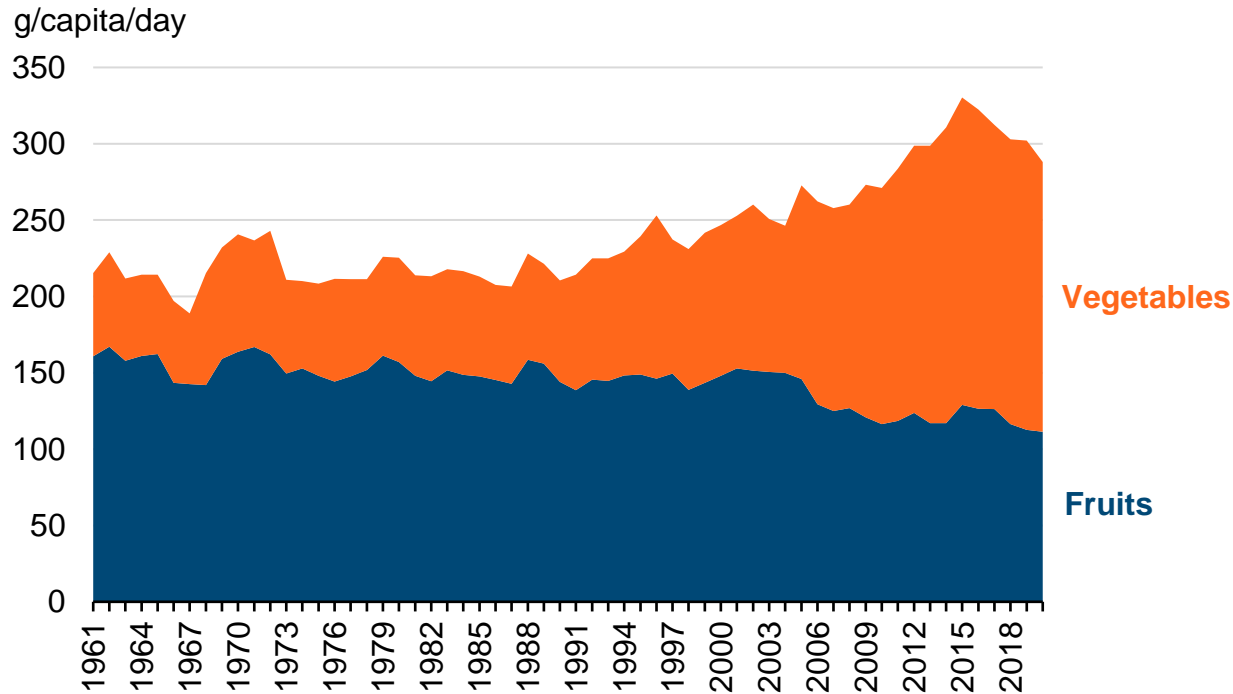
- Malaysia is increasingly reliance on food import for caloric and nutrient supply, which introduces challenges into our food environment.
- The weight of imported **ultra-processed, energy-dense, and high-fat foods** has been increasing at a compounded annual growth rate (CAGR) of 5.82% since 1990, higher than that of healthy food (CAGR = 4.94%).

Source: KRI calculations based on Friel et al. (2013), United Nations (2020), and Brewer et al. (2023)

Note: Healthy foods include fresh fruit and vegetables, pulses, nuts and seeds, and staple whole-grain cereals. Unhealthy foods comprise ultra-processed, energy-dense, and high-fat foods that are associated with elevated obesity and NCD risks. The list of food items is extracted from UN COMTRADE Database.

# Supply of fruits and vegetables insufficient for the population to meet dietary recommendations

Supply of fruits and vegetables in Malaysia, 1961 – 2020

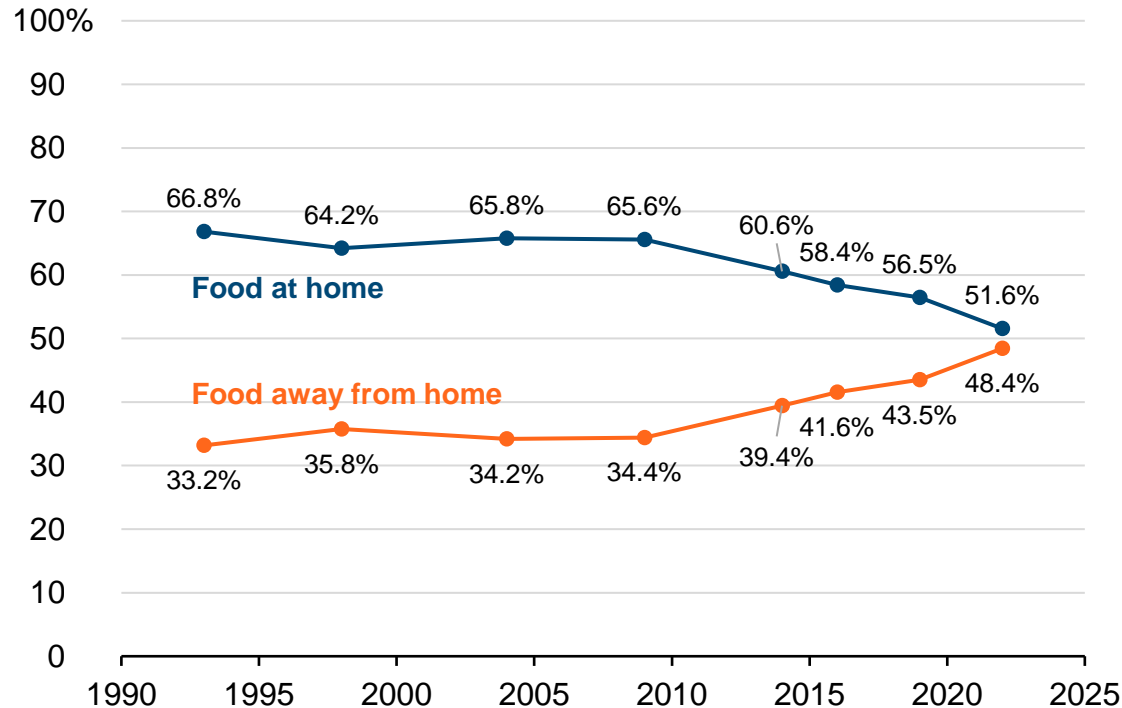


- In 2020, the supply of fruits and vegetables in Malaysia was **111.4 g/capita/day** and **176.6g/capita/day**, respectively.
- Malaysian Dietary Guidelines (MDG) 2020 recommends consuming at least **two servings of fruits and three servings of vegetables**. The WHO’s guidance is to eat **at least 400g** or five portions of fruits and vegetables daily.
- Globally, the supply of fruits and vegetables is also 22% short of the total population’s nutritional recommendations.

Source: FAO (2020), Siegel et al. (2014)

# Food away from home has become an essential part of the Malaysian diet

Composition of household nominal food consumption expenditure, 1993 – 2022



- Malaysian households also experience a **transition in consumption expenditure patterns** as the national food supply shifted towards a more energy-dense, high-fat and high-sugar diet.
- Rapid urbanisation prompts the **shift from food at home (FAH) consumption to greater spending on food away from home (FAFH)**.
- **In 2022, FAFH constituted 48%** of the total food consumption expenditure among Malaysian households—the highest share of FAFH since 1993.

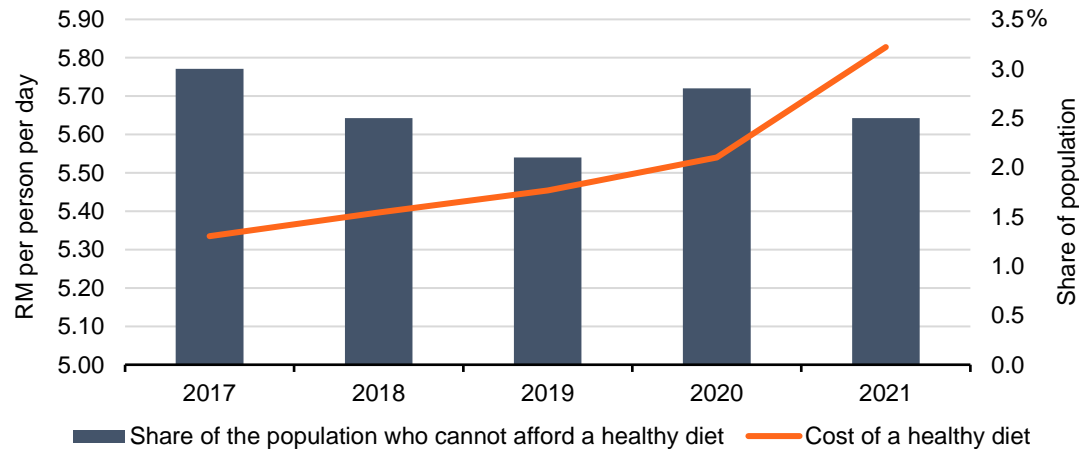
Source: DOS (various years), Author's calculations



# Cost of a healthy diet has been rising, with fruits being the most expensive food component

- From 2017 to 2021, the cost of a healthy diet has climbed by 9.2%, estimating to **cost RM5.83 in 2021**. There has been little progress in reducing the **number of people who cannot afford a healthy diet** in Malaysia.

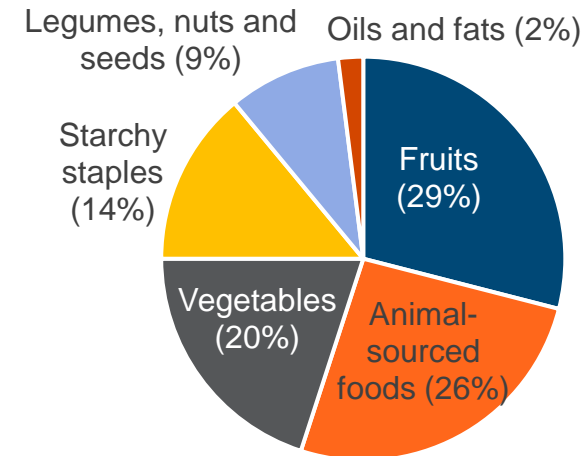
**Cost of a healthy diet and the number of people who cannot afford a healthy diet in Malaysia, 2017 – 2021**



Source: FAO, IFAD, UNICEF, WFP, and WHO (2023), World Bank (2023)

- While **fruits, vegetables, and animal-sourced foods** are nutritious, they are also more expensive. This does not include the **hidden costs of healthy home-cooked meals**, such as time and energy costs.

**Cost shares of food groups in a healthy diet in Malaysia, 2017**



Source: World Bank (2023)

# Growing consumption of food away from home poses public health concerns

FAFH includes food items obtained from:



- **Commercial formal** food service establishments (e.g. restaurants and cafés)



- **Commercial informal** food service establishments (e.g. street vendors)



- **Non-commercial** institutions (e.g. canteens and schools)

However, FAFH consumption is generally associated with:

- Higher **energy, fat** and **sodium** intake
- Poorer **diet quality**
- Higher intake of **SSBs**
- Higher intake of **fast food**

# Modernisation of food retail contributes to increased availability of processed foods

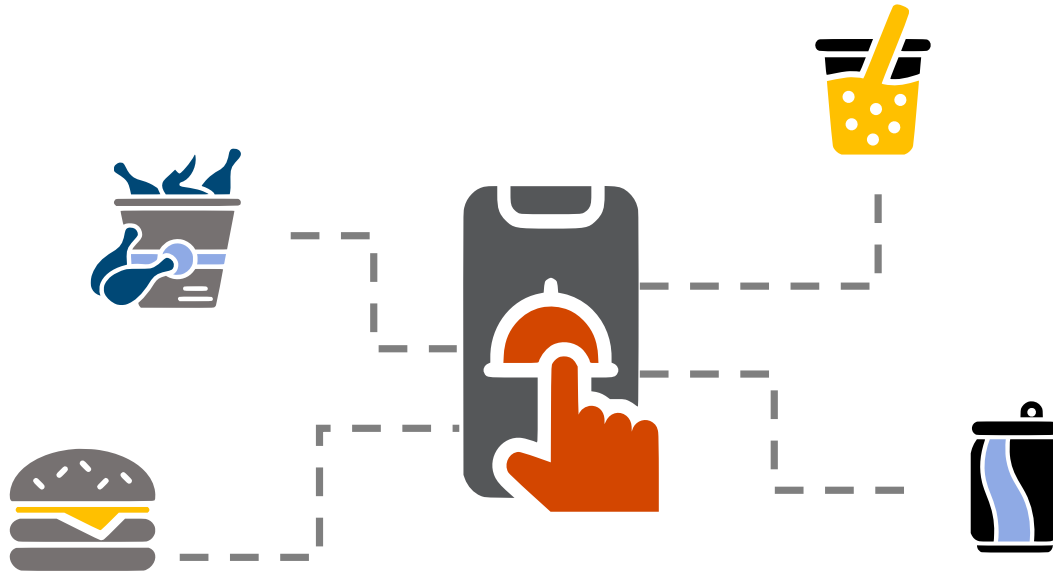
The **share of processed food distributed through modern retail channels** (convenience stores, supermarkets and hypermarkets) in Malaysia **increased by 3-fold** from 1999 to 2013 (10% to 30%).

The **sales growth of ultra-processed, sweetened beverages** (e.g. soft drinks, ready-to-drink coffee, tea and Asian specialty drinks) **remains strong** in Malaysia.



- While some modern food retailers offer a wide range of fresh produce, they tend to be dominated by **processed, dry and packaged foods**.
- Modern food retail, especially multinational food retail chains, offer **great price competitiveness**, making them an increasingly favourable choice for consumers to shop.
- They also serve as a key channel for **food marketing and promotion**:
  - Charlton et al. (2015) showed that supermarket circulars contained a ratio of **two unhealthy foods to every healthy food promoted**.

# Online food deliveries expand access to food, including unhealthy ones



- **Fast food and sugary drinks** are consistently reported as among the **top food categories searched or most popular food ordered on GrabFood** from 2021 to 2023.
- **Sweetened or carbonated drinks** are frequently ordered as teatime and supper snacks.
- The strategy of offering **combo sets or add-ons, typically drinks and desserts** may encourage overconsumption.
- The convenience of ordering food online and having it delivered to the doorstep may also promote a **sedentary lifestyle**.

## Vendor Properties



# Unhealthy street foods are commonly available

**Street food is a major source of food for people in developing countries – adults generally consume 13% to 50% and children consume 12% to 40% of energy from street food.**

- **Street food in Malaysia typically consists of snacks, main meals and desserts.**
  - Snacks: fried processed meat products, keropok lekor, satay, curry puff
  - Main meals: fried noodles, fried rice, *nasi lemak*
  - Desserts: *kuih muih*, cakes and pastries, banana fritters
- **Deep frying** is the most common cooking method, followed by steaming and pan-frying.
- Many street food options were reported to be **high in sodium, sugar and fat**.
- They are also very **accessible**, given the **proximity** to neighbourhoods, public transports and workplaces.

Source: Haron et al. (2022), Steyn et al. (2014), Zainal Arifen et al. (2023; 2024)

# Trends towards unhealthy eating further reinforced by social media

## Trending Food in Malaysia ▾



The Most Customers Korean Spicy Buldak...

travelicio... 627.7K



RM5 Viral Indomie at Tasik Titawangsa!

bestfoodmy 28.1K



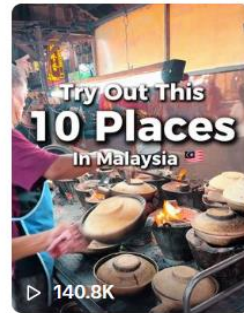
Viral Maggi Goreng In Setiawangsa

bestfood... 53.3K



Vietnam roll KUAH KARIII???

foodhunte... 4589



Saved & Shared for your next trip

vanishaoct... 4065



Viral Thai Snow Bun in KL

bestfoodmy 75.4K



Cuba makanan viral dekat KL

frhnani.j 100.7K



RM180 Viral Fix Chocolate Dubai! 10/1...



Tak dinafikan, cheese leleh ini antara satu...



Trying out these 5 viral things to eat in Bukit...



\$0.42 Traditional Malaysian Cake



6 JUN 24: Nak 10 suap kena beli 10 bungkus...

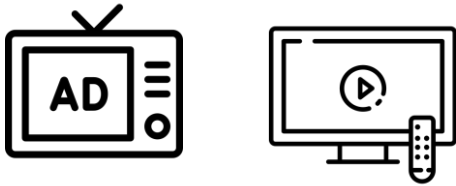


Harga murah giler! Rasa pun sedap. U guys ras...



Viral Milk Bun at Pasar Seni

# Unhealthy food advertising tends to target children, while adolescents are vulnerable to digital marketing



The existing body of evidence shows that:

- Foods advertised on **TV and YouTube** are primarily **non-core or unhealthy foods**.
- Unhealthy food advertising rate is significantly **higher during school holidays and children's peak viewing time**.
- **Promotional characters** like cartoons or celebrities were commonly used in the advertisement of unhealthy food.
- The most commonly advertised unhealthy foods include **SSBs, pastries and cakes, snacks, fast food and ice cream**.

Source: Karupaiah et al. (2008), Ng et al. (2014), Tan et al. (2018)



**The rapid spread of digital food marketing alongside the lack of regulations is a serious concern.**

- Digital food marketing has proven **more persuasive** than generic and conventional marketing and **more significant in influencing food choices**.
- **Adolescents and young adults** may be at a greater risk to being **negatively influenced by digital unhealthy food marketing**, given that these groups of individuals made up a high share of social media users.

Source: Matz et al. (2017)

# 2. Food Environment Policies and Initiatives



# Policies addressing various aspects of food environment in Malaysia

## Food availability

- Self-sufficiency ratio (SSR)
- Guidelines on the Prohibition of Sales of Foods Outside School Perimeters
- Healthy Meal Provision during Meetings
- Guide for Healthy School Canteen Management

## Food and vendor properties

- Healthier Choice Logo
- Healthy Cafeteria
- Healthy Catering Training
- Food Regulations 1985
- Food composition standards
- Malaysian Dietary Guidelines
- Recommended Nutrient Intakes for Malaysia

## Food affordability

- SSB tax
- Excise duty on premix preparations
- Payung Rahmah initiatives (e.g. Menu Rahmah and Jualan Rahmah)
- Food-related income support for the poor

## Food messaging

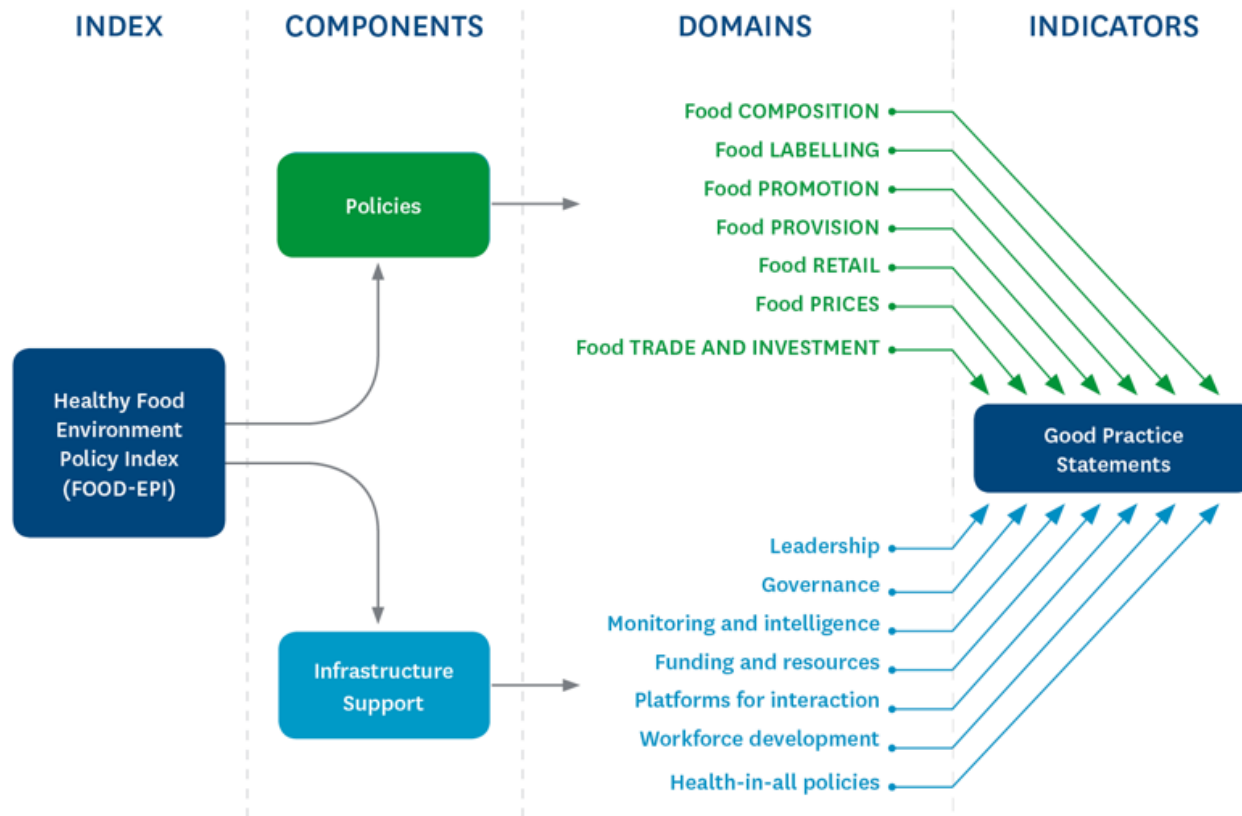
- Healthier Choice Logo
- Fast Food Advertising Guidelines
- Responsible Advertising to Children's Initiative (the Malaysian Pledge)
- Provision of nutrition information at fast food restaurants
- Code of Ethics for the Marketing of Infant Food and Related Products

Source: NPANM III (2016)

Note: The abovementioned list is non-exhaustive.

# Tool to assess food environment policies

**Food Environment Policy Index (Food-EPI)** developed by the International Network for Food Obesity /NCDs Research, Monitoring and Action Support (INFORMAS) serves as an **index to monitor food environment policy implementation**.



- Ng et al. (2018) showed that the implementation of **nearly two-thirds of the Food-EPI indicators was low** (mean % of implementation of 26-50%)
- The rest are rated as medium (51-75% of implementation)
- Malaysia's performance was **average, neither commendable nor poor**, compared to international best practices
- **Lowest rated** indicators are
  - **Restrictions of unhealthy food promotion** in children's settings and through broadcast media
  - Food composition targets or standards for **out-of-home meals**

# Opportunities and Gaps

## Data and research on:

- **Food away from home consumption** (e.g. sources, types of food, consumer characteristics, locality, sociocultural drivers and nutritional implications)
- Healthy and unhealthy food **cost and affordability**
- **'Hidden' cost** of healthy home-cooked food (e.g. time cost)
- Impact of **retail modernisation** on consumer food choices and adherence to dietary guidelines
- **Spatial access** to food and the impact on food choices
- Influences of **online food deliveries** on food consumption patterns
- **Digital food environment**



# 3. The Way Forward

# System wide improvements in the food environment are needed



- **Strengthen existing food environment policies to respond to inequalities in food choices** (e.g. by income, education level, health literacy, ethnicity) **and consider making them mandatory**
- **Undertake a more comprehensive package of food environment policies** to more adequately respond to shifts in the food environment and consumption patterns



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