

**Turning the tide on childhood  
overweight in East Asia and the Pacific:**  
Building better food environments for  
children

This report was prepared by the UNICEF East Asia and the Pacific Regional Office (EAPRO).

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UNICEF is grateful for the support received by Novo Nordisk for the development and dissemination of this report. Special thanks to the UNICEF Child Nutrition and Development Programme of the UNICEF Programme Group and the Data and Analytics Section of the UNICEF Data, Analytics, Planning and Monitoring Division for their support in the production of this report.

**Suggested citation:** United Nations Children's Fund, *Turning the tide on childhood overweight in East Asia and the Pacific: Building better food environments for children*, UNICEF, Bangkok, 2025.

September 2025

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# Acronyms

BMI	Body mass index
CCFA	China Chain-store and Franchise Association
CPCF	Commercially produced complementary food
FOPL	Front-of-pack-labels
GDP	Gross domestic product
NCD	Non-communicable disease
NCD-RisC	Non-Communicable Disease Risk Factor Collaboration
NEAT-S	Nutrition Environment Assessment Toolkit for Schools
SD	Standard deviation
SSB	Sugar-sweetened beverage
WHO	World Health Organization

# Introduction

All children have the right to nutritious foods and healthy futures. Yet, today, children's rights to health and nutrition are being threatened by food environments dominated by companies that produce, market and sell products that compromise children's physical and mental well-being. Unhealthy, ultra-processed foods and beverages high in sugar, salt or unhealthy fats and low in essential nutrients are now ubiquitous, inexpensive and aggressively marketed to children in the places where they live, learn, eat and play.

The number of children and adolescents living with overweight or obesity has skyrocketed in recent decades. The 2025 UNICEF Child Nutrition Report *'Feeding Profit: How food environments are failing children'* reports that 427 million children and adolescents aged 0–19 years are now living with overweight globally, an increase from 229 million in 2000. Obesity – the most severe form of overweight – is also now more prevalent than underweight among children and adolescents aged 5–19 years.<sup>1</sup> These findings make clear that child overweight is a global emergency demanding immediate attention.

A similar surge in overweight has taken place in East Asia and the Pacific: the burden of child overweight doubled from 56 million children aged 0–19 years living with overweight in 2000 to more than 113 million children today. The burden of obesity in the region is now double that of underweight among children and adolescents aged 5–19 years, with 50 million children and adolescents living with obesity (10.7 per cent prevalence) compared to 26 million affected by underweight (5.7 per cent prevalence). The prevalence of child overweight and obesity in East Asia and the Pacific has also increased faster than global rates, and the high child population means that the region is home to an alarming share of the global burden of child overweight.

The consequences of the rapid increase in childhood overweight are immense: children are increasingly experiencing non-communicable diseases (NCDs) and other adverse physical and mental health effects in both the short- and long-term. The growing burden of child overweight also exacts a tremendous toll on health systems and economies – it increases health care costs, decreases productivity in adulthood, reduces life expectancy and lowers national gross domestic product (GDP).

Overweight and obesity are largely preventable, but timing is critical. Once a child becomes overweight or obese, it is difficult for them to return to normal weight.<sup>2–6</sup> In fact, obesity rarely resolves after adolescence.<sup>4,5</sup> This makes childhood a critical window of opportunity to protect children from overweight and its lifelong consequences.

The 2025 UNICEF Child Nutrition Report makes clear that the surge in child overweight globally is driven in part by a lack of robust regulatory frameworks to adequately protect children from the various harms associated with the marketing, sale and consumption of unhealthy, ultra-processed foods – and the situation in East Asia and the Pacific is no different. While no country in the world has a comprehensive set of mandatory policies and legal measures to protect children from unhealthy food environments,<sup>1</sup> many countries in East Asia and the Pacific are making progress.

This report describes the crisis of childhood overweight in East Asia and the Pacific and the key areas where UNICEF and partners have already demonstrated progress in the region. Finally, it outlines the urgent actions needed to accelerate this work in the next five years to curb the child overweight epidemic in the region.

## Box 1: Defining overweight and obesity in childhood

Children living with overweight have an excessive accumulation of body fat that presents a risk to their health. Obesity is considered the most severe form of overweight. Overweight and obesity are diagnosed using measurements of weight and height in children under 5 years of age, and by calculating body mass index (BMI) in children and adolescents aged 5–19 years, with World Health Organization (WHO) Growth Charts used as a benchmark to determine healthy versus unhealthy weight.

In children under 5 years of age, overweight is defined as excess weight for height that is greater than 2 standard deviations (SDs) above the median in the WHO Child Growth Standards. Obesity is defined as excess weight for height that is greater than 3 SD above the median.

Among children and adolescents aged 5–19 years, overweight is defined as a BMI more than 1 SD above the median in the WHO Growth Reference. Obesity is defined as a BMI greater than 2 SD above the median.

### The heavy burden of childhood overweight and obesity on health and well-being

Childhood overweight and obesity are often framed as a risk for future health complications in adulthood.<sup>5</sup> However, even today, in childhood, overweight and obesity leave children facing immediate physical, social and emotional consequences that adversely impact their health and well-being. Children affected by overweight or obesity are more likely to experience high blood pressure, diabetes and musculoskeletal problems during childhood and adolescence. Among children and adolescents living with obesity in Asia, an estimated 38 per cent experience obesity-related hypertension, 26 per cent experience obesity-related metabolic syndrome and 49 per cent experience obesity-related non-alcoholic fatty liver disease.<sup>7</sup>

Children and adolescents affected by overweight or obesity may also experience bullying due to social stigmas around weight and obesity, often resulting in a sense of loneliness or social disconnection, depression, low self-esteem or other emotional or mental health problems. Weight bias and obesity stigma can also lead to discrimination in health care and educational settings.<sup>8</sup> Together, these physical, social and emotional consequences often result in poorer educational outcomes for children affected by obesity compared to their healthy-weight peers.<sup>9</sup>

Children and adolescents living with overweight or obesity are more likely to become overweight or obese adults, increasing their lifetime risk of disability, NCDs and premature death. Childhood obesity in particular increases the risk for NCDs, such as cardiovascular diseases, type 2 diabetes and cancer later in life. NCDs are the leading cause of death in East Asia and the Pacific, accounting for more than 70 per cent of all deaths in the region.<sup>10</sup>

### Persistent and increasing rates of childhood overweight and obesity are a detriment to national social and economic well-being

Addressing the crisis of overweight and obesity is crucial to improve children's health and well-being and foster sustainable economic growth and development in East Asia and the Pacific. An unhealthy population requires more resources for health services, and national economies are already seeing rapid increases in the direct health care costs related to overweight and obesity. The indirect costs of overweight and obesity – missed days at work, reduced productivity and early withdrawal from the labour force due to premature death or disability – also result in national economic losses.

Globally, the economic consequences of childhood overweight and obesity are staggering.

In 2019, the global economic impact of overweight and obesity, including both direct and indirect costs, was estimated to exceed 2 per cent of the world's GDP. If current trends continue, the economic impact is projected to exceed US\$4 trillion – 3 per cent of the global GDP – by 2035.<sup>11</sup> Without intervention, the largest increases in economic costs will be concentrated in low- and middle-income countries, where costs are expected to increase between 12–25 times.<sup>12</sup>

Economic losses from overweight and obesity are similarly high in East Asia and the Pacific (**Table 1**), costing countries in the region billions of dollars in 2019. Without intervention, the economic costs will

skyrocket in the coming years. By 2030, overweight and obesity will cost approximately 2 per cent or more of most national GDPs across the region. By 2060, costs will increase exponentially, resulting in annual losses of more than US\$10 trillion in China (3.1 per cent of the GDP), US\$394 billion in Indonesia (4.7 per cent of the GDP), US\$181 billion in Thailand (6.4 per cent of the GDP), US\$105 billion in Malaysia (4.0 per cent of the GDP) and US\$103 billion in Viet Nam (2.8 per cent of the GDP). In several other countries, the cost as a portion of the GDP is expected to soar by 2060: 12.1 per cent in Vanuatu, 8.6 per cent in Timor-Leste, 7.8 per cent in Brunei Darussalam and 7.0 per cent in Fiji.<sup>13</sup>

**Table 1**

**Estimated economic costs of overweight and obesity as a percentage of GDP, total economic cost and total economic cost per capita in 2019 and projected for 2030 and 2060, by country**

Countries	2019			By 2030			By 2060		
	% of GDP	Cost (US\$ billions)	Cost per capita (US\$)	% of GDP	Cost (US\$ billions)	Cost per capita (US\$)	% of GDP	Cost (US\$ billions)	Cost per capita (US\$)
Australia	1.89%	27.0	1,070	2.34%	43.9	1,558	3.49%	158.0	4,521
Brunei Darussalam	0.98%	0.1	305	1.65%	0.3	581	7.82%	1.9	3,844
Cambodia	1.22%	0.3	20	1.95%	0.9	48	2.88%	9.1	401
China	1.81%	259.5	181	1.89%	766.4	523	3.06%	10,108.3	7,583
Fiji	3.78%	0.2	233	5.01%	0.3	344	6.98%	1.0	947
Indonesia	1.56%	17.5	65	2.56%	46.8	156	4.70%	394.4	1,172
Japan	0.99%	50.8	400	1.32%	74.1	614	2.18%	197.6	2,009
Lao People's Democratic Republic	1.30%	0.2	34	2.25%	0.6	78	3.48%	5.5	568
Malaysia	1.55%	5.7	178	2.48%	13.7	378	3.98%	104.6	2,505
Mongolia	2.37%	0.3	104	3.29%	0.7	191	5.14%	4.3	913
Myanmar	1.26%	0.9	16	2.74%	2.3	40	3.47%	25.7	413
New Zealand	2.24%	4.7	988	2.84%	7.7	1,479	4.68%	27.0	4,716
Philippines	1.34%	5.1	47	1.99%	11.7	95	4.45%	84.6	563
Republic of Korea	1.30%	21.5	419	1.97%	46.0	899	3.41%	410.5	9,614
Samoa	2.79%	0.0	121	3.74%	0.0	162	5.94%	0.1	361
Singapore	0.96%	3.6	620	1.41%	7.6	1,211	2.09%	58.2	9,295
Thailand	1.52%	8.3	119	2.89%	21.1	300	6.36%	180.8	2,930
Timor-Leste	1.21%	0.0	16	2.46%	0.1	32	8.56%	0.4	189
Tonga	2.70%	0.0	132	3.52%	0.0	184	5.28%	0.1	444
Vanuatu	3.03%	0.0	95	4.77%	0.1	144	12.06%	0.3	475
Viet Nam	1.21%	3.7	38	1.65%	10.2	98	2.81%	103.1	943

Source: World Obesity Federation, 2022, *The Economic Impact of Overweight and Obesity 2<sup>nd</sup> Edition with Estimates for 161 Countries*<sup>13</sup> and the World Obesity Federation Global Obesity Observatory, Economic impact of overweight and obesity.

Note: No data were available for the Cook Islands, the Democratic People's Republic of Korea, Kiribati, the Marshall Islands, Micronesia (Federated States of), Nauru, Niue, Palau, Papua New Guinea, Solomon Islands, Tokelau or Tuvalu.



# Overweight and obesity among children and adolescents in East Asia and the Pacific

The past two decades have seen important gains in improving child and adolescent nutrition in East Asia and the Pacific. The number of children under 5 years of age affected by stunting decreased from 39.6 to 15.2 million between 2000 and 2024, and the number of children aged 5–19 years suffering from underweight reduced from 42.6 to 26.6 million between 2000 and 2022. The prevalence and number of children affected by overweight, however, has increased rapidly over time.<sup>14</sup>

Globally, more than 35.5 million children under 5 years of age (5.5 per cent) and 396 million children and adolescents aged 5–19 years (19.8 per cent) are living with overweight. In East Asia and the Pacific, 7.8 per cent of children under 5 years of age (8.9 million) and 22.3 per cent of children aged 5–19 years (104.5 million) are affected.<sup>1</sup> In total, more than 113 million children and adolescents in East Asia and the Pacific are living with overweight.

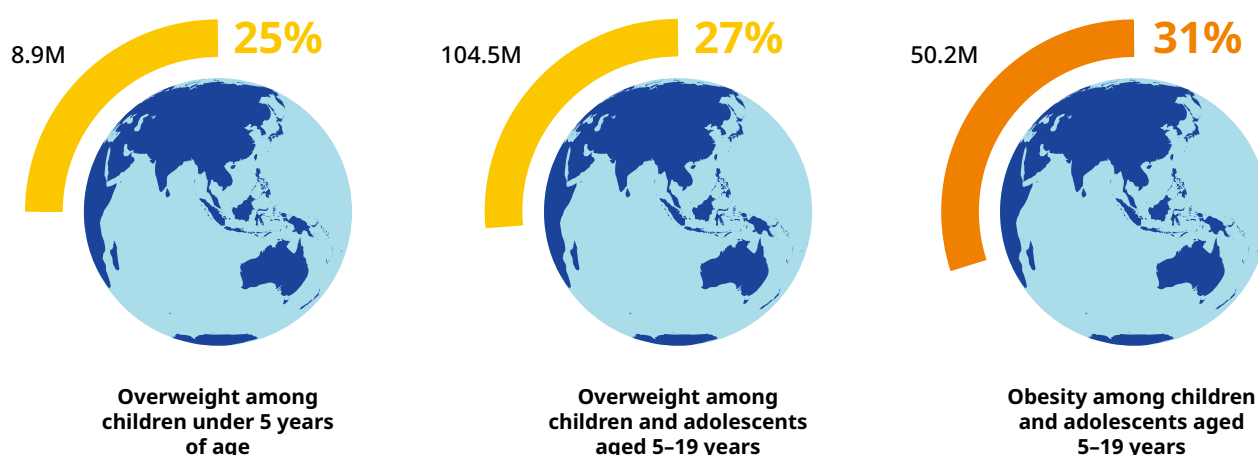
## One in four children affected by overweight live in East Asia and the Pacific

East Asia and the Pacific is home to the largest number of children affected by overweight in the world (113 million out of 427 million). A quarter of children under 5 (25 per cent) and 27 per cent of children and adolescents aged 5–19 years affected by overweight live in the region (**Figure 1**).

The high burden of overweight in the region is due in part to the combination of highly populated countries with high overweight prevalence. For example, China is home to 16 per cent of *all* children under 5 living with overweight globally (5.7 million) and 15 per cent of *all* children and adolescents aged 5–19 years living with overweight (58.9 million).

**Figure 1**

**Proportion of all children under 5 and children aged 5–19 years living with overweight or obesity globally that reside in East Asia and the Pacific**



Source: UNICEF/WHO/World Bank Joint Malnutrition Estimates 2025 Regional and Global Estimates for children under 5<sup>15</sup> and UNICEF analysis of data from the Non-Communicable Disease Risk Factor Collaboration (NCD-RisC) for children and adolescents aged 5–19 years.<sup>16</sup> Population estimates based on the United Nations Population Division World Population Prospects.<sup>17</sup>

Globally, only 1 per cent of children under 5 years of age are living with obesity, and therefore there are currently no estimates on obesity for children under 5 in East Asia and the Pacific.<sup>1</sup> The proportion of children and adolescents aged 5–19 years living with obesity in East Asia and the Pacific, however, is alarming: nearly a third (31 per cent) of all children and adolescents living with obesity reside in East Asia and the Pacific.

### Nearly all countries in East Asia and the Pacific exceed prevalence thresholds for child and adolescent overweight

The prevalence of overweight in children under 5 exceeds 10 per cent – at least double the global

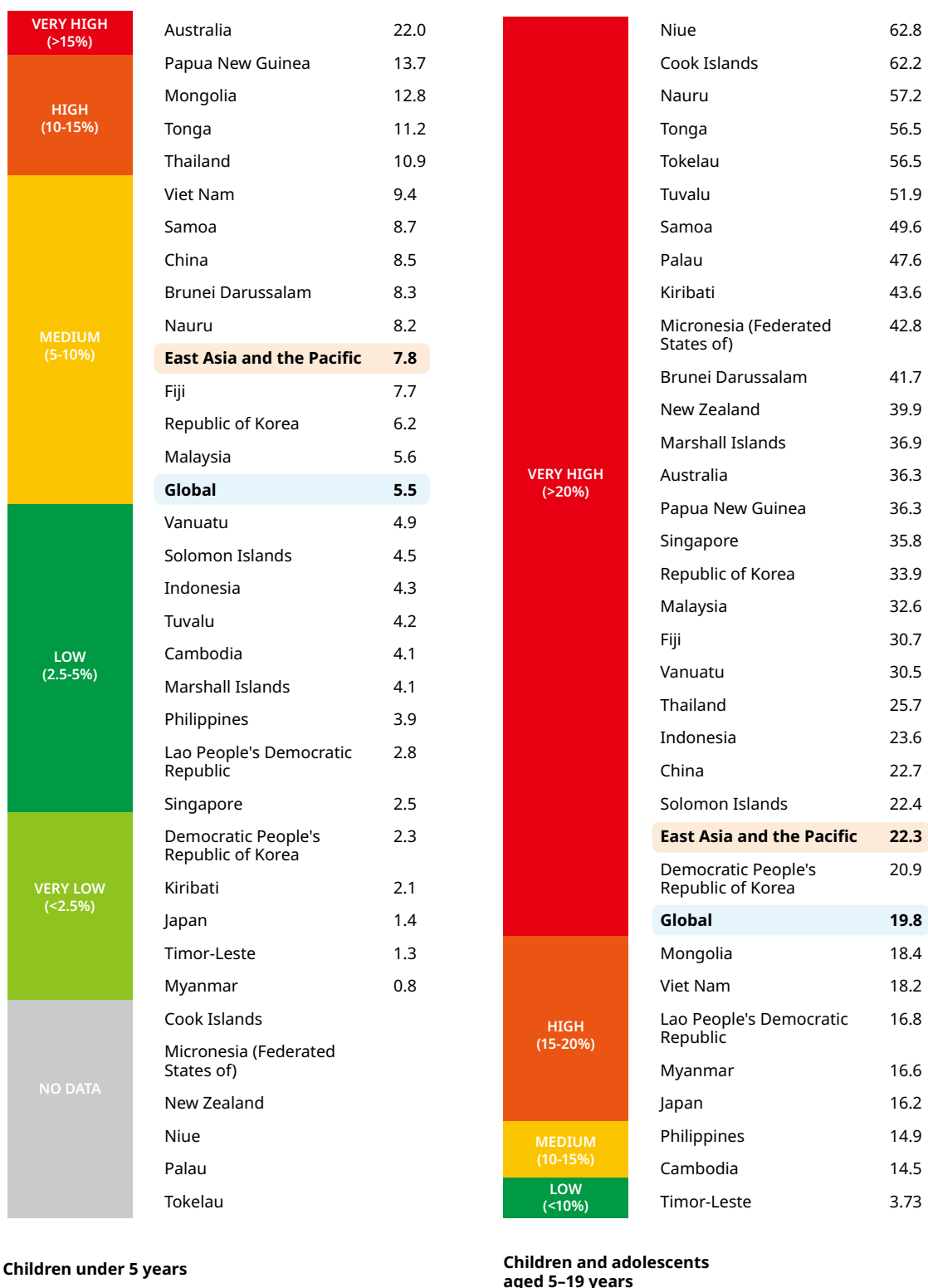
average – in five countries in the region (**Figure 2**). This level of overweight among children under 5 is considered high or very high, per prevalence thresholds.

The situation is more alarming among older children: the prevalence of overweight among children and adolescents aged 5–19 years exceeds 15 per cent – a high or very high prevalence – in 30 of the 33 countries in East Asia and the Pacific. In 16 countries in the region, more than a third of children aged 5–19 years live with overweight, and in six Pacific Island countries – Niue, the Cook Islands, Nauru, Tonga, Tokelau and Tuvalu – more than half live with overweight.



**Figure 2**

**Prevalence of overweight in children under 5 years of age (left) and in children and adolescents aged 5–19 years of age (right) in East Asia and the Pacific, by threshold level**



Source: UNICEF/WHO/World Bank Joint Malnutrition Estimates 2025 Country Estimates for children under 5<sup>18</sup> and UNICEF analysis of data from NCD-RisC for children and adolescents aged 5–19 years.

Note: Prevalence thresholds for overweight among children under 5 years of age are based on recommendations from UNICEF and WHO:<sup>19</sup> prevalence <2.5% (very low), 2.5–<5% (low), 5–<10% (medium), 10–<15% (high) and ≥15% (very high). Thresholds for overweight prevalence among children and adolescents aged 5–19 years are based on recommendations from the World Bank Group:<sup>20</sup> <10% (low), 10–15% (medium), 15–20% (high), ≥20% (very high).

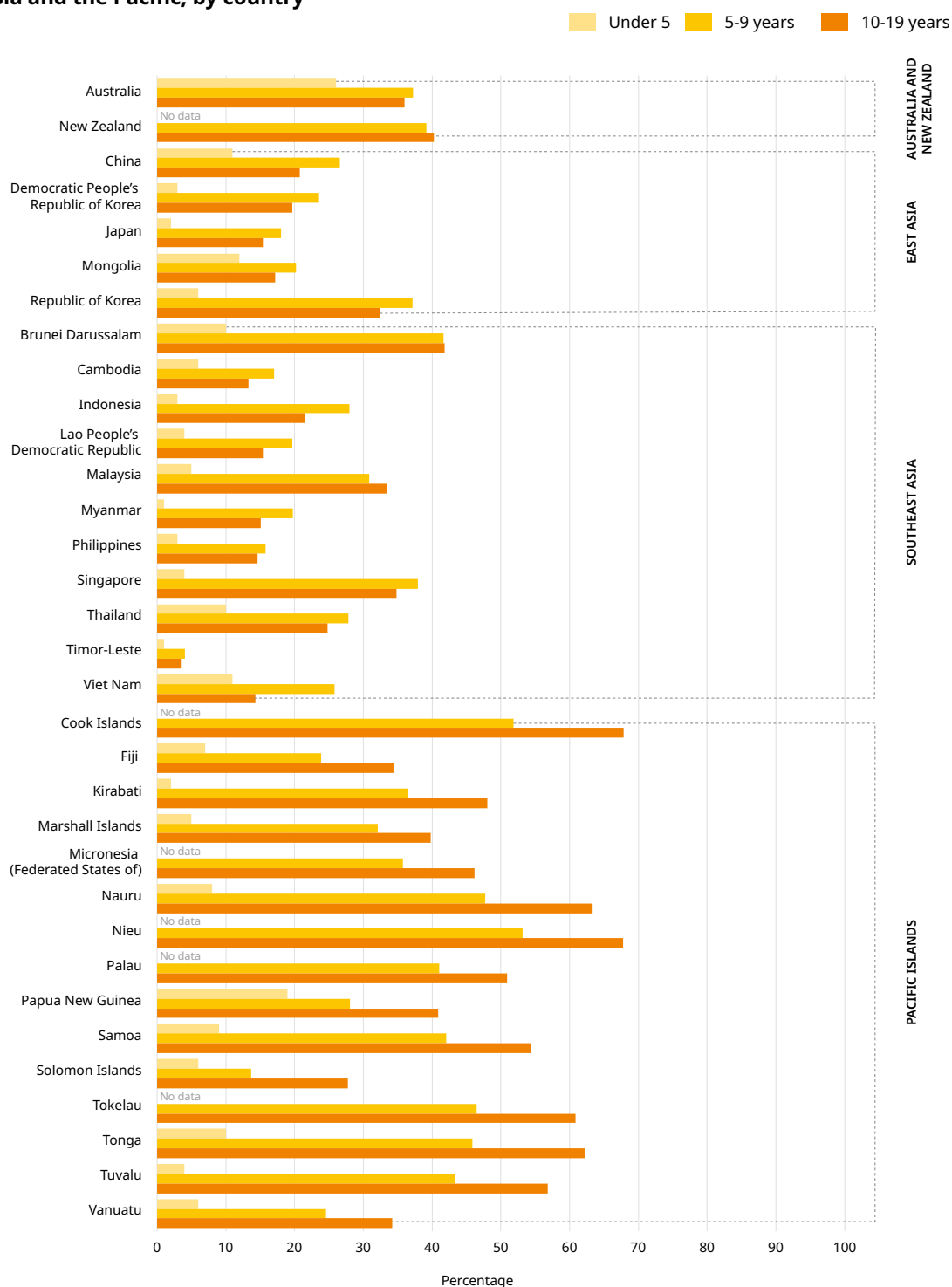
## Overweight begins early in childhood; a quarter of children aged 5–9 years in the region are affected

The crisis of overweight affects children early in childhood: 21 per cent of children worldwide are already affected between 5 and 9 years of age, while in East Asia and the Pacific, this figure

reaches 26 per cent. In 15 countries in the region, prevalence is even higher, with over a third of children aged 5–9 years already living with overweight (**Figure 3**). Prevalence also continues to increase in adolescence in many Pacific Island countries – often increasing to more than 60 per cent in children aged 10–19 years.

**Figure 3**

**Prevalence of overweight in children under 5 years of age, 5–9 years of age and 10–19 years of age in East Asia and the Pacific, by country**



Source: UNICEF/WHO/World Bank Joint Malnutrition Estimates 2025 Country Estimates for children under 5 and UNICEF analysis of data from NCD-RisC for children and adolescents aged 5–19 years.

## The number of children living with overweight in East Asia and the Pacific has doubled since 2000, driven by a surge in obesity

Globally, the prevalence of overweight among children under 5 remained relatively stable between 2000 and 2024, increasing from 5.3 per cent to 5.6 per cent, while the prevalence in East Asia and the Pacific increased from 5.1 per cent to 7.8 per cent. Among children aged 5–19 years, global prevalence increased two-fold from 10.7 per cent to 19.8 per cent between 2000 and 2022, while the prevalence in East Asia and the Pacific increased by 2.5 times, from 8.9 to 22.3 per cent (Figure 4).

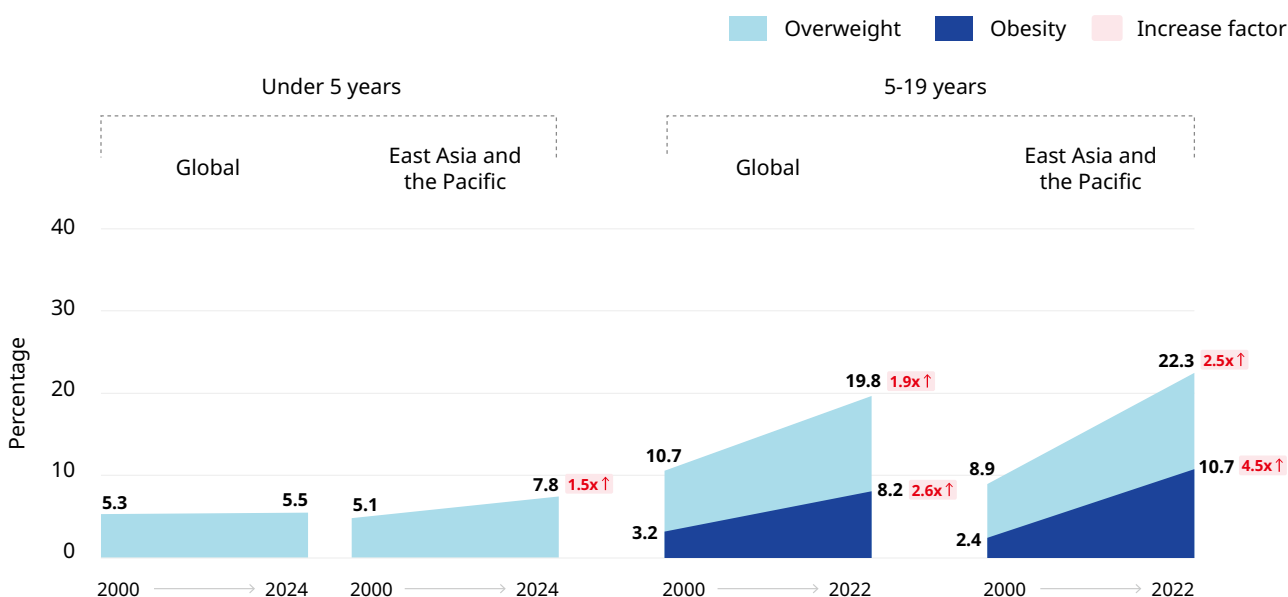
Among older children and adolescents, the increase in prevalence of overweight is driven by a rapid increase in the prevalence of obesity.

Globally, the prevalence of overweight among children aged 5–19 years increased by 1.9 times, while the prevalence of obesity increased 2.6 times (from 3.2 to 8.2 per cent). The surge in obesity is even more prevalent in East Asia and the Pacific, where the prevalence of obesity increased by an alarming 4.5 times. As a result, obesity now represents a larger share of all overweight cases: nearly half (48 per cent) of all children and adolescents with overweight had obesity in 2022, up from only 27 per cent in 2000 (Figure 5).

There are now 28 countries across the region where obesity accounts for 40 per cent or more of the burden of overweight, and 11 countries where the obesity accounts for more than half of overweight cases (Figure 6).

Figure 4

Trends in overweight and obesity prevalence globally and in East Asia and the Pacific, by age group, 2000 to latest

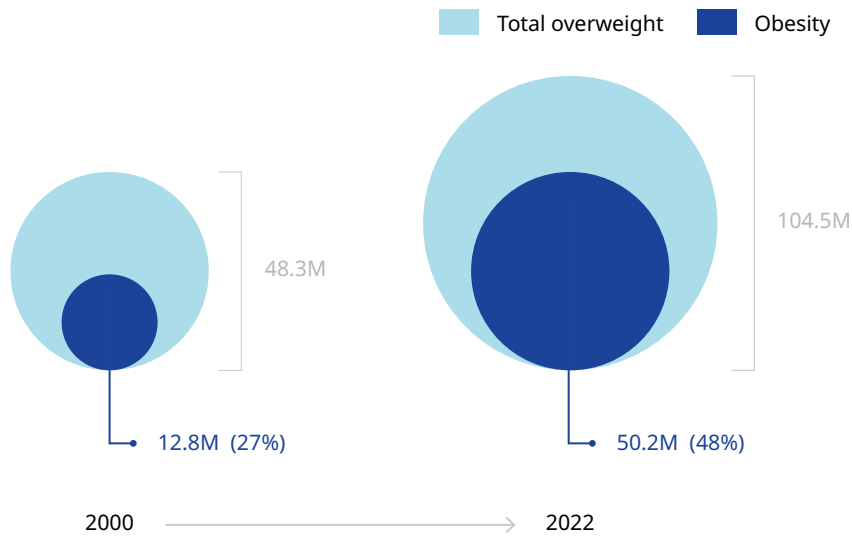


Source: UNICEF/WHO/World Bank Joint Malnutrition Estimates 2025 Regional and Global Estimates for children under 5 and UNICEF analysis of data from NCD-RisC for children and adolescents aged 5–19 years.

Note: Latest estimates for children under 5 are from the year 2024, and from the year 2022 for children and adolescents aged 5–19 years. Baseline estimates are from 2000 for all age groups. There are limited data available on obesity among children under 5 years of age, so no analysis on obesity for this age group is presented.

**Figure 5**

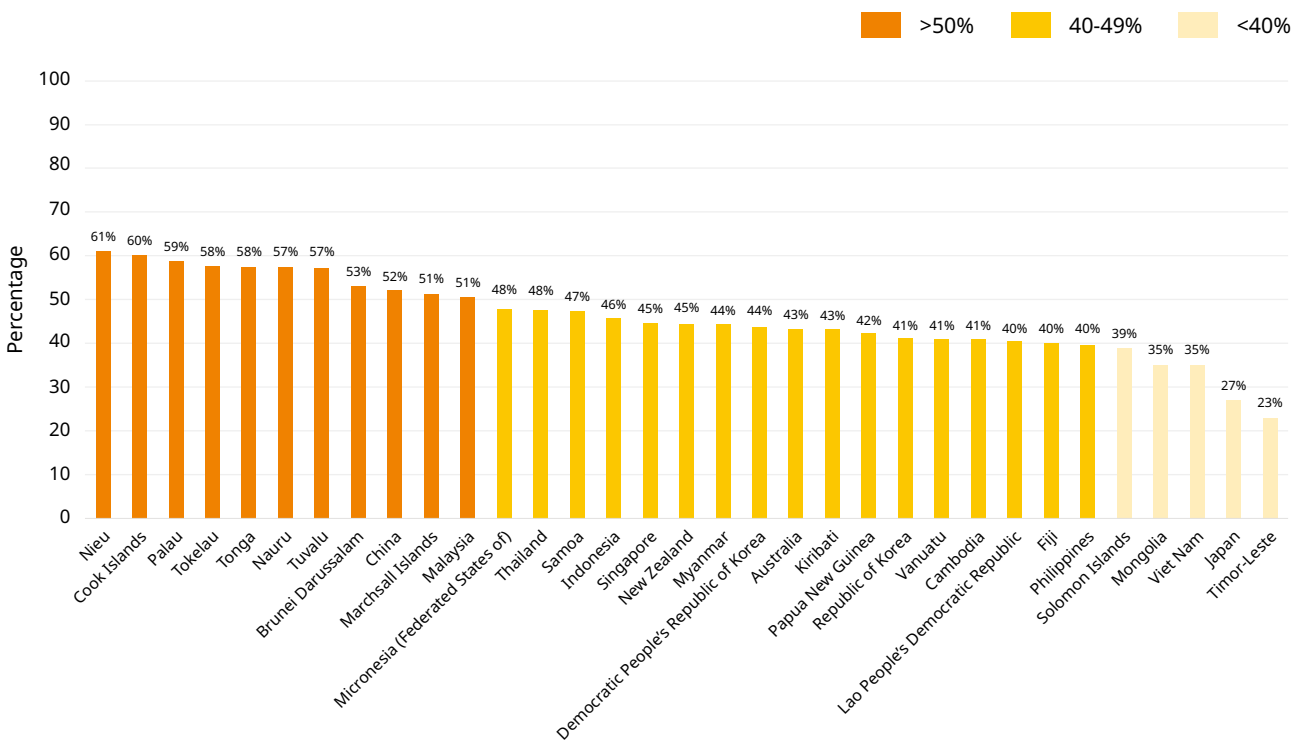
**Trends in the number of children aged 5–19 years living with overweight and obesity in East Asia and the Pacific, 2000 and 2022 (in millions)**



Source: UNICEF analysis of data from NCD-RisC, with population estimates based on the United Nations Population Division World Population Prospects.

**Figure 6**

**Proportion of children aged 5–19 years living with overweight who are also living with obesity, by country, 2022**



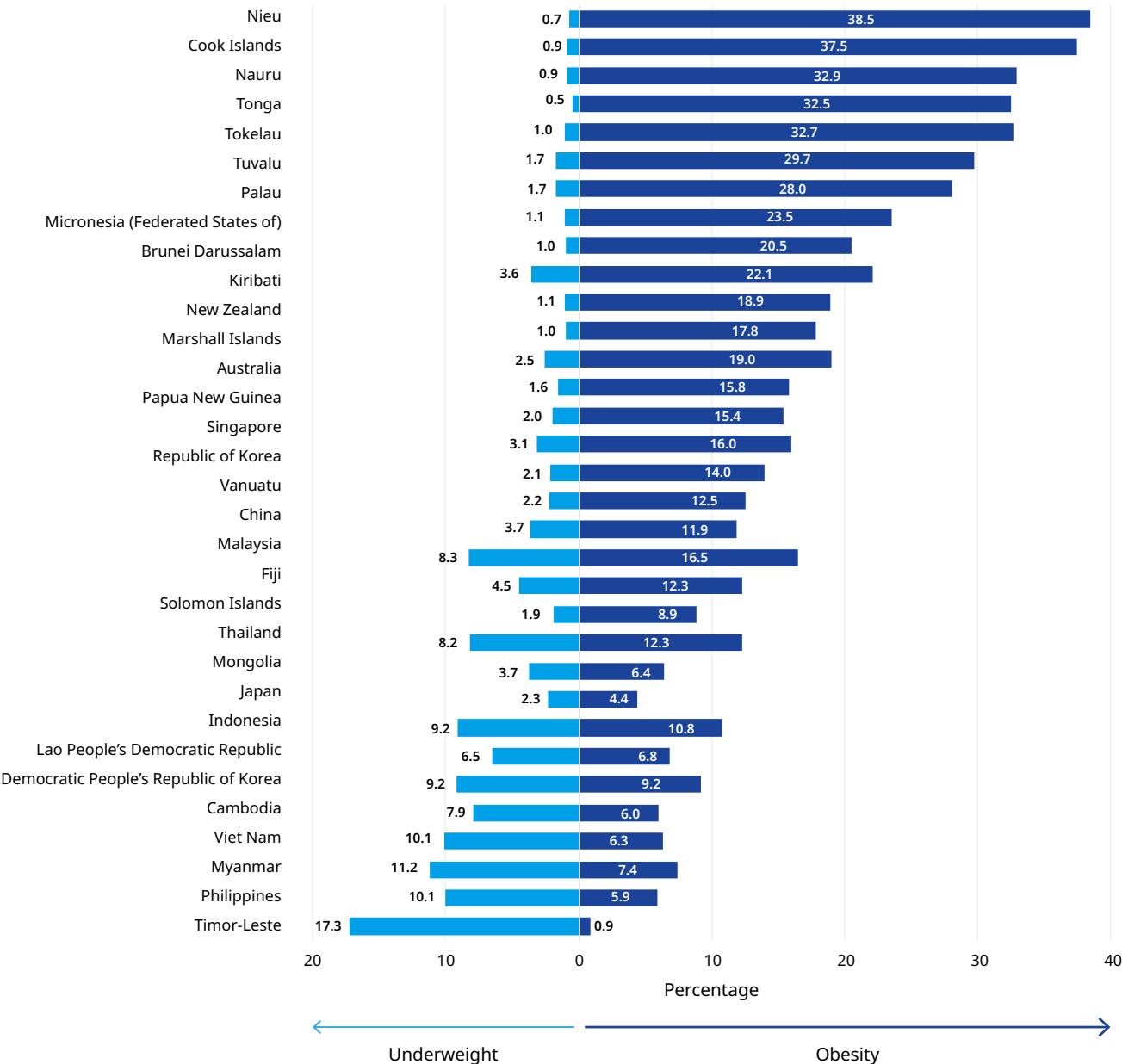
Source: UNICEF analysis of data from NCD-RisC.

## The burden of child obesity is now double that of underweight in East Asia and the Pacific

Today, 10.7 per cent (50 million) of children and adolescents aged 5–19 years in East Asia and the Pacific are living with obesity, compared to 5.7 per cent (26 million) that are affected by

underweight. Out of the 33 countries in the region, 27 now report a prevalence of obesity in this age group that is greater than the prevalence of underweight. In many Pacific Island countries, the prevalence of underweight is now less than 2 per cent, while obesity prevalence has increased to 20 per cent or more (**Figure 7**).

**Figure 7**  
**Prevalence of underweight and obesity among children aged 5–19 years in East Asia and the Pacific, by country, 2022**



Source: UNICEF analysis of data from NCD-RisC.

Note: Underweight among children and adolescents greater than 5 years of age is defined as a BMI less than 2 SD below the median, according to the WHO references for school-age children and adolescents. It is also referred to as 'thinness'. The countries in this figure are ranked by the difference between the prevalence of obesity and underweight.

## Overweight and obesity now affects children across all country-income groups

Childhood overweight is no longer a problem for the wealthiest nations only. In East Asia and the Pacific, the burden of overweight has shifted over time, with an increasing proportion of those children affected by overweight living in low- and lower-middle-income countries. In 2000, only 19 per cent of children under 5 years of age lived in low- or lower-middle income countries in the region. By 2024, however, nearly a quarter (24 per cent) of all children under 5 living with overweight were residing in low- or lower-middle-income countries. Among older children, only 16 per cent of children aged 5–19 years living with overweight resided in low- or lower-middle-income countries in 2000. By 2022, however, the burden increased to nearly a third (31 per cent).

A similar shift has been seen globally, with childhood overweight now a problem everywhere. The 2025 UNICEF Child Nutrition Report found that globally, overweight has more than doubled in low- and middle-income countries since 2000, compared to a modest 1.2-fold increase in high-income countries. Low- and middle-income countries now account for 81 per cent of the global overweight burden, an increase from 66 per cent in 2000.<sup>1</sup>

## The region is off track to meet the global target on childhood overweight – and without immediate action, the prevalence of childhood overweight and obesity will continue to increase in years to come

Today, an estimated 5.5 per cent of world's population of children under 5 are living with overweight – almost double the 2030 global target of 3 per cent prevalence. Currently, only 21 per cent of countries worldwide with progress

data are on track to meet the 2030 target. In East Asia and the Pacific, only five countries are on track to meet the global target, while the situation is worsening in 12 countries.<sup>1</sup>

Based on current trends, the burden of childhood overweight will continue to grow in years to come. Without intervention, an estimated 770 million children aged 5–19 years worldwide (39 per cent) are projected to be living with overweight by 2035, with approximately 50 per cent affected by obesity.<sup>21</sup> If the forecasted increases in childhood overweight materialize – particularly the stark increases in childhood obesity – the impact will be devastating for individual and collective health, economies and societies. East Asia and the Pacific is already home to a quarter of all overweight children, and the prevalence has increased faster than global rates. Without urgent action, the prevalence and number of children with overweight – and particularly children with obesity – will continue to rise.

The next five years before 2030 are crucial for governments to address the childhood overweight and obesity epidemic. After 2030, the greatest increases in overweight and obesity will be experienced in low- and lower-middle-income contexts, and often in countries with high populations and limited resources, stressing already fragile health systems. The current and future burden of childhood overweight will not only result in significant costs for health systems and national economies, but will also have immediate and long-term impacts on children and adolescents for decades to come.



# The link between food environments and childhood overweight and obesity

Children's environments shape their individual, social and cultural food preferences; impact their food consumption patterns; and influence physical activity. The food choices made by children, adolescents and caregivers, for example, are frequently based on what is widely available, affordable and promoted. The 2025 UNICEF Child Nutrition Report found that the child overweight and obesity crisis stems from toxic food environments driven by profit-focused industry practices and weak government protections.<sup>1</sup> Across East Asia and the Pacific, these same harmful food environments are also failing to protect children.

**Ultra-processed foods and beverages are more available, and consumed, than ever before.** The availability and consumption of unhealthy foods and beverages is surging, including ultra-processed foods high in sugar, salt and unhealthy fats and sugar-sweetened beverages. Sales of ultra-processed foods and drinks have increased significantly in recent years: Between 2017 and 2021, sales increased by 257 per cent in Viet Nam, 136 per cent in the Lao People's Democratic Republic and 52 per cent in China.<sup>22</sup> In the Pacific Islands, unhealthy, ultra-processed are widely available at retail markets and in schools, and are generally more available and less expensive than healthy foods.<sup>23</sup> In Southeast Asia, approximately three-quarters (77 per cent) of adolescents aged 15–19 years consume unhealthy, ultra-processed foods – including processed meat and other ultra processed sweet and savoury snacks – and 63 per cent consume sweet beverages. While consumption of these foods is high across the entire population, adolescents consume these products the most frequently.<sup>24</sup>

**Persuasive and pervasive food marketing is increasingly reaching children and influencing their food choices.** Children and adolescents are exposed to a high volume of food marketing throughout their daily lives, including in schools, supermarkets and convenience stores, on television, social media, at sporting events and in other settings. Food manufacturers also target children by using bright colours, cartoons, catchy jingles or slogans and photos of children with their foods. Constant exposure to powerful and engaging food advertisements for unhealthy foods and beverages results in greater consumption of these products – and children's exposure to these advertisements has increased over time.<sup>25</sup> In Thailand, an analysis on trends in food and beverage advertising on major television broadcasting channels found that not only have food advertisements increased over the last decade, but unhealthy food products dominate television food advertising, and the advertisements for unhealthy foods are concentrated during broadcast times that attract the greatest number of child viewers.<sup>26</sup> Digital food marketing is also rapidly expanding, and gives companies the power to deliver highly personalized and persuasive advertisements directly to children.

**Misleading food labels distort consumer perceptions of what is healthy and nutritious.** Unhealthy food products are not always easily identifiable to consumers and can include misleading health and nutrition claims on their packaging to increase their appeal. Food manufacturers may use claims about supposed health benefits or the specific nutrients included in their products (e.g., a great source of vitamin A) to appeal to parents. These claims often

exaggerate or misrepresent any actual benefit. Across East Asia and the Pacific, packaged and processed foods marketed as suitable for older infants and young children aged 6 months to 3 years often include levels of salt and sugar that exceed appropriate levels for young children.<sup>27-29</sup>

**Modern food retailers dominate the food landscape.** Economic and demographic shifts in East Asia and the Pacific have reshaped both diets and retail food landscapes. There has been a rapid expansion of modern food retailers – including supermarkets, hypermarkets and convenience stores – and a decline in more traditional fresh and informal food outlets. Between 2007 and 2021, the number of supermarkets and convenience stores grew over 1,200 per cent in Myanmar and Viet Nam, 814 per cent in Lao People’s Democratic Republic, 649 per cent in Cambodia and around 300 per cent in Indonesia and the Philippines.<sup>22</sup> This dramatic transition to modern food retailers is notable due to the enormous influence food retailers have on the types of foods sold, their price and how they are marketed. While modern food retailers offer convenience, and in some cases increased food affordability, evidence suggests that shopping at these retailers is linked with less healthy diets.<sup>30</sup> Throughout Southeast Asia, supermarkets,

hypermarkets and convenience stores often prioritize unhealthy foods over healthier options for both shelf space and promotions<sup>31-33</sup> and have become the dominant distribution channels for packaged and ultra processed foods in the region.<sup>34</sup>

**Existing regulations are insufficient to protect children’s right to good nutrition.** Many countries in the region still lack robust legal measures to limit the amount of sugar, salt and fat in processed food products or to restrict inappropriate food marketing to children. Where regulations exist, they are usually voluntary or insufficient to curb harmful industry practices. Partial advertising bans such as limiting ads at certain times or on specific platforms fail to address the pervasive and persuasive nature of unhealthy food marketing. Industry exerts its influence against mandatory legal measures by lobbying against stricter regulations, funding biased research or pressuring decision-makers to dilute policies. To effectively safeguard children’s right to good nutrition, governments need strong, evidence-based policies, reliable enforcement and clear penalties for non-compliance.





# UNICEF efforts to improve food environments and reduce and prevent child overweight in East Asia and the Pacific

While children and their families can work to achieve healthy weights through nutritious diets and physical activity, their individual efforts cannot be sustained when living in food environments that prioritize profits over people. The 2025 UNICEF Child Nutrition Report makes clear that without changes to the systems that influence what children eat, individual diet and lifestyle changes will not produce meaningful or sustainable change.<sup>1</sup> It is governments rather than individuals that must address the population-level drivers of overweight and obesity. Collective policy actions across both public and private sectors (including food industry actors) are essential to improve the food environment and promote healthy lifestyles.

The 2025 UNICEF Child Nutrition Report outlines key recommendations to improve food environments and protect children's right to food and nutrition.<sup>1</sup> In East Asia and the Pacific, UNICEF is already supporting governments to implement many of the recommendations. In particular:

- Adopting mandatory policies to transform the food environment for children and adolescents, including:
  - Marketing restrictions to protect children from the harmful impact of food marketing across all forms of media.
  - Front-of-pack labels on foods and beverages to help families make healthier purchases and encourage manufacturers to produce healthier products.
  - Fiscal policies, such as sugar-sweetened beverage (SSB) taxes, to reduce SSB consumption.
- Creating healthier school food environments.
- Engaging young people in public policymaking on food justice by fostering youth-led advocacy.

UNICEF East Asia and the Pacific has also supported efforts to:

- Develop nutrient profile models to assess the nutritional quality of foods marketed to children and to better inform national regulations.
- Transform retail food environments to support healthier food choices.

This section of the report presents key considerations for these policy and intervention areas and case studies summarizing UNICEF's support for each through both country and regional efforts.

<sup>17</sup> UNICEF efforts to improve food environments and reduce and prevent child overweight in East Asia and the Pacific

# Restricting food marketing to children

The ultra-processed food industry prioritizes profit over people. Major food and beverage manufacturers spend billions of dollars to advertise products high in sugar, salt and fat, and they intentionally design their marketing to appeal to children. Much of children's exposure to this marketing takes place outside the home – in schools, at sporting events, in retail outlets and online – leaving parents unaware and with limited power to protect their children. Even brief exposure to food marketing can change a child's food preferences, and high exposure to these compelling and unethical ads over time can have a lifelong impact on their food choices.

The damaging effects of children's exposure to food marketing are well known. In 2010, the Sixty-third World Health Assembly unanimously endorsed the WHO *Set of recommendations on the marketing of foods and non-alcoholic beverages to children*, which called for concerted action to reduce the impact on children of the marketing of foods high in fat, sugar and salt.<sup>35, 36</sup> However, despite global commitments, children of all ages are still insufficiently protected from harmful food marketing. This is particularly true for digital marketing – which delivers highly personalized and targeted content through digital platforms to magnify its reach and impact. Few countries have adopted and implemented the comprehensive regulations needed to protect children from these practices.<sup>37</sup>

The aim of regulating and restricting food marketing is to reduce both the exposure of children to, and the power of, food marketing. Exposure to marketing is influenced by the communication channels, times and settings in which children see marketing. The power of marketing is influenced by the content of the message, especially the creative strategies used – including graphics and visual design, humour, celebrities and entertainment events.<sup>36, 37</sup>

National food marketing regulations must be government-led, mandatory and comprehensive. Careful restrictions must be placed on where, how and when unhealthy foods and beverages can be marketed. The existence of regulations alone is not sufficient; governments must adequately enforce these restrictions and hold companies accountable for skirting regulations. Piecemeal or voluntary actions – such as industry-led pledges and other self-regulatory measures – allow food companies to decide if and how they restrict their marketing and have not been shown to effectively protect children.

In East Asia and the Pacific, only 11 of the 33 countries in the region have some form of policy on marketing food to children, however, many of these are voluntary, weak or unenforced. UNICEF works with countries across the region to generate evidence on the impact of food marketing to children and advocate for the adoption and enforcement of mandatory food marketing regulations.

## Case study

# Restricting children's exposure to harmful food marketing in Thailand

Children's right to good nutrition in Thailand is under threat due to the widespread and aggressive marketing of unhealthy, ultra-processed foods and beverages that are high in salt, sugar and unhealthy fats. Television advertisements for these products have increased over the last decade and are intentionally concentrated during broadcast times that attract the greatest number of child viewers.<sup>26</sup> Exposure to marketing for these products extends beyond television, with 84 per cent of children aged 6–18 years seeing advertisements on social media.<sup>38</sup>

Recognizing the threat that food marketing poses to children and adolescents, the Government of Thailand committed to introducing regulations to restrict the marketing of unhealthy food and beverages to children. In 2020, UNICEF supported the Thai Department of Health to prepare an evidence paper on the rationale and potential legislative mechanisms for controlling the marketing of unhealthy foods and drinks in Thailand. In 2021, a multisectoral and multistakeholder working group was established to develop a first draft of the Act to Control the Marketing of Food and Drinks Affecting Children's Health (referred to as the 'Marketing Act').

Between 2021 and 2023, the working group revised the draft Marketing Act following extensive consultations with more than 170 stakeholders, including government agencies, business actors, civil society, academia and the public. Most stakeholders consulted expressed support for the legislation, with limited opposition (primarily from the private sector and industry-related organizations). A UNICEF-supported poll of 1,500 adults, children and young people also found that a majority supported the Marketing Act, while only 10 per cent were opposed.

The resulting draft Marketing Act aims to reduce children's exposure to food marketing for unhealthy foods and beverages through a series of provisions that restrict: (1) the use of techniques that appeal to children on product labels (e.g., cartoons); (2) the sale of these products in primary and secondary educational institutions; (3) product advertisements across all communication channels, including television, radio, online media, billboards, public transport and in schools; (4) product donations to schools and other places that children gather; (5) direct engagement between companies and children to promote these products; (6) direct engagement between companies and communities (e.g., clubs or online communities) to promote these products; (7) company sponsorship of children's activities in exchange for branding or messages linked to these products; and (8) the use of value-for-money claims on product labels or marketing claims. The draft Marketing Act also requires product labels to use easy-to-understand symbols indicating high levels of fat, sugar or salt.

In 2025, UNICEF developed an advocacy strategy in consultation with a broad range of stakeholders, including children and adolescents, to coordinate advocacy efforts and mobilize key political actors. The Director General of the Thai Department of Health and the Permanent Secretary of the Ministry of Public Health both signed off on the final draft of the Marketing Act in early 2025. The draft is now awaiting approval from the Minister of Public Health. Once passed, the Marketing Act will contribute to reducing children's exposure to, and the power of, food marketing in Thailand and drive progress in reducing child overweight and obesity.

# Front-of-pack labelling

Misleading and confusing food labels and health and nutrition claims allow companies to disguise their products as healthy and nutritious. Phrasing such as “contains fruit” and “high in vitamin A” mislead children and parents into thinking a food product is healthy, when it may contain excessive amounts of sugar, salt and fat or other ingredients that contribute to long-term health problems. Children and families have a right to be warned about the harmful ingredients in the foods available to them.

Front-of-pack labelling (FOPL) can be used to support children and families to make healthier food choices. FOPL refers to nutrition labelling systems presented on the front of pre-packaged foods and beverages. These labels deliver clear and simple nutritional information at-a-glance, allowing consumers to quickly distinguish between healthy and unhealthy options. Simple, negative warning labels that clearly identify unhealthy products have been shown to discourage the purchase and consumption of these foods.<sup>39</sup>

WHO and UNICEF recommend the use of FOPL to help improve diets and curb the rise in childhood overweight and obesity, with a focus on reducing the consumption of foods and beverages high

in sugar, salt and fat. There are a wide variety of FOPL approaches used worldwide, including nutrient warnings (e.g., ‘high in sugar’), colour-coded traffic lights or scores (e.g., green logos for healthy and red logos for unhealthy), guidelines for daily allowance (e.g., clear labels indicating the proportion or recommended daily allowance for sugar, salt and fat per serving) and others.<sup>39</sup>

Some labelling systems are mandatory and required for all pre-packaged product types outlined in national legislation; however, a greater number of labelling systems around the world are voluntary and applied only at the discretion of food manufacturers. Voluntary labelling systems can also lead to multiple types of logos and labels on products, which can confuse consumers and decrease the usefulness of FOPLs.

In East Asia and the Pacific, few countries implement FOPLs. Only one country in the region (Singapore) has mandatory FOPL, which applies to pre-packaged and freshly prepared beverages to reduce sugar consumption. A handful of other countries also have government-supported voluntary policies: Australia, Brunei Darussalam, China, Indonesia, Malaysia, New Zealand, the Philippines, Thailand and South Korea.

## Case study

# Making the case for mandatory front-of-pack labelling in Indonesia

The widespread availability, affordability and marketing of unhealthy, ultra-processed food and beverage products high in sugar, salt and unhealthy fats is a key contributor to overweight among children and adolescents in Indonesia. Among children aged 5–19 years, 55 per cent consume at least one SSB per day and 43 per cent consume at least one confectionery (e.g., candy) per day.<sup>40</sup> A lack of robust regulatory frameworks is a critical factor behind this shift towards unhealthy diets and food environments.

In 2022, UNICEF completed a landscape analysis on child overweight to better understand gaps in the regulatory framework and develop recommendations on how to transform the food environment to better protect children's right to good nutrition. The analysis found that while Indonesia has two voluntary FOPL schemes – a non-interpretative Guideline Daily Amount label and a 'healthier choice' logo – they are unlikely to have a meaningful public health impact because they are voluntary, not aligned with global recommendations and only apply to a limited range of ultra-processed foods. One of the key recommendations from the analysis was to develop a new, mandatory FOPL scheme that applies to a broader range of unhealthy foods.<sup>40</sup>

At the Government's request, UNICEF conducted research to understand how well different FOPL formats in Indonesia support healthier food choices. One study assessed whether an interpretive FOPL that uses colors, symbols or a score to communicate nutritional quality – such as Nutri-Score, colour-coded traffic lights or warning labels – could improve consumers' ability to identify and choose healthy food

options. The study concluded that interpretive FOPL significantly improved consumers' ability to identify the healthiest and least healthy foods. UNICEF is also supporting additional research on consumer perceptions of FOPL and which FOPL types work best for different population groups to help guide decisions on label design and placement.

Using this new evidence, UNICEF developed an advocacy campaign to mobilize partners and political actors on the need for an updated, mandatory FOPL scheme. UNICEF also developed information, education and communication materials on FOPL and integrated them into community nutrition initiatives, including a 2024 pilot school nutrition programme targeting primary school children.

In 2024, the Indonesian Food and Drug Authority began drafting new mandatory FOPL regulations that will incorporate an interpretive FOPL alongside the existing 'healthier choice' logo on product packaging. UNICEF provided inputs to the draft regulation as part of a multistakeholder group involving several line ministries, WHO, academia and civil society. The draft regulation is undergoing review to ensure the new FOPL scheme is supported by robust, context-specific evidence, including findings from the UNICEF studies. Once passed, the new FOPL scheme will support other national efforts to improve food environments for children, including restricting the sale or marketing of unhealthy food products in schools and developing public education campaigns on how to read and interpret food labels to make healthy food choices.

# Sugar-sweetened beverage taxes

A single sugary drink – like soda, fruit juices or chocolate milk – can contain more than double the daily maximum recommended sugar intake for children. Regular consumption of SSBs threatens children’s health and development – yet the attractive packaging of these products, their easy availability and low cost mean that children and families often opt for SSBs over healthier alternatives.

The global increase in overweight and obesity is linked in part to increasing consumption of SSBs and unhealthy ultra-processed foods. In addition to increasing the risk of overweight and obesity, high consumption of SSBs alone is estimated to contribute to 2.2 million new cases of type 2 diabetes and 1.2 million new cases of cardiovascular disease annually.<sup>41</sup> SSB consumption is also linked to increased dental caries and erosion.<sup>42</sup>

WHO recommends the implementation of a tax on SSBs to promote healthier diets. The purpose of an SSB tax is two-fold: first, to incentivize beverage manufacturers to reduce the sugar content in SSBs, and second, to discourage consumers from the purchase and consumption of SSBs through price increases. When designed and implemented appropriately, SSB taxes can reduce the consumption of sugary beverages in

target groups and contribute to reductions in overweight and obesity. Taxes can also provide governments with important revenue to fund nutrition and health-related programmes.

Today, SSBs are one of the most commonly taxed unhealthy food products in the world<sup>43</sup> and more than half (59 per cent) of the world’s population is currently covered by a national-level SSB tax.<sup>44, 45</sup> In East Asia and the Pacific, 18 of the 33 countries in the region have passed a national SSB tax. National taxes have been passed, but not yet implemented, in Viet Nam, Mongolia and Indonesia. One country (Micronesia) has a subnational SSB tax.

The strength and scope of an SSB tax matters. Some SSB taxes in East Asia and the Pacific may apply an excise tax that is too low to discourage consumption, or a tax may include exemptions for items such as fruit juice, despite its high sugar content. Continued assessment of the impact of SSB taxes and advocacy for evidence-based improvements is critical to ensure their success.

UNICEF supports countries throughout the policy process of developing and implementing an SSB tax – from evidence generation to understand the need and potential impact of a tax, through continued advocacy to strengthen existing taxes.

## Box 2: Global recommendations for SSB taxes

WHO recommends implementing an SSB tax that increases the retail price of SSBs by at least 20 per cent to effectively reduce consumption. The tax should cover all types of SSBs – including sodas, energy drinks, fruit juices and sweetened teas; and as of 2022, it also includes non-nutritive sweeteners to prevent their substitution with untaxed sugary drinks. Revenue from the tax should be allocated to health promotion activities, such as improving access to clean water and nutrition education. Public awareness campaigns about the health risks of SSBs and the benefits of the tax are essential. Continuous monitoring and evaluation are crucial to assess the tax’s impact on consumption and health outcomes.<sup>46</sup>

## Case study

# Mobilizing commitment to adopt a sugar-sweetened beverage tax in Viet Nam

The rate of childhood overweight and obesity in Viet Nam surged in recent decades: from 2 per cent in 2000 to 19 per cent in 2020. The consumption of SSBs has also skyrocketed: Between 2002 and 2016, the consumption of juices increased 10-fold, sports and energy drinks increased nine-fold and sweetened, ready-to-drink tea increased six-fold.<sup>47</sup>

A 10 per cent ad valorem tax on carbonated soft drinks was first proposed by the Ministry of Finance in 2014 as part of a revised Excise Tax Law; however, the proposal was removed from drafts of the revised law due to a lack of evidence between SSB consumption and health outcomes in Viet Nam and interference from industry. The tax was again proposed in 2017 with an expanded definition of SSBs, but was not adopted into law.

To increase Government support for passing and implementing an SSB tax policy, UNICEF supported several research activities designed to (1) better understand current consumption habits and perceptions of SSB consumption on health among Vietnamese youth; and (2) model the potential health and economic impacts of SSB taxation in Viet Nam. Notably, trained youth champions actively participated in the research by interviewing their peers in public places, such as coffee shops and other venues where students frequently consume sugary drinks.

Among Vietnamese youth aged 11–25 years, 80 per cent are aware that frequent SSB consumption increases their risk of overweight, obesity and diabetes; yet, despite this known risk, 43 per cent consume SSBs at least twice per

week. Of those regularly consuming SSBs, 51 per cent reported that the low price of SSBs was a driving factor for regular consumption.

Models of the potential impacts of an SSB tax estimated that an ad valorem tax of 10 per cent on SSBs – equivalent to a 5 per cent price increase – could reduce the prevalence of overweight and obesity and contribute to an estimated 20,000 fewer cases of diabetes, saving approximately 155 billion VND (US\$ 5 million) in direct medical costs. The study highlighted that the higher the SSB price increase, the greater the health and economic benefits. For example, a 20 per cent price increase (i.e., an ad valorem tax of 40 per cent) could contribute to 81,000 fewer cases of diabetes and 623 billion VND (US\$24 million) in savings.

UNICEF worked closely with a coalition of organizations to advocate for a tax on SSBs, using the results from the UNICEF-led studies. The coalition organized a series of advocacy events with youth champions, leaders of relevant line ministries and National Assembly members, including a joint workshop to highlight research findings and international experiences and best practices on SSB taxes. UNICEF sent timely and targeted advocacy letters to the Minister of Finance and the President of the National Assembly. These joint efforts contributed significantly to influencing policymakers and advancing policy change.

In June 2025, the Viet Nam National Assembly approved an excise tax on SSBs under an amended Law on Special Consumption Tax. Under the revised law, drinks containing more

than 5 grams of sugar per 100 ml will be taxed at 8 per cent in 2027, and at 10 per cent starting in 2028. The overwhelming support for the amended law and SSB tax – with 94 per cent of participating National Assembly Members voting in favour – reflects a recognition at the highest level that SSBs are major contributors to

childhood overweight and obesity. UNICEF and partners will continue to support the Government to monitor the implementation of the tax and advocate for adjustments to tax levels aligned to maximize the policy impact.



## Case study

# Monitoring and advocacy to strengthen a sugar-sweetened beverage tax in Malaysia

The consumption of sugary drinks among adolescents in Malaysia has steadily increased over time. The proportion of adolescents consuming at least one soft drink per day increased from 29 per cent in 2012 to 37 per cent in 2017.

With the support of UNICEF and WHO, the Government of Malaysia introduced a tax on SSBs at RM 0.40 per litre (equivalent to US\$0.08) in 2019. The tax was levied on two broad categories of SSBs, either imported or domestically produced: beverages containing more than 5 g of sugar per 100 ml and fruit juice or vegetable-based drinks with over 12g of sugar per 100 ml. While the SSB tax was a significant step towards reducing sugar consumption among children and adolescents, the tax was lower than initially planned due to strong resistance from SSB manufacturers.

The Government and UNICEF closely tracked the impact of the tax on SSB consumption to determine whether and how the tax needed to be refined over time. In 2021–2022, a comprehensive evaluation revealed both promising results and concerns. In response to the tax, manufacturers had reformulated some beverages to reduce the sugar content and increased production of low-sugar beverages. However, most of the larger manufacturers had absorbed the tax rather than passing it to consumers, thus the retail price

of SSBs did not increase to the extent needed to discourage consumption. Adolescents still consumed an average of six servings of SSBs each week and more than half of the total free sugars consumed by adolescents came from beverages.

Using this evidence, the Government has continuously strengthened and expanded the SSB tax to increase its impact. In 2024, the tax was increased by 25 per cent – to RM 0.50 per litre (US\$0.12) – and the scope of the tax was expanded to cover milk-based drinks and premix preparations. In January 2025, the SSB tax was increased further to RM 0.90 per litre (US\$0.21).

In 2025, the Government of Malaysia launched a ‘war on sugar’ to help curb the rise in NCDs and childhood overweight. As part of these efforts, the Government proposed raising the SSB tax to 20 per cent of the total cost of an SSB to maximize impact and align with the WHO recommend tax rate. UNICEFs continued support for evaluations of the SSB tax, monitoring of sugar and SSB consumption and continued advocacy to strengthen to tax in line with global guidance has helped to highlight the crisis of childhood overweight, build political will to address the issue and pass policies that prioritize children and health over profit.

# Nutrition in schools

Schools play a critical role in shaping children's nutrition and lifestyle habits. The high rates of school attendance in East Asia and the Pacific – exceeding 95 per cent in primary schools – mean that school programmes and policies designed to improve nutrition can reach millions of children and adolescents. For example, schools that offer nutrition education and interventions that assess and address malnutrition can have a positive influence on dietary habits that will last a lifetime. School meal programmes can also act as a crucial safety net, ensuring children have access to at least one nutritious meal per day and incentivizing school attendance.<sup>48</sup>

While schools should be a safe space for children to learn and thrive, the food environments within and around schools are instead increasing children's exposure to unhealthy foods and beverages. Unhealthy, ultra-processed foods high in sugar, salt and unhealthy fats are frequently sold in schools or by nearby vendors, and food manufacturers are often allowed to market their products on school premises or sponsor school activities in exchange for brand promotion. Further, many schools have limited or no school meal programmes, do not provide consistent access to safe drinking water, lack equipment and facilities for physical activity and do not incorporate nutrition education into their curriculum.

To protect children's right to good nutrition, robust legal measures are required to improve the school nutrition environment. Governments must regulate the marketing and sale of unhealthy foods and beverages in and around schools, prohibit food manufacturers from sponsoring school activities in exchange for promoting their products and guarantee students' access to safe drinking water. In addition, governments should implement nutritious school meals, provide regular nutrition education and integrate relevant health and nutrition interventions in schools. These actions not only support children's immediate well-being but also contribute to their long-term development and learning potential.

UNICEF works with Governments in East Asia and the Pacific to improve the school nutrition environment through policy and programme development so that students are protected and can build the skills and knowledge needed to make healthy food choices.

## Case study

# Assessing the school nutrition environment across East Asia and the Pacific

Children and adolescents in East Asia and the Pacific are increasingly targeted by unhealthy food marketing and exposed to unhealthy, ultra-processed foods and beverages in schools – one of the most important places where they learn and play. Few countries in the region have regulations in place to protect children and adolescents from unhealthy foods in schools and the marketing materials used to promote them, leaving children vulnerable in one of the places they should be safest.

In 2024, UNICEF launched the Nutrition Environment Assessment Toolkit for Schools (NEAT-S) to help schools, local and national government authorities and partners better understand the school nutrition environment and identify actions needed to better protect children. More specifically, NEAT-S provides step-by-step guidance on how to assess the school environment across four domains: (1) nutritious foods in schools; (2) healthy school food and physical activity environments; (3) nutrition services in school; and (4) nutrition education in school curricula. NEAT-S is also designed to provide data that can be used by policymakers to gain insight into the status of school nutrition environments nationally and set priorities for school nutrition policy and programme development.<sup>49</sup>

With UNICEF support, several countries in East Asia and the Pacific have adapted NEAT-S to their context and piloted the toolkit to assess the school nutrition environment. Fiji conducted a pilot school assessment using NEAT-S in 10 schools – including those in urban and rural areas, both primary and secondary schools and public, as well as boarding and faith-based schools. All schools had access to safe drinking water and physical activity equipment and facilities for students, and eight of the 10 schools

were free from unhealthy food marketing and sponsorship. However, all 10 schools sold sweet, salty or deep-fried foods and only six schools had teachers trained on nutrition education.<sup>49</sup> Fiji will roll out the first national survey using NEAT-S in 2025/2026.

Mongolia adapted NEAT-S to include assessments of the content of school lunches, students' attitudes and views on the school lunch programme and school stakeholders' perceptions of the school nutrition environment. The adapted tool was piloted in eight schools across different districts. All schools had access to safe drinking water, teachers trained on nutrition education, were free from unhealthy food marketing and sponsorship and did not sell sweet or sugary drinks. However, only half of schools had physical activity equipment and facilities.<sup>49</sup> Findings from the Mongolia NEAT-S pilot were used to advocate for improvements to the quality of school meals, which contributed to the Government's approval of a budget increase in 2025. NEAT-S has since been further adapted by school children to monitor the marketing of unhealthy foods in more schools, with the data used to inform a policy dialogue with Government on adopting national regulations to restrict unhealthy food marketing to children.

Viet Nam adapted NEAT-S in collaboration with the Ministry of Education and Training to be used as a routine annual self-assessment tool for all schools. The adapted NEAT-S included a diet quality questionnaire for students and was piloted in 16 schools across four provinces. Half of surveyed schools sold sugary drinks and sweet, salty or deep-fried snacks, and only three schools had teachers trained on nutrition education. However, 75 per cent of the schools had physical activity equipment and facilities and ten were free from unhealthy food marketing

and sponsorship.<sup>49</sup> A second phase of the NEAT-S pilot will include additional schools and test a data management system for schools to utilize and manage. These findings will contribute to the national institutionalization of the adapted NEAT-S by 2026.

Indonesia adapted and piloted NEAT-S in 268 primary schools across three regions, ensuring that both urban and rural schools and public, private and faith-based schools were represented in the pilot sample. Approximately 98 per cent of the surveyed schools sold sweet or sugary drinks and sweet, salty or deep-fried foods, and approximately half had daily access to safe drinking water and teachers trained in nutrition education. However, half of schools did provide growth and weight measurements with a referral system in place for students identified

as malnourished and 68 per cent of schools were free from unhealthy food marketing and sponsorship.<sup>49</sup> The findings generated from the pilot will contribute to the scale up of the Free Nutritious Meal (Makan Bergizi Gratis) Programme initiated by Government in 2025.

Other countries in the region also have plans to adapt and implement NEAT-S. For example, in the Solomon Islands, UNICEF and the Ministries of Education and Health used NEAT-S to develop a comprehensive surveillance tool for school nutrition, which will be used to conduct a national school survey in 2026. With the continued expansion of NEAT-S across the region, UNICEF and schools will have the evidence needed to advocate for stronger programmes and regulations to protect and improve the school nutrition environment.



# Nutrient profile models

To effectively protect children from the sale and marketing of unhealthy foods and beverages, tools are needed to identify food items that do, and do not, contribute to a healthy diet. Nutrient profiling is a scientific method for categorizing food and beverage items according to their nutritional quality.<sup>50</sup> A nutrient profile model, for example, can be used to assess and classify foods and beverages that contain excess amounts of sugar, salt and fat. In some regions, including East Asia and the Pacific, nutrient profile models have also been adapted to identify food and beverage labels that violate global and national guidelines on food marketing to children. WHO recommends the use of region-specific or country-specific nutrient profile models to assess the nutrient composition and/or product packaging of foods marketed to children, adolescents and the general population.

Governments can use nutrient profile model assessments to develop public health interventions and regulatory frameworks to improve the food environment and prevent and control overweight and obesity. For example, if a food or beverage exceeds defined thresholds for

sugar, salt or fat in a nutrient profile model, or if the product label includes misleading health or nutrition claims, the sale or marketing of the product can be restricted or prohibited. As a result, nutrient profile models are critical tools to help governments define allowable levels of sugar, salt and fat in products marketed to children; determine which food and beverage products require FOPL; and regulate the availability and marketing of unhealthy foods and beverages sold in schools. Other relevant applications include, but are not limited to: establishing nutrition or health claim policies, implementing taxation policies to limit the consumption of unhealthy foods or beverages, promoting reformulation by food and beverage companies, and regulating school food environments, including cafeterias and vending machines.

UNICEF supports governments across East Asia and the Pacific to develop and implement nutrient profile models, and to use the results to advocate for and inform regulatory frameworks that adequately protect children from the various harms associated with the marketing, sale and consumption of unhealthy foods.

## Case study

# Applying a nutrient profile model to assess the nutritional quality and labelling of foods in seven countries

What, when, how and how much children are fed in early life lays the foundation for their health and survival. Yet even the diets of the youngest children are under threat as the food and beverage industry is increasingly marketing packaged, processed foods as appropriate and even beneficial for children between 6 months and 3 years of age. These processed food products – known as commercially produced complementary foods (CPCF) – include widely available instant cereals, porridges, puréed foods, food in pouches, snacks and ready-to-eat or instant meals.

There is clear global guidance to limit the sugar, salt and fat content in CPCF, and on how to ensure the statements, claims or images included on CPCF labels do not undermine breastfeeding or mislead caregivers about the nutritional composition of the product or its purported benefits. Yet, little was known about the nutritional quality or labelling practices of the CPCF sold in East Asia and the Pacific.

In 2020, UNICEF developed a nutrient profile model to specifically assess how well the nutrient composition and labelling of CPCF sold in the region adhered to global guidance. Using this nutrient profile model, UNICEF supported the most comprehensive assessment of CPCF to date – analysing over 1,600 CPCF products sold across seven countries: Cambodia, Indonesia, Lao People's Democratic Republic, Malaysia, the Philippines, Thailand and Viet Nam.

The nutrient profile model found that the majority of CPCF available in the region are not nutritionally appropriate for young children and include claims that may mislead caregivers.

Almost half (44 per cent) of CPCF contain added sugar or sweeteners and 37 per cent contain more sodium than recommended by international guidance. More than 80 per cent of CPCF included misleading compositional claims (e.g., 'all natural') and other nebulous claims designed to appeal to parents (e.g., 'nutritionally balanced'). The labels on more than 80 per cent of CPCF in Cambodia, the Lao People's Democratic Republic and the Philippines did not include any information in the country's national language, limiting the ability of caregivers to make informed choices when buying food for their children.

UNICEF presented the nutrient profile model results at a regional workshop and in multiple reports and a scientific journal to raise awareness about the poor nutritional quality and inappropriate labelling of CPCF, and the critical gaps in CPCF regulatory frameworks in East Asia and the Pacific. Governments across the region now have compelling evidence that national legal measures regulating CPCF must be strengthened to better protect children.

In Cambodia, Viet Nam, the Philippines and Indonesia, the nutrient profile model results are being used to improve national regulations that restrict the amount of salt and added sugar in CPCF, and the types of claims allowed on product labels. For example, in Cambodia, the results have informed new draft national standards for CPCF, which are currently under review by the Ministry of Health and will be submitted to the Council of National Standards for endorsement and approval in late 2025.

# Retail food environments

The retail food environment refers to the physical spaces where people buy food, including a broad range of informal and formal settings, from wet markets to street food vendors, supermarkets, convenience stores, online traders and vending machines. Food manufacturers and retailers together play a critical role in shaping retail food environments by influencing the types of foods available to purchase, their prices and affordability, and the way they are promoted. As a result, the retail food environment has a significant impact on what people choose to buy and on the healthiness of their diets.

Food retailers often promote unhealthy foods to children by placing ultra-processed sweet or salty foods or snacks on shelves at the eye level of children, making them highly visible and appealing. Retailers also display and heavily promote unhealthy products in key locations throughout stores and prioritize these items for discounts or sales to appeal to those with limited means. Stores prominently display candy and other sweet or salty snacks in checkout areas to ensure consumers and children are exposed to them while waiting in line to pay.

In East Asia and the Pacific, an increasing number of people buy most of their food from modern food retailers, including supermarkets, hypermarkets and convenience stores. In fact, between 2009 and 2023, the number of

supermarkets per capita in East Asia and the Pacific grew by 53 per cent – faster than in any other region in the world.<sup>22</sup> These large, chained retail markets have a particularly significant influence on diets, given their substantial market power, and their rapid expansion is directly linked to the increased availability and consumption of unhealthy foods in the region.<sup>51</sup>

Recognizing the critical role that food retailers play in influencing diets, UNICEF partnered with Deakin University in Australia to launch a region-wide initiative known as 'RESHAPE' to make urban retail food environments healthier for children. The initiative includes collaboration with academia and governments to engage food retailers to advocate for increased access to healthier foods. The initiative had an initial focus on Chengdu City in China, Indonesia, the Philippines and Thailand, and recently expanded to Malaysia.

Through the RESHAPE initiative, UNICEF East Asia and the Pacific is working to strengthen the evidence base on retail food environments by mapping retail environments, documenting retail practices and consumer purchasing behaviour, advocating for policies to promote healthier food environments and working with food retailers to test innovative interventions to encourage healthier retail environments.

## Case study

# Transforming retail food environments to support child nutrition in China

Sales and consumption of unhealthy, ultra-processed foods and beverages in China have steadily increased over time, in part due to the rapid increase in the presence of modern food retail markets such as supermarkets, hypermarkets and convenience stores. By 2021, 61 per cent of ultra-processed food sales in China were made through modern food retailers. A survey in Chengdu City found that 92 per cent of adolescents making food purchases from supermarkets or convenience stores most frequently bought sweet and salty snacks – such as confectionery, chips and ice-cream – from these retailers.<sup>52</sup>

To help transform modern retail food environments to support healthier food choices for children and adolescents, UNICEF established a partnership with the China Chain-store and Franchise Association (CCFA) in 2023. A prominent participant in this partnership is 7Fresh Supermarket, opened by JD.com, which is the second-largest e-commerce retailer in China. With the support of UNICEF and the CCFA, 7Fresh Supermarket launched a pilot supermarket in Tianjin in 2023. Guided by the UNICEF Guidance Framework to Support Healthier Food Retail Environments for Children,<sup>53</sup> the pilot was designed to centre child health in its product selection, food promotions and overall store design.

The 7Fresh pilot store in Tianjin implemented a series of in-store interventions to help create a healthier retail food environment for children: the store reduced the availability of ultra-processed food products by 20 per cent, and replaced these products with fresh produce, whole foods and healthier packaged alternatives; sugary

drinks and snacks were moved to less visible areas of the store, while healthier items – such as bottled water, fruit and nutritious snacks – were positioned on prominent, child eye-level shelves; and all food products were removed from checkout areas to discourage impulse buys of unhealthy snack foods. UNICEF and the CCFA also co-developed a 'Better Pick for Kids' label that was used to highlight healthy food options throughout the store.

The results of the pilot child-friendly supermarket were remarkable. The store attracted a higher than normal number of visitors after its launch and was able to cover its operating costs and become profitable after only three months – far faster than the usual six months it takes grocery stores to turn a profit. Over the course of the 6-month pilot, the 7Fresh in Tianjin observed a significant increase in profits from healthy product categories. In fact, during the Chinese Spring Festival, a time traditionally associated with high consumption of unhealthy snacks, sales of healthy products equalled, and in some instances exceeded, those of unhealthy products.

The partnership between the CCFA and UNICEF demonstrated the commercial viability and long-term sustainability of the healthy retail approach. Inspired by the success of 7Fresh pilot, at least three additional major food retailers are making plans to embed a health focus into their retail strategies. One of these retailers – Tianhong, a major Chinese supermarket chain – entered a three-year partnership with CCFA to establish a Healthy Retail Lab, which will act as a technical hub dedicated to developing, testing and refining health-promoting retail interventions.

# Engaging young people in public policymaking

Childhood is a critical period of rapid physical, cognitive and social development, and children and adolescents today are undergoing these transformations amid unprecedented changes to their food environments.<sup>54, 55</sup> Traditional diets based on nutritious and fresh foods are rapidly being replaced with unhealthy, ultra-processed foods and beverages high in sugar, salt and unhealthy fats and children and adolescents are increasingly exposed to food marketing. As the population shifts towards a more highly processed diet, our food systems are also negatively impacting the natural environment.<sup>56</sup>

As children grow, they gain increased autonomy over their food decisions, yet they are rarely asked about how they view their food and food environments. This leaves them on their own to navigate ubiquitous food marketing across media and social media platforms when deciding what to eat.<sup>55</sup> The children of today will also shoulder the heavy burden of climate change as it accelerates in the coming decades, yet youth voices are largely excluded from policy discussions on how to address climate change or its impact on our food systems.

In 2021, UNICEF partnered with Western Sydney University to bring the voices of children to the forefront of discussions on food environments through participatory food systems dialogues in 18 countries. This work clarified that children today are aware of the importance of good nutrition and the growing physical and financial barriers they face to nutritious, safe and sustainable diets. All participating children expressed a strong desire to be engaged in the dialogue and take action to transform their food environments and address the links between our current food systems and environmental degradation and climate change.<sup>56</sup>

Governments and the companies that produce, sell and market ultra-processed foods and beverages need to hear a multitude of voices that share the common aim of promoting healthier food environments. Children have a right to be consulted in the development of policies that directly impact their lives. Their lived experiences, skills and aspirations can help enrich policies and their voices can be extremely powerful to effect policy change.

## Case study

# Amplifying children's demands for healthier food environments across East Asia and the Pacific

Childhood overweight and obesity in East Asia and the Pacific has rapidly increased since 2000, with the burden of obesity among children and adolescents now double that of underweight. Children across the region are bombarded by targeted and often unethical food advertisements that undermine their rights and jeopardize their health and well-being.

In 2023, the UNICEF East Asia and Pacific Regional Office launched a multi-year, multi-country initiative titled 'Fix My Food' to place children and adolescents at the centre of efforts to create healthier food environments in the region. A workshop was organized with children, social media influencers, a chef and UNICEF staff from eight countries – Cambodia, China, Fiji, the Federated States of Micronesia, Mongolia, the Solomon Islands, Timor-Leste and Viet Nam – to co-create campaign objectives and identify areas where children and adolescents wanted to engage. Of particular concern to children was the pervasive marketing of 'junk' food and how to preserve the vibrant food cultures of East Asia and the Pacific amid the rise of ultra-processed foods. The official Fix My Food campaign was launched via a livestreamed event across multiple platforms. The launch event was covered by more than 200 media articles from 17 countries and social media posts received more than 5.3 million impressions and 875,000 engagements.<sup>57</sup>

To build children's research and advocacy skills, UNICEF supported participatory action research to help children and adolescents understand how food environments shape their daily lives. Youth leaders from eight countries supported more than 250 children and adolescents to critically examine and document their food environments using journalling and photography. Their research confirmed that not only are unhealthy foods more available and affordable than healthy foods,

but the bright packaging and trendy, targeted advertisements for these products make them extremely appealing.

The Fix My Food platform is now being used by children and adolescents across East Asia and the Pacific to share their research, advocate for healthier food environments and push their governments for change. In Viet Nam, the national Fix My Food campaign established eight youth communities and identified 70 Fix My Food coordinators across major universities and youth networks. To date, more than 20 face-to-face communication sessions have been organized and roughly 1,000 youth have been mobilized through Fix My Food. The national campaign has published more than 400 social media posts, reaching more than 8 million children and adolescents with Fix My Food content. Fix My Food youth advocates also hosted joint events with the Viet Nam National Assembly to share their research and experiences and use their voices to support a tax on SSBs. Their contribution to ongoing advocacy efforts for an SSB tax significantly contributed to the passing of Viet Nam's first SSB tax in 2025.

In Mongolia, the national Fix My Food campaign partnered with the Mongolian Children's Council to co-create a public art exhibit with the Union of Mongolian Artists, titled "A Healthy Child has 1,000 Wishes", promoting access to healthier food for children. Youth advocates with Fix My Food also conducted school food environment assessments in 10 schools to generate evidence on the current state of school food environments to push for greater coverage of nutritious and free school meals.

In China, youth advocates in both Beijing and Chengdu were engaged via an online survey to better understand the challenges they

face in choosing healthy food options and to identify innovative solutions to improve their food environments. Children and adolescents confirmed that food advertising is everywhere and specifically designed to appeal to kids. They also called for more active governmental action to regulate unfettered food marketing and protect consumers' rights and they suggested subsidies for healthy food to make it more affordable and accessible for low-income families and communities. UNICEF disseminated the findings through a press release and social media videos featuring the children and adolescents. The social media posts attracted more than 916,500 views and more than 3,700 interactions from the online audience. Additionally, the campaign received 33 mentions from mainstream media outlets.<sup>58</sup>

As Fix My Food spreads across additional countries in the region, a greater number of children are demanding that their voices be heard. They want and deserve to be included in the decision-making processes to improve their food systems for a sustainable and healthy future. UNICEF continues to support Fix My Food, with strong national campaigns being developed across the region, including in Fiji, where a Fix My Food campaign was recently launched to advocate for restricting marketing of unhealthy foods to children.





# The way forward

Governments are increasingly recognizing that the childhood overweight and obesity crisis is a result of food environments driven by profit – not the individual choices of children and families. This report shows that in East Asia and the Pacific, governments are already taking steps to implement the policies needed to regulate unhealthy food environments to protect children's right to food and nutrition. More work is needed to continue and expand these efforts, and to accelerate progress by incorporating all the 2025 UNICEF Child Nutrition Report recommendations into regional and national strategies to address childhood overweight.

UNICEF recommends that all countries in East Asia and the Pacific:

## **Implement a comprehensive set of mandatory measures to transform food environments for children and adolescents with:**

- Regulations to restrict unhealthy food marketing to children.
- Mandatory FOPL.
- SSB taxes and other fiscal policies to incentivize healthy eating.
- Nutrient profile models to classify foods as permitted or not permitted based on their nutritional composition, which serve as the scientific foundation for the above policies.

## **Prioritize healthier school food environments:**

- Regulate the sale and marketing of unhealthy foods and beverages in and around schools.
- Provide nutritious school foods (and, if needed, micronutrient supplements).
- Provide free, safe drinking water in all schools.
- Improve nutrition and physical activity education in the national curriculum.

## **Expand the engagement of young people in public policymaking**

- Support youth advocates (including from Fix My Food) to engage in policy processes for food justice.
- Leverage social media and other online platforms to engage and inform young people about policy efforts.
- Amplify youth voices across the region to demand healthier food options and to better protect and preserve the vibrant food cultures in East Asia and the Pacific.

In line with the 2025 UNICEF Child Nutrition Report, the above actions should be supported by additional efforts to transform food environments:

- **Establish robust safeguards to protect public policy processes from interference by the ultra-processed food industry.** By implementing conflict of interest safeguards and excluding ultra-processed food and beverage industry actors from any involvement in policy development and implementation, we can better ensure that policies prioritize the health and well-being of children and not corporate profits.
- **Implement policies to improve the availability and affordability of nutritious food for children and adolescents.** This requires strengthening food systems and infrastructure to support the production, processing and distribution of nutritious and healthy foods, including through large-scale food fortification.
- **Adapt and strengthen social protection schemes to increase children's access to nutritious and healthy diets.** Social transfers and other forms of social protection (e.g., food, cash, vouchers, affordable

childcare) can help improve families' financial and physical access to nutritious foods.

- **Strengthen national data and surveillance to monitor child overweight, child diets and the food environment.** Most countries in the region regularly collect national estimates of child overweight, but more routine collection of data on the availability and consumption of unhealthy foods in childhood and adolescence can improve the ability to determine policy needs and track our progress.

The rising rates of childhood overweight and obesity in the region are presenting an immense challenge to the health and development of children and nations. While the forces of the ultra-processed food industry are powerful and expanding, governments throughout East Asia and the Pacific can and are already mounting powerful responses every day to turn the tide on overweight and obesity in the region. This report has intended to sound the alarm on a growing crisis – while highlighting how countries in the East Asia and the Pacific region can continue rising to the challenge through stronger policies that protect children's rights to healthy foods and a brighter future.



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September 2025

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