



Landscape analysis tool on overweight and obesity in children and adolescents

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OVERVIEW

Overweight and obesity among children and adolescents is a global problem (hereafter childhood overweight and obesity).¹ Virtually every country is experiencing a rising level of childhood overweight and obesity. In 2019, an estimated 38 million children aged 5 years or under were living with overweight or obesity, along with more than 340 million school-aged children and adolescents (aged 5-19 years).^{2,3} In some countries childhood overweight or obesity affects a quarter of all children.

There have long been calls to address this issue. Indeed, countries have committed to halt the increase of childhood overweight and obesity by endorsing global targets to halt the rise in obesity, as put forth in the WHO Global Action Plan for the Prevention and Control of Noncommunicable Diseases 2013–2020 and the WHO Comprehensive Implementation Plan on Maternal, Infant and Young Child Nutrition. These WHO targets have subsequently been adopted as targets in the sustainable development agenda. In addition, WHO convened the Commission on Ending Childhood Obesity which recommended multisectoral action to address childhood overweight and obesity building on WHO guidance, and the World Health Assembly also adopted a global acceleration plan in 2022.

UNICEF has also more recently begun to integrate the issue into its country programming and the prevention of overweight and obesity is an integral part of UNICEF's Nutrition Strategy 2020-2030. Nevertheless, bolder action is urgently needed if these targets are to be met. UNICEF, together with partners like WHO, has an important part to play in supporting countries to tackle the problem through a comprehensive response.

The present tool provides guidance on undertaking a landscape analysis, which can be used or adapted by UNICEF offices, together with their country-level partners, to help form strategies and set priorities for their work on the prevention and control of childhood overweight and obesity. It describes methods for conducting an in-depth analysis of the situation of childhood overweight and obesity, its determinants and a review of the existing policies, laws, strategies and programmes in the country context. It is intended that the findings will help UNICEF, together with partners such as WHO, provide tailored guidance to countries and support government develop or refine their national and sub-national policy and strategy development on childhood overweight prevention as well as identify any data or evidence gaps.

1 The term 'overweight' includes all classifications of excess bodyweight, including obesity, severe obesity and morbid obesity. For definitions of overweight and obesity see the Glossary. UNICEF defines children as any human being under the age of 18 (Convention on the Rights of the Child).

2 WHO: World Health Statistics 2018: Monitoring health for the sustainable development goals. <https://apps.who.int/iris/bitstream/handle/10665/272596/9789241565585-eng.pdf>

3 UNICEF/WHO/World Bank Joint Child Malnutrition Estimates, March 2020 edition. <https://data.unicef.org/topic/nutrition/malnutrition/>

SECTION 1

Introduction



1.1 ABOUT THE TOOL

1.1.1 Who is this for?

This tool is intended to support UNICEF country staff when working together with government and UN partners in the prevention and control of childhood overweight and obesity. The purpose of the tool is to assist UNICEF in conducting a landscape analysis, the results of which will enable UNICEF to provide tailored guidance to government counterparts so that the government is better equipped to develop appropriate policies to tackle childhood overweight and obesity.

It was originally developed by UNICEF to complement the UNICEF programming guidance on the prevention of overweight in children and adolescents⁴ and provide UNICEF country offices with tools to conduct a landscape analysis that informs their country programming. Recognizing WHO's long experience working on this issue and in developing much of the relevant global and regional policy guidance in this area, the tool was finalized following extensive input from WHO Headquarters and Regional Offices. The tool builds on UNICEF's expertise in nutrition programming and conducting country-level situation analyses and is informed by WHO's previous work on nutrition landscape analyses, its expertise in surveillance and in providing support to the development of country

action plans to address childhood overweight and obesity, including healthy diets and physical activity promotion.

The results of the landscape analysis will be important for government counterparts responsible for prioritising actions to prevent and control childhood overweight and obesity. The findings will also be helpful for UNICEF senior management in country and regional offices as they raise awareness of the critical problems facing children in the country and determine how the agency and its partners can provide more targeted support at the country-level. The findings may also be relevant to UNICEF colleagues working on other issues not directly related to childhood overweight and obesity – such as maternal nutrition, health promotion, urban, education, WASH, social policy – who can contribute through multi-sector action.

1.1.2 What problem does this tool help to address?

Overweight and obesity is one of the most serious public health challenges of the 21st century. Children affected by overweight and obesity experience immediate health and psychosocial impacts, are likely to be affected by obesity in adulthood, and are more likely to develop non-communicable diseases, like diabetes and cardiovascular diseases, at a younger age.⁵ Worldwide, the majority of the children experiencing overweight and obesity now live in low- and middle-income countries.

⁴ Prevention of Overweight and Obesity in Children and Adolescents. UNICEF Programming Guidance, UNICEF 2019.

⁵ WHO. Report of the commission on ending childhood obesity. Geneva: WHO, 2016.

The present landscape analysis tool is an aid to understanding whether overweight and obesity is an issue in a given country context, understand the trajectory of change and underlying factors driving these changes, such as maternal nutrition, infant and young child feeding practices, dietary and physical activity shifts among children, and obesogenic food and built environments. In addition, the landscape analysis will review the current policy and programme context against existing recommendations and guidance to identify any possible gaps. Based on this assessment, UNICEF, together with government and UN counterparts, can support in the definition of country-level strategies and actions to halt the rise.

1.1.3 How does this tool relate to UNICEF’s and WHO’s current strategies and guidance?

Preventing malnutrition in all its forms plays an integral role in guaranteeing that children survive, grow and develop to their full potential. As the prevalence of childhood overweight and obesity has increased almost everywhere, including in low- and middle-income countries where it co-exists with undernutrition (stunting, wasting and micronutrient deficiencies), the importance of surveillance, prevention and control of overweight has grown.

Countries have committed to halt the increase of childhood overweight and obesity by endorsing global targets to halt the rise in obesity, as put forth in the WHO Global Action Plan for the Prevention and Control of Noncommunicable Diseases 2013–2020 and the WHO Comprehensive Implementation Plan on Maternal, Infant and Young Child Nutrition. The reduction of overweight is also prioritized in the Sustainable Development Goals (SDGs) as a key objective to protect children, adolescents and adults against obesity and diet-related NCDs. One of the indicators of SDG2 for nutrition (indicator 2.2.2) is the prevalence of overweight in children under five.

In 2014, WHO established the Commission on Ending Childhood Obesity. In 2016, the Commission issued a set of recommendations for multi-sector actions acting across the life cycle, specifically during pregnancy, the early childhood period, school age, and adolescents. UNICEF’s nutrition strategy 2020-2030 and WHO’s Ambition and Action in Nutrition (2016-2025) both place emphasis on addressing overweight and obesity as part of a comprehensive response to all forms of malnutrition, including undernutrition (stunting, wasting), micronutrient deficiencies and overweight/ obesity. Both agencies advocate for and support national governments in adopting the policies and regulatory frameworks needed to create healthy food environments and to positively influence the availability, affordability and appeal of healthy food, and safeguard children from unhealthy foods early in life



Figure 1: External and Personal Food environments

(See Figure 1 for how UNICEF thinks about both external and personal food environments).

UNICEF and WHO support the implementation of double duty actions to address both undernutrition and overweight. In addition, WHO has developed a new Acceleration Plan to help countries scale up policy actions to prevent and manage obesity over the life course. Key, and consistently recommended, policies to address childhood overweight and obesity include restrictions on marketing of breast milk substitutes and unhealthy foods and beverages, front-of-pack nutrition labelling, sugar sweetened beverage taxation and regulations on school food environments.

UNICEF and WHO are both guided by the conviction that prevention must come first. Both organizations are also grounded in a *systems-strengthening* approach which aims to prevent and control overweight and obesity through actions across multiple different systems – including in the health, food, education, WASH, social protection and urban systems. *(see Figure 2)*

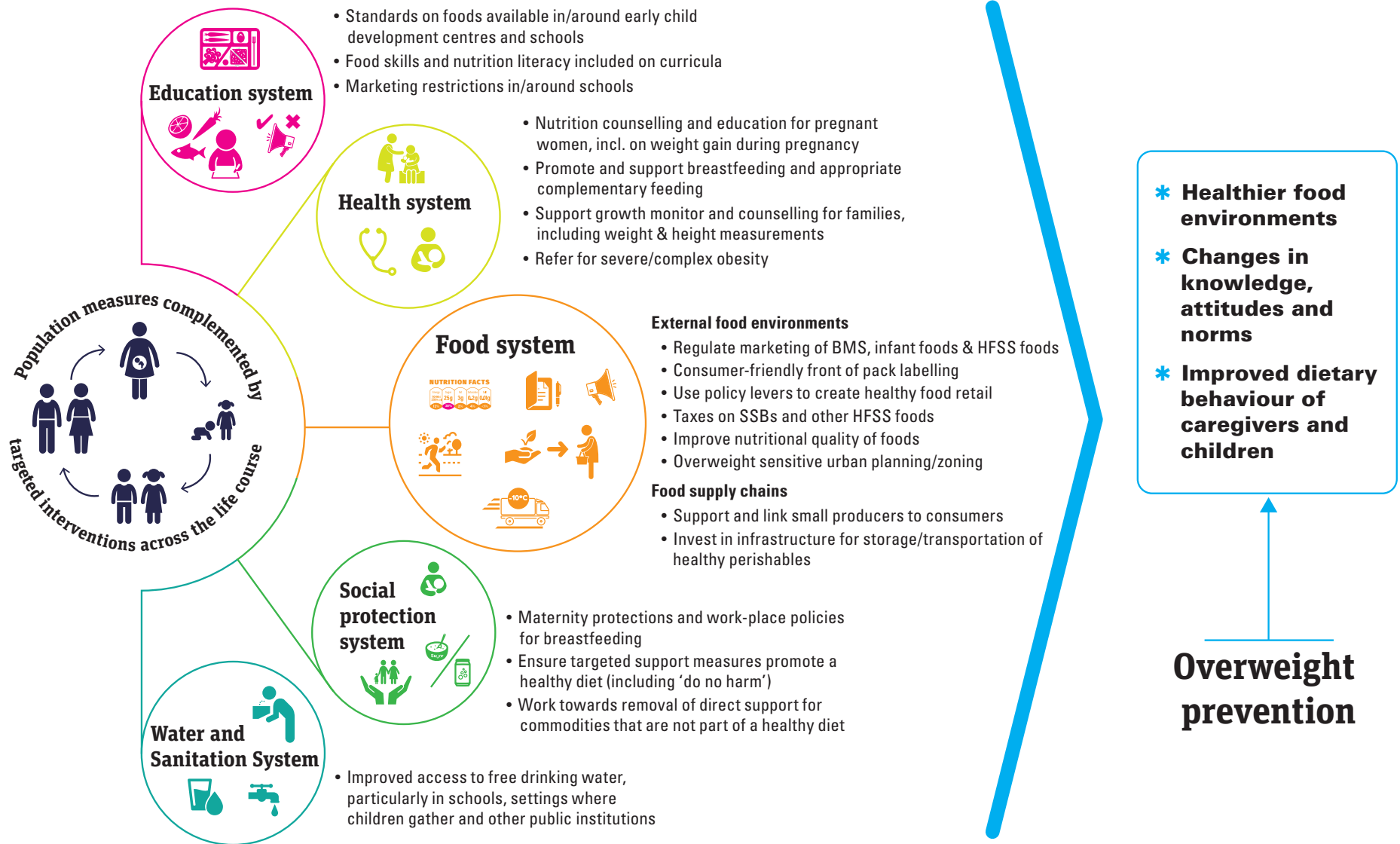


Figure 2: Creating enabling environments for overweight prevention

1.2 USING THE TOOL

1.2.1 Stages of the landscape analysis

The tool sets out six stages of a landscape analysis. Stages 1, 2 and 3 are supported with Worksheets (Worksheet 1-4) to help collect information and assess the situation. Stage 1 involves a review of existing data on prevalence and trends in childhood overweight and obesity in the country to provide an initial assessment of how bad the problem is and understand the speed and trajectory of change. Stage 2 then involves a more detailed look at the situation in the country with regards to some of the known

individual and environmental risk factors for overweight and obesity, including maternal and early-life nutrition, children's dietary intake and physical activity levels. Stage 3 looks at the policy context. Subsequently, Stages 4 and 5, which involve a process for reviewing gaps and opportunities and stakeholder consultation to develop consensus around priority policies and programmes for the country and to identify where UNICEF and other UN agencies/partners can provide support. Stage 6 provides guidance for refining the policy priorities identified through the validation workshops and ensuring that the landscape analysis translates into further policy action.

Six stages of the landscape analysis

1. Review the childhood overweight and obesity situation

This assesses the prevalence of childhood overweight and obesity in the country by age group, gender, geography and socio-economic status, along with the trends over time. It is an important step that should be undertaken to demonstrate the need for action (*Worksheet 1*).

2. Review key risk factors for overweight and obesity in the country

This assesses the risk factors and environmental conditions that increase the chances of childhood overweight and obesity levels rising (*Worksheet 2*). It includes early life risks (such as suboptimal breastfeeding practices, early or inappropriate complementary feeding, stunting) and risks throughout childhood (such as dietary patterns and physical activity). This helps identify the areas that might need to be targeted or prioritised.

3. Review the policy and programme landscape

This examines the existence or absence of policies or programmes to prevent overweight and obesity in the country and address the obesogenic environments in which children grow up (*Worksheet 3*) such as food prices, availability and labelling. It also looks at the political, institutional and cultural factors influencing the response (*Worksheet 4*). These will help you to identify gaps and opportunities for policies and interventions.

4. Identify gaps in the current policy environment and policy opportunities

This examines the current policies, legislation and strategies for action, through key stakeholder interviews. The interviews help to fill information gaps identified in stage 3 and focus on the opportunities and barriers for developing policies in the country context. It is also helpful to look at policy case studies from other countries.

5. Agree on key policy priorities and next steps

This identifies opportunities for policy development and implementation through convening stakeholders in a validation workshop. The political opportunities and the allies and networks needed to encourage stakeholder and government action are examined. Consensus is reached.

6. Refine recommendations and outline next steps

This supports governments to implement the policy priorities identified through the validation workshop.

1.3 OUTPUTS AND CAPACITY

A landscape analysis should ideally be produced by a country team, with at least some level of coordination with relevant government departments in a participatory process. It may, for example, be published as a joint report between UNICEF, WHO and the government, with recommendations and proposals for governments and other actors. Consider what has been done previously in the country and discuss options with government counterparts.

When preparing the landscape analysis on childhood overweight and obesity, you may find that much of the information has already been collected in recent publications by the government and/or UN agencies. For example, useful sources of information include the Global Health Observatory and regional health observatories, the Global Nutrition Policy Review, the NCD Country Capacity Survey, the Global School Health Surveys, the STEPS surveys, the Childhood Obesity Surveillance Initiative (COSI), and previous country Situation Analyses or Nutrition Landscape Analysis Country Assessments. This can be helpful and save you some time, so it is worth

reviewing these documents. Drawing on as many relevant elements as possible will ensure the landscape analysis is comprehensive and provides evidence-based insights.

1.3.1 Landscape analysis outputs

Examples of tangible outputs from the landscape analysis can include:

- **A full report** introducing the work, showing what was found (from the landscape analysis Worksheets in Section 2), and what actions can be proposed (from the policy development work in Section 3). Examples of landscape analysis reports can be found [here](#).
- **A policy brief**, no more than 3 to 4 pages, describing the main findings from the landscape analysis, including current trends in overweight and obesity (Section 1), risk factors and obesogenic environments (Section 2) and current policy initiatives (Section 3), and key recommendations for action (Sections 4 and 5). Examples of policy briefs can be found [here](#).
- **A slide deck/Powerpoint** summarising what is in the executive summary in a few words, using pictures and graphics to describe the situation, what can be done, and who might do it.

In addition, it may be useful to provide:

- **An infographic** giving the main issues identified in Section 2 (i.e. the seriousness of the problem and the extent of some of the risk factors).
- **An advocacy pamphlet** describing actions being taken in other countries that could be taken in your country (adapted from Section 3).

1.3.2 Capacity for a landscape analysis

Skills

The country team convened to undertake a landscape analysis should have some essential skills including:

- Understanding statistical reports on child anthropometrics (including trends over time)
- Understanding the life course, growth and nutritional status of children
- Familiarity with existing WHO recommendations and WHO and UNICEF guidance
- Familiarity with using on-line databases e.g. hosted by UNICEF, WHO and FAO
- Ability to summarise evidence succinctly and provide clear recommendations

Time

The total may be two month's work spread over three or four months.

It should be possible to complete the analysis of the levels and trends in overweight and obesity (*Section 2, Worksheets 1 and 2*) in approximately three weeks.

Ensure that time is built in for checking with appropriate government officials.

An analysis of the policy landscape (*Worksheets 3 and 4*) may take a further three to four weeks, while the drafting of the report on the policy options and the strategy and proposals for action may take two or three weeks spread over one or two months.

Recruitment for interviews and organisation of validation workshops can be time consuming. **For this reason, it is important to start contacting and recruiting interview and validation workshop participants at the start of the process.**



0–1 months:

- **Complete worksheets 1 and 2**
- **Commence recruitment of interview and validation workshop participants**



1–2 month:

- **Complete worksheets 3 and 4**
- **Continue recruitment of interview and validation workshop participants**



2–3 months:

- **Conduct key informant interviews**
- **Identify key policy gaps and opportunities**
- **Commence writing of final report and other dissemination materials**



3–4 months:

- **Host validation workshop**
- **Draft final report, policy brief, and other dissemination materials**

SECTION 2

Landscape analysis worksheets: questions to be answered



The Worksheets are the core of the landscape analysis. They provide guidance on:

- Core indicators that should be included within the analysis;
- Expanded indicators that are desirable to provide more nuance, but not all countries will have these data;
- Rating suggestions to help interpretation.

Wherever they exist, WHO cut-off criteria to aid interpretation have been adopted and clearly referenced. Elsewhere cut-off criteria are suggested, but users of the tool should be aware that they have not been validated by WHO or UNICEF; they are merely to aid interpretation, are indicative and there is still significant uncertainty.

The worksheets provide guidance on potential data sources that may help country teams find the needed information. It also provides other notes to help answer the questions, such as indicator definitions. For greater detail on the notes, see the Glossary (page 47).

The version provided as a spreadsheet (in Excel) is for country teams to enter your results. In the Excel spreadsheet country teams are encouraged to provide details about where they found the information to complete the analysis, so that they can check back if needed, and so that other users can review or update the landscape analysis at a later date.

Some information may not be available. **A lack of information is itself an interesting finding** and should be noted. Country teams may want to recommend that surveys or studies are undertaken to generate the missing information.

To ensure all available information is gathered, the country assessment team should double-check with wider colleagues at UNICEF / WHO. The team can also double check with:

- Government counterparts/ officials
- Research departments in colleges and universities
- Non-governmental organisations, including consumer groups, health professional groups, and development agencies
- Consultants and specialists

People consulted from this list can also be helpful for sense-checking and quality control of the information you have collected. They can review your outputs and help spot any inconsistencies or misunderstandings. The collated information will need to be discussed with and agreed upon with the government counterparts.

Questions in the white boxes are **core questions**, and you should try to get answers to all these.

Questions in the light purple boxes are **expanded questions** that provide additional insights into the country situation and may help formulate targeted responses. However, they may not be available in all countries.

Stage 1: Review the childhood overweight and obesity situation



WORKSHEET 1 – Rapid assessment of overweight and obesity in infants, children and adolescents (0 to 19 years) in your country

Q1. Does the country have a problem with childhood overweight and obesity? Which sub-groups are affected? Is the problem getting worse or improving?

Core questions	Suggested indicators	Interpretation	Possible data sources
<p>Overweight prevalence among infants and children under 5y</p> <p>... and by urban and rural populations, and national sub-regions</p>	<p>Overweight: % infants and children under age 5 years classified with overweight</p> <p><i>Technical note: For children under 5 years, the definition of 'overweight' is 2 standard deviation (SD) above median weight for height, or BMI, using the WHO Child Growth Standard tables. See the Glossary.</i></p>	<p><2.5% = Very low 2.5% to <5% = Low 5% to <10% = Medium 10% to <15% = High 15% or more = Very high⁶</p>	<p>UNICEF/WHO/World Bank Joint Malnutrition Estimates</p> <p>WHO Nutrition Landscape Information System</p> <p>National surveys</p>
<p>Overweight prevalence among children aged over 5y</p> <p>... and by urban and rural populations, and national sub-regions</p>	<p>Overweight: % older children and adolescents (age 5-18y or 5-19y) classified with overweight (1sd above the median)⁷</p> <p><i>Technical note: For children 5 to 19 years, the definition for 'overweight' is 1sd above median BMI-for-age, and 'obesity' is 2sd above median BMI-for-age, using the WHO Child Growth Reference tables. See the Glossary.</i></p>	<p><10% = Very low 10% to <15% = Low 15% to <25% more = Medium 25% to <35% = High >35% = Very high⁸</p>	<p>WHO Global Health Observatory</p> <p>WHO Nutrition Landscape Information System</p> <p>NCD Risk Factor Collaboration</p> <p>National surveys</p>
<p>Trend in prevalence for children under 5y</p>	<p>Compound annual growth rate (CAGR) calculated from two data points several years apart, preferably 10 or more years apart.</p> <p>To calculate the CAGR see the Glossary.</p> <p><i>Note: The landscape analysis worksheets 1 and 2 include a CAGR calculator where you insert the start figure, the end figure and the number of years, and it produces the CAGR.</i></p>	<p>CAGR</p> <p><0.5% low or no growth 0.5% to <1% = moderate growth 1% to <3% = rapid growth 3% or more = very rapid growth</p>	<p>UNICEF/WHO/World Bank Joint Malnutrition Estimates</p> <p>WHO Nutrition Landscape Information System</p> <p>National surveys</p>
<p>Trend in prevalence for older children and adolescents</p>	<p>Compound annual growth rate (CAGR) calculated from two data points several years apart, preferably 10 or more years apart.</p> <p>To calculate the CAGR see the Glossary.</p> <p><i>Note: The landscape analysis worksheets 1 and 2 include a CAGR calculator where you insert the start figure, the end figure and the number of years, and it produces the CAGR.</i></p>	<p>CAGR</p> <p><0.5% low or no growth 0.5% to <1% = moderate growth 1% to <3% = rapid growth 3% or more = very rapid growth</p>	<p>WHO Global Health Observatory</p> <p>WHO Nutrition Landscape Information System</p> <p>NCD Risk Factor Collaboration</p> <p>National surveys</p>

6 de Onis, M., et al. (2018). Prevalence thresholds for wasting, overweight and stunting in children under 5 years. *Public health nutrition*, 22(1), 175–179.

7 A note on age ranges provided in this landscape analysis: we have provided the standard age ranges that WHO/UNICEF use. However, in your country, different age ranges may be used. Wherever possible, try to use the standard age ranges as this improves comparability. However, if the only data you have is for another age range (e.g. 5 – 11y and 12 -18y), you should by all means use this data.

8 Lobstein T, Jewell J. What is a “high” prevalence of obesity? Two rapid reviews and a proposed set of thresholds for classifying prevalence levels. *Obesity Reviews*. 2022 Feb;23(2):e13363.

Expanded questions			
Overweight prevalence among infants and children under 5y by gender <i>... and by family socio-economic status</i>	Overweight: % infants and children under age 5 years classified with overweight by gender Overweight: % infants and children under age 5 years classified with overweight by socioeconomic status	<2.5% = Very low 2.5% to <5% = Low 5% to <10% = Medium 10% to <15% = High 15% or more = Very high	UNICEF/WHO/World Bank Joint Malnutrition Estimates WHO Nutrition Landscape Information System National surveys
Overweight prevalence among children aged over 5y by gender <i>... and by family socio-economic status</i>	Provide separate figures for age younger children (e.g. 5–10y) and adolescents (e.g. 10–18 or 10–19y)	<10% = Very low 10% to <15% = Low 15% to <25% more = Medium 25% to <35% = High >35% = Very high8	WHO Global Health Observatory WHO Nutrition Landscape Information System NCD Risk Factor Collaboration National surveys
Likelihood of meeting the WHO-UNICEF target for overweight among infants and children under 5y	Global Nutrition Report assessment	'On course: Good progress' 'On course: At risk' 'Off course: Some progress' 'Off course: No progress' 'No data' = unknown	WHO Global Targets Tracking Tool Global Nutrition Report Country Profiles
Likelihood of meeting WHO NCD target for obesity in children and adolescents	Probability (expressed as % chance of meeting target)	>70% = good chance 40% to 70% = moderate chance <40% =poor chance	World Obesity Federation Global Atlas on Childhood Obesity
Overall childhood obesity country risk level.	World Obesity Federation national childhood obesity risk scores	<3 = low risk 3 to 6.5 = moderate risk >6.5 = high risk	World Obesity Federation Global Atlas on Childhood Obesity

Stage 2: Review key risk factors for overweight and obesity in the country



WORKSHEET 2 – Assessment of key risk factors for childhood overweight and obesity

Q2. What is the degree of risk: Prenatal and perinatal?

Key questions	Suggested indicators	Interpretation	Data source examples
<p>Women classified with overweight in age range 15-49y</p> <p><i>[Or, overweight in all adult women]</i></p> <p><i>Note: parents, especially mothers, with obesity are more likely to have children with obesity.</i></p>	<p>% of women in that age range or sub-group, with BMI $\geq 25\text{kg/m}^2$</p> <p>For adolescents 15-19, obesity should be calculated as BMI for age, with overweight being $>+1\text{SD}$)</p>	<p>$<20\%$ = Very low</p> <p>20 – 29% = Low</p> <p>30 – 49% = Medium</p> <p>50 – 70% = High</p> <p>$>70\%$ = Very high</p>	<p>WHO Global Health Observatory (obesity in non-pregnant women)</p> <p>WHO Global Health Observatory (obesity among adults)</p> <p>WHO Nutrition Landscape Information System</p> <p>National surveys</p> <p>Demographic and Health Surveys</p> <p>Multiple Indicator Cluster Surveys</p>
<p>Women aged 15-49 classified with under-nutrition</p> <p><i>[Or, under-nutrition in all adult women]</i></p> <p><i>Note: Maternal undernutrition is associated with infant undernutrition with a risk of rapid weight gain and later obesity.</i></p>	<p>% adult women underweight (BMI$<18.5\text{ kg/m}^2$)</p>	<p>5–9% = low</p> <p>10–19% = moderate</p> <p>20–39%: high</p> <p>$\geq 40\%$: very high</p>	<p>UNICEF/WHO/World Bank Joint Malnutrition Estimates</p> <p>National surveys</p> <p>Demographic and Health Surveys</p> <p>Multiple Indicator Cluster Surveys</p>
<p>Low birth weight</p> <p><i>Note: Low birth weight followed by rapid weight gain and/or early adiposity rebound is associated with subsequent obesity.</i></p>	<p>% births weight $<2.5\text{kg}$</p>	<p>$<5\%$ = low</p> <p>5% to $<10\%$ = moderate</p> <p>10% or more = high⁹</p>	<p>UNICEF/WHO Low Birthweight Estimates</p> <p>National surveys</p> <p>Demographic and Health Surveys</p> <p>Multiple Indicator Cluster Surveys</p>

⁹ <https://www.who.int/nutrition/publications/UNICEF-WHO-lowbirthweight-estimates-2019/en/>

Expanded questions			
Key questions	Suggested indicators	Interpretation	Data source examples
Trends in the % of women classified with overweight in age range 15-49y [Or, overweight in all adult women]	Compound annual growth rate (CAGR) calculated from two data points several years apart, preferably 10 or more years apart.	CAGR <0.5% low or no growth 0.5% to <1% = moderate growth 1% to <3% = rapid growth 3% or more = very rapid growth	WHO Global Health Observatory (obesity in non-pregnant women) WHO Global Health Observatory (obesity among adults) Demographic and Health Surveys Multiple Indicator Cluster Surveys
Weight gain in pregnancy	% pregnancies in which maternal weight gain is above recommended levels.	<10% = low 10% to <25% = moderate 25% or more = high	National surveys Local health professional organisations (e.g. obstetrics, midwives).
Gestational diabetes (GDM) or hyperglycaemia in pregnancy <i>Note: Children born to women who had GDM are at greater risk of overweight or obesity.</i>	% of pregnant women classified as having GDM or hyperglycaemia	<5% = low 5% to <10% = moderate 10% or more = high	International Diabetes Federation Diabetes Atlas National surveys Local health professional organisations (e.g. obstetrics, diabetes).
Trends in gestational diabetes (GDM) or hyperglycaemia in pregnancy	Compound annual growth rate (CAGR) calculated from two data points several years apart, preferably 10 or more years apart.	CAGR <0.5% low or no growth 0.5% to <1% = moderate growth 1% to <3% = rapid growth 3% or more = very rapid growth	International Diabetes Federation Diabetes Atlas National surveys Local health professional organisations (e.g. obstetrics, diabetes).
Women aged 15-49y smoking <i>Note: Maternal smoking is associated with infant rapid weight gain and later obesity.</i>	% women tobacco smoking or using tobacco products	<5% = low 5% to <15% = moderate 15% or more = high	WHO Global Health Observatory
Likelihood of meeting the WHO NCD target to halt the rise in adult obesity	Global Nutrition Report assessment	'On course: Good progress' 'On course: At risk' 'Off course: Some progress' 'Off course: No progress' 'No data' = unknown	Global Nutrition Report Country Profiles
Prevalence of moderate or severe food insecurity	% of households where at least one adult has been found to be food insecure. OR % of children classified as being food insecure.	<20% = good 20% to 40% = moderate >40% = high	FAO National surveys or studies



WORKSHEET 2 – Assessment of key risk factors for childhood overweight and obesity, continued

Q3. What is the degree of risk for under 5s?

Key questions	Suggested indicators	Interpretation	Data source examples
<p>Early initiation of breastfeeding</p> <p><i>Note: breastfeeding is protective against subsequent childhood overweight and obesity.</i></p>	% births with breastfeeding initiated within one hour after birth	<p>>70% = high</p> <p>30% to 70% = moderate</p> <p><40% =low¹⁰</p>	<p>UNICEF Infant and Young Child Feeding Data</p> <p>WHO Global Health Observatory</p> <p>National surveys</p> <p>Demographic and Health Surveys</p> <p>Multiple Indicator Cluster Surveys</p>
<p>Prevalence of exclusive breastfeeding</p>	% infants 0-5 months fed exclusively with breastmilk	<p>>70% = high</p> <p>30% to 70% = moderate</p> <p><30% =low¹⁰</p>	<p>UNICEF Infant and Young Child Feeding Data</p> <p>WHO Global Health Observatory</p> <p>National surveys</p> <p>Demographic and Health Surveys</p> <p>Multiple Indicator Cluster Surveys</p>
<p>Stunting in children under 5y</p> <p><i>Note: stunting is a risk factor for childhood overweight and obesity.</i></p>	% children under 5y with length/height for age more than 2sd below WHO child Growth Standard median (<-2SD)	<p><2.5% = Very low</p> <p>2.5% to <10% = Low</p> <p>10% to <20% = Medium</p> <p>20% to <30% = High</p> <p>>30% = Very high⁷</p>	<p>UNICEF/WHO/World Bank Joint Malnutrition Estimates</p> <p>Demographic and Health Surveys</p> <p>Multiple Indicator Cluster Surveys</p>
<p>Trends in stunting prevalence</p>	Compound annual growth rate (CAGR) calculated from two data points several years apart, preferably 10 or more years apart.	<p>CAGR</p> <p><0.5% low or no growth</p> <p>0.5% to <1% = moderate growth</p> <p>1% to <3% = rapid growth</p> <p>3% or more = very rapid growth</p>	<p>UNICEF/WHO/World Bank Joint Malnutrition Estimates</p> <p>Demographic and Health Surveys</p> <p>Multiple Indicator Cluster Surveys</p>
<p>Insufficient physical activity in children under 5y</p> <p><i>Note:</i></p>	% of children under 5y who fail to meet the recommended levels of physical activity, sedentary behaviour	<p><40% = good</p> <p>40% to 70% = moderate</p> <p>>70% = poor</p>	<p>National surveys</p> <p>WHO publications</p>
<p>Sleep (lack of sleep) in children under 5y</p>	% of children routinely having <10 hours sleep per night	<p><10% =good</p> <p>10% to 20% = moderate</p> <p>>20% = poor</p>	<p>National surveys</p>
Expanded questions			
Key questions	Suggested indicators	Interpretation	Data source examples
<p>Continued breastfeeding</p>	% of children aged 12–23 months who were fed with breastmilk during the previous day	<p>>60% = high</p> <p>20% to 60% = moderate</p> <p><20% =low¹⁰</p>	<p>UNICEF Infant and Young Child Feeding Data</p> <p>WHO Global Health Observatory</p> <p>National surveys</p>

10 <https://www.who.int/nutrition/publications/infantfeeding/global-bf-scorecard-2019-methology.pdf?ua=1>

12 Landscape analysis tool on overweight and obesity in children and adolescents

Expanded questions			
Key questions	Suggested indicators	Interpretation	Data source examples
Trends in sales or consumption of breastmilk substitutes (volume per capita)	Compound annual growth rate (CAGR) calculated from two data points several years apart, preferably 10 or more years apart.	CAGR <0.5% low or no growth 0.5% to <1% = moderate growth 1% to <3% = rapid growth 3% or more = very rapid growth	Euromonitor Data ¹¹ National surveys Local market surveys
Stunting prevalence by gender ... and by urban/rural, region <i>... and by SES</i>	% children under age 5y with height for age more than 2sd below median	<2.5% = Very low 2.5% to <10% = Low 10% to <20% = Medium 20% to <30% = High >30% = Very high ⁷	WHO Global Health Observatory
Consumption of commercial complementary foods: sales data <i>Note: The Euromonitor definition combines formula milks and prepared, dried and other baby foods. It is given tonnes or kilograms per year, so an account needs to be taken of population growth</i>	Kg per capita per year	<0.01kg = low 0.01 to 0.5kg = moderate >0.5kg = high	Euromonitor Data National surveys Local market surveys
Consumption of sugar-sweetened beverages, including 100% fruit juice <i>Note: this data may only be available for younger children aged 6-23 months. If so, provide that data but make a note.</i>	% of children under age 5y who consumed a sugar-sweetened beverage, including 100% fruit juice during the previous day		National survey data
Zero vegetable or fruit consumption <i>Note: this data may only be available for younger children aged 6-23 months. If so, provide that data but make a note.</i>	% of children under age 5y who did not consume any vegetables or fruits during the previous day		National survey data
Trends in insufficient physical activity in children under 5y	Compound annual growth rate (CAGR) calculated from two data points several years apart, preferably 10 or more years apart.	CAGR 3% or more = very rapid growth 1% to <3% = rapid growth 0.5% to <1% = moderate growth -0.5% to <0.5% little growth or decline -1% to -0.5% = moderate decline < -1% = rapid decline	National surveys WHO publications

¹¹ Euromonitor market data, available in Euromonitor reports and the Euromonitor Passport database, can be accessed through subscribing libraries. Check with your regional offices regarding UNICEF access. Please note that Euromonitor data is copyright, which means the data can be used to inform your ratings ('low', 'moderate', 'high' etc), but only the ratings should be reported, not the Euromonitor data. Check with the account owner at UNICEF and/or Euromonitor before publishing any data.



WORKSHEET 2 – Assessment of key risk factors for childhood overweight and obesity, continued

Q4a. What is the degree of risk for children aged 5-19? Dietary intake

Key questions	Suggested indicators	Interpretation	Data source examples
<p>Consumption of sugar-sweetened beverages, including 100% fruit juice</p> <p><i>[If not available for 5-19 age group, then all population]</i></p> <p><i>Note: the definition of sugar-sweetened beverages may differ between surveys. It may use terms such as soft drinks, sugary drinks or soda. If available, collect data disaggregated by type of SSB (carbonated and non-carbonated soft drinks, 100% fruit juice, <100% fruit drinks, energy or sports drinks, flavoured sweetened milks, etc).</i></p>	<p>'Drinks' per day or litres per week, per capita</p>	<p><1 drink/day = low</p> <p>1 to < 2 drinks/day = moderate</p> <p>2 or more drinks/day = high</p> <p>[Also: 1 drink/day or more = moderate to high]</p> <p><1 litre/week = low</p> <p>1 to <2 litres/week = moderate</p> <p>2 or more litres/week = high</p>	<p>Global School-based Student Health Survey</p> <p>Health Behaviour of School Children Survey</p> <p>National surveys</p>
<p>Or</p> <p>If consumption levels are not available, then proportion of children drinking moderate to high quantities</p>	<p>% children consuming 1 or more servings of 100% fruit juice or sugar sweetened beverages per day</p> <p>Or, % drinking 2 or more per day (% of children who are high consumers)</p>	<p>1 or more per day:</p> <p><20% = low</p> <p>20% to <40% = moderate</p> <p>40% to <60% = high</p> <p>60% or more = very high</p> <p>2 or more per day:</p> <p><10% = low</p> <p>10% to <20% = moderate</p> <p>20% to <30% = high</p> <p>30% or more = very high</p>	<p>Global School-based Student Health Survey</p> <p>Health Behaviour of School Children Survey</p> <p>National surveys</p>
<p>Consumption of confectionery (including chocolate)</p> <p><i>[If not for age group, then all population]</i></p> <p><i>Note: the definition of confectionery may differ between surveys. It may use terms such as sweets or candies.</i></p>	<p>Grams per week per capita</p> <p>Or</p> <p>% children consuming 1 or more servings of confectionery (including chocolate) per day</p>	<p><100g per week = low</p> <p>100g – 250g per week = moderate</p> <p>>250g per week = high</p> <p>1 or more per day:</p> <p><20% = low</p> <p>20% to <40% = moderate</p> <p>40% to <60% = high</p> <p>60% or more = very high</p>	<p>Global School-based Student Health Survey</p> <p>Health Behaviour of School Children Survey</p> <p>National surveys</p>

Key questions	Suggested indicators	Interpretation	Data source examples
Consumption of salty snacks <i>[If not for age group, then all population]</i>	Grams per week per capita Or % children consuming 1 or more servings of salty snacks per day	<100g per week = low 100g – 250g per week = moderate >250g per week = high 1 or more per day: <20% = low 20% to <40% = moderate 40% to <60% = high 60% or more = very high	Global School-based Student Health Survey Health Behaviour of School Children Survey National surveys
Consumption of fast food <i>[If not for age group, then all population]</i>	Grams per week per capita Or % children consuming 1 or more servings of fast food per week	<100g per week = low 100g – 250g per week = moderate >250g per week = high 1 or more per day: <20% = low 20% to <40% = moderate 40% to <60% = high 60% or more = very high	Global School-based Student Health Survey Health Behaviour of School Children Survey National surveys
Consuming neither fruit nor vegetables daily	% of children that consumer neither fruits nor vegetables daily (at least once)	<20% = low 20% to <40% = moderate 40% to <60% = high 60% or more = very high	Global School-based Student Health Survey Health Behaviour of School Children Survey National surveys
Trends in sales of sugar-sweetened beverages, including 100% fruit juice <i>Note: Market research data may use different definitions. For example, the Euromonitor definition combines bottled water, carbonates, concentrates, juices, RTD tea, RTD coffee, sports and energy drinks and Asian speciality drinks</i>	Compound annual growth rate (CAGR) calculated from two data points several years apart, preferably 10 or more years apart. Litres per capita per year	CAGR <0.5% low or no growth 0.5% to <1% = moderate growth 1% to <3% = rapid growth 3% or more = very rapid growth	Euromonitor Data National surveys Local market surveys
Trends in sales of sweet snacks <i>Note: Market research data may use different definitions. For example, the Euromonitor definition combines granola/muesli bars, breakfast bars, energy and nutrition bars, fruit bars and other snack bars and fruit snacks (all dried fruit)</i>	Compound annual growth rate (CAGR) calculated from two data points several years apart, preferably 10 or more years apart. Kg per capita per year	CAGR <0.5% low or no growth 0.5% to <1% = moderate growth 1% to <3% = rapid growth 3% or more = very rapid growth	Euromonitor Data National surveys Local market surveys
Trends in sales of savoury snacks <i>Note: Market research data may use different definitions. For example, the Euromonitor definition combines nuts, seeds and trail mixes, potato chips, tortilla chips, puffed snacks, rice snacks, vegetable, pulse, and bread chips, savoury biscuits, popcorn, pretzels, noodle snacks, seaweed snacks, dried fish and cuttlefish snacks.</i>	Compound annual growth rate (CAGR) calculated from two data points several years apart, preferably 10 or more years apart. Kg per capita per year	CAGR <0.5% low or no growth 0.5% to <1% = moderate growth 1% to <3% = rapid growth 3% or more = very rapid growth	Euromonitor Data National surveys Local market surveys

Expanded questions			
Key questions	Suggested indicators	Interpretation	Data source examples
<p>Trends in fast-food transactions</p> <p><i>Note: Market research data may use different definitions. For example, the Euromonitor definition classifies fast-food outlets as chained consumer foodservice with more than 10 outlets.</i></p>	<p>Compound annual growth rate (CAGR) calculated from two data points several years apart, preferably 10 or more years apart.</p> <p>Transactions per capita per year</p>	<p>CAGR</p> <p><0.5% low or no growth</p> <p>0.5% to <1% = moderate growth</p> <p>1% to <3% = rapid growth</p> <p>3% or more = very rapid growth</p>	<p>Euromonitor Data</p> <p>National surveys</p> <p>Local market surveys</p>
<p>Quality of foods offered in schools, including snacks and meals (also orphanages)</p> <p><i>Note: Information on this indicator may be hard to find. Consider if there are national studies that have looked at the quality of foods offered, even if from a small number of schools.</i></p>	<p>% schools providing food that complies with national school food/meal standards or national FBDGs</p>	<p>>90% = good</p> <p>60% - 90% = moderate</p> <p><60% = poor</p>	<p>National surveys or studies</p>
<p>Foods and beverages available in schools (also orphanages)</p> <p><i>Note: Information on this indicator may be hard to find. Consider if there are national studies that have looked at the types of foods and beverages available, even if from a small number of schools.</i></p>	<p>% schools where sugar-sweetened beverages are available</p> <p>% schools where HFSS snacks are available</p>	<p>>90% = good</p> <p>60% to 90% = moderate</p> <p><60% = poor</p>	<p>National surveys or studies</p>
<p>Safe drinking water available in schools (also orphanages)</p> <p><i>Note: Information on this indicator may be hard to find. Consider if there are national studies that have looked at the availability of safe drinking water in schools</i></p>	<p>% schools offering safe drinking water</p>	<p>>90% = good</p> <p>60% to 90% = moderate</p> <p><60% = poor</p>	<p>UNICEF Wash in Schools Data</p> <p>National surveys or studies</p>
<p>Quality of foods offered in pre-school care</p> <p><i>Note: Information on this indicator may be hard to find. Consider if there are national studies that have looked at the quality of foods offered</i></p>	<p>% pre-school care centres providing food that complies with national FBDGs</p>	<p>>90% = good</p> <p>60% to 90% = moderate</p> <p><60% = poor</p>	<p>National surveys or studies</p>
<p>Quality of foods offered as part of low-income/ social support programmes, such as social safety nets or food and nutrition supplement programmes</p> <p><i>Note: Information on this indicator may be hard to find. Consider if there are national studies that have looked at the quality of foods offered</i></p>	<p>Healthy foods (non-HFSS foods) as % of all foods supplied.</p> <p>HFSS can be defined by national or WHO regional nutrient profiling scheme - see Glossary</p>	<p>>90% = good</p> <p>60% to 90% = moderate</p> <p><60% = poor</p>	<p>National surveys or studies</p>

Expanded questions			
Key questions	Suggested indicators	Interpretation	Data source examples
<p>Children’s exposure to unhealthy food and beverage marketing</p> <p><i>Note: Try to look for data on different forms of marketing (e.g. TV, digital, in-school). We have provided an example for a TV indicator here. Consider to split the data into different time slots (e.g. between 4pm and 9pm; after 9pm)</i></p>	<p>Adverts promoting HFSS foods as % of all adverts on TV programmes</p> <p>HFSS defined by national or WHO regional nutrient profiling scheme - see Glossary</p>	<p><10% =good 10% to 20% = poor >20% = very poor</p>	<p>Government media regulator, country advertising agency reports, consumer organisations’ publications, national surveys or studies</p>
<p>Children’s exposure to food and fast food brands on sponsored school equipment, including sports kit</p> <p><i>Note: Information on this indicator may be hard to find. Consider if there are national studies that have looked at food marketing, including sponsorship, in schools</i></p>	<p>% schools accepting branded products or sponsorship from food brands</p>	<p><10% =good 10% to 20% = poor >20% = very poor</p>	<p>Government education department, teachers’ organisations, consumer organisations, national surveys</p>
<p>Trends in (unhealthy) food and beverage industry marketing expenditure.</p> <p><i>Note: Information on this indicator may be hard to find. WARC publishes data for some countries and others may have country-specific databases. Consider if there are national studies that have looked at food marketing.</i></p>	<p>Compound annual growth rate (CAGR) calculated from two data points several years apart, preferably 10 or more years apart.</p>	<p>CAGR <0.5% low or no growth 0.5% to <1% = moderate growth 1% to <3% = rapid growth 3% or more = very rapid growth</p>	<p>WARC Commercial databases National studies GlobalData</p>
<p>Trend in consumption of 100% fruit juice and sugar-sweetened beverages</p> <p><i>[If not for age group, then all population]</i></p>	<p>Compound annual growth rate (CAGR) calculated from two data points several years apart, preferably 10 or more years apart.</p>	<p>CAGR <0.5% low or no growth 0.5% to <1% = moderate growth 1% to <3% = rapid growth 3% or more = very rapid growth</p>	<p>Euromonitor Data National surveys Local market surveys</p>
<p>Trend in the burden of mental health amongst children and adolescents.</p> <p><i>Note: Burden should be measured in Disability-Adjusted Life Years (DALYs). GBD study will provide trend.</i></p>	<p>Compound annual growth rate (CAGR) calculated from two data points several years apart, preferably 10 or more years apart.</p>	<p>CAGR <0.5% low or no growth 0.5% to <1% = moderate growth 1% to <3% = rapid growth 3% or more = very rapid growth</p>	<p>GBD Study</p>



WORKSHEET 2 – Assessment of key risk factors for childhood overweight and obesity, continued

Q4b. What is the degree of risk for children aged 5-19? Physical activity

Key questions	Suggested indicators	Rating scale	Data source examples
Insufficient physical activity	% of children and youth who fail to meet the Global Recommendations on Physical Activity for Health	<40% = good 40% to 70% = moderate >70% = poor	National physical activity surveillance systems or surveys WHO Global Health Observatory Global School-based Student Health Survey Health Behaviour of School Children Survey
Trends in insufficient physical activity	Compound annual growth rate (CAGR) calculated from two data points several years apart, preferably 10 or more years apart.	CAGR 3% or more = very rapid growth 1% to <3% = rapid growth 0.5% to <1% = moderate growth -0.5% to <0.5% little growth or decline -1% to -0.5% = moderate decline < -1% = rapid decline	National physical activity surveillance systems or surveys WHO Global Health Observatory Global School-based Student Health Survey Health Behaviour of School Children Survey
Active transport to school	% children who walked or rode a bike to school during past 7 days	<40% = poor 40% to 70% = moderate >70% = good	National physical activity surveillance systems or surveys Global School-based Student Health Survey Health Behaviour of School Children Survey
School physical activity facilities	% of schools where students experience have access to outdoor playground areas and/or an indoor gym	>70% = good 40% to 70% = moderate <40% = poor	Government education department, national surveys
Sedentary behaviour	% of children who spent ≥ 2 hrs watching television, playing computer games or engaged in other sitting activities during a typical day	<40% = good 40% to 70% = moderate >70% = poor	National physical activity surveillance systems or surveys Global School-based Student Health Survey Health Behaviour of School Children Survey
Sleep (lack of sleep)	% of children routinely having <8 hours sleep per night	<10% = good 10% to 20% = moderate >20% = poor	National surveys

Expanded questions			
Key questions	Suggested indicators	Interpretation	Data source examples
Insufficient physical activity by age <i>... and by gender... and by urban/ rural and region... and by SES</i>	% of children and youth who fail to meet the Global Recommendations on Physical Activity for Health	<40% = good 40% to 70% = moderate >70% = poor	National physical activity surveillance systems or surveys
Active play	% of children and youth who engage in unstructured/ unorganized active play for >2 hours a day.	>70% = good 40% to 70% = moderate <40% = poor	National physical activity surveillance systems or surveys
Time spent outdoors	% of children and youth who report being outdoors for >2 hours a day.	>70% = good 40% to 70% = moderate <40% = poor	National physical activity surveillance systems or surveys
Available safe cycling routes	Communities/ municipalities that report they have infrastructure (e.g., sidewalks, trails, paths, bike lanes) specifically designed to promote physical activity, as % of all communities	>70% = good 40% to 70% = moderate <40% = poor	National physical activity surveillance systems or surveys
Trends in available safe cycling routes	Compound annual growth rate (CAGR) calculated from two data points several years apart, preferably 10 or more years apart.	CAGR 3% or more = very rapid growth 1% to <3% = rapid growth 0.5% to <1% = moderate growth -0.5% to <0.5% little growth or decline -1% to -0.5% = moderate decline < -1% = rapid decline	National physical activity surveillance systems or surveys
Ownership of cars	% of population owning cars [or number of cars per 100 population][or annual sales cars per 100 population]	<40% [or <40/100] [or 4/100] =good 40% to 70% [40-70/100] [4-7/100] = moderate >70% [>70/100] [>7/100] = poor	National physical activity surveillance systems or surveys
Trends in ownership of cars	Compound annual growth rate (CAGR) calculated from two data points several years apart, preferably 10 or more years apart.	CAGR < -1% = rapid decline -1% to -0.5% = moderate decline -0.5% to <0.5% little growth or decline 0.5% to <1% = moderate growth 1% to <3% = rapid growth 3% or more = very rapid growth	National physical activity surveillance systems or surveys

Expanded questions			
Key questions	Suggested indicators	Interpretation	Data source examples
Trends in sedentary behaviours	Compound annual growth rate (CAGR) calculated from two data points several years apart, preferably 10 or more years apart.	CAGR < -1% = rapid decline -1% to -0.5% = moderate decline -0.5% to <0.5% little growth or decline 0.5% to <1% = moderate growth 1% to <3% = rapid growth 3% or more = very rapid growth	National physical activity surveillance systems or surveys Global School-based Student Health Survey Health Behaviour of School Children Survey
Sleep (lack of sleep) by age <i>... and by gender</i> <i>... and by urban/rural and region</i> <i>... and by SES</i>	% of children routinely having <8 hours sleep per night	<10% =good 10% to 20% = moderate >20% = poor	National surveys
Ambient air pollution	Ambient air pollution attributable death rate (per 100 000 population, age-standardized)	<20 =good 20 to <50 = moderate 50 to <80 = poor 80 or more very poor	WHO Global Health Observatory

Stage 3: Review the policy and programme landscape



WORKSHEET 3 –

Q5. What are the strategies, policies and norms to address the obesogenic environment and promote healthy diets and physical activity?

Key questions	Suggested indicators or supplementary questions	Data source examples
Overarching policies		
<p>Strategy or action plan – Does the national government have a written strategy, action plan or policy addressing overweight and obesity (e.g. specific obesity plan, comprehensive nutrition policy, NCD or health plan, food strategy, etc)?</p>	<p>Policy name: Year of implementation: Governing agency: Does this specifically include goals, objectives or indicators related to childhood overweight and obesity?: Does this have specific budget attached to it?: Does it link overweight and obesity to undernutrition in childhood or in the life course, and recognising the need for double-duty actions?:</p>	<p>WHO GINA database of policies WHO GINA database of programmes WHO Nutrition Landscape Information System World Obesity Federation database of policies and interventions Government websites</p>
Food systems policies		
<p>Dietary guidelines – are there government-endorsed national food-based dietary guidelines (FBDGs) and do these include recommendations for specific age groups, e.g. infants, young children or adolescents?</p> <p><i>Note: for definition of food-based dietary guidelines (FBDGs) – see glossary</i></p>	<p>Policy name: Year of implementation: Governing agency: Published national FBDGs? Health promotion material based on FBDGs?</p>	<p>FAO database on food-based dietary guidelines Government websites</p>
<p>Nutrient profiling – Is there a government-endorsed nutrient profile model (NPM), e.g. used to restrict marketing foods to children or to classify foods for front-of-pack labelling?</p> <p><i>Note: for definition of nutrient Profile Models (NPM) see glossary</i></p>	<p>Policy name: Year of implementation: Governing agency: Published national NPM?: Published endorsement of regional WHO NPM?: Published endorsement of an industry-created NPM?:</p>	<p>Government websites</p>

Key questions	Suggested indicators or supplementary questions	Data source examples
Taxes – Are there specific taxes or levies on foods or beverages that are health-related and/or linked explicitly to the government-endorsed FBDGs or NPM, where these exist?	Policy name: Year of implementation: Governing agency: Products targeted: Tax rate: Monitoring and evaluation:	WHO GINA database of policies World Obesity Federation database of policies and interventions WCRF International NOURISHING Database Government websites
Subsidies – Are there specific subsidies on foods or beverages?	Policy name: Year of implementation: Governing agency: Products targeted: Subsidy rate: Monitoring and evaluation:	WHO GINA database of policies World Obesity Federation database of policies and interventions WCRF International NOURISHING Database Government websites
Public procurement of food – Are there any examples of government procurement policies or standards linked specifically to FBDGs or NPM, where these exist?	Policy name: Year of implementation: Governing agency: Policy settings: Policy monitoring:	WHO GINA database of policies World Obesity Federation database of policies and interventions WCRF International NOURISHING Database Government websites
Nutrition labelling – nutrient declarations – Does the government have mandatory nutrient declarations?	Policy name: Year of implementation: Governing agency: Products targeted: Nutrients targeted: Monitoring and evaluation:	WHO GINA database of policies World Obesity Federation database of policies and interventions WCRF International NOURISHING Database Government websites
Nutrition labelling – front of pack nutrition labelling – Is there a government-endorsed front-of-pack labelling scheme?	Policy name: Year of implementation: Governing agency: Products targeted: FOPNL description (e.g. “high-in” warning label, multiple traffic lights, Nutriscore, Healthy Star Rating, other summary indicator system, endorsement logos or other): Mandatory or voluntary: Monitoring and evaluation:	WHO GINA database of policies World Obesity Federation database of policies and interventions WCRF International NOURISHING Database Government websites

Key questions	Suggested indicators or supplementary questions	Data source examples
Menu labelling: are there policies to require food service operators to show nutritional information on their menus?	Policy name: Year of implementation: Governing agency: Products targeted: Labelling requirements: Mandatory or voluntary: Monitoring and evaluation:	WHO GINA database of policies World Obesity Federation database of policies and interventions WCRF International NOURISHING Database Government websites
Food marketing to children – Are there policies to control what types of food and beverages are being marketed to children: <ul style="list-style-type: none"> • on TV or through radio? • within schools or other places where children gather (e.g. sports clubs)? • in the street? • on digital media? 	Policy name: Year of implementation: Governing agency: Products targeted: Is a NPM in place: Mandatory or voluntary: Media targeted: Ages targeted: Monitoring and evaluation:	WHO GINA database of policies World Obesity Federation database of policies and interventions WCRF International NOURISHING Database Government websites
Food supply chain – Is there a policy to subsidise or support food chain processes (transport, warehousing, chilling, freezing) for healthy foods specifically linked to government-endorsed FBDGs or NPS criteria?	Policy name: Year of implementation: Governing agency: Products targeted: What does the policy intend to do: Monitoring and evaluation:	WHO GINA database of policies World Obesity Federation database of policies and interventions WCRF International NOURISHING Database Government websites
Food imports – Is there a policy for restricting imports of specific foods or foods which fail to meet specific nutritional criteria, e.g. using FBDGs or NP model classification?	Policy name: Year of implementation: Governing agency: Products targeted: Monitoring and evaluation:	WHO GINA database of policies World Obesity Federation database of policies and interventions WCRF International NOURISHING Database Government websites

Key questions	Suggested indicators or supplementary questions	Data source examples
Agriculture development – Is there a policy to support research or outreach training and development that specifically links to government-endorsed FBDGs or NPS criteria?	Policy name: Year of implementation: Governing agency: Budget: Monitoring and evaluation:	WHO GINA database of policies World Obesity Federation database of policies and interventions WCRF International NOURISHING Database Government websites
Commercial food service – Are there any local or national controls on commercial catering services (including fast food chains) linked specifically to FBDGs or NPM? E.g. restrictions on allowing fast food stores near schools? Restrictions on the quality of fats and limitation of salt to be used?	Policy name: Year of implementation: Governing agency: Mandatory or voluntary: Monitoring and evaluation:	WHO GINA database of policies World Obesity Federation database of policies and interventions WCRF International NOURISHING Database Government websites
Health system: What is happening to reduce childhood obesity risk during pregnancy?		
Maternal nutrition – Are adolescent and maternal nutrition programmes provided?	Policy name: Year of implementation: Governing agency: Related to obesity, undernutrition, or double duty:	WHO GINA database of programmes Government websites Health professionals
Weight gain – Do women receive antenatal monitoring to prevent excessive or insufficient weight gain and maternal diabetes?	Policy name: Year of implementation: Governing agency: Available to all women (Y/N):	WHO GINA database of programmes Government websites Health professionals
Counselling – Is there provision for pre-natal counselling and care (including diet, physical activity and smoking)?	Policy name: Year of implementation: Governing agency: Related to obesity, undernutrition, or double duty: Fathers, mothers or both: Are these obesity-specific or double duty or related to undernutrition only? Is this targeted at fathers as well as mothers?	WHO GINA database of programmes Government websites Health professionals
Supplements – Are protein and/or energy supplements (or cash or food vouchers) provided to pregnant women?	Policy name: Year of implementation: Governing agency: Monitoring and evaluation:	WHO GINA database of programmes Government websites Health professionals

Health and social support systems: What is happening to reduce childhood obesity risk during infancy and young childhood (to 5 years)?		
Breastfeeding promotion – Are there programmes and practices to promote breastfeeding?	Policy name: Year of implementation: Governing agency: 10 Steps Programme (Y/N): Policies on maternity leave (Y/N): Target population:	WHO GINA database of programmes Government websites Health professionals
Does the government have Baby-Friendly Hospitals Initiative?	Policy name: Year of implementation: Governing agency: Monitoring and evaluation:	WHO GINA database of policies WHO GINA database of programmes Global Breastfeeding Scorecard Government websites Health professionals NGOs
Do women have a right to maternity leave?	Policy name: Year of implementation: Governing agency: Length of maternity leave:	Government websites Health professionals NGOs
Is the International Code on the Marketing of Breast-milk Substitutes implemented by national legislation?	Policy name: Year of implementation: Governing agency: Extent of compliance (Substantially aligned/Moderately aligned/Some provisions/No legal provisions): Monitoring and evaluation:	WHO GINA database of policies WHO GINA database of programmes Global Breastfeeding Scorecard Government websites Health professionals NGOs
Child growth monitoring – is there growth monitoring for infants and young children for overweight or other forms of malnutrition?	Policy name: Year of implementation: Governing agency: Target population:	WHO GINA database of programmes Government websites Health professionals NGOs

Welfare/social protection - Are there policies or programmes to support families with infants and young children access healthy foods?	Policy name: Year of implementation: Governing agency: Means testing (Y/N): Food-related (Y/N): Nutrition sensitive (Y/N): Monitoring and evaluation:	WHO GINA database of programmes Government websites Health professionals NGOs
Care pathways – Are there well-publicised referral routes for infants and young children at higher risk of overweight and obesity?	From screening to GP? From screening to paediatrician? From GP to paediatrician?	WHO GINA database of programmes Government websites Health professionals NGOs
Health worker training - Do primary health-care workers receive training in providing nutrition counselling and breastfeeding support?	Does the training recognise the need for double-duty actions?	Government websites Health professionals NGOs
Education system: What is happening to reduce childhood obesity risk in educational settings?		
Pre-school settings – Are there nutritional standards for food provided to young children in child-care settings?	Policy name: Year of implementation:	WHO GINA database of policies World Obesity Federation database of policies and interventions
Are there physical activity standards for child-care settings?	Governing agency:	WCRF International NOURISHING Database
Is there national guidance for screen-time and sleep in child-care settings?	Nutrition standards (Y/N): Physical activity standards (Y/N): Screen-time and sleep standards (Y/N): Settings/school types: Monitoring and evaluation:	Government websites
School standards - Are there nutrition standards for meals provided in schools? Is it monitored? Are schools supported to provide meals with diet diversity (e.g., with a school garden and fruit trees)?	Policy name: Year of implementation: Governing agency: Settings/school types: Mandatory or voluntary: Linked to national FBDGs (Y/N): Monitoring and evaluation:	WHO GINA database of policies World Obesity Federation database of policies and interventions WCRF International NOURISHING Database Government websites

<p>Are there nutrition standards for other foods (snacks and beverages) sold in schools, e.g. in vending machines?</p>	<p>Policy name: Year of implementation: Governing agency: Settings/school types: Mandatory or voluntary: Monitoring and evaluation:</p>	<p>WHO GINA database of policies World Obesity Federation database of policies and interventions WCRF International NOURISHING Database Government websites</p>
<p>Are there standards for children’s physical activity/education in the curriculum?</p>	<p>Policy name: Year of implementation: Governing agency: Settings/school types: Mandatory or voluntary: Monitoring and evaluation:</p>	<p>WHO GINA database of policies World Obesity Federation database of policies and interventions WCRF International MOVING Database WHO Regional Office databases and reports Government websites</p>
<p>Are there standards for the amount of sedentary time, or screen time, for children at school? Does this cover all schools, state and private?</p>	<p>Policy name: Year of implementation: Governing agency: Settings/school types: Monitoring and evaluation:</p>	<p>Government websites Health professionals NGOs</p>
<p>School curriculum – Are there clear guidelines in the school curriculum about teaching children on health promotion, including healthy eating and physical activity?</p>	<p>Policy name: Year of implementation: Governing agency: Settings/school types: Monitoring and evaluation:</p>	<p>WHO GINA database of policies World Obesity Federation database of policies and interventions WCRF International NOURISHING and MOVING Databases WHO Regional Office databases and reports Government websites</p>
<p>School drinking water – Are there policies to ensure access to safe drinking water in schools and sport facilities?</p>	<p>Policy name: Year of implementation: Governing agency: Settings/school types: Mandatory or voluntary: Monitoring and evaluation:</p>	<p>WHO GINA database of policies World Obesity Federation database of policies and interventions WCRF International NOURISHING Database WHO Regional Office databases and reports Government websites</p>

<p>Active travel – Are there policies to encourage active travel (walking and cycling) to and from school?</p>	<p>Policy name: Year of implementation: Mode of operation: National or local: Monitoring and evaluation: How do they operate: do they restrict vehicles, provide safe routes, encourage walking groups? Are the policies national or local? How are they monitored?</p>	<p>WCRF International MOVING Database Government websites Health professionals NGOs</p>
<p>School and community facilities – Are there policies to give access to school and municipal sport and play facilities outside of school hours?</p>	<p>Policy name: Year of implementation: Governing agency:</p>	<p>WCRF International MOVING Database Government websites Health professionals NGOs</p>
<p>Fitness monitoring – Are there school-based fitness monitoring programmes?</p>	<p>Policy name: Year of implementation: Governing agency: Settings/school types: Monitoring and evaluation:</p>	<p>WCRF International MOVING Database Government websites Health professionals NGOs</p>
<p>Urban system: what is happening to make cities less obesogenic?</p>		
<p>Urban planning: active transport and green spaces – are there policies at national or city level to provide safe cycling and walking routes and access to green spaces?</p>	<p>Policy name: Year of implementation: Governing agency: Monitoring and evaluation:</p>	<p>WCRF International MOVING Database Government websites Health professionals NGOs</p>
<p>Urban planning: cars – are there policies at national or city level to reduce car use? This includes policies to improve air pollution as well as encourage outdoor activity (another win-win policy)</p>	<p>Policy name: Year of implementation: Governing agency: Monitoring and evaluation:</p>	<p>WCRF International MOVING Database Government websites Health professionals NGOs</p>



WORKSHEET 4 –

Q6. What are the political, institutional and cultural factors influencing the response to childhood obesity?

Key questions	Suggested indicators or supplementary questions	Data source examples
<p>Leadership: is there evidence of support from the president/prime minister/cabinet office for action on childhood obesity?</p>	<p>Is there a statement of political commitment from government (Y/N)?:</p> <p>Have other political parties made statements (Y/N)?:</p> <p>Is there a minister or department with specific responsibility for coordinating action on obesity (Y/N)?:</p> <p>Do political statements recognise undernutrition as well as obesity (Y/N)?:</p>	<p>Government statements, officials, NGOs</p>
<p>Government co-ordination: Is there a policy coordination platform for cross-government collaboration that already works to prevent and control childhood obesity, or could take up this work?</p>	<p>Is there a government cross-departmental taskforce (Y/N)?:</p> <p>Does it have a formal mandate (Y/N)?:</p> <p>Are there multi-stakeholder ‘partnerships’ in policy-making or in programme design and delivery (Y/N)?:</p> <p>Do these partnerships/platforms include BMS Code violators, soft drinks companies etc (Y/N)?:</p>	<p>Government statements, officials, NGOs</p>
<p>Civil society empowerment – Is there a government-led platform, forum, committee or other body that engages academia and nongovernmental organization with a focus on childhood obesity?</p>	<p>Yes/No</p> <p>Does it include the following:</p> <p>Public health representatives (Y/N)?:</p> <p>Consumer groups (Y/N)?:</p> <p>Development agencies (Y/N)?:</p> <p>Representatives from the food industry (Y/N)?:</p> <p>To help assess the capacity of a multi-stakeholder platform to promote or obstruct meaningful action, consider its composition in terms of vested interests and access to independent public health evidence and consideration of rights:</p> <p>For example, does membership include:</p> <p>violators of the Code of Marketing of Breastmilk Substitutes</p> <p>major suppliers of sugar-sweetened beverages, fast foods or confectionery</p>	<p>Government departments, WHO nutrition counterparts, NGOs</p>
<p>City-level programmes - Are there city-led or local authority-led strategies and policies to tackle child obesity?</p>	<p>Who leads the initiative – e.g. the mayor?:</p> <p>Do the policies include measurable, time-limited targets (Y/N)?:</p> <p>Are the policies being monitored and reported (Y/N)?:</p>	<p>Metropolitan and local government officials, NGOs</p>

<p>Monitoring: Does the government (or other independent organisation, free from conflict of interest) conduct surveillance to monitor child obesity levels, and report the results, or monitor diet and nutrition intakes??</p>	<p>Did you find it easy or difficult to get the data you need from government sources for this landscape analysis?:</p> <p>What gaps did you find?</p> <p>Were the data nationally representative (Y/N)?:</p> <p>Were trends monitored over time (Y/N)?:</p>	<p>Government statements, officials, NGOs</p>
<p>Published national targets: Does the government have obesity (and undernutrition) targets? Are they time-limited?</p>	<p>What do the targets cover?:</p> <p>Who is responsible for meeting the targets (Y/N)?:</p>	<p>Government statements, officials, NGOs</p>
<p>Transparency: Is there good public access to government information and the evidence used for obesity-related policy-making?</p>	<p>Are government policy documents well-referenced to authoritative documents (Y/N)?:</p> <p>Are there open consultations on policies, and is there easy access to the responses (Y/N)?:</p>	<p>Government statements, officials, NGOs</p>
<p>Commercial interests: Does the government have a clear policy on preventing and managing conflicts of interest and vested interests?</p>	<p>Does the government publish information on its meetings with companies involved in breastmilk substitutes, complementary foods or highly-processed foods or beverages (Y/N)?:</p> <p>Do advisory committees show their membership and their member's commercial links (Y/N)?:</p> <p>Does the government prohibit the funding of obesity-prevention interventions by the food and beverage industry (Y/N)?:</p>	<p>Government reports, officials, NGOs</p>
<p>Are there any monitoring reports of food company activities on the marketing of foods high in fat, sugars and salt?</p>	<p>Yes/No</p> <p>How often are these undertaken and are they independent?</p>	<p>Government statements, officials, NGOs</p>
<p>Funding/Resources: Is the government funding nutrition education promotion programmes for children (in schools?), that include a focus on good nutrition to promote healthy weight?</p>	<p>Is the government funding nutrition education promotion programmes for children (Y/N)?:</p> <p>Do they include a focus on good nutrition to promote healthy weight (Y/N)?:</p>	<p>Government statements, officials, NGOs</p>
<p>Is the government funding nutrition interventions for children?</p>	<p>Yes/No</p> <p>Are these double-duty interventions (Y/N)?:</p>	<p>Government statements, officials, NGOs</p>
<p>Is the government funding obesity prevention research?</p>	<p>Yes/No</p> <p>Research on, for example:</p> <p>the impact of policies (taxation, marketing controls), including on different sub-groups</p> <p>the impact of obesity prevention on undernutrition (maternal and child).</p>	<p>Government statements, officials, NGOs</p>

Health impact assessment (HIA): Is there a standard procedure to assess the impact of food and physical activity-related policies on health and obesity?	Yes/No Who is responsible for HIAs?: Does the assessment include both obesity and undernutrition (Y/N)?: Are they mandatory or discretionary? How are HIAs taken into account in policy-making (Y/N)?:	Government statements, officials, NGOs
Cultural factors		
Safe drinking water – Are local water supplies believed to be safe to drink? Is safe drinking water widely available for free?	Yes/No Are there local and regional differences (Y/N)?: Are bottled sugary drinks the customary drink at meals (Y/N)?:	Please report a reliable source of evidence, not just a personal observation!
Physical activity – are there specific cultural norms (such as dress codes or gender segregation of sports facilities) that reduce the opportunities to take physical activity? Or increase the need for sedentary behaviour?	Yes/No Are there gender differences (Y/N)?:	Please report a reliable source of evidence, not just a personal observation!
Climate and geography – does the prevailing climate affect availability of food, dietary behaviours or levels of physical activity? Does the natural terrain affect physical activity?	Yes/No Are there gender differences (Y/N)?: Are there sub-groups or regions especially affected (Y/N)?:	Please report a reliable source of evidence, not just a personal observation!
Weight stigma in media – Is there evidence of a code of conduct for media companies, or for journalists, on reporting on obesity and avoiding stigma and victim blaming?	Are there surveys of media stories on obesity (Y/N)?: What images are used to accompany stories about obesity – do these imply the individual was lazy, stupid, or in any way to blame for their condition, or do they respectfully show professional people living with obesity?	Journalists' association, media research in university
Culinary and dietary norms – are there cultural preferences for particular foods or cooking practices?	Yes/No How do these fit with FBDGs? Are there sub-group differences, e.g. by region or income level?	Please report a reliable source of evidence, not just a personal observation!
Body-weight norms – are their cultural reasons why fatness might be encouraged? Are these changing? Are there gender differences?	Are there reasons for positive associations with excess weight, e.g. is thinness perceived to be due to disease or poverty?	Please report a reliable source of evidence, not just a personal observation!
Feasting and fasting – are there specific rules about feasting or fasting which may encourage weight gain?	How do the rules relate to the national food-based dietary guidelines? Are children and teenagers exempt?	Please report a reliable source of evidence, not just a personal observation!

Stage 4: Identify gaps in the current policy environment and policy opportunities

The purpose here is to identify opportunities and potential points of resistance or bottlenecks in policy development in the country context. The first step is to see what other countries in the region or beyond have implemented which might be transferrable to your country, based on gaps identified in Section 3. There are several online sources of policy information and examples are shown in the box. The **Annex II: Support** included in the present document has gathered a wide range of the policies from these sources and listed them to aid the country team's research.

BOX

Examples of policy databases. See the Annex II: Support for a list of policies and recommendations taken from these documents.

- WHO *Global nutrition policy review 2016-2017* published the numbers and percentages (in a region) of countries undertaking nutrition-related actions, many of which are relevant to the present landscape analysis.
- The WHO's *Global database on the Implementation of Nutrition Action* (GINA) lists country-by-country information on nutrition policies and legislation, programmes and actions, and mechanisms used for compliance, implementation and evaluation.
- The World Cancer Research Fund International (WCRFI) *NOURISHING* database of implemented policies relating to food systems that is searchable by country or policy domain.
- The World Obesity Federation provides interactive maps listing country-by-country policy and intervention documents.
- The University of North Carolina's Global Food Research Program provides country-by-country reports of policy development.
- Double-duty policies have been in a *Lancet* special issue published in December 2019.
- Triple-duty policies have been described in the *Lancet* special issue on the Global Syndemic, published in early 2019.

To further highlight these gaps, and identify policy barriers, enablers, and opportunities, interviews should be conducted with key stakeholders. It will be important for the country team to include a variety of stakeholders with a range of interests and positions. The country team should ask the stakeholders for their views on the situation (including challenges and barriers) and share some of the insights from the landscape analysis, including existing gaps and opportunities for more comprehensive action.

Interviews should also be viewed as an opportunity to validate the data collected through the worksheets. Interviewees may have suggestions of additional data sources or their own knowledge of existing policies.

Interview recruitment: Potential interview participants should ideally be first contacted by the government partner where possible. This initial contact should include a request to participate and the contact details of the country team for further information. Stakeholders should be asked to (i) provide additional data sources to fill gaps in the worksheets that have been identified by country teams, and (ii) share any additional information they have regarding the policies and related interventions they think would be important to take forward. The aim is to conduct around ten interviews with a range of relevant people from within and outside government. Ideally, key stakeholders are experienced senior staff with extensive knowledge of relevant areas. The list of key stakeholders might include some of the following:

- A wide range of national government officials, beyond immediate counterparts, including departments responsible for health, food and agriculture, education, trade, media and treasury.
- Sub-national and city-level officials
- UN agencies
- Academics
- Health promotion agencies
- Consumer groups
- Development and aid organisations
- Child rights groups
- Other health and professional associations such as diabetes association, associations of nutritionists and registered dietitians etc.

Interview content: It is good practice to send the key stakeholder a two-page summary of the findings from the landscape analysis worksheets in advance and to include the questions that you would like to discuss with them. The full findings can also be shared as further reading. Interviews should be audio recorded and then transcribed, either manually, through an online application, or through the automatic transcription service available on many teleconferencing software packages. Some countries may require ethical approval prior to conducting interviews and country-specific contexts should be researched for this.

Commercial interests

We have not included representatives from food and beverage companies here. UNICEF has learnt from global experience on overweight prevention that close engagement with the food and beverage industry involves significant risk and undermines progress in policy development and adoption (See Conflicts of Interest in the Glossary). While there are opportunities in open meetings to hear the views of the industry, it is recommended here that food and beverage industry representatives should not be interviewed nor directly involved in the development of the recommendations from the landscape analysis. In contrast, it can be very helpful to ask other key interviewees about their experiences with the food and beverage industry.

While some governments may currently include industry in their advisory committee, and some interaction with the private sector may be inevitable, UNICEF should aim to minimize the risks by avoiding direct input from the food and beverage industry. If the government insists on recommendations targeted towards the food and beverage industry (i.e. voluntary actions), these should complement not replace recommendations to regulate harmful industry practices and should always relate to changes to industry core business (i.e. industry should make changes to the way they produce and promote foods) rather than contributing to raising awareness of the issue.

If there is a desire to publish this research in an academic journal, then ethical approval will be required. Ethical approval may be obtained from a government agency and/or an academic partner institution.

Examples of areas to cover are set out below.

- **Introduction:** establish the status of the interviewee and the position of their department or organisation on childhood overweight
- **Gaps:** Include questions on the key gaps in data and knowledge, opportunities, challenges for filling the gaps. What evidence is needed to improve interventions?
- **Key policies:** Ask for opinions on the key policies recommended by UN organisations or in government strategy documents: for example introducing or expanding a sugar tax, restricting marketing of unhealthy foods to children, improving labelling to identify unhealthy foods and beverages, strengthening the Code of Marketing of Breastmilk Substitutes, improving school food environments. Include questions on previous attempts to introduce the policies if any, the legislative and regulatory architecture, resources and capacities, enforcement and violations of similar laws and policies, successes, challenges, opportunities, barriers, opponents, etc.
- **Social and Behaviour Change Communications:** Ask for opinions on the value of school health and nutrition education, counselling through health system, public health communication, social media 'influencers' and government-initiated media campaigns. Include questions on successes, gaps, challenges, opportunities, barriers etc.
- **Engagement with industry:** Ask about the interviewee's experiences in relation to food and beverage industry involvement with nutrition

interventions, sponsorship, advertising, role in policy development. Include questions on opportunities, risks, and methods for handling conflicts of interest.

- **Priority actions to prevent overweight:** Ask the interviewees to name their top three actions that would make a difference.

A sample interview schedule is provided in Annexe II.

- **Interview Analysis:** After the interview the country team should summarise the insights provided by the interviewee and note any key themes that were mentioned. After multiple interviews are completed, the study team should compare the perspectives of different interviewees to find key themes. Key themes may relate to i) perceived drivers of childhood overweight and obesity, ii) perceived barriers and enablers to policy implementation, and iii) policy options for addressing childhood overweight and obesity. Your report of the interviews should present these key themes after the results of worksheets 3 and 4 are presented. Key themes should be presented with some relevant supporting quotes.

Any additional data that was provided by interviewees should be used to finalise worksheets 1 to 4.

Stage 5: Agree priorities and next steps and engage stakeholders through a validation workshop

From the information collected in the landscape analysis, it should now be possible for the country team to list the policies that are needed and agree where there are win-win or triple-win opportunities to improve nutrition and reduce the risk of overweight and obesity. Gaps in relation to 'overweight-specific' policies may also be identified, that may have little direct impact in alleviating undernutrition but will help to tackle obesity (for example, measures to reduce the excess consumption of sugary drinks or increase physical activity).

From the information in landscape analysis, and from the comparison with other policies in section 3.1.1., and knowledge of policies in child nutrition and health promotion, the country team can undertake a series of filtering processes to identify the most promising areas of policies based on their being **realistic** and **feasible** in the national context. The aim is to identify what can be done to fill the policy gaps, and what can be modified so that the country's policies are better.

Realistic should take account of the potential to gain support for policies. For example:

- policies and actions which may have potential double-duty benefits
- policies which are being promoted (or at least supported) by others in your country, including professional societies, health and consumer advocacy groups, aid and development agencies, child protection and human rights groups

Feasible should take into consideration any political, cultural or commercial bottlenecks and opportunities, and available resources and capacity. For example:

- policies already in place in your country which could be taken further or scaled up;
- policies not in place, but which have been taken forward in neighbouring countries or other countries in the region, which could be tried in your country.

Even if a possible policy or intervention does not seem realistic or feasible in the short term, it may be that there is a role for the country team, with support of UNICEF and UN partners, to engage with the government and to generate the evidence or start a dialogue to get it on the policy agenda and to chart a way forward to overcome opposition and barriers.

It may also help to talk with local advocacy groups to understand their strategies and priorities and/or recruit advisors or consultants, perhaps with international experience of policy development, to help generate an output from this step. The output should take the form of a list of possible ideas for policies, interventions, advocacy activities and other initiatives.

Validation Workshop

Now the country team's recommendations are ready for discussion with the government through a validation workshop. This provides an opportunity to share and discuss the findings of the landscape analysis, including provisional recommendations, and collectively identify priority actions for scaling-up. The participation of all relevant government sectors and partner agencies is crucial in fostering ownership of results, identifying what different organisations and agencies are doing and could be doing, and reaching a consensus on key priorities. The ultimate outcome from the validation workshops is commitment to act on the recommendations.

Validation workshops can have a simple agenda such as:

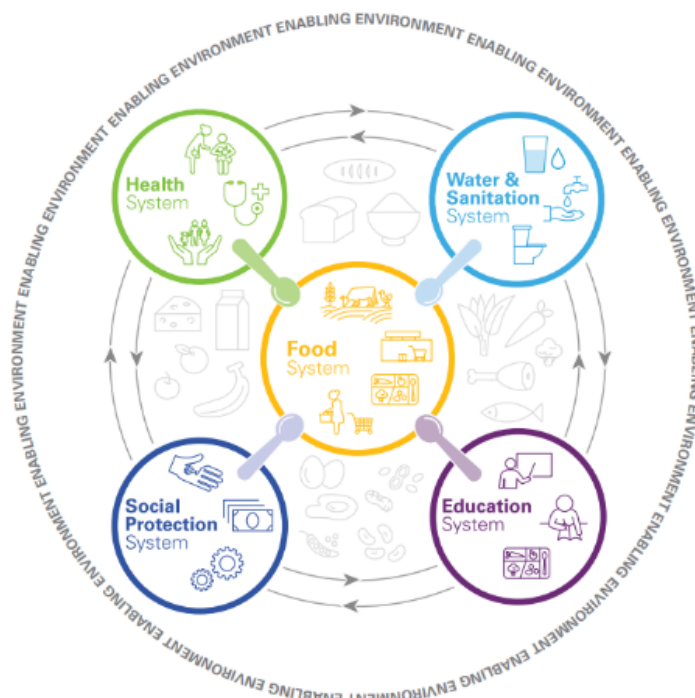
- Step 1: Presenting the results of the landscape analysis and highlighting policy options:
 - ♦ Presenting the preliminary results of the landscape analysis
 - ♦ Describing policies which are being recommended internationally
 - ♦ Describing policies being tried in other countries and regions
 - ♦ Showing how policies can be set in terms of systems-strengthening
 - ♦ Proposing policies which could be developed in your country
- Step 2: Break-out groups to discuss specific policy options:
 - ♦ Break-out groups may be organised relative to their policy. For example, Ministries of Finance may discuss taxation; Ministries of Education may discuss school food environments.
- Step 3: Reconvening to finalise policy priorities:
 - ♦ Seeing if there is a consensus agreement on the priorities for the policies.
 - ♦ Finalising policy commitments amongst stakeholders

Raising awareness of strategies to tackle childhood obesity

If you want to go further in developing awareness and prioritising policies then various tools are available which may be used to encourage exchange of ideas and debate. Use of these tools is not essential but may be considered in some cases. These tools include:

- **Group model building:** This is an exercise in mapping (sometimes called 'systems mapping') the influences on children's health and children's behaviour. For details, see Annex II: Support 'Systems mapping'
- **Policy rating:** This is an exercise which can be done using the Food Environment Policy Index (Food-EPI) process to evaluate policies and interventions in the public sector. It looks at the current actions of government and local authorities and asks how these rate against the ideal, and how they rate against what other countries or cities are doing. For details, see Annex II: Support 'Food EPI'
- **Landscape Analysis country assessments on accelerating action in nutrition:** These have been undertaken in 20 countries, in a participatory fashion by an interagency team, including WHO and UNICEF, with national and international team members. It gathers country stakeholders around a common understanding of challenges countries are facing, opportunities that exist and seek to identify possible actions that need to be prioritised in each country in order to accelerate scaling-up of effective interventions programmes.
- **EVIPnet:** EVIPNet takes the form of a network with distinct country, regional and global nodes. EVIPNet operates by forming country (or sub-regional) teams, composed of policymakers, researchers and civil society. These teams, in close collaboration with local decision-makers and through deliberated policy dialogues, identify national priority topics and ways to address them using the best available data and research evidence and the insights of those who will be involved or affected by decisions.

The key reportable outcome from the validation workshop is a list of the identified policy priorities for addressing childhood overweight and obesity. These could be presented as a list, grouped by the environmental systems that they target (Figure 2).



Stage 6: Refining the proposals and identifying next steps

The goal of collecting the data set out in stages 1 to 3, and engaging stakeholders through stages 4 and 5, is to provide information on the extent of a problem, why the problem might be occurring and understand what has been done to date. When this exercise has been completed, it can be used for several purposes:

- to reinforce that action on childhood overweight and obesity is necessary in order to protect and promote children's health and welfare;
- to identify gaps in knowledge in relation to the level of child overweight and obesity and the obesogenic environment;
- to show how existing policies in the country compare with other countries and with international recommendations;
- to show where additional policies and programmes can be proposed, or existing policies and programmes strengthened;
- to identify opportunities and pathways for policy change, as well as potential barriers and challenges
- to indicate how the proposals should be monitored and reviewed if they are adopted.

Possible next steps that the government might take to advance the agenda, together with UNICEF and UN partners, include:

- Policy dialogue with different sectors relevant to overweight prevention, including support for the establishment of cross-sectoral taskforces to coordinate actions.
- Review, develop and update regulations or policies, in line with international recommendations.

- Review existing policies, programmes and guidelines to ensure they are consistent with international guidance, e.g. IYCF programming; school-based nutrition education.
- Undertake or commission rapid research reviews to fill evidence gaps that have been identified and help government identify effective policy actions.
- Establish processes to build capacity for programme managers, health professionals and other caregivers, especially aiming to improve knowledge in child overweight prevention.
- Include nutrition, physical activity and the prevention of overweight as priority subjects in the curricula of health and related professionals (e.g. teachers, childcare workers).
- Perform evaluations of key policies and programmes to bolster them and explore possible expansion/adaptations that might be needed.
- Ensure inclusion of indicators for overweight and the obesogenic environment in routine monitoring and surveys.
- Incorporate worksheets 1-4 in routine monitoring to track trends and changes over time, or routinely conduct an abridged format of the landscape analysis approach described herein.

ANNEXES

ANNEX I: GLOSSARY

ACTIVE TRANSPORT	Transport using physical activity, including walking and cycling. It contrasts with using a car from door to door (e.g. from home to school).
BMI	Body mass index is the ratio of weight to height (squared). BMI= weight (in kilograms) / height (in metres) ² . See also <i>SELF-REPORTED BMI</i> .
BMI-FOR-AGE	BMI adjusted for age, standardized for children. See <i>OBESITY AND OVERWEIGHT</i>
CAGR – COMPOUND ANNUAL GROWTH RATE	A measure of the rate of change which is independent of the starting point. The CAGR between two surveys is calculated from this formula: $100 \times ((\text{Prevalence in year B} / \text{Prevalence in year A})^{1/A-B} - 1)$ For example, a survey in 2012 found that 20% of all children were experiencing obesity, and then in 2019 this had risen to 30%. The CAGR is calculated as $\text{CAGR} = 100 \times ((30/20)^{1/7} - 1) = 5.96\%$ <i>Note: The landscape analysis worksheets 1 and 2 include a CAGR calculator where you insert the start figure, the end figure and the number of years, and it produces the CAGR.</i>
CHILDREN	Those less than 18 years of age. However, please note that the WHO definitions for overweight and obesity apply to young people up to age 19 years.
CONFLICT OF INTEREST	The potential corruption of objectivity and independence as a result of one or more parties in a decision-making process having private, often financial, interests that would be affected by the decisions being made.
DOUBLE BURDEN	A simultaneous burden of high levels of undernutrition (including stunting, wasting and micronutrient deficiencies) and obesity within a population. May be experienced within a community, household or even an individual (for example a child who has experienced stunting and has become overweight).
DOUBLE DUTY ACTIONS	Policies and interventions which tackle both undernutrition and obesity, for example by promoting exclusive breastfeeding.
DRIVERS OF OBESITY	The root causes or determinants of obesity. These include the social determinants (income, education, equity) as well as the systems that create and promote obesogenic environments.
FOOD-BASED DIETARY GUIDELINES (FBDGs)	Nationally-approved recommended patterns of food consumption for promoting health and protecting against diet-related chronic diseases. These may be presented as a diagram such as a wheel or a pyramid. They usually indicate which foods should be eaten and in what proportion to ensure good health. They usually indicate which foods should be eaten in limited amounts if at all, and this can help to define which foods might be subjected to marketing restrictions. See <i>NUTRIENT PROFILING</i> .
HEALTHY DIETS	A healthy diet helps to protect against malnutrition in all its forms, as well as noncommunicable diseases (NCDs), including such as diabetes, heart disease, stroke and cancer. The exact make-up of a diversified, balanced and healthy diet will vary depending on individual characteristics (e.g. age, gender, lifestyle and degree of physical activity), cultural context, locally available foods and dietary customs. However, the basic principles of what constitutes a healthy diet remain the same. WHO indicates that for a diet to be healthy: A) daily needs of energy, vitamins and minerals should be met, but energy intake should not exceed needs; B) consumption of fruit and vegetables is at least 400 g per day; C) total fat intake is less than 30% of total energy intake; D) intake of saturated fats is less than 10% of total energy intake; E) intake of trans-fats is less than 1% of total energy intake; F) intake of free sugars is less than 10% (preferably, less than 5%) of total energy intake; D) intake of salt is less than 5 g per day Read more in this WHO fact sheet .

HEALTHY AND UNHEALTHY FOODS	Healthy (or <i>nutritious</i>) foods tend to be high in essential nutrients including vitamins and minerals (micronutrients), proteins, unrefined fibre-rich carbohydrates, and/or unsaturated fats that contribute to a healthy diet. Nutritious foods are also low in sodium, free sugars, saturated fats and trans fats. The tend to be foods that are recommended in FBDGs as contributing to the promotion of health and prevention of diet-related disease. In contrast, FBDGs typically recommend that individuals limit intake of foods high in saturated fats, trans-fatty acids, free sugars or sodium (i.e. energy-dense, nutrient-poor foods) to reduce the risk of weight gain and diet-related risk. These foods may be referred to as unhealthy. (See also <i>HFSS</i> and <i>NUTRIENT PROFILING</i>)
HFSS	Foods that are high in saturated fat, trans-fat, sugar, or salt, sometimes abbreviated to High Fat, Sugar, or Salt (HFSS).
INFANTS	Children less than 12 months of age.
MALNUTRITION	Malnutrition refers to deficiencies, excesses, or imbalances in a person's intake of energy and/or nutrients. Malnutrition, in all its forms, includes undernutrition (wasting, stunting, underweight), inadequate vitamins or minerals, overweight, obesity, and resulting diet-related noncommunicable diseases. While overweight and obesity has increased dramatically in a generation, it has not replaced undernutrition.
NON-COMMUNICABLE DISEASES (NCDs)	NCDs are diseases which are not communicated in the traditional sense, i.e. they are not infectious diseases. Typical examples are diabetes, heart disease, lung cancer, tooth decay and mental disorders – and obesity, which many countries now recognise as a disease condition in its own right. There is some concern that by calling such diseases 'non-communicable' they imply that the individual is responsible for developing the disease, whereas it can be argued that the disease is 'communicated' through cultural, commercial, social or economic vectors – such as advertising junk food to children or subsidising the cost of sugar in the food supply.
NGO	Non-governmental organisation. These can include professional societies, consumer organisations, aid agencies and advocacy groups. They may also include commercial groups, and there is some debate about whether public-interest NGOs (PINGOs) should be treated differently to business interest NGOs (BINGOs) who may have a conflict of interest.
NUTRIENT PROFILING	<p>Nutrient profiling is the science of classifying or ranking foods according to their nutritional composition for reasons related to preventing disease and promoting health. Nutrient profile models can help to categorise products for food labelling warnings, for health claims and for restricting marketing (e.g. restricting advertising to children). Many other uses of nutrient profiling can be developed (see https://apps.who.int/iris/handle/10665/325201).</p> <p>Many countries have developed their own nutrient profile models. The regional offices of the WHO have published recommendations:</p> <p>WHO Regional Office for Europe (2015) http://www.euro.who.int/__data/assets/pdf_file/0005/270716/Nutrient-children_web-new.pdf</p> <p>Pan-American Health Organization/WHO Regional Office for the Americas (2016) http://iris.paho.org/xmlui/bitstream/handle/123456789/18621/9789275118733_eng.pdf</p> <p>WHO Regional Office for the Western Pacific (2016) http://apps.who.int/iris/bitstream/handle/10665/252082/9789290617853-eng.pdf</p> <p>WHO Regional Office for South-East Asia (2017) http://apps.who.int/iris/bitstream/handle/10665/253459/9789290225447-eng.pdf</p> <p>WHO Regional Office for the Eastern-Mediterranean (2017) http://apps.who.int/iris/bitstream/handle/10665/255260/EMROPUB_2017_en_19632.pdf</p> <p>WHO Regional Office for Africa (2019) https://apps.who.int/iris/bitstream/handle/10665/329956/9789290234401-eng.pdf</p>

<p>OBESITY AND OVERWEIGHT</p>	<p>The classification criteria for defining degree of excess bodyweight. For adults, overweight and obesity are usually defined according to threshold BMI values, above which an individual is classified as overweight or obese. Children’s weight and height fluctuate as they grow and do not increase at exactly the same rate, and therefore a single threshold value (such as BMI 25 kg/m² for adult overweight and BMI 30 kg/m² for adult obesity) is not appropriate. Age-specific thresholds to define overweight and obesity are required.</p> <p>Growth standards and BMI reference charts are produced by the World Health Organization (WHO), the International Obesity TaskForce, the US National Centre for Health Statistics, and by national authorities. Each one uses different criteria. Take care when looking at survey reports.</p> <p>Overweight in children under 5 years</p> <p>UNICEF and WHO recommend the use of <i>weight-for-height (or length)</i> to assess both wasting and overweight. Overweight is defined as above +2 SD (standard deviation) of the WHO Child Growth Standards median. Severe overweight (above +3 SD) is referred to as obesity. For this age group, a prevalence of overweight between 0% and 2.5% is considered ‘very low’, between 2.5% and 5% ‘low’, between 5% and 10% ‘medium’, between 10% and 15% ‘high’ and over 15% ‘very high’.</p> <p>Overweight in children aged 5-19 years</p> <p>UNICEF and WHO recommend the use of <i>BMI-for-age</i> to assess overweight. Overweight is defined as above 1 SD (standard deviation) of the WHO Growth Reference median. A BMI-for-age above +2 SD is referred to as obesity. A BMI-for-age above +3 SD is referred to as severe obesity.</p> <p><i>Note that the term ‘overweight’ sometimes refers to children above the relevant threshold including those who are above the higher threshold for obesity, but sometimes it refers only to children above the overweight threshold but not above the obesity threshold. Again, take care when looking at survey reports.</i></p>
<p>OBESOGENIC ENVIRONMENT</p>	<p>An environment that promotes the consumption of energy-dense, nutrient-poor foods and beverages, or encourages reduced physical activity or increased sedentary behaviour (sitting down or lying down). Obesogenic environments include food environments (e.g. which foods and beverages are available, affordable, accessible and promoted), economic environments (e.g. prices and costs of foods, household incomes and social support), social environments (e.g. norms for eating, taking exercise, screen-watching, body shape), and physical environments (opportunities for physical activity, available active transport).</p> <p>Exposure to obesogenic environments is increasing in low- and middle-income countries and across all socioeconomic groups. In some cultural settings, overweight is becoming the social norm, and this in turn reinforces the obesogenic environment.</p>
<p>POLICY MAKERS</p>	<p>In government, this refers to legislators (e.g. MPs, senators) or government ministers, or the civil servants who draft policies for government ministers. At local level it can refer to officials in authority who propose or decide on how resources are spent and for whom.</p>
<p>PREGNANCY: RECOMMENDED WEIGHT GAIN</p>	<p>The recommended weight gain which can be expected during pregnancy without raising concerns of overweight or obesity. This is set by government agencies or health professionals’ organisations.</p> <p>As a guide, the USA Institute of Medicine recommends the following criteria, according to the mothers’ BMI at the start of pregnancy:</p> <p>BMI at start of pregnancy <18.5kg/m² then healthy weight gain is up to 18kg.</p> <p>BMI at start of pregnancy 18.5-25kg/m² then healthy weight gain is up to 16kg.</p> <p>BMI at start of pregnancy 25-30kg/m² then healthy weight gain is up to 11.5kg.</p> <p>BMI at start of pregnancy >30kg/m² then healthy weight gain is up to 9kg.</p>

RISK FACTORS	<p>'Risk factors' refers to influences in the environment which encourage weight gain. These include exposure to the promotion of energy-dense, nutrient-poor foods and reduced opportunities to be physically active with more time spent on screen-based and sedentary leisure activities (see <i>OBESOGENIC ENVIRONMENTS</i>).</p> <p>Perhaps surprisingly, undernutrition can increase the risk of overweight and obesity. Maternal undernutrition in pregnancy increases the likelihood of a low birth-weight infant. A low birth-weight infant is more likely to develop obesity in childhood than a normal birth-weight infant, especially if the infant shows rapid 'catch-up' weight gain. Rapid weight gain in infancy is a strong predictor of obesity risk.</p> <p>Stunting in childhood is also a risk factor for overweight, especially a form of overweight termed 'central adiposity' (body fat around the abdomen), which is closely linked to obesity-related chronic diseases in adulthood.</p> <p>Breastfeeding is protective against infant obesity, which indicates that early use of formula feeding and early complementary feeding may raise the risk of obesity, while also raising the risk of inadequate feeding and diarrhoea, and consequential undernourishment.</p> <p>Risk factors also include the social conditions which can increase or decrease the likelihood of ill-health (i.e. the social determinants of disease). This might include the household income and available resources, the educational level of the parents, and the equality of income distribution in the country.</p>
SELF-REGULATION	<p>Self-regulation is a process whereby a commercial actor, such as a food company or a group of food companies, agree to a set of standards which they write, and then monitor their own conduct. There is no legal compulsion to abide by these standards, and no legal punishment if they are not obeyed.</p> <p>Contrast with Co-regulation in which an industry group, such as the food industry acting as a body, agree with a regulatory authority, such as a government department, that they will abide by a code of practice written and agreed by the government and industry together. The industry may undertake to monitor their members' activities and impose punishments. There is also a potential for the regulatory authority to punish a company if the code is not obeyed.</p> <p>Also contrast with Statutory regulation in which government authorities impose a code of practice enforceable by law.</p>
SELF-REPORTED BMI	<p>The individual (or their parents) are reporting the heights and weights to the researcher. There is potential inaccuracy, as measurement equipment is not standardised, and the report may be biased (e.g. female adolescents may understate their weight, males may over-state their height). Contrast to 'Measured' survey data in which the measurement of height and weight is undertaken by a trained researcher using measuring equipment.</p>
STAKEHOLDERS	<p>Organisations and agencies that have an interest in a specific issue, such as regulations affecting the food system. A stakeholder may literally have a stake, or financial interest, or may have other interests such as statutory responsibilities or other legitimate concerns. Thus a list of stakeholders might include authorities responsible for regulation, commercial bodies defending and developing markets for their products, UN agencies, charities protecting and promoting health, and children and their representatives.</p>
YOUNG CHILDREN	<p>Those less than 5 years of age.</p>

ANNEX II: SUPPORT

Tools to assist a landscape analysis.

- 1. A list of policies**
- 2. Sample interview schedule**
- 3. Workshop tools**
- 4. A sample landscape report**

1. A non-exhaustive list of potential policies

Here we list a selection of policies and interventions that are recommended or being implemented.

The sources for these include:

- The WHO Report of the Commission on Ending Childhood Obesity
<https://www.who.int/end-childhood-obesity/publications/echo-report/en/>
- The WHO *Global nutrition policy review 2016–2017*
<https://apps.who.int/iris/bitstream/handle/10665/275990/9789241514873-eng.pdf>
- The WHO *Global database on the Implementation of Nutrition Action* (GINA)
<https://extranet.who.int/nutrition/gina/>
- The WHO *Global Action Plan on Physical Activity*
<https://www.who.int/ncds/prevention/physical-activity/global-action-plan-2018-2030/en/>
- The WHO *Best Buys and Other Recommended Actions for Prevention and Control of NCDs*
<https://apps.who.int/iris/handle/10665/259232>
- The WHO *Essential Nutrition Actions*
<https://www.who.int/publications/i/item/9789241515856>
- The *International Code on the Marketing of Breastmilk Substitutes*
<https://www.who.int/nutrition/publications/infantfeeding/9241541601/en/>
- The *Ten Steps to Successful Breastfeeding*
<https://www.who.int/activities/promoting-baby-friendly-hospitals/ten-steps-to-successful-breastfeeding>
- The UNICEF Programming Guidance: *Prevention of Overweight and Obesity in Children and Adolescents*; UNICEF (in press 2020).
- The World Cancer Research Fund International *NOURISHING and MOVING* databases
<https://policydatabase.wcrf.org/>
- The Lancet special series on double-duty policies
[https://doi.org/10.1016/S0140-6736\(19\)32506-1](https://doi.org/10.1016/S0140-6736(19)32506-1)
- The IOTF European Congress on Obesity expert workshop,
(Lobstein T, Baur LA. Policies to prevent childhood obesity in the European Union. *Eur J Public Health*. 2005;15:576-9.)
- The INFORMAS evaluation of food policy environments
<https://health-policy-systems.biomedcentral.com/articles/10.1186/s12961-018-0278-0>

The list shows the main policy areas in **bold**, and

• **the bullet points** indicate support actions and specific issues needing to be addressed

Food system

Implement an effective tax or levy on sugar-sweetened beverages and/or snack foods or HFSS products

- Consider the application of sales taxes and other fiscal measures to support national nutrition targets, e.g. adding taxes to energy-dense foods, and use the revenue from these taxes to support measures for obesity prevention and health promotion
- Consider removing tax exemptions given to the marketing of energy-dense foods to children
- Analyse the administration and impact of a tax on HFSS products
- Monitor the impact of food taxes and subsidies on lower-income families, looking at costs and health benefits
- Assess the impact of raising import tariffs on unhealthy foods and beverages, or lowering them on healthier foods

Implement the WHO set of recommendations on reducing the exposure of children to the marketing of unhealthy foods and beverages

- Establish mechanisms to effectively enforce implementation of legislation or regulation on the marketing of foods and non-alcoholic beverages to children
- Assess the impact of legislation, regulation and guidelines to tackle the marketing of unhealthy foods and non-alcoholic beverages to children, where required
- Engage in inter-country discussions on policies and proposals for regulating cross-border marketing of unhealthy foods and non-alcoholic beverages to children (e.g. through WHO regional committees and other relevant regional mechanisms)

Develop a nutrient profile scheme to identify unhealthy foods and beverages

- Support the adoption and implementation of a national nutrient-profiling model to regulate marketing, taxation, labelling and other interventions which need a definition of 'healthy' and 'unhealthy' foods. (The WHO has drafted regional nutrient-profile models to assist member states – see Glossary.)

Implement interpretive front-of-pack labelling, supported by public education of both adults and children for nutrition literacy

- Undertake pre-market consumer testing of interpretive front-of-pack labelling, based on a nutrient-profile model
- Adopt, or develop as necessary, a mandatory interpretive front-of-pack labelling system based on the best available evidence to identify the healthfulness of foods and beverages
- Monitor the effect of mandatory interpretive front of pack labelling, including manufacturers' reformulation of product recipes to improve the product's nutrient profile

Increase access to healthy foods in disadvantaged communities

- Involve actors and resources outside the health system to improve access to nutritious foods, including availability and affordability, in disadvantaged communities (for instance, through incentives to retailers and zoning policies)
- Evaluate and monitor nutritional standards for social support programmes based on national food-based dietary guidelines
- Assess incentives for local production of fruit and vegetables, such as urban agriculture
- Assess subsidies for the distribution of healthier products to remote areas

Regulate nutrition information and health claims for products

- Monitor mandatory nutrient lists on packaged food, including trans fats, sugars, salt
- Assess the adequacy of rules on nutrient claims (i.e. nutrient content and nutrient comparative claims)
- Assess the adequacy of rules on health claims (i.e. nutrient function and disease risk reduction claims)
- Develop rules for on-shelf labels, promotional displays, and all marketing communications
- Develop calorie and nutrient labelling on menus and displays in out-of-home venues
- Assess interpretive warning labels on menus and displays in out-of-home venues

Improve nutritional quality of the whole food supply

- Compare voluntary and mandatory reformulation of food products
- Compare voluntary and mandatory moves to reduce and standardize portion sizes

- Monitor mandatory limits on specific components: e.g. salt, sugar, TFAs
- Monitor impact of restricted availability of unhealthy food products, and its impact in low-income populations

Provide incentives and rules to create a healthy retail and food service environment

- Compare incentives and restrictions for stores to locate in under-served neighbourhoods
- Investigate initiatives to increase the availability of healthier food in stores and food service outlets
- Propose incentives and rules to offer healthy food options as a default in food service outlets (e.g. all meals automatically include vegetables)
- Propose incentives and rules to restrict sugar-sweetened beverage consumption (e.g. no free 'top-ups' of sugary beverages)
- Assess the need for planning restrictions on food outlets, e.g. restricted near schools
- Promote child-oriented retailer actions, such as 'Free Fruit for Children' box at store entrance

Harness public sector resources to promote healthier food supplies

- Investigate the use of nutrition standards and nutrient profiling for public procurement
- Assess public procurement as a means to encourage market development of healthier foods
- Promote nutrient profiling for guiding agricultural support services
- Promote nutrient profiling to guide support for food chain research and development
- Support urban agriculture and community food production

Develop and extend accountability mechanisms for monitoring food industry activities

- Using NetCode protocols, monitor food and beverage companies, advertising agencies and media organisations to ensure the full implementation of the WHO-UNICEF Code of Marketing of Breast Milk Substitutes and subsequent World Health Assembly resolutions, including WHA 69.9
- Monitor food and beverage companies, advertising agencies and media organisations compliance with the WHO Set of Recommendations on marketing of foods and non-alcoholic beverages to children and ensure that the promotion of food products is consistent with public health dietary goals

Monitor and report on the progress of nutrition-sensitive agriculture

- Ensure wide diversity in food production and consumption
- Promote women's empowerment in agricultural programmes
- Develop and support urban and peri-urban agriculture for nutritious foods

Monitor and report on the progress of the food industry

- Monitor availability of healthier alternatives to confectionery, snacks and soft drinks for children
- Monitor the use of interpretative nutritional labelling to warn against unhealthy foods
- Monitor the supply of healthier ready-to-eat take-away and convenience foods

Monitor and report on the progress of the catering industry

- Monitor the availability of child-size portions for restaurant main menu items, and healthy convenience foods
- Monitor reduced promotion of larger portion sizes and 'super-size' special offers
- Monitor and evaluate menu displays with warnings using government-approved nutritional profiles
- Monitor the reduction of child-oriented inducements, such as free toys, with unhealthy foods

Monitor and report on the progress of retailers

- Assess the need for, and the supply of, and product placement of healthy food options, including fruit and vegetables, especially in remote areas and for low-income populations
- Monitor the prices and availability of healthier foods in lower-income areas
- Monitor retailers' promotion of unhealthy foods and healthier foods, including fruit and vegetables

Health system

Ensure training of health care providers includes information on diet, physical activity and the causes of childhood obesity

- Develop training and guidance for ante-natal and post-natal care providers
- Develop training and guidance for family physicians and family clinic staff

- Develop training and guidance for paediatric service providers
- Educate and train primary health care providers in how to avoid stigmatising children (or parents) who are experiencing obesity

Include nutrition and physical activity in advice provided to prospective mothers and fathers before conception

- Ensure nutrition advice is included in adolescent education curriculum
- Disseminate guidance and provide support for healthy diet and physical activity to prospective parents whom preconception or antenatal care may not reach
- Develop clear guidance and support for avoiding the use of and exposure to tobacco, alcohol or drugs

Screen for child obesity risks in antenatal and mother and baby clinics

- Ensure screening for hypertension and hyperglycaemia are included in antenatal care
- Ensure measurement of weight and gestational weight gain are included in antenatal care
- Ensure that diet and nutrition counselling is included in antenatal care
- Well baby clinics should record obesity indices as well as growth indices
- Ensure interventions and advice promote growth in length (or height) in preference to growth in weight
- Monitor the impact of protein and energy supplements on weight gain

Ensure all maternity facilities promote healthy nutrition and physical activity

- Establish regulations for all maternity facilities to practice the Ten Steps to Successful Breastfeeding
- Build or enhance assessment systems to regularly verify maternity facilities' adherence
- Eliminate the promotion of breastmilk substitutes, including follow-on formula milks
- Develop guidance on complementary feeding and healthy snacks for infants
- Emphasise diverse diets, including daily vegetables and fruits
- Avoid feeding young children products high in energy, sugar, fat or salt
- Avoid encouraging rapid weight gain

- Encourage age-appropriate levels of physical activity

Develop and support appropriate weight management services for children and adolescents who are overweight or obese

- Increase opportunities for weight and height measurement and reporting
- Provide referral paths for counselling and support for healthy growth
- Develop a context-appropriate weight management protocol that covers diet, physical activity and psychosocial support services tailored to children and families
- Ensure services are aligned to existing clinical guidelines and clearly support primary health care providers for effective multidisciplinary work
- Promote childhood weight management services as part of universal health coverage

Think 'obesity' when tackling undernutrition

- Promote healthy diets as the default intervention for undernutrition, and explain why
- Avoid the use of energy-dense foods and supplements for mothers and infants, especially for stunting or wasting
- Avoid rapid weight gain or excess weight gain for height

Education system

Strengthen health-related school governance

- Implement a comprehensive 'whole school' approach to food, nutrition and physical activity (for children, parents and all staff, and including taught lessons, non-lesson activities and food services)
- Ensure schools are fully funded so they do not need to raise funds for school programmes or sports from commercial sponsorship from food or beverage companies
- Conduct health audits of commercially sponsored materials for schools

Require settings such as child-care settings, schools and colleges and children's sports facilities to create healthy food and physical activity environments

- Develop and implement standards for the foods that can be provided in these settings based on national food-based dietary guidelines, and national nutrient-profile models
- Include vending machines, school shops, and school events in the standards

- Ensure foods brought into school by students comply with healthy nutrition standards
- Prohibit unhealthy food and drink marketing in schools
- Provide free, clean drinking water fountains in central locations
- Provide training for caterers and food service providers
- Ensure school neighbourhoods are free from inducements to consume unhealthy foods, including ice-cream vans, hot-dog vans, HFSS food advertising, and refusing of new trading licenses for fast food stores
- Support programmes such as the Health-Promoting Schools Initiative, or the Nutrition-Friendly School Initiative
- Support the provision of freely-available safe drinking water, in combination with policies to limit the consumption of sweetened beverages

Ensure nutrition and physical activity education are included in the core curriculum of pre-schools and schools.

- Develop nutrition and physical activity education curricula jointly between education and health sectors
- Train teachers in curriculum delivery for healthy nutrition and physical activity
- Increase media literacy training in schools
- Train teachers to recognise unusual eating behaviours
- Train teachers to recognise fat-shaming and obesity bullying, and provide methods and resources for dealing with these
- Provide guidance to carers on the provision of safe and age-appropriate physical activity, active play and active recreation for all children
- Ensure that inspection and licensing requirements include food and physical activity standards
- Set standards for quality physical education in the school curriculum
- Offer a wide range of physical activities in schools e.g. dance, aerobics and self-defence
- Improve changing room facilities to provide privacy; reduce the need for changing clothes to participate in activities
- Encourage schools to make their facilities available for after-school activities and during non-school days, and for family and community use

- Support measures to encourage safe walking and cycling to and from school, including the provision of secure cycle racks in schools and traffic-calming measures near schools

Social protection system

Think 'obesity prevention' in social support

- Promote child health through good nutrition and physical activity
- Prevent poor nourishment in pregnancy
- Ensure maternity leave and maternity rights fully support breastfeeding
- Ensure nutrition supplements and food welfare support for pregnant mothers and infants do not increase risk of obesity
- Food-based support for infants should be based on promoting a healthy, varied diet

Review cash and food transfers

- Ensure any cash or food vouchers are nutrition-sensitive and designed to improve maternal and young child diets
- Include education and skills counselling to promote health when providing transfers
- Encourage retailers to respond to vouchers by providing nutritious foods
- Consider ways to discourage use of social support transfers on breastmilk substitutes or commercial complementary foods
- Exclude products high in sugar, saturated fat or salt when providing discount vouchers

Water and sanitation (WASH) system

Ensure easy access to safe drinking water

- Where there is a safe water supply, ensure safe drinking water is easier to obtain than sugar-sweetened beverages
- Ensure pre-schools, schools and colleges have freely available drinking water
- Ensure sports facilities and all school events have freely available drinking water
- Protect drinking water sources from depletion or pollution

Urban system

Active transport and public transport

- Introduce transport policies that increase active travel e.g. walking and cycling infrastructure

- Strengthen road safety measures for pedestrians and cyclists, including traffic calming and low speed limits
- Consider incentives and restrictions to increase public transport use and decrease car use

Integrated urban design and land-use policies prioritising compact, mixed-land use

- Strengthen access to good-quality public and green open spaces, green networks, recreational spaces (including river and coastal areas) and sports amenities by all people
- promote public amenities, schools, health care, sports and recreation facilities, workplaces and social housing that are designed to enable occupants and visitors with diverse abilities to be physically active in and around the buildings

Examples of government legislation to prevent overweight and obesity

Infant and young child nutrition

- Fully implement human rights obligations to protect socially-disadvantaged populations, especially children: incorporate rights to health, rights to food, cultural rights and the rights of the child and the implied right to a healthy environment into national constitutions
- Ensure that legislation and regulations on the marketing of breast-milk substitutes adhere to all the provisions in the International Code of Marketing of Breast-milk Substitutes and subsequent related Health Assembly resolutions
- Monitor and enforce these Code-related regulatory measures to protect breastfeeding
- Ratify ILO Convention 183 and enact legislation mandating all the provisions of ILO recommendation 191 on maternity leave and provision of time and facilities in the work place for breastfeeding
- Monitor and enforce these ILO-related regulatory measures to protect breastfeeding.
- Develop regulations on the marketing of complementary foods and beverages, in line with WHO recommendations to limit the consumption of foods and beverages high in fat, sugar and salt by infants and young children
- Assess the impact of legislation, regulations and guidelines to address the marketing of complementary foods for infants and young children, where required
- Adopt and implement effective measures, such as legislation or regulation, to implement WHO guidance to end the inappropriate marketing of foods for infants and young children

- Establish mechanisms to enforce effectively and monitor implementation of legislation or regulation on the marketing of complementary foods for infants and young children

Childhood nutrition

- Develop regulations on the marketing of HFSS foods and non-alcoholic beverages directed towards children, in line with WHO recommendations.
- Assess the impact of legislation, regulations and guidelines to address the marketing of HFSS foods to children, where required
- Adopt and implement effective measures, such as legislation or regulation, to restrict the inappropriate marketing of HFSS foods to children
- Establish mechanisms to enforce effectively and monitor implementation of legislation or regulation on the marketing of HFSS foods to children
- Require health and obesity impact statements in all government policies (including agriculture, trade, education, media, transport, urban planning)
- Empower local planning authorities to regulate the location and distribution of food stores, including fast food stores and suppliers of fruit and vegetables
- Strengthen legislation to restrict the influence of commercial operators on public health policy-making. This should include requiring full declarations of conflicted interests, removal from policy-making committees, and restricted political donations from companies involved in the marketing of breastmilk substitutes, complementary foods and HFSS foods

Examples of government enabling actions

- Establish a monitoring agency, such as a parliamentary scrutiny committee or an 'obesity observatory' to ensure childhood obesity policies are implemented, monitored and reported
- Review and publish nationally-approved food-based dietary guidelines, including guidelines for children of all ages, and for mothers before and during pregnancy
- Review and publish nationally-approved nutrient profiling schemes to define healthy and unhealthy foods for marketing, and to define foods requiring front-of-pack nutrition warning signals
- Develop guidance on physical activity for children under 5 years of age, including age-appropriate activities and ideas to support and encourage participation in physical activity at home and in the community all year round
- Develop guidance on appropriate sleep time and use of screen-based entertainment by children and

adolescents and ideas to avoid sedentary activities, including avoiding excessive screen-time, and to model regular physical activities for families

- Develop guidance and support to carers to avoid specific categories of foods (e.g. sugar-sweetened milks and fruit juices or energy-dense, nutrient-poor foods) for the prevention of excess weight gain
- Use nutritional criteria in government purchasing contracts to promote the supply of healthier food and beverage products
- Assess national contracts for distributing food to remote areas for their impact on nutrition and health
- Ensure private sector partnerships and other cooperative actions do not benefit the producers of unhealthy foods including breastmilk substitutes, complementary foods or HFSS foods
- Undertake routine national monitoring of the nutritional status of women and children
- Undertake routine national monitoring of diets, sedentary screen-watching and physical activity patterns among women and children
- Ensure government offices provide facilities and break-time for breastfeeding
- Ensure government staff childcare facilities provide healthy food and activity for children

Examples of public information/awareness raising

- Disseminate guidance on physical activity to carers, school staff and health professionals in an accessible manner
- Identify community champions/leaders/civil society organizations to work with, and ensure community representation
- Use public service media to promote healthy food choices and physical activity.
- In all communications think of the child and avoid creating stigma by:
 - ♦ (i) avoiding language of personal responsibility and implied blame for weight gain
 - ♦ (ii) acknowledging difficulty in preventing weight gain and in losing excess weight, especially in an obesogenic environment
 - ♦ (iii) acknowledging the need for support and a health-promoting environment

Examples of possible action a local and provincial government levels

- Appoint a senior officer in each local authority to be

responsible for integrating anti-obesity programmes and related public health measures across departments, including health, education, welfare, transport and urban planning

- Audit local policies for their obesity impact, including policies in health, education, transport, economic development, planning, urban design and retail development
- Ensure facilities for breastfeeding are available in publicly owned buildings
- Ensure all foods sold in public parks and centres meet national dietary guidelines
- Ensure drinking water is freely and widely available in public places
- Ensure licences for food retailers require healthy foods to be widely available in low income areas
- Limit the numbers of fast food outlets in urban areas
- Promote more and safer walking and cycling routes, pedestrian zoning and cycle parking provision, and discourage short-journey car use
- Ensure parks and play areas are clean, secure, safe and freely available to children, especially near areas of high-density housing
- Ensure that adequate facilities are available on in public spaces for physical activity during recreational time for all children (including the provision of gender-friendly spaces where appropriate
- Require planning authorities to ensure that new or relocated public services, including schools and clinics, are sited where their clients and staff can reach them by walking, cycling and public transport
- Review public procurement policies so that they encourage the market for healthier foods

Media

- Require media companies to commit to end children's exposure to advertising for unhealthy foods and beverages
- Require that broadcast programmes seen by children show positive role models for health and nutrition
- Require media companies and online platforms to show a sympathetic portrayal of children living with overweight or obesity
- Require media companies and online platforms to commit they will not tolerate stigmatising language or images, and will not over-emphasise personal responsibility for obesity
- Ensure all forms of children's entertainment support healthy diets and active lifestyles

2. Sample interview schedule

Introductions

Presentation of data:

Present some of the key findings from worksheets 1 – 4. Possible follow-up questions might include:

Do these results align with what you expect?

Do any of the risk factors for overweight and obesity surprise you?

Gaps:

Discuss the key gaps in the data available for worksheets 1 – 2 and the policies found in worksheets 3 – 4.

Use this time to ask the interviewee if they have any knowledge of how to fill these gaps.

Keep this to just the key data to avoid going overtime.

Key policies:

Ask for opinions on the key policies recommended by UN organisations or in government strategy documents. Possible policies for discussion include:

- Introducing or expanding a sugar tax
- Restricting marketing of unhealthy foods to children
- Improving labelling to identify unhealthy foods and beverages
- Strengthening the Code of Marketing of Breastmilk Substitutes
- Improving school food environments.

Possible questions relating to these policies include:

Have there been previous attempts to introduce this policy?

Can you think of similar policies that might inform the development of this policy?

What resources and systems would be required to implement and enforce such a policy?

Which actors would be key for the implementation of such a policy?

Can you think of any barriers or opponents to the implementation of such a policy?

Social and Behaviour Change Communications:

Discuss the role of social and community influences on childhood overweight and obesity. Questions might include:

What is your opinion on the value of school health and nutrition education for addressing childhood overweight and obesity?

What is your opinion on the value of government or NGO-led public-health campaigns for addressing childhood overweight and obesity?

Can you think of any successful government or NGO-led public-health campaigns?

What are some of the barriers to addressing behavioural drivers of childhood overweight and obesity?

Prompt: Understanding of behavioural drivers of childhood overweight and obesity, parental influences, focus on undernutrition rather than overnutrition

Engagement with industry:

Ask about the interviewee's experiences in relation to food and beverage industry involvement with nutrition interventions, sponsorship, advertising, role in policy development.

What role does the food and industry play in changing food environments?

Prompt: Discuss marketing, availability, affordability, sponsorship

What role does the food and beverage industry play in the food and nutrition policy development and implementation process.

Prompt: Discuss lobbying, relationships with policy makers.

What opportunities are available for handling conflicts of interest when it comes to the food and beverage industry?

Priority actions to prevent overweight:

Ask the interviewees to name their top three actions that would make a difference to childhood overweight and obesity. Include questions on why they have chosen their top three.

3. Tools for workshops

Two tools are shown here.

(i) Group model building, which is a tool for raising awareness about the causes of childhood obesity, the systems which influence obesogenic environments and the interventions that might be used to tackle childhood obesity, and

(ii) Food-EPI, an exercise in discussing the policies enacted in a country, the options that could be considered for policy development, and the priorities for establishing and implementing these policies.

(i) Group model building

When you run a workshop on tackling childhood obesity you may find that the discussions are strongly biased towards ‘individual choice’ and blaming people for their ‘bad’ (unhealthy) behaviour. This is less likely the case for children, but still can be focused on putting the blame on parents and caregivers, rather than the environment in which families live. This sort of narrative is likely to bias policy solutions towards education and information, rather than addressing the full range of risk factors and obesogenic environments that in which children live.

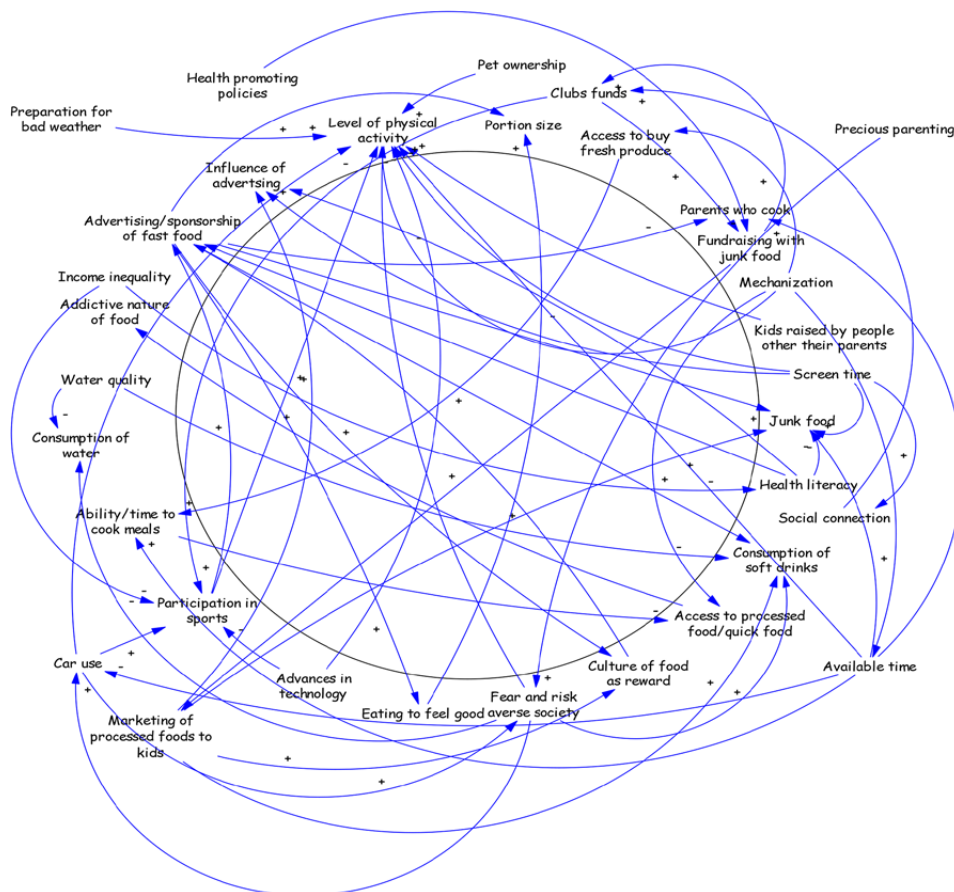
If you are holding group discussion then you might consider starting the group off by undertaking a systems mapping exercise, called ‘group model building’. This can help to show the multiple causes of obesity, most of which may lie outside the individual family’s control.

In group model building the aim is to draw a map of the influences on children, and by doing so raise awareness of the environments children experience which influences their health behaviour (and their parents’ health behaviour). Then, in asking how these environments come about, the group further explores the underlying drivers, or root causes, that shape the environments, and how these drivers are controlled, who controls them, and the power relations they reveal. Participants will increase their understanding of the complexity of an issue, and the need for multiple, coordinated interventions across different systems to increase the chance of successful outcomes.

Various approaches can be taken to the development of a systems map, from simple ‘mind dumps’ to formal loop diagrams. In a workshop setting one approach is to ask the participants to undertake two steps: firstly they generate a list of reasons why something happens – e.g. why children

Figure: A circle of relationships with arrows of influence, positive and negative

Source: Allender S, Owen B, Kuhlberg J, Lowe J, Nagorcka-Smith P, Whelan J, Bell C. A community based systems diagram of obesity causes. PloS one. 2015 Jul 8;10(7):e0129683.



(ii) Food-EPI: A workshop to evaluate policies and establish priorities

In order to gain a good understanding of the policy landscape it is helpful to bring in some expert advice. One successful approach – the Food Environment Policy Index (Food-EPI) – is to organize a workshop consisting of public health experts, advocacy groups, government officials, development agencies and others, to spend a day assessing the implementation of local and national policies, asking how the current policies compare with the best practice that could be possible, and what are the priorities for moving forward. The Food -EPI model can be adapted to look specifically at public sector policies and actions focusing on childhood obesity and on double-duty actions.

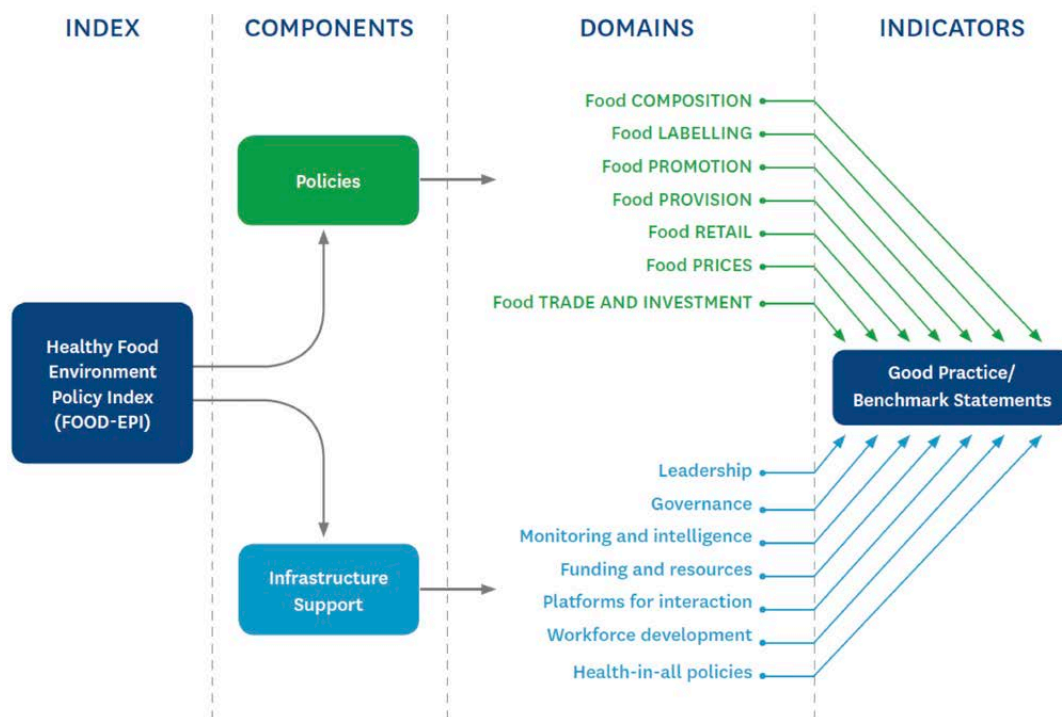
Undertaking such a workshop can be a valuable experience, as it not only provides a broad consensus analysis of the public sector actions in your country, but also creates a local network for taking policies forward. Using the Food-EPI method has several advantages.

- It is based on a consensus of a group of experts gathered for a day to consider the progress being made in government policies to tackle obesity and promote healthy nutrition.
- The group uses examples of good practice from other countries as a ‘benchmark’ to evaluate national progress.

- It considers how much the government is really supporting the policies it promotes in a set of questions about the capacity, resources and leadership the government is showing.
- After rating the progress being made, the group assess the priorities for moving forward, based on criteria such as ‘importance’ and ‘achievability’.
- There are now several national examples of Food-EPIs already undertaken and published online.

Participants in a Food-EPI workshop should include public health experts, NGOs with direct experience of the issues, and regional and national government officials with experience of policy implementation. These participants should be committed to public policy development and to recognise the need for state-sector intervention, and for this reason the inclusion of commercial sector stakeholders is not recommended.

In the Food-EPI workshop two stages are undertaken. First, participants are asked to consider seven indicative areas for public sector policy (‘action’ areas), and seven indicative areas showing public sector capacity and support for the policies (‘infrastructure’ areas). These are shown in the diagram below.



Source: Swinburn, Professor Boyd; Vandevijvere, Stefanie (2017): INFORMAS Protocol: Public Sector Module - Healthy Food Environment Policy Index (Food-EPI). The University of Auckland. Journal contribution. <https://doi.org/10.17608/k6.auckland.5673439.v1>

For each of these 14 areas (each with several sub-questions which may be varied according to local context), participants are asked to compare how their national government is doing, evaluated against 'good practice indicators' taken from other countries, or from recommendations made by authoritative sources: e.g. the World Health Organization, inter-governmental reports, SUN movement, international professional societies, NGOs and development organisations. The assessment is done by participants individually after discussion, and the results displayed for all to consider. An example is shown with ratings in the second diagram below.

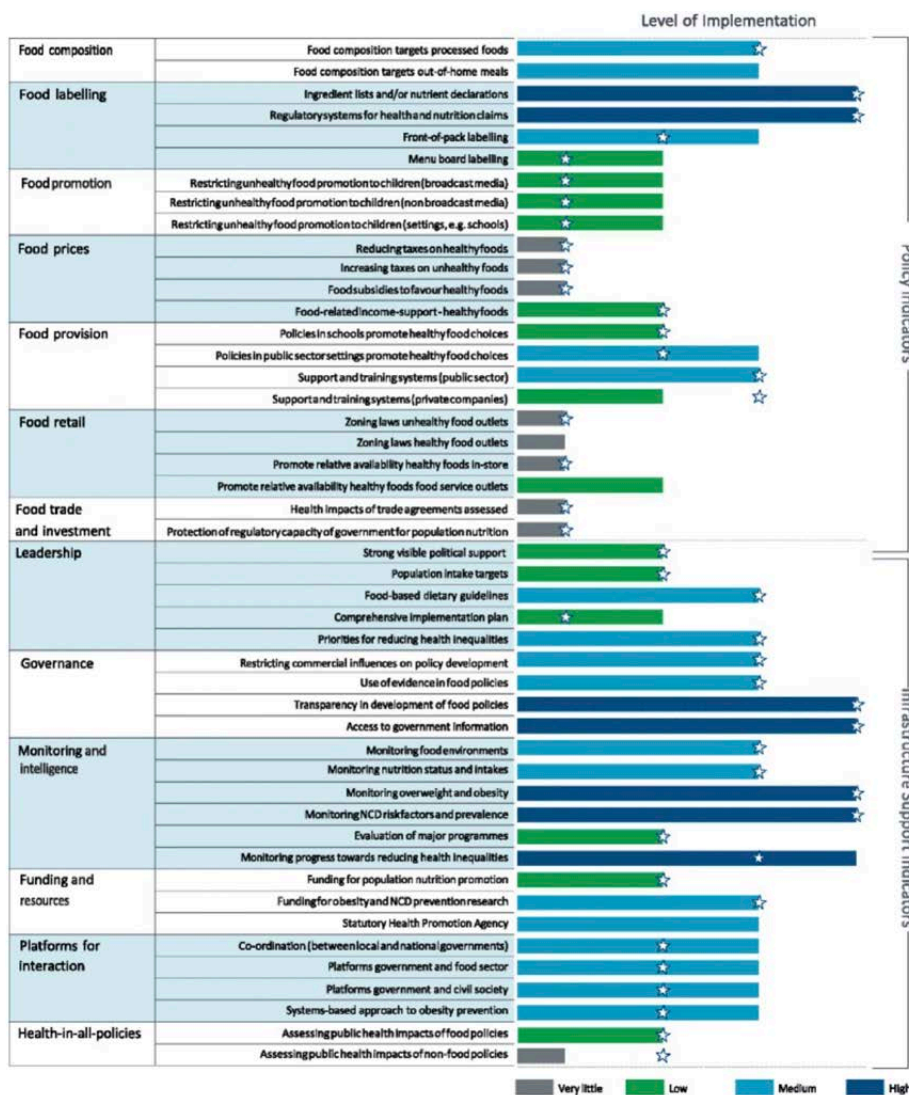
Some preparation is required before the workshop to ensure that the current status of the national actions is correctly described when it is being rated against 'best practice' benchmarks. Prior to the Food-EPI workshop, the status of national actions should be checked with officials and counterparts in relevant ministries. If the landscape analysis tool (Section 4) has been undertaken carefully it should serve as the basis for discussions with officials.

In the second stage, participants discuss (in small groups or as a single group) the areas which they believe are most achievable and the areas which should be prioritised. The results of these discussions are collected and synthesised into a single report describing the view (or range of views) coming from the meeting. A diagram showing how the recommended actions score on two dimensions (priority and achievability) can show which ones are both a priority and have a degree of achievability. The same can be done for the 'infrastructure' recommendations.

As an example, the list of indicators and sub-questions used in one study (New Zealand 2017) is shown in the illustration below, with the ranking given by the workshop where the policies were being evaluated. The average score for each policy issue is categorised as 'very low', 'low', 'medium' and 'high' in comparison with the best practice benchmark.

The Food-EPI methodology was developed by INFORMAS (www.informas.org) a group of researchers

Source: Vandevijvere S, Mackay S, Swinburn B. Measuring and stimulating progress on implementing widely recommended food environment policies: the New Zealand case study. Health research policy and systems. 2018 Dec;16(1):1-9.



and NGOs looking to assess the food environment, both the immediate environments (school food, food labels, advertising etc) and the policies that create these environments, in the public and private sectors. The Food-EPI focuses on public sector policy development. A method for assessing private sector policies is also available (ref doi.org/10.1111/obr.12878).

Modules for assessing immediate food environments are also available on the INFORMAS website and have been used in some 37 countries. For example, Fiji has undertaken a series of food environment assessments, including food composition, food labelling, food nutrient content, food promotion in schools, food advertising to children, food retail strategies and pricing, and the impact of trade and investment agreements on national food environments (ref <https://www.informas.org/countries/fiji/>). Check the country listing here <http://informas.blogs.auckland.ac.nz/countries/> to see if your country, or another in your region, has already undertaken a Food-EPI or a food environment module.

Examples of Food-EPI evaluations undertaken in several countries:

- 11-country report (Vandevijvere et al): <https://doi.org/10.1111/obr.12819>
- Mexico (Nieto et al): <https://doi.org/10.1111/obr.12814>
- UK (Watson et al) <https://doi.org/10.1017/S1368980017003500>
- New Zealand 2017 (Vandevijvere et al): <https://ndownloader.figshare.com/files/9920716> and <https://doi.org/10.1186/s12961-018-0278-0>
- Thailand (Phulkerd et al): <https://doi.org/10.1017/S1368980016002391>
- Malaysia (Ng et al): <https://doi.org/10.1017/S1368980018002379>

4. Example of a completed country landscape policy brief



Indonesia

Landscape analysis of overweight and obesity

Policy Brief 2022

Overview

This policy brief summarises the results of a landscape analysis of overweight and obesity in Indonesia conducted by UNICEF. The study provides a comprehensive overview of available evidence on prevalence and risk factors for overweight and obesity, and of the enabling environment for their prevention. Findings from the study served to identify and discuss with the Government of Indonesia a set of priority actions for effective scale-up of overweight and obesity prevention. The landscape analysis was conducted by David Colozza (Nutrition Specialist, UNICEF Indonesia) and Astrid Citra Padmita (Nutrition Officer, UNICEF Indonesia), under the overall guidance of Jee Hyun Rah (Chief of Nutrition, UNICEF, Indonesia).





Methods

The study followed the five steps outlined by the UNICEF “Landscape analysis tool on overweight and obesity in children and adolescents” [1]:

1. Existing data on prevalence and trends from national surveys and other studies was reviewed.
2. Key risk factors for overweight and obesity were then analysed, following the data points suggested in the UNICEF landscape analysis tool. Risk factors included both individual-level biological and lifestyle ones, and those related to obesogenic food environments.
3. The study then looked at the enabling environment for overweight prevention in Indonesia, including level of political support and funding, existing policies and programmes, and broader socio-economic and cultural factors that can favour the emergence of obesogenic environments.
4. Based on findings from the desk review of the enabling environment, 11 focus group discussions and key informant interviews were organized with government partners and other stakeholders, to fill in knowledge gaps and understand priorities and perceptions around overweight prevention.
5. Finally, a two-day validation workshop was organized, to discuss the draft report and develop collaboratively policy and programmatic recommendations to strengthen overweight prevention in Indonesia. These will serve as the foundation to guide UNICEF’s future efforts on overweight prevention in Indonesia.

This summary brief complements the full technical report from the landscape analysis study and highlights key findings. Prevalence, trends and risk factors were assessed against thresholds outlined in the UNICEF tool and developed based on available global evidence, which indicate the level of concern that each poses in terms of overweight and obesity risk. These are presented throughout the brief where relevant, to aid with interpretation of results, based on the indicators outlined in the box below.

CONCERN FOR CHILDHOOD OVERWEIGHT AND OBESITY

	Low concern
	Moderate concern
	High concern
	Very high concern

1. Overweight and obesity are gaining prominence as major public health challenges in Indonesia, alongside other forms of malnutrition such as stunting and wasting.

Data from National Basic Health Research surveys (RISKESDAS) [2–4] suggest that overweight and obesity have been on the rise in Indonesia over the past decades, across all age groups. As of 2018, 1 in 5 school-age children (20 per cent, or 7.6 million), 1 in 7 adolescents (14.8 per cent, or 3.3 million) and 1 in 3 adults (35.5 per cent, or 64.4 million) were living with overweight or obesity¹. This poses a major threat to the well-being of Indonesian children, as overweight and obesity can have immediate consequences on their health and psycho-social development, but also lead to an increased risk of developing non-communicable diseases (NCDs) later in life, including type 2 diabetes, heart conditions and some types of cancer [5,6].

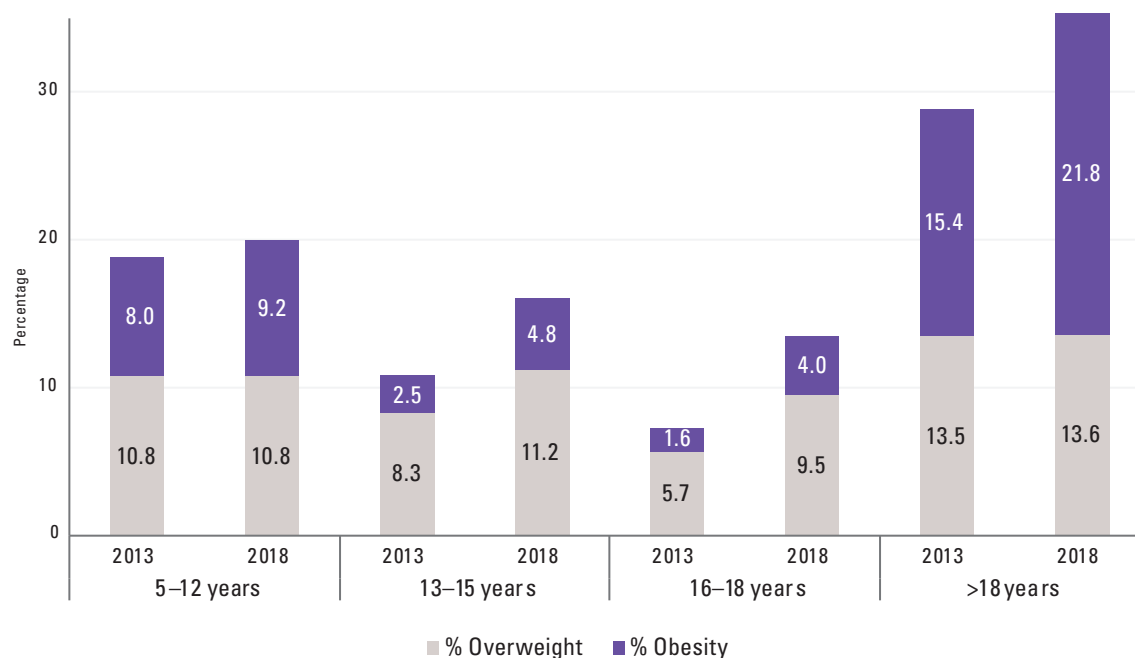


Figure 1. Prevalence and trends in overweight and obesity among Indonesian children, adolescents and adults.







Source: RISKESDAS, 2013, 2018.

Available data also show a growing prevalence of overweight and obesity within groups that traditionally were not considered at risk—including low-income households and rural residents [7,8]—and in provinces that are still affected by high rates of stunting and wasting [4].

¹ Absolute numbers are rough estimates based on Statistics Indonesia (BPS) [21] and Ministry of Health [22] data.







2. A range of pre- and perinatal risk factors put young Indonesian children at higher risk of overweight and obesity.

There is increasing evidence that a range of pre- and perinatal conditions are linked with increased risk of developing overweight and obesity during childhood and in later life [9]. These include maternal overweight and obesity, low birth weight of newborns, and sub-optimal breastfeeding practices. In addition, available evidence suggests a link between stunting in young children and increased risk of later-life overweight and obesity [10]. While there have been positive steps towards stunting reduction in Indonesia over recent decades, the overall prevalence among children under 5 remains high, and therefore represents a prominent risk factor for this age group.

Indicator	Value	Rating
Indicator: Overweight and obesity among women of reproductive age ²	44.4 [4]	
Low birth weight	6.2 [4]	
Early breastfeeding initiation	48.6 [11]	
Exclusive breastfeeding	52.5 [11]	
Stunting among children <5 years		
2018	30.8 [4]	
2021	24.4 [11]	

3. Unhealthy diets and insufficient physical activity remain a major threat to the health and well-being of Indonesians of all ages.

Available data show that Indonesians of all ages are consuming unhealthy diets, characterized by excessive intake of foods and beverages high in unhealthy fats, sugar and salt, such as sugar-sweetened beverages (SSBs)³, packaged products and ready-made meals, and low in healthy foods such as fruits and vegetables. At the same time, there is evidence that the majority have insufficient levels of physical activity. These two sets of factors are major contributors to increased rates of overweight and obesity.

Indicator	Value	Rating
Consumption of SSBs (1 or more p/day)		
Children aged 5-19	66.7 [4]	
Adults ≥ 20	64.3 [4]	
Insufficient fruits and vegetables consumption (Less than 5 portions p/day)		
Children aged 5-19	96.7 [4]	
Adults ≥ 20	94.9 [4]	
Children aged 11–19 years who were doing less than 60 minutes per day over seven days of physical activity	87.9 [12]	
Children aged 13–17 years walking or biking to school at least once per week	39.8 [12]	

2 As a breakdown by age group was not available, the figure refers to all adult women aged >18.

3 Sugar-sweetened beverages are drinks with added sugar, including for example soft drinks/sodas, flavoured juice drinks, sports and energy drinks, sweetened tea, and coffee drinks. Due to their high sugar content, SSBs are high in calories, while at the same time providing no nutritional value, and can thus contribute to weight gain and a range of other conditions such as tooth decay, type 2 diabetes, and heart disease.

4. Food and physical environments in Indonesia are increasingly obesogenic and fail to enable the uptake of healthy diets and active lifestyles.

The environments that Indonesians live in have become increasingly obesogenic, meaning that they make high fats, salt and sugar (HFSS) foods and beverages easily available and affordable, while restricting opportunities to access healthier alternatives and to maintain active lifestyles. Some of the obesogenic environments risk factors analysed in the study include:

- The **growth in fast food outlets and modern food retailers** such as supermarkets, minimarkets and convenience stores, which has sometimes been associated with increased risk of unhealthy food and beverage consumption among local residents [13–15]. Fast food and modern retail outlets have grown exponentially in Indonesia over the past few decades (with an annual growth rate of between 17-45 per cent for the three leading chains; and of 14.1 per cent respectively) making HFSS foods and beverages widely available and affordable throughout the country.
- **Access to safe drinking water**, as having accessible and affordable sources of safe drinking water can help the uptake of healthy habits by enabling more frequent water consumption and providing a healthier alternative to SSBs. Drinking water availability and accessibility are still major issues in Indonesia. The results of a recent study [16] looking at the quality of drinking water available to Indonesian households showed that 9 in 10 (88.1 per cent) households lacked access to safely managed drinking water⁴, and approximately 20 and 30 per cent of schools and madrasah lacked access to basic drinking water services⁵.
- **Exposure to HFSS food and beverage marketing, particularly among children and adolescents.** While no nationally representative data were available on this indicator, evidence from individual studies suggests high exposure among Indonesian children. A comparative study [17] conducted in several Asia-Pacific countries highlighted how in Indonesia, a child watching TV can be exposed to advertisements for HFSS foods and beverages as often as every four minutes. Another study [18] carried out in Java showed that a high proportion (81.1 per cent) of outdoor F&B advertisements in the urban and rural areas analysed were for unhealthy products, and that their number increased in proximity to gathering spaces frequented by children and adolescents.
- **Availability of active mobility infrastructure**, which can enable the uptake of physical activity by making it part of daily routines (for example, commuting from home to school). Based on a survey of user satisfaction and perception of safety of mobility infrastructure [19], most urban residents consulted across large, mid-sized and small cities felt unsafe walking and cycling due to the unavailability of appropriate infrastructure, or their poor quality. This, together with persistent air pollution issues, prevents many Indonesians from safely engaging in physical activity outdoors.

4 Defined as households that have access to an improved water source, properly managed and free from contamination, on premises and available when needed [16].

5 Defined as schools that have access to an improved source of water, properly managed and safe from contamination, with round trip collection time equal to or under 30 minutes [23].

5. The enabling environment for overweight prevention in Indonesia is lagging behind.

While some relevant initiatives to contrast the growing issues with overweight and obesity are in place in Indonesia, major gaps remain in terms of policies and programmes aiming for long-term transformative action. Meanwhile, political commitment is low, and awareness and evidence limited, particularly at the sub-national level. The table below summarises Indonesia’s progress on implementing a range of recognised best policy options to curb and reverse the worrying trends in overweight and obesity [20].

Governance		
National targets for overweight prevention	Partial	The National Medium-Term Development Plan (RPJMN) 2020-2024 includes a target of no increase in adult obesity, but does not include any target for childhood overweight and obesity, reflecting the limited political and financial support for overweight prevention.
National programmes for overweight prevention	Partial	Some national overweight prevention programmes exist—for example, the National Movement to reduce Obesity (GENTAS) and the Healthy Living Community Movement (GERMAS). However, these have failed to translate into quality programmes at local scale, in part due to the lack of coordination between national and local authorities and between sectors.
Food environment policies		
Tax on SSBs or other HFSS foods	No	At present, no taxes are imposed on SSBs or other HFSS foods.
Controls on marketing of food and non-alcoholic beverages to children	Partial	Some regulations on HFSS food and beverage marketing exist on paper, but their enforcement is limited, as evidenced by frequent non-compliance by the food and beverage industry.
Front of pack nutrition labelling	Partial	Some front of pack nutritional labelling (FOPNL) schemes are in place, namely a front-of-pack GDA label and a “healthier choice” logo. However, these remain voluntary and do not include those recommended by WHO as most effective in public health terms, namely, warnings and traffic light labels.
Policies to improve school food environments	No	There is a lack of regulations to promote healthy school food environments, for example, to ensure that school canteen food adheres to good nutritional standards and that sales of unhealthy UPFs in and around schools are restricted. Existing guidelines for school canteens primarily regulate food safety aspects.

Recommendations

UNICEF calls the government of Indonesia to prioritise overweight and obesity prevention and put in place ambitious policies and programmes to ensure long-term and large-scale change. Based on the findings from the landscape analysis study and on the results of a two-day multi-stakeholder validation workshop, a set of key priorities was identified, and is presented below. While this initial list focuses on overarching actions and nutrition-specific recommendations across the health and food systems domains, looking ahead, additional recommendations will have to be identified and agreed across other sectors—including for instance educational, environmental, WASH and social protection systems.

Overarching strategies:

1. Include childhood obesity indicators in the RPJMN and other relevant documents, to strengthen commitment and mobilise funding for overweight prevention.
2. Establish a cross-sectoral, multi-stakeholder mechanism to promote awareness, knowledge sharing and coordination for overweight prevention.
3. Ensure the generation of quality evidence to address existing knowledge gaps and inform the launch of evidence-based overweight prevention actions.
4. Conduct continued awareness raising to promote a strong understanding of overweight and obesity and related issues, and of effective prevention strategies.

Nutrition-specific actions:

1. Implement an SSB tax to reduce consumption and encourage product reformulation.
2. Strengthen monitoring and enforcement of existing HFSS food and beverages sales and marketing regulations, including within schools and food retailers, and work with companies in the internet and social media sector to restrict marketing through their channels.
3. Improve existing FOPNL schemes by expanding their coverage, making them mandatory and implementing incentives to encourage adoption and establish schemes with demonstrated public health benefits, particularly warning logos and traffic light labels.
4. Ensure implementation and scaling up of existing overweight prevention programmes and strengthen the capacity of health workers to deliver counselling services.
5. Strengthen data systems to facilitate the screening and referral of children at overweight risk, as well as programme monitoring and evaluation.

There is a strong and urgent need for ambitious policies and programmes that can effectively prevent the long-term consequences of rising rates of overweight, obesity and non-communicable diseases in Indonesia. This report represents a first step in making available quality evidence for effective, evidence-backed actions that can effectively scale-up overweight and obesity prevention and contribute to enabling healthier diets and active lifestyles for all Indonesians.

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