ECONOMIST ENTERPRISE

The Obesity Response Index

Methodology note

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Introducing the Obesity Response Index

The Obesity Response Index, supported by Eli Lilly and Company, was developed independently by Economist Enterprise to assess countries' efforts to prevent and manage obesity at a national level. It identifies where policy intervention is most needed and highlights countries that are leading the way to enable others to learn and improve.

This report details the methods used for each stage of the research programme and the rationale behind them.

The Obesity Response Index programme had four stages:

1. **Deep learning phase:** we conducted a literature review to understand the factors impacting obesity, its long-term health and economic impacts, current policy responses, and existing indicators and datasets used to measure those responses. This review drew on reliable international sources (such as the World Obesity Federation and World Health Organisation—WHO), government bodies (such as the UK National Institute for Health and Care Excellence) and academic publications (such as The Lancet).
2. **Expert engagement:** we consulted obesity experts across regions to refine the Index framework and validate data sources.
3. **Data collection:** we gathered data from a range of credible primary and secondary sources to assess how countries perform against the qualitative and quantitative indicators of the Index. To ensure accuracy and completeness, we cross-checked our data with leading resources such as the World Obesity Federation's Obesity Atlas and Global Obesity Observatory.[1,2]
4. **Index development and analysis:** we compiled the data into an index workbook; consulted obesity experts for perspectives on the findings; and summarised the research findings in an executive summary, full report and data story.

[1] https://s3-eu-west-1.amazonaws.com/wof-files/World_Obesity_Atlas_2025_rev1.pdf
[2] https://data.worldobesity.org/

Country selection

In the first edition of the Index, we analyse 20 countries from across the six WHO regions. In selecting them, we aimed for diversity across geography, income levels, demographics, population sizes and the readiness of healthcare systems to respond to obesity. We also prioritised countries with high and rising adult and/or childhood obesity rates, and those with a significant economic impact of obesity on GDP.

The countries assessed are:

- African Region—Nigeria, Rwanda, South Africa
- Americas Region—Brazil, Canada, Mexico
- Eastern Mediterranean Region—Saudi Arabia, United Arab Emirates
- European Region—Finland, France, Germany, Italy, Serbia, Spain, United Kingdom
- South-East Asian Region—India
- Western Pacific Region—Australia, China, Japan, South Korea

Expert engagement

While developing the Index framework, we brought together a panel of experts to review the preliminary version. The panel included:

- **Dr Deepika Anand,** nutrition specialist, Health, Nutrition & Population Global Practice, The World Bank
- **Dr María Eugenia Anselmi,** endocrinologist, Austral University Hospital
- **Professor Louise Baur,** chair of child and adolescent health, University of Sydney
- **Dr Bruno Halpern,** president-elect, World Obesity Federation; vice-president, Brazilian Association for the Study of Obesity
- **Dr Angie Jackson-Morris,** director of programme development and strategy, World Obesity Federation
- **Jaynaide Powis,** head of data and evidence, World Obesity Federation
- **Johanna Ralston,** chief executive officer, World Obesity Federation
- **Professor Sir Collin Tukuitonga,** associate dean Pacific and professor of public health, University of Auckland
- **Euan Woodward,** executive director, European Association for the Study of Obesity

While analysing the Index, we interviewed experts in public health, obesity and chronic diseases to contextualise the findings:

- **Dr Abdullah Alarifi,** director general of global health, Ministry of Health of the Kingdom of Saudi Arabia
- **Dr Amjad Alfaleh,** director general of primary health care, Ministry of Health of the Kingdom of Saudi Arabia
- **Dr Nasreen Alfaris,** founder of the Saudi Obesity Medicine Fellowship Programme, King Fahad Medical City
- **Dr Shaker Alomary,** director general, General Directorate for Health Programmes and Chronic Disease, Ministry of Health of the Kingdom of Saudi Arabia
- **Dr Deepika Anand,** nutrition specialist, Health, Nutrition & Population Global Practice, The World Bank
- **Professor Louise Baur,** chair of child and adolescent health, University of Sydney
- **Professor Luca Busetto,** vice president, European Association for the Study of Obesity
- **Professor Sébastien Czernichow,** professor of nutrition, Paris Cité University and Assistance Publique Hôpitaux de Paris
- **Jorge del Diego Salas,** senior adviser to the Directorate-General for Public Health and Health Equity, Ministry of Health of Spain

- **Dr Stuart Flint,** associate professor of the psychology of obesity, University of Leeds
- **Dr Mike Freelander MP,** federal member for Macarthur, House of Representatives, Parliament of Australia
- **Dr Bruno Halpern,** president-elect, World Obesity Federation; vice-president, Brazilian Association for the Study of Obesity
- **Professor Linong Ji,** director, Peking University Diabetes Centre; director of the Department of Endocrinology and Metabolism, Peking University People's Hospital
- **Professor Jeanne Lubbe,** consultant surgeon, Tygerberg Hospital and University of Stellenbosch
- **Federico Luis Moya,** vice president and patient advocate, European Coalition for People Living with Obesity; president, ANPObesidad (National Association of People Living with Obesity)
- **Dr Florence Sibomana,** Rwanda senior programme officer on NCDs, PATH
- **Dr Sanjeev Sockalingam,** scientific director, Obesity Canada; professor, University of Toronto
- **Heli Viljakainen,** principal investigator, Folkhälsan Research Centre
- **Dr Kathryn Williams,** endocrinologist (obesity specialist) and conjoint senior lecturer, University of Sydney
- **Professor Koutaro Yokote,** president, Japan Society for the Study of Obesity

Index structure

The Index framework has four key pillars:

Policy and governance: How well do government policies and governance structures address obesity and facilitate access to care?

Obesity management: How effectively does the government support individuals in accessing affordable and comprehensive obesity management?

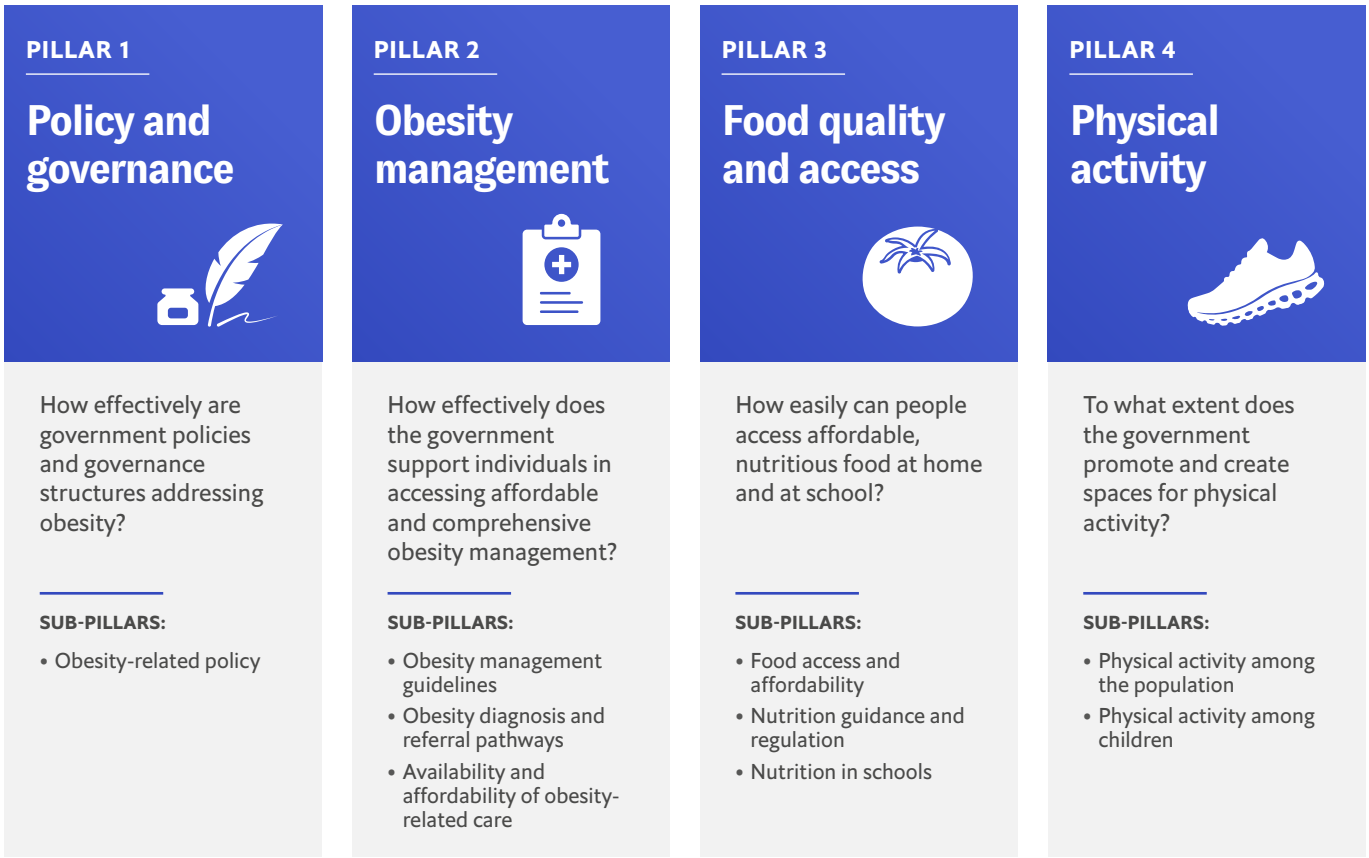
Food quality and access: How easily can people access affordable, nutritious food?

Physical activity: To what extent does the government promote and create spaces for physical activity?

The framework is further broken down into nine sub-pillars, containing 30 indicators in total (28 qualitative and two quantitative). Figure 1 shows how the pillars and sub-pillars are organised.

We also collected data for 11 background indicators to allow for correlation analysis and to provide context. These indicators do not contribute to countries' scores. They include measures of obesity prevalence by demographic group, the economic impact of overweight and obesity, healthcare spending and access (such as healthcare spending per capita and access to a physician), and health outcomes (such as life expectancy).

Figure 1: The Obesity Response Index framework



Data collection

Indicator design

We designed 28 qualitative indicators to analyse factors that lack readily available cross-country data. These indicators are scored using detailed criteria, which are applied consistently across countries. For more details about the indicators, scoring criteria and score ranges, see Table 1 below. Data collection for these indicators involves research using credible sources such as government websites and official government documents. The information on which the scores are based, including references, is presented in the Index data workbook.

The two quantitative indicators draw on raw data from existing datasets from the Food and Agriculture Organisation and the World Bank.

We collected the data between April and July 2025.

Table 1. Indicator framework

No.	Indicator	Question	Scoring schema	Unit
Pillar 1: Policy and governance				
1.1 Obesity-related policy				
1.1.1	Health policy/strategy/plan that includes obesity	**Does the national health policy/strategy/plan specify obesity as a priority area?**	0 = No, or there is either insufficient publicly available evidence of a national health policy/strategy/plan in place OR one that is currently valid 1 = Yes	0-1
1.1.2	Definition of obesity	**Does the government define obesity as a chronic disease and connect obesity to its related chronic diseases (e.g. cardiovascular disease, diabetes)?**	0 = No, there is insufficient publicly available evidence of this 1 = Yes, it defines obesity as a chronic disease OR makes reference to other chronic diseases related to obesity (e.g. diabetes, cardiovascular disease, obstructive sleep apnoea) 2 = Yes, it defines obesity as a chronic disease AND makes reference to other chronic diseases related to obesity (e.g. diabetes, cardiovascular disease, obstructive sleep apnoea)	0-2
1.1.3 Obesity-related policy/strategy/plan				
1.1.3a	Existence of an obesity-related policy/strategy/plan	**Does the country have an obesity-related policy/strategy/plan?**	0 = No, there is insufficient publicly available evidence of this 1 = Yes, but the document is not periodically updated or currently valid 2 = Yes, the document is periodically updated or currently valid	0-2

1.1.3b	Engagement with stakeholders during development	**Were stakeholders from various sectors involved in the development of the national obesity-related policy/ strategy/plan?**	0 = No, only health-focused stakeholders were involved in developing the policy OR there is either insufficient publicly available evidence of a national obesity-related policy/strategy/plan in place OR one that is periodically updated or currently valid 1 = Yes, stakeholders from at least two sectors (e.g. health, agriculture, education, finance, urban planning) were involved in developing the policy 2 = Yes, stakeholders from three or more sectors (e.g. health, agriculture, education, finance, urban planning) OR people living with obesity were involved in developing the policy 3 = Yes, stakeholders from three or more sectors (e.g. health, agriculture, education, finance, urban planning) AND people living with obesity were involved in developing the policy	0-3
1.1.3c	Measures for obesity prevention	**Does the national obesity-related policy/strategy/ plan contain measures for obesity prevention across the population?**	0 = No, or there is either insufficient publicly available evidence of a national obesity-related policy/strategy/plan in place OR one that is periodically updated or currently valid 1 = Yes, but the measures do not include clear actions or specific targets 2 = Yes, there are measures with clear actions or specific targets, but they lack methods of evaluation 3 = Yes, there are measures with clear actions or specific targets AND methods of evaluation	0-3
1.1.3d	Measures for obesity management	**Does the national obesity-related policy/strategy/plan contain measures for obesity management across the population?**	0 = No, or there is either insufficient publicly available evidence of a national obesity-related policy/strategy/plan in place OR one that is periodically updated or currently valid 1 = Yes, but the measures do not include clear actions or specific targets 2 = Yes, there are measures with clear actions or specific targets, but they lack methods of evaluation 3 = Yes, there are measures with clear actions or specific targets AND methods of evaluation	0-3
1.1.3e	Targets for obesity prevalence reduction	**Does the national obesity-related policy/strategy/plan contain targets for obesity prevalence reduction across the population?**	0 = No, or there is either insufficient publicly available evidence of a national obesity-related policy/strategy/plan in place OR one that is periodically updated or currently valid 1 = Yes, short-term targets (0-5 years) OR long-term targets (6 years+) 2 = Yes, short-term targets (0-5 years) AND long-term targets (6 years+)	0-2

1.1.3f	Focus on vulnerable groups	**Does the national obesity-related policy/strategy/plan include a particular focus on the prevention and management of obesity in groups at increased risk of developing obesity?**	0 = No, or there is either insufficient publicly available evidence of a national obesity-related policy/strategy/plan in place OR one that is periodically updated or currently valid 1 = Yes, but it does not outline specific actions, targeted interventions or comprehensive strategies to address the unique needs of vulnerable and minority groups (e.g. children; low-income populations; ethnic or racial minorities) 2 = Yes, it outlines well-defined and actionable measures specifically addressing the needs of vulnerable and minority groups (e.g. children; low-income populations; ethnic or racial minorities)	0-2
1.1.3g	Obesity-related stigma and discrimination	**Does the national obesity-related policy/strategy/plan make reference to obesity-related stigma/discrimination and contain measures to combat it?**	0 = No, or there is either insufficient publicly available evidence of a national obesity-related policy/strategy/plan in place OR one that is periodically updated or currently valid 1 = Yes, it mentions obesity-related stigma/discrimination BUT does not contain any measures to combat it 2 = Yes, it mentions obesity-related stigma/discrimination AND contains measures to combat it	0-2
1.1.4	Obesity-related funding	**Is there a budget allocated to implement the national obesity-related policy/strategy/plan?**	0 = No, or there is either insufficient publicly available evidence of a national obesity-related policy/strategy/plan in place OR one that is periodically updated or currently valid 1 = Yes	0-1
1.1.5	Weight-related discrimination	**Does the country have a law that prohibits weight-based discrimination and classifies weight as a protected characteristic?**	0 = No, there is insufficient publicly available evidence of this 1 = Yes	0-1
Pillar 2: Obesity management				
2.1 Obesity management guidelines				
2.1.1	Existence of obesity management guidelines	**Does the country have national guidelines on obesity management?**	0 = No, there is insufficient publicly available evidence of this 1 = Yes, but they have not been published/updated in the last 10 years 2 = Yes, they have been published/updated in the last 10 years	0-2

2.1.2	Evidence-based obesity management guidelines	**Were the national guidelines on obesity management developed using an evidence-based methodology, comprising a structured review and synthesis of best available evidence, grading of the evidence, and the input of independent experts, in accordance with international standards (e.g. the WHO's standard guideline development methods)?**	0 = No, or there is either insufficient publicly available evidence of obesity management guidelines in place OR they have not been published/updated in the last 10 years 1 = Yes, the guidelines are based on a structured review of evidence OR expert input 2 = Yes, the guidelines are based on a structured review of evidence AND expert input	0-2
2.1.3	Clinical and cost-effectiveness of obesity management interventions	**Are the recommendations in the national guidelines based on an evidence-based assessment of the clinical and cost-effectiveness of interventions?**	0 = No, or there is either insufficient publicly available evidence of obesity management guidelines in place OR they have not been published/updated in the last 10 years 1 = Yes, the guidelines include an assessment of the clinical effectiveness OR cost-effectiveness of interventions 2 = Yes, the guidelines include an assessment of the clinical effectiveness AND cost-effectiveness of interventions	0-2
2.2 Obesity diagnosis and referral pathways				
2.2.1	Obesity management pathway	**Do national obesity management guidelines include a clear clinical pathway?**	0 = No, or there is either insufficient publicly available evidence of obesity management guidelines in place OR they have not been published/updated in the last 10 years 1 = Yes	0-1
2.2.2	Obesity pathway in chronic disease management	**Is obesity diagnosis and a referral pathway integrated into the clinical pathways for associated chronic diseases (e.g. diabetes, cardiovascular disease, obstructive sleep apnoea)?**	0 = No, there is insufficient publicly available evidence of this 1 = Yes, for one associated chronic disease 2 = Yes, for more than one associated chronic disease	0-2
2.3 Availability and affordability of obesity-related care				
2.3.1	Reimbursement/coverage of obesity care	**Does the main public insurance scheme(s) reimburse/ cover the four elements of comprehensive obesity care (nutrition counselling, intensive behavioural therapy, obesity medications, and metabolic and bariatric surgery)?**	0 = No, there is insufficient publicly available evidence of this 1 = Yes, one element is covered 2 = Yes, two elements are covered 3 = Yes, three elements are covered 4 = Yes, all four elements are covered	0-4

Pillar 3: Food quality and access				
3.1 Food access and affordability				
3.1.1	Level of food security	**What is the level of food security in the country?**	Higher=better % of population experiencing food security	%
3.1.2	Healthy food affordability	**What is the share of the population that can afford a healthy diet?**	Higher=better % of population who can afford a healthy diet	%
3.1.3	Nutrition programmes for lower-income individuals	**Does the country have a programme for lower-income individuals to access nutritious food?**	0 = No, there is insufficient publicly available evidence of this 1 = Yes	0-1
3.2 Nutrition guidance and regulation				
3.2.1	Nutrition policy/strategy/ plan that addresses obesity	**Does the country's national nutrition policy/strategy/ action plan include measures aimed at preventing and managing obesity?**	0 = No, or there is either insufficient publicly available evidence of a national nutrition policy/strategy/action plan in place OR one that has been published/ updated in the last 10 years 1 = Yes, but the measures do not include clear actions or specific targets 2 = Yes, there are measures with clear actions or specific targets, but they lack methods of evaluation 3 = Yes, there are measures with clear actions or specific targets AND methods of evaluation	0-3
3.2.2	Marketing of unhealthy food and beverages to children	**Does the country restrict the marketing of unhealthy foods and beverages to children (e.g. on television, in-school advertising)?**	0 = No, there is insufficient publicly available evidence of this 1 = Yes, there are regulations restricting the marketing of unhealthy foods/ beverages to children BUT they are not mandatory 2 = Yes, there are mandatory regulations restricting the marketing of unhealthy foods/beverages to children	0-2
3.2.3	Food labelling	**Does the country mandate food labelling to support healthy eating (e.g. nutrition facts)?**	0 = No, there is insufficient publicly available evidence of this 1 = Yes, but it does not require front-of-package labelling 2 = Yes, it requires front-of-package labelling	0-2
3.2.4	Menu labelling	**Does the country mandate nutrition labelling on menus to support healthy eating in cafes, restaurants, takeaways etc?**	0 = No, there is insufficient publicly available evidence of this 1 = Yes, there are regulations on menu labelling BUT they are not mandatory 2 = Yes, there are mandatory regulations on menu labelling	0-2

3.2.5	Taxes on unhealthy food and beverages	**Does the country levy taxes on unhealthy food or beverage products?**	0 = No, there is insufficient publicly available evidence of this 1 = The country levies a tax on unhealthy food OR unhealthy beverages 2 = The country levies a tax on both unhealthy food AND unhealthy beverages	0-2
3.3 Nutrition in schools				
3.3.1	School nutrition standards	**Does the country have nutrition standards for school food?**	0 = No, there is insufficient publicly available evidence of this 1 = Yes	0-1
3.3.2	Nutrition education	**Does the country include nutrition education in the national curriculum?**	0 = No, there is insufficient publicly available evidence of this 1 = Yes	0-1
Pillar 4: Physical activity				
4.1 Physical activity among the population				
4.1.1	Promotion of physical activity	**Does the country have policies in place to promote physical activity among the population?**	0 = No, there is insufficient publicly available evidence of this 1 = Yes, but they do not focus on promoting active travel (e.g. walking, cycling) or reducing car usage 2 = Yes, they focus on either promoting active travel (e.g. walking, cycling) OR reducing car usage 3 = Yes, they focus on both promoting active travel (e.g. walking, cycling) AND reducing car usage	0-3
4.1.2	Physical activity policies that address obesity	**Do the country's policies to promote physical activity among the population include explicit measures aimed at preventing and managing obesity?**	0 = No, or there is insufficient publicly available evidence of national policies in place to promote physical activity among the population 1 = Yes, but the measures do not include clear actions or specific targets 2 = Yes, there are measures with clear actions or specific targets, but they lack methods of evaluation 3 = Yes, there are measures with clear actions or specific targets AND methods of evaluation	0-3
4.2 Physical activity among children				
4.2.1	Physical activity mandates	**Does the country mandate physical activity in schools?**	0 = No, there is insufficient publicly available evidence of this 1 = Yes, but less than 60 minutes per day OR the time period is not specified 2 = Yes, 60 minutes per day (or more), in line with WHO recommendations	0-2

Data collection for countries where obesity response is regulated at the sub-national level

In countries where responsibility for obesity response or other relevant areas of health policy has been delegated to the sub-national level, Economist Enterprise identified the sub-national jurisdiction with the highest GDP and the lowest GDP in each federalist country (for example, the provinces of Ontario and the Yukon in Canada) and explored whether a law, policy or programme was available in both jurisdictions. If yes, then the country received credit on the question. If only one jurisdiction or neither jurisdiction had a law, policy or programme available, the country did not receive credit on the question.

We considered assigning partial credit on a question to countries where one of the two jurisdictions had a law, policy or programme available. However, as the Index aims for equitable obesity prevention and management efforts to address everyone living in the country, regardless of region, we determined that both jurisdictions must have a law, policy or programme to receive credit.

Construction of the scores

Overall scores for each country are produced by normalising, weighting and combining the scores of the four pillars and their indicators.

Normalisation

All qualitative indicator scores are presented on a normalised scale from 0 to 100 (where 100 represents the strongest obesity response), allowing us to compare each country's performance. The indicators are scored based on their scoring mechanism (that is, if the scoring is out of 4, a score of 4 receives 100; if it is out of 3, a score of 3 receives 100).

EXAMPLE:

For indicator 2.3.1 (reimbursement/ coverage of obesity care), countries are scored using a qualitative rating of 0 (no forms of obesity care are covered), 1 (one form is covered), 2 (two forms are covered), 3 (three forms are covered) and 4 (all forms are covered). On the normalised scale, countries covering all forms receive a score of 100, those covering three forms receive 75, those covering two forms receive 50, those covering one form receive 25, and those not covering any forms receive 0 for this indicator.

For the two quantitative indicators, where the raw data is a percentage, we equated the data to the score, as it is reasonable for a country to achieve 100%.

EXAMPLE:

For indicator 3.1.1 (level of food security), the minimum score (26%) is equal to 26 on the normalised scale and the maximum score (98%) is equal to 98.

Weightings

Overall, weightings are intended to reflect the importance of each pillar of the Index. We judged that the aspects of obesity response covered by the Index are equally important, so we assigned equal weights to the four pillars and their sub-pillars.

Most indicators are also weighted equally, except for one. Under pillar 1, we give more weight to indicator 1.1.3a (existence of an obesity-related policy/strategy/plan) than to indicators 1.1.3b to 1.1.3g, which assess the plan's contents. This reflects the view that having a plan is a critical first step before assessing its comprehensiveness.

Please note that, in some instances, the total weightings do not add up to 100% owing to rounding.

Pillar/sub-pillar/indicator	Weight
1) Policy and governance	**25%**
1.1) Obesity-related policy	**100%**
1.1.1) Health policy/strategy/plan that includes obesity	20%
1.1.2) Definition of obesity	20%
1.1.3) Obesity-related policy/strategy/plan	20%
1.1.3a) Existence of an obesity-related policy/strategy/plan	25%
1.1.3b) Engagement with stakeholders during development	13%
1.1.3c) Measures for obesity prevention	13%
1.1.3d) Measures for obesity management	13%
1.1.3e) Targets for obesity prevalence reduction	13%
1.1.3f) Focus on vulnerable groups	13%
1.1.3g) Obesity-related stigma and discrimination	13%
1.1.4) Obesity-related funding	20%
1.1.5) Weight-related discrimination	20%
2) Obesity management	**25%**
2.1) Obesity management guidelines	**33%**
2.1.1) Existence of obesity management guidelines	33%
2.1.2) Evidence-based obesity management guidelines	33%
2.1.3) Clinical and cost-effectiveness of obesity management interventions	33%
2.2) Obesity diagnosis and referral pathways	**33%**
2.2.1) Obesity management pathway	50%
2.2.2) Obesity pathway in chronic disease management	50%
2.3) Availability and affordability of obesity-related care	**33%**
2.3.1) Reimbursement/coverage of obesity care	100%
3) Food quality and access	**25%**
3.1) Food access and affordability	**33%**
3.1.1 Level of food security	33%
3.1.2) Affordability of nutritious food	33%
3.1.3) Nutrition programmes for lower-income individuals	33%

3.2) Nutrition guidance and regulation	**33%**
3.2.1) Nutrition policy/strategy/plan that addresses obesity	20%
3.2.2) Marketing of unhealthy food and beverages to children	20%
3.2.3) Food labelling	20%
3.2.4) Menu labelling	20%
3.2.5) Taxes on unhealthy food and beverages	20%
3.3) Nutrition in schools	**33%**
3.3.1) School nutrition standards	50%
3.3.2) Nutrition education	50%
4) Physical activity	**25%**
4.1) Physical activity among the population	**50%**
4.1.1 Promotion of physical activity	50%
4.1.2 Physical activity policies that address obesity	50%
4.2) Physical activity among children	**50%**
4.2.1 Physical activity mandates	100%

Index limitations

To interpret the findings of the Obesity Response Index appropriately, its limits must be recognised.

The Index is a first attempt to benchmark a complex reality. It offers a comparable, structured assessment of the state of obesity response based on a set of indicators deemed most representative within the chosen pillars that reflect the key areas of obesity policy. The Index framework—pillars and indicators—were selected after a review of the literature and consultations with leading obesity experts.

The Index looks mainly at inputs—policies, guidelines, laws, resources and infrastructure. Many indicators rest on national policies or strategies, which reflect intent rather than action. They do not report on whether measures are implemented or effective. A country with relevant policy developments may therefore score highly but not see this translate into on-the-ground action or changes in health outcomes.

To balance this, the Index includes some indicators that hint at implementation, such as the presence of time-bound targets or a dedicated budget, which suggest government intent and capacity. Interviews with leading obesity experts in the 20 countries studied add further insight into how policies work in practice. Taken together, the Index scores and interviews offer a fuller view of how countries are responding to obesity.

Reporting of the Index findings aims to be fully transparent about how countries' performance is assessed, scored and ranked, highlighting where there is a known policy-action gap and emphasising throughout that policy does not ensure action.