CHILD NUTRITION REPORT 2025

FEEDING PROFIT

HOW FOOD ENVIRONMENTS ARE FAILING CHILDREN

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September 2025

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FOREWORD

UNICEF works to address child malnutrition in many countries. Today, the global prevalence of obesity among school-age children and adolescents has surpassed underweight. The double burden of malnutrition has dire consequences for the health and future potential of children, communities and nations.

Low- and middle-income countries are experiencing the steepest rise in overweight among school-age children and adolescents, while still grappling with child undernutrition. These countries are fighting an uphill battle: they are striving to end undernutrition and secure nutritious diets for children in an environment where harmful foods are thwarting their efforts.

This Child Nutrition Report – *Feeding Profit: How food environments are failing children* – reveals how unhealthy food environments are driving the worldwide surge in children living with overweight and obesity. It describes how these environments expose children and adolescents to a constant supply of cheap, ultra-processed foods and sugary drinks, while failing to make nutritious options available and affordable to families.

Children depend on good nutrition to develop their minds and bodies. They are, therefore, the hardest hit when it comes to the impact of unhealthy food. But it does not have to be this way. We know that comprehensive mandatory legal measures and policies – including marketing restrictions, food labelling and taxes on unhealthy foods and beverages – can protect children and adolescents. Meanwhile, policies such as targeted subsidies on healthy food, mandatory large-scale fortification of appropriate foods and social transfers to address income poverty are needed to increase the availability and affordability of nutritious foods for children.

While we know what works, we have much work to do to make it a reality: today, no country has a comprehensive set of measures to protect children from unhealthy food. Yet there are hopeful signs that change is possible and happening. Drawing from recent examples of countries that have made extraordinary progress, we present an agenda for transforming children's food environments through eight key actions – with recommendations for governments, civil society, the food and beverage industry and other actors.

With governments in the lead, supported by UNICEF and civil society, in partnership with the private sector, we can ensure that every child realizes their right to nutritious and healthy food.

Catherine Russell
Executive Director, UNICEF


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EXECUTIVE SUMMARY

Millions of children and adolescents are growing up in environments where sugary drinks, salty and sweet snacks and fast foods, including ultra-processed foods and beverages, are highly accessible and aggressively marketed. These unhealthy food environments are driving nutrient-poor, unhealthy diets and a surge in overweight and obesity among children and adolescents, even in countries still grappling with child undernutrition.

The cost of inaction for children, adolescents, families, societies and economies is immense. Unhealthy diets increase the risk of overweight, obesity and other cardiometabolic conditions in children and adolescents, including high blood pressure, elevated blood glucose and abnormal blood lipid levels. These health problems can persist into adult life, increasing the risk of non-communicable diseases, including type 2 diabetes, cardiovascular disease and some cancers. Overweight and obesity are also associated with low self-esteem, anxiety and depression among children and adolescents. Parents bear the emotional toll of their children's mental health challenges and the financial strain of higher medical expenses and lost income to care for them. Economies throughout the world are already struggling with escalating health care costs and reduced workforce productivity because of rising overweight and obesity.

The ultra-processed food and beverage industry holds disproportionate influence over children's food environments. It shapes what foods and beverages are produced and how they are marketed, especially in settings where government regulation is weak or absent. In pursuit of profit, the industry leverages vast financial resources and deep political influence to resist policies aimed at creating healthier, more equitable food environments. This imbalance of power makes it difficult for governments, communities and families to protect children's right to food and nutrition.

OUR RESEARCH
The forces shaping children's diets

This global report examines how unhealthy food environments are shaping children's and adolescents' diets and contributing to the surge in overweight and obesity. It presents data on the status, trends and inequities in overweight and obesity in children and adolescents, and projects when obesity will overtake underweight as the more prevalent form of malnutrition. It also reviews the latest evidence on children's and adolescents' diets and investigates the key forces driving unhealthy food environments.

We analysed data on nutritional status from the UNICEF, World Health Organization (WHO) and World Bank Joint Child Malnutrition Estimates database for children aged less than 5 years, and the Non-Communicable Disease Risk Factor Collaboration (NCD-RisC) for children and adolescents aged 5–19 years. Dietary data were sourced from the UNICEF Global Infant and Young Child Feeding databases for children aged 6–23 months, and the Global Diet Quality Project for adolescents aged 15–19 years. We present analysis from a global U-Report poll among adolescents and young people aged 13–24 years on their exposure to advertisements for sugary drinks, snacks and fast food. In addition, the report draws evidence from state-of the art reviews on commercially produced complementary foods, ultra-processed foods and sugar-sweetened beverages, and from UNICEF-supported studies on the drivers of unhealthy food environments.

OUR FINDINGS
The scale of overweight, obesity and poor diets

Our findings expose the current scale of overweight and obesity among children and adolescents worldwide, the rapidly increasing prevalence in low- and middle-income countries, and the shift from underweight to obesity as the more dominant form of malnutrition among 5–19-year-olds. We also explore how sweet, salty and fried foods and sugary beverages – including ultra-processed foods and beverages – are embedded in children's diets in early life and persist into late adolescence.

Finding 1. The global surge in overweight is affecting children and adolescents in every region of the world.

Globally, one in twenty children under 5 years of age (5 per cent) and one in five children and adolescents aged 5–19 years (20 per cent) are living with overweight. Latin America and the Caribbean, the Middle East and North Africa and North America rank in the top three regions for overweight prevalence among children and adolescents aged 0–19 years. However, East Asia and the Pacific, Latin America and the Caribbean and South Asia account for more than half of all children and adolescents with overweight globally (241 million out of 427 million).

Since 2000, the number of children and adolescents aged 5–19 years living with overweight has doubled from 194 million to 391 million. Some regions have experienced a much greater rise in overweight than others. In South Asia, the region with the lowest prevalence of overweight in 2000, the prevalence increased almost fivefold by 2022, and in East Asia and the Pacific, Latin America and the Caribbean, and the Middle East and North Africa, the prevalence increased by at least 10 percentage points.

Finding 2. Low- and middle-income countries are experiencing the steepest rise in overweight in school-age children and adolescents.

The prevalence of overweight among children and adolescents aged 5–19 years has historically been highest in high-income countries. However, since 2000, overweight has more than doubled in low- and middle-income countries, compared to a modest 1.2-fold increase in high-income countries. As a result, the gap in prevalence is narrowing, and low- and middle-income countries now account for 81 per cent of the global overweight burden, up from 66 per cent in 2000.

As nations develop economically, the pattern of child overweight shifts. In low-income countries, children are more likely to have overweight if they belong to wealthier households, which can afford larger quantities of food, including energy-dense foods. As countries transition to middle-income status, ultra-processed foods and beverages become more widely available and more affordable, increasing the prevalence of overweight among children across all household income levels. In high-income countries, the pattern reverses: nutrient-poor, unhealthy diets are a marker of poverty, not affluence, and child overweight tends to be more common among children and adolescents belonging to poorer households.

Finding 3. Globally, obesity has overtaken underweight as the more dominant form of malnutrition among school-age children and adolescents.

Since 2000, obesity has risen at a faster rate than overweight among school-age children and adolescents. At the same time, there has been a steady fall in the prevalence of underweight. In 2025, a historic turning point was reached: for the first time, the global prevalence of obesity among children and adolescents aged 5–19 years surpassed that of underweight (9.4 per cent versus 9.2 per cent).

Obesity accounts for a growing share of all overweight cases. In 2022, 42 per cent of all children and adolescents aged 5–19 years living with overweight had obesity (163 million out of 391 million), up from 30 per cent in 2000 (58 million out of 194 million). This is immensely concerning because obesity is more difficult to reverse than overweight and has a greater risk of serious health conditions.

Finding 4. The diets of children and adolescents are loaded with unhealthy foods and beverages, including ultra-processed foods.

In 2021, UNICEF and WHO introduced new indicators for monitoring the consumption of unhealthy foods and beverages in children aged 6–23 months, such as sweet, salty and fried foods and sweet beverages. While there are currently insufficient data to produce global estimates, available data show that more than 50 per cent of young children consumed sweet foods or beverages during the previous day in 13 out of 20 low- and middle-income countries.

In adolescents aged 15–19 years, data from the Global Diet Quality Project reveal that a staggering 60 per cent consumed more than one sugary food or beverage during the previous day, 32 per cent consumed a soft drink and 25 per cent consumed more than one salty processed food. Furthermore, studies show that ultra-processed foods and beverages account for at least one-third of the total energy intake of adolescents in Argentina, Belgium, Chile and Mexico, and at least half of total energy intake in Australia, Canada, the United States and the United Kingdom. These levels are so high that they match the description of a staple food – meaning they constitute a dominant portion of adolescents' diets.

OUR ANALYSIS
The drivers of unhealthy food environments

Our analysis finds that unhealthy foods and beverages, including ultra-processed foods and beverages, are widely available, inexpensive and aggressively marketed in the places where children live, learn and play. The unethical business practices of the ultra-processed food and beverage industry undermine efforts to put legal measures and policies in place to protect children from unhealthy food environments. However, with determined action, governments can adopt comprehensive, mandatory measures to reshape food environments and uphold children's right to food and nutrition.

Analysis 1. Inexpensive ultra-processed foods and beverages are flooding retail markets and infiltrating schools.

Global sales of ultra-processed foods and beverages are rising sharply, driven by rapid growth in middle-income countries, where modern retail outlets, online grocery stores and food delivery apps are expanding rapidly, alongside traditional outlets. These ultra-processed foods and beverages tend to be relatively cheaper than fresh or minimally processed nutritious foods – due partly to agricultural subsidies that artificially lower the cost of key ingredients, such as corn, soy and wheat.

Evidence from both high- and middle-income countries shows that retailers disproportionately expose children in poorer neighbourhoods to unhealthy foods and beverages, including ultra-processed foods and beverages. For example, our research in Argentina, Brazil, Chile, Costa Rica and Mexico found that retailers were more likely to prominently display sweet snacks and sugary cereals at entrances and within children's reach in poorer communities than in wealthier areas.

In the absence of effective policies, schools are also being infiltrated by unhealthy foods and beverages – undermining their role as safe spaces for children and adolescents. According to the Global Survey of School Meal Programs, one in four school meal programmes serve processed meat (25 per cent), about one in five serve sweets/ice-cream (21 per cent) and deep-fried foods (19 per cent), and 14 per cent provide sugar-sweetened beverages. UNICEF studies in the United Republic of Tanzania and Zimbabwe reveal how public-private partnerships have enabled ultra-processed food companies to distribute ultra-processed products in schools, build brand loyalty among young learners and strengthen their corporate reputation.

Analysis 2. Children are highly exposed to the marketing of ultra-processed foods and beverages at home, school and play, particularly digital marketing.

Our 2024 global U-Report poll across 171 countries highlights the extent of exposure to food marketing. We found that 75 per cent of young people aged 13–24 years saw advertisements for sugary/energy drinks, snacks or fast food during the previous week. While marketing exposure is highest among those living in upper-middle-income countries (90 per cent), it is also unacceptably high in low-income countries (65 per cent) and even in countries affected by conflict (68 per cent). Children, adolescents and young people report that they experience temptation, pressure and powerlessness in the face of relentless food marketing.

Digital marketing is expanding rapidly and gives the ultra-processed food and beverage industry unprecedented access and power to target children and adolescents. It uses children's online behaviours to deliver highly personalized and persuasive food advertisements; it is interactive, engaging and constantly available; it blurs the boundaries between content and food advertising; and it is poorly regulated and largely invisible to parents and policymakers.

Analysis 3. The unethical practices of the ultra-processed food and beverage industry undermine government action and exploit children, even in times of crisis.

Across the globe, the ultra-processed food and beverage industry leverages its considerable power and influence to out-manoeuvre governments and resist meaningful policy change to improve children's food environments and diets. Our research across 24 countries found that 70 per cent of government officials and civil society representatives identified industry influence as a major barrier to introducing government-led food marketing controls. Studies have found that the industry uses a mix of political, scientific, reputational management and marketing practices to delay, weaken, block and evade government policies.

The ultra-processed food and beverage industry has proven highly resilient, even in times of crisis. Past experience shows that it exploits humanitarian disasters and public health emergencies – such as the COVID-19 pandemic – to expand market reach, strengthen brand image and lobby for the delay or weakening of legal measures and policies to protect children and families from their products.

Analysis 4. Inadequate legal measures and policies enable the ultra-processed food and beverage industry to manipulate children's food environments.

Mandatory national legal measures and policies help create food environments that protect children and adolescents from unhealthy foods and beverages and are conducive to their nutrition and health. Yet, no governments have enacted a comprehensive and coherent set of mandatory legal measures and policies – covering breastfeeding and complementary feeding, school food environments, food marketing restrictions, food labelling, food subsidies, food taxes and food reformulation – to protect children from unhealthy food environments.

The gaps in legal measures and policies allow the ultra-processed food and beverage industry to continue shaping food environments to its advantage, to the detriment of children and adolescents. Delays in implementing these legal measures and policies will only allow the drivers of nutrient-poor, unhealthy diets to become more deeply entrenched and difficult to reverse.

However, important progress has been achieved in countries with political will at the highest level, robust civil society support, public engagement to build demand for legal measures and policies, and the refusal to give in to industry pressure. For example, Brazil, Chile and Mexico have some of the most comprehensive sets of legal measures and policies in the world, while notable advances have been made in countries such as Fiji, India, Lebanon, Sierra Leone, South Africa and Spain.

OUR RECOMMENDATIONS
An agenda to transform children's food environments

The widespread exposure to unhealthy food environments and the surge in childhood overweight and obesity call for immediate and transformative action to protect children's right to food and nutrition.

The following eight recommendations – requiring actions across the food, health, water and sanitation, education and social protection systems – are universally applicable, including in humanitarian contexts:

1. **Implement the International Code of Marketing of Breast-milk Substitutes and subsequent World Health Assembly resolutions to protect and promote breastfeeding and appropriate complementary feeding.** This includes the WHO guidance on regulatory measures aimed at restricting the digital marketing of breastmilk substitutes, and the guidance on ending the inappropriate promotion of foods for infants and young children.
2. **Implement comprehensive, mandatory measures to transform food environments for children and adolescents.** These encompass legal measures and policies that protect children's diets by limiting the availability, marketing and purchase of unhealthy foods and beverages, including ultra-processed foods. They include school food environments, food marketing restrictions, food labelling, taxes on unhealthy foods and beverages, and food reformulation that limits both unhealthy ingredients and harmful substitutes.

3. **Implement comprehensive policies to improve the availability and affordability of locally produced nutritious foods for children and adolescents.** These include redirecting agricultural, trade and consumer incentives and subsidies towards nutritious and healthy foods; strengthening systems and infrastructure to support the production, processing and distribution of nutritious and healthy foods, including large-scale mandatory fortification of appropriate food vehicles; and improving access to safe and palatable drinking water in schools and communities.
4. **Establish robust safeguards to protect public policy processes from interference by the ultra- processed food industry.** This includes conflict-of-interest safeguards, the exclusion of ultra-processed food and beverage industry actors from involvement in policy development and implementation, and the mandatory reporting of industry lobbying activities and membership in trade and business associations.
5. **Implement social and behaviour change initiatives that empower families and communities to claim their right to healthy food environments,** raise awareness of the harm caused by diets high in ultra-processed foods and beverages, and build public support for legal measures and policies to transform food environments for children.
6. **Strengthen social protection programmes to address income poverty and increase children's access to nutritious and healthy diets** through social transfers (food, cash, vouchers) and other forms of social protection (e.g., parental benefits, affordable childcare and labour market programmes).
7. **Engage young people in public policymaking on food justice by fostering youth-led advocacy.** Support young advocates to share their lived experiences of unhealthy food environments and amplify their voices to demand healthier food and beverage options in schools, communities and beyond.
8. **Strengthen global and national data and surveillance systems to monitor food environments, diets and overweight among children and adolescents using standardized indicators and data collection methods.** In addition, track the implementation of legal measures and policies to protect children and adolescents from unhealthy food environments.

Governments bear the primary responsibility for protecting children's right to food and nutrition; however, achieving swift, impactful change towards healthier food environments demands unified action from multiple stakeholders.

All parties must urgently commit to a bold, comprehensive response – holding themselves and one another accountable for transparent decision-making and measurable progress to create equitable, healthy food environments for all children and adolescents, everywhere.

Governments must:

- Enact, implement, monitor and enforce a comprehensive set of mandatory legal measures and policies to protect children and adolescents from unhealthy foods and beverages, including ultra-processed foods and beverages, and improve equitable access to nutritious and healthy foods.
- Enact, implement, monitor and enforce legal frameworks to prevent interference by the ultra-processed food and beverage industry in public policy processes, including conflict-of-interest safeguards, mandatory transparency measures and restrictions on lobbying and influence.
- Strengthen national monitoring and accountability systems through regular data collection on children's diets and nutrition, the implementation of legal measures and policies, and industry practices impacting children's food environments.

Civil society and the media must:

- Raise public awareness of the harm caused by unhealthy foods, beverages and diets, amplify the voices of children and families affected by unhealthy food environments, and build public demand for legal measures and policies to transform food environments.
- Advocate for comprehensive, mandatory and enforceable legal measures and policies that protect children, adolescents and families from unhealthy food environments and improve access to nutritious and healthy foods, and demand that public policy processes be free from commercial influence.
- Investigate and serve as a public watchdog to publicly expose the harmful commercial practices of the ultra-processed food and beverage industry, including policy interference, misleading marketing practices and other tactics that undermine children's right to food and nutrition.

Development and humanitarian organizations must:

- Set global standards and guidance to improve food environments, including reducing industry interference in policymaking; and strengthening government capacity to implement legal measures and policies to transform food environments for children.
- Advocate for agricultural and trade policies that reduce incentives for ultra-processed food production and improve access to nutritious and healthy foods; and invest in systems and infrastructure that promote equitable access to nutritious and healthy foods.
- Track global and country progress on strengthening food environments, improving diets and reducing overweight and obesity among children and adolescents, using standardized indicators and data collection methods.

Donors and other financial partners must:

- Declare the prevention of childhood and adolescent overweight and obesity as a key priority within organizational agendas, policies, strategies and investments for improving children's and adolescents' nutrition, health, well-being and prosperity.
- Secure global and national commitments to transform food environments through legal measures and policies that restrict access to unhealthy foods and beverages, including ultra-processed foods and beverages, and enhance the availability and supply of nutritious and healthy foods.
- Commit to and deliver financial investments that strengthen institutional and regulatory capacities to improve food environments, particularly in under-resourced settings, including support for systems and infrastructure that improve equitable access to nutritious and healthy foods.

Academic and research organizations must:

- Undertake independent studies and research – free from conflicts of interest – on the trends, inequities and drivers of nutrient-poor, unhealthy diets, overweight and obesity in children and adolescents, and the impacts on children, families, societies and nations.
- Undertake independent studies, research and evaluations – free from conflicts of interest – on legal measures and policies to improve food environments and diets among children and adolescents.
- Train multidisciplinary professionals – including agriculturists, nutritionists, public health experts, educators and economists – to lead and sustain national efforts to improve food environments for children and adolescents.

Food and beverage industry actors must:

- Ensure that company policies, practices and products fully comply with human rights treaties, normative guidance issued by United Nations agencies, and legal measures and policies to protect children and adolescents from unhealthy food environments.
- Invest in the production, processing and promotion of nutritious, healthy, affordable and sustainable foods for children, adolescents and their families that are low in free sugars, refined starches, salt, unhealthy fats, additives and other harmful ingredients.
- Never seek to delay, prevent or weaken global or national legal measures and policies to protect children and adolescents from unhealthy food environments.

1 | OUR RESEARCH

THE FORCES SHAPING CHILDREN'S DIETS

This chapter introduces the urgent and growing problem of overweight and obesity among children and adolescents worldwide. It describes how failing food systems are shaping food environments that encourage the overconsumption of unhealthy foods and beverages, including those that are ultra-processed. We outline the research and analysis that UNICEF has undertaken to generate insights on the scale and drivers of this global challenge, and to guide more effective and impactful responses.

Millions of children and adolescents are growing up in food environments where the forces influencing their diets are more powerful, pervasive and harmful than ever before.

Whether walking through a supermarket, passing a street vendor or scrolling through social media, the evidence is clear: the overwhelming supply and aggressive marketing of cheap ultra-processed foods and beverages, such as packaged snacks, fast food and sugary drinks, have become a worldwide reality for children and adolescents everywhere, even in the most remote communities.

These unhealthy products are engineered for profit rather than good nutrition and are fuelling a global nutrition and public health crisis: a rising tide of overweight and obesity and diet-related non-communicable diseases that is threatening the health of children and adolescents in every region of the world.

The rise in overweight and obesity

Historically, undernutrition and micronutrient deficiencies have been the most prevalent forms of malnutrition among children and adolescents worldwide, including stunting (low height-for-age), wasting (low weight-for-height), underweight (low body mass index for age), and deficiencies of essential micronutrients, such as iodine, iron and vitamin A.[1]

Undernutrition and micronutrient deficiencies remain significant concerns in most low- and middle-income countries, although substantial progress has been made. Since 2000, the number of children under 5 years of age with stunted growth and development has fallen by 57 million, the number of children aged 5–19 years suffering from underweight has declined by 43 million, and the global burdens of iodine deficiency and vitamin A deficiency have decreased.[2–4]

However, this progress is accompanied by a rapid rise in childhood overweight and obesity, even in countries still grappling with undernutrition and micronutrient deficiencies.[1] Once considered a problem limited to high-income countries, overweight and obesity is now increasing among school-aged children and adolescents in almost all low- and middle-income countries. In fact, overweight and obesity is the only form of malnutrition that is rising among children and adolescents at a global level.

These changing patterns of malnutrition reflect profound and rapid shifts in the diets of children and adolescents across the world.

How unhealthy diets and overweight harm children, families and societies

A nutritious and healthy diet (*see Box 1*) supports the growth and development of children and adolescents and protects them from all forms of malnutrition and diet-related non-communicable diseases. It includes a variety of nutritious and healthy foods – such as vegetables, fruits, legumes, nuts and seeds, whole grains, dairy products, eggs, poultry and fish – and is low in, or free from, unhealthy foods and beverages.

Historically, diets were shaped by local geography, climate and cultural traditions.[5] Diets in hunter-gather societies were typically diverse and rich in protein, micronutrients and fibre.[6, 7] With the advent of agriculture, populations relied on subsistence farming and children ate what their families could produce or trade locally. Diets were often centred around one or two main staple ingredients and were low in diversity. Food security was frequently precarious, and a single failed harvest could escalate into widespread child malnutrition.

The twentieth century saw considerable advances in agricultural productivity, public health, urbanization, global trade and economic growth. Food and nutrition security improved, household incomes rose, and families were able to diversify diets beyond subsistence staples. Although progress was uneven, undernutrition began to fall in many parts of the world,[8, 9] bringing greater well-being and prosperity to millions of children and their families.

BOX 1

SELECTED TERMS AND DEFINITIONS USED IN THIS REPORT

Nutritious and healthy foods are defined as those that are good sources of vitamins, minerals, protein, unrefined carbohydrates, healthy fats, fibre and other health-promoting substances; do not contain excessive amounts of added sugar, salt, fat and refined starches; do not contain industrially produced trans-fats, harmful additives and other harmful ingredients; and are not ultra-processed. Examples include vegetables, fruits, legumes, nuts and seeds, plant-based oils, whole grains, dairy products, eggs, poultry and fish. While no single type of food can meet children's and adolescents' dietary needs (other than breastmilk in the first six months of life), in appropriate variety, combinations and quantities, these foods are the basis for nutritious and healthy diets.

Unhealthy foods and beverages are defined as those that contain excessive amounts of added sugar, salt, fat and refined starches; contain industrially produced trans-fats, harmful additives and other harmful ingredients; and/or are ultra-processed. Examples include commercially baked foods with industrially produced trans-fat, deep-fried fast foods, sugary and salty snacks, sugar-sweetened beverages and other ultra-processed foods and beverages. While no single food or beverage is inherently 'unhealthy', excessive and/or prolonged consumption of these products can contribute to nutrient-poor, unhealthy diets, especially when they displace nutritious and healthy foods from the diet.

Ultra-processed foods and beverages are industrially formulated foods and beverages, composed primarily of chemically modified substances extracted from foods, together with additives and preservatives to enhance taste, texture, appearance and shelf-life. They contain few or no whole foods and are typically high in refined starches, sugar, salt and fat, including trans-fat. Examples include commercially produced complementary foods, sweet and salty snacks, confectionery, breakfast cereals, processed meat products, ready-made meals and sugar-sweetened beverages.

A nutritious and healthy diet is defined as containing a variety of nutritious and healthy foods and is low in, or free from, unhealthy foods and beverages. It provides adequate amounts of vitamins, minerals, protein, unrefined carbohydrates, healthy fats, fibre and other health-promoting substances; balances energy intake with energy requirements; supports the growth and development of children and adolescents; and provides protection from all forms of malnutrition and diet-related non-communicable diseases.

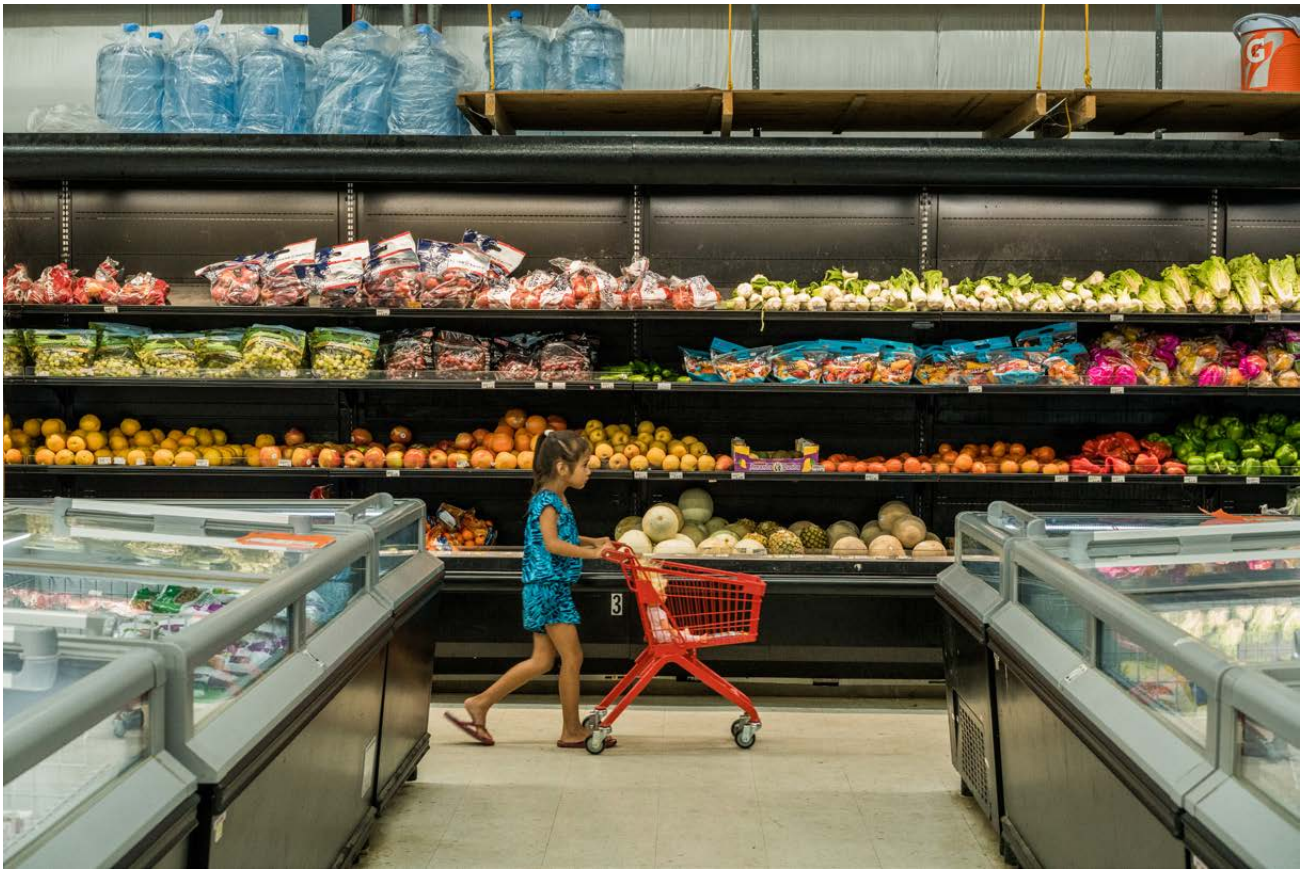
A nutrient-poor, unhealthy diet is defined as containing excessive quantities of unhealthy foods and beverages and is low in or lacking nutritious and healthy foods. Such diets often contain inadequate amounts of essential vitamins and minerals, protein, fibre and other health-promoting substances, and provide excessive energy. They increase the risk of all forms of malnutrition – stunting, wasting, underweight, micronutrient deficiencies and overweight and obesity – as well as diet-related non-communicable diseases.

Food and beverage industry refers to commercial entities involved in the production, processing and distribution of foods and beverages. This definition includes businesses servicing the industry (e.g., packaging, retailing and marketing) when most of their portfolio, core business and related public profiling revolve around food and beverage. Besides companies, entities representing food and beverage interests, such as industry trade associations and sectoral platforms (e.g., aggregators connecting players within the industry around a common agenda), are collectively referred to as the food and beverage industry.

Ultra-processed food and beverage industry refers to companies and entities whose core business revolves around the manufacturing, distribution, marketing and/or retailing of ultra-processed foods and beverages, as well as entities representing the interests of these companies, including trade groups, multi-stakeholder platforms, front groups and others. The portfolios of conglomerates with a largely diversified range of food and beverages and/or non-food/beverage products may also include ultra-processed foods and beverages.

Ironically, some of the same forces that helped reduce child undernutrition are now driving a steady shift to unhealthy diets. Economic growth, the industrialization of food systems and globalization of food corporations has paved the way for diets that are too high in free sugars, refined starches, salt and unhealthy fats.[10, 11] As a result, traditional diets – rooted in whole and minimally processed staples and freshly prepared meals – are increasingly being replaced by nutrient-poor unhealthy diets dominated by ultra-processed foods and beverages (*see Box 2*). These industrially formulated products are composed primarily of chemically modified substances extracted from foods, together with additives and preservatives to enhance taste, texture, appearance and shelf-life. They are engineered and marketed to encourage overconsumption and drive profit, while offering little in terms of vitamins, minerals or fibre.

Children are especially vulnerable to recent shifts in food systems because they are dependent on others for food provision. They are born with only a few innate food preferences, most notably, a natural liking for sweetness and aversion to bitterness.[12] The foods they come to enjoy or reject are largely determined by early exposure and repetition. Children fed sugar-rich diets early in life often struggle to reduce sugar intake later on, while those who grow up eating vegetables from a young age are more likely to maintain vegetable-rich diets as they become older.[13–16] By the time children reach adolescence, their food preferences are largely set, and their dietary practices are increasingly hard to change with age.



BOX 2

ULTRA-PROCESSED FOODS AND CHILDREN'S NUTRITION, HEALTH AND WELL-BEING

Ultra-processed foods and beverages are industrially formulated and composed primarily of chemically modified substances extracted from foods, together with a myriad of additives and preservatives to enhance taste, texture, appearance and durability.[17] Examples of ultra-processed foods and beverages include commercially produced complementary foods, sweet and salty snacks, refined baked goods, confectionery, breakfast cereals, instant noodles, processed meat products, ready-made meals and sugar-sweetened beverages.

Ultra-processed foods and beverages tend to be poor in nutritional content. They are typically energy-dense, high in free sugars, refined starches, salt and unhealthy fats, and low in vitamins, minerals, protein and dietary fibre.[18] When consumed in excess, they displace whole foods and minimally processed foods – such as fruits, vegetables, legumes, lean meats and grains – that are an essential part of nutritious and healthy diets.[17]

But it is not just their poor nutritional content that causes concern: the industrial processes used in manufacturing may also be harmful. Ultra-processed foods and beverages are industrially engineered to be hyper-palatable, highly appealing, convenient and inexpensive, which encourages excessive consumption.[17] They have chemical and physical structures and contain industrial ingredients, such as emulsifiers, that may override satiety signals, disturb the gut microbiome and/or contribute to chronic inflammation.[19–21] Other additives, including preservatives, artificial colours and flavours and sweeteners, may also have harmful impacts on children and adolescents.[22]

Furthermore, the persuasive and aggressive marketing strategies used by ultra-processed food manufacturers – visually appealing packaging, misleading health and nutrition claims, emotionally appealing advertising campaigns and promotional offers – are designed to build brand loyalty, encourage repeat purchases and increase intake.[17,23]

A higher ultra-processed food and beverage consumption is associated with a higher prevalence of overweight and obesity among children and adolescents, and there is emerging evidence that links consumption with cardiometabolic risk factors, such as abdominal obesity, elevated blood pressure, triglycerides, low-density lipoprotein cholesterol and fasting blood glucose.[24–35] In addition, high consumption of ultra-processed food and beverages is associated with greater dental caries in children and adolescents.[36–37]

Because ultra-processed foods and beverages are low in essential nutrients and displace more nutritious foods from diets, high consumption is also associated with micronutrient inadequacy and impaired growth, increasing the risk of micronutrient deficiencies and stunting in children.[38–45] These risks are most pronounced in early childhood, when nutritional needs are relatively high and children are extremely vulnerable to the impacts of dietary deficiencies on their growth, brain development and immune function.[45]

Lifelong taste preferences are established at a young age, which means that exposure to ultra-processed foods and beverages in early childhood can promote a preference for sweet, salty and artificially flavoured foods.[15] Such early conditioning, combined with the persistent and aggressive marketing of unhealthy foods and beverages, can shape dietary practices that track into adulthood, increasing the risk of all forms of malnutrition and cardiometabolic disorders across the lifespan.

Studies have also reported links between diets high in ultra-processed foods and beverages and poor mental health in children and adolescents, including anxiety, depression, aggressive behaviour and suicidal behaviour.[47–52] However, further research is needed to understand the causal pathways.

This body of evidence underscores that early and sustained exposure to ultra-processed foods and beverages not only undermines children's immediate nutritional status and health but also sets the stage for long-term health challenges.

Unhealthy diets increase the risk of overweight, obesity and other cardiometabolic risk factors during childhood and adolescence, including high blood pressure, raised blood glucose and abnormal blood lipids.[33, 53] These health risks persist into later life, increasing the likelihood of obesity and diet-related non-communicable diseases in adulthood, such as type 2 diabetes, cardiovascular disease and some cancers.[54, 55] Children and adolescents living with overweight and obesity are also more susceptible to life-threatening infectious diseases, as witnessed during the COVID-19 pandemic.[56, 57] In addition, they may experience psychological and psychosocial impacts, including weight stigma, low self-esteem, social isolation and mental health challenges, such as anxiety and depression.[58] These impacts can affect school attendance and have long-lasting consequences on quality of life.[59] Adolescents living with overweight, and particularly those living with obesity, are unlikely to improve their weight status with age into adulthood, underpinning why prevention is so crucial.[60–62]

Beyond these individual impacts, overweight and obesity during childhood and adolescence have considerable consequences for families and societies. Parents and caregivers face the financial burden of higher medical costs and lost income to care for their children, while bearing the emotional toll on their children's mental health.[63] Childhood overweight and obesity strain health care systems, reduce workforce productivity and stymie economic growth.[63, 64] In the absence of effective action, the global economic impact of overweight and obesity in adults will surpass a staggering US$4 trillion annually (3 per cent of global GDP) by 2035 – the year when today's adolescents will all reach adulthood.[65] There is a scarcity of data on the economic impacts of overweight and obesity among children and adolescents, and most available evidence relates to high-income countries; however, UNICEF analyses in three middle-income countries – China, Mexico and Peru – reveal immense lifetime costs (*see Box 3*).

BOX 3

THE ECONOMIC COST OF OVERWEIGHT AND OBESITY IN CHILDREN AND ADOLESCENTS

The economic impacts of overweight and obesity in childhood and adolescence result from the health care costs of treatment, combined with increased unemployment, absenteeism from work, reduced productivity, lower income, disability and premature death in adulthood.[63, 66]

There are no global estimates of the economic cost of overweight and obesity among children and adolescents, but estimates are available for several high-income countries. For example, in the United States, where 42 per cent of children and adolescents aged 5–19 years are living with overweight, the projected cost of adolescent overweight is US$13.6 billion in annual direct medical costs and US$49 billion in productivity losses by 2050.[67]

There is a scarcity of evidence on economic costs in low- and middle-income countries.[63] To address the evidence gap, UNICEF conducted investment case analyses to quantify the economic damage of overweight and obesity among children and adolescents aged 0–19 years in three middle-income countries – China, Mexico and Peru.[68–70] Without actions to address childhood overweight and obesity, we estimate these countries will experience a lifetime economic impact of US$31.6 trillion in China, US$1.8 trillion in Mexico and US$210.6 billion in Peru. These crippling costs are equivalent to 3 per cent of China's annual GDP and 1.1 per cent of Mexico's GDP, and will be a significant burden on the long-term economies of all three countries.

However, these costs can be averted. We examined the potential returns on investment from a set of four to five interventions, tailored to each country, to address childhood and adolescent overweight. These interventions include breastfeeding promotion, policies and regulations to improve the food environment (e.g., taxes on sugar-sweetened beverages, subsidies on fruits and vegetables, and marketing restrictions), school-based interventions and nutrition counselling. National implementation of these interventions has a lifetime return on investment of 89:1 in China, 515:1 in Mexico and 164:1 in Peru. In all three countries, interventions that are designed to improve food environments, such as fiscal and regulatory policies, offered the strongest economic gains.

UNICEF estimated the cost to implement a core package of five interventions to halt childhood obesity globally (food subsidies and taxes, food marketing restrictions, food labelling, food school policies and food reformulation). The total estimated cost is international dollars (I$)24.6 billion over a 10-year period, based on 2024 values, which equates to I$0.34 per capita per year. These interventions are highly affordable compared to the projected US$4 trillion annual global economic burden of obesity by 2035.[65]

The nutritional impacts of unhealthy diets are not limited to excessive weight gain. Ultra-processed foods and beverages tend to be low in essential nutrients and displace nutritious and healthy foods from the diets of children and adolescents. The consumption of ultra-processed foods and beverages is associated with stunting in children under 5 years of age and inadequate micronutrient intake in childhood and adolescence,[38–45] conditions that are linked with micronutrient deficiencies, lower immune function, poor cognitive development, lower educational attainment and reduced work productivity in later life.[71]

Diets high in ultra-processed foods and beverages are also harmful for the planet. These foods contain ingredients – such as refined grains and industrial vegetable oils – that are linked to more intensive agricultural practices, soil depletion, biodiversity loss and greenhouse gas emissions, than other foods.[72–74] Moreover, energy-intensive processing, packaging and global transportation of these products contribute significantly to greenhouse gas emissions and plastic pollution.[75]

Food environments and why they matter

As concern over children's diets and the rising burden of overweight and obesity grows, so too does the urgency to act. However, meaningful action is constrained by public discourse on the drivers of nutrient-poor, unhealthy diets among children and adolescents, which is riddled with misconceptions that perpetuate stigma and mislead effective policy action.[76]

One persistent myth is that nutrient-poor, unhealthy diets are primarily due to dietary decisions – a view that places blame unfairly on children, adolescents and their parents and families, and frames these diets as a moral failure of the individual rather than a failure of society to protect the environments that children grow up in.[77] It is unreasonable to assert that a sudden decline in children's willpower or parental responsibility explains the rapid recent changes in diets or the global surge in childhood overweight. Another false narrative is that physical activity can offset the harmful effects of nutrient-poor, unhealthy diets.[78–80] In reality, it is impossible to 'outrun' the health consequences of a diet high in free sugars, refined starches, salt, trans-fats, harmful additives and excessive energy through physical activity alone.[81]

These misleading narratives misdirect attention and resources towards individual lifestyle factors – such as individual nutrition choices or physical activity – while obscuring the far more powerful force: food environments. The worldwide deterioration in children's and adolescents' diets, along with the rise in overweight and obesity, is driven primarily by profound changes in the food environments in which children, adolescents and families eat, live, learn and play.

FIGURE 1: **External and personal domains of food environments for children and adolescents**

Note: Adapted from Turner, Christopher et al., 'Concepts and critical perspectives for food environment research: A global framework with implications for action in low- and middle-income countries', *Global Food Security,* vol.18, September 2018, pp. 93–101.

Food environments are the spaces in which people make decisions about the foods they procure, prepare and consume. They comprise a range of influences across 'external' and 'personal' domains that interact in ways that may either help or hinder a child's ability to access and consume a nutritious and healthy diet (*Figure 1*).[82, 83] The 'external' food environment encompasses the locations where food is acquired or purchased by children, adolescents and their families, such as retail and commercial markets, informal vendors, restaurants, schools and care settings, and online food delivery apps. It has an important bearing on children's diets because it determines food availability, price, vendor and product properties (e.g., vendor hours and the quality of food and beverages offered or for sale), food marketing and regulation in a particular setting. The 'personal' food environment represents the individual and household-level factors that influence the accessibility, affordability, convenience and desirability of different food and beverage options.

The food and beverage industry (*see Box 1*) can be a powerful partner in shaping food environments in ways that create equitable access to nutritious, safe, affordable and sustainable foods for children, adolescents and families. The industry has substantial expertise in technology, research, innovation, supply chain management and marketing that can enhance the availability, accessibility and desirability of foods. For example, the food industry is a vital partner in the fortification of salt with iodine and staple grains with vitamins and minerals to prevent micronutrient deficiencies, using its expertise to improve taste and increase consumer access to fortified foods. Profit is essential for the industry because it drives innovation, investment and sustainability. However, such profit must help uphold the food and nutrition rights of children, rather than come at their expense.

In contrast, the ultra-processed food and beverage industry – a subset of the food and beverage industry – has reshaped food environments in ways that undermine child nutrition. It generates profit by producing and marketing hyper-palatable, unhealthy ultra-processed foods and beverages, while lobbying governments to block regulations that might reduce sales.[10, 84] Ultra-processed foods and beverages tend to be much more profitable than whole and minimally processed foods, such as vegetables, fruits, legumes, whole grains and eggs. This is because they are cheap to produce – due to heavily subsidized ingredients and additives that extend shelf-life – and are designed to be highly marketable.[10, 84] The industry has mastered the science of making these foods highly appealing, blending salt, sugar, refined starches, fat and additives into combinations that are designed to encourage excessive consumption, coupled with marketing that speaks directly to children, adolescents and their caregivers.

Industrialization and globalization of the ultra-processed food and beverage industry and its leading firms have aided the mass production and efficient distribution of ultra-processed foods and beverages to every country in the world.[10, 85–87] Local distribution networks and long shelf lives allow these products to reach virtually every community, even in the most remote locations. The increasing availability of ultra-processed foods and beverages, combined with aggressive marketing, makes it extremely difficult for whole and minimally processed foods to compete.

Governments can positively influence food environments through legal measures and policies that reduce the availability, affordability and marketing of unhealthy foods and beverages (*see Box 4*). But despite the legal and moral duty to protect children's right to food, nutrition, health and information (*see Box 5*), many governments have been unable to take meaningful and comprehensive actions – often due interference and lobbying by the ultra-processed food and beverage industry – allowing the industry to wield significant control.

In many contexts, the external food environment interacts with the economic, biological, psychological and social vulnerabilities of children and their families in ways that promote the overconsumption of unhealthy foods and beverages, including those that are ultra-processed.[88] For example, low-income families in poor urban neighbourhoods often rely on inexpensive, ultra-processed foods to curb hunger because affordable healthy food options are difficult to find locally.[89] Parents facing work-related stress or time pressures may default to the convenience of fast foods for family meals in settings that are flooded with fast food outlets.[90, 91] Children have a stronger biological preference for sweet foods than adults and struggle to adopt healthy dietary practices in environments swamped with heavily marketed sugary snacks and drinks.[92] They also lack the cognitive capacity to distinguish between information and marketing, which increases their vulnerability to the unethical marketing of unhealthy products.[93] Social and cultural norms and practices that favour nutrient-poor, unhealthy diets can deepen vulnerabilities, especially when marketers exploit them by associating products with social status, cultural traditions and positive emotions.[94]

BOX 4

PRIORITY REGULATORY ACTIONS TO CREATE HEALTHY FOOD ENVIRONMENTS FOR CHILDREN

The UNICEF Nutrition Strategy 2030 and accompanying guidance, together with World Health Organization Acceleration Plan to Stop Obesity, recommend the following mutually supportive regulatory actions to create healthy food environments for children.[95–98]

Breastfeeding

Action: Implement the International Code of Marketing of Breast-milk Substitutes and subsequent World Health Assembly resolutions, which regulate the promotion of breastmilk substitutes up to the age of 36 months, including in digital environments.[99–102]

Rationale: Breastfeeding can reduce the risk of overweight and obesity among children,[103] while the marketing of breastmilk substitutes undermines breastfeeding practices.[100, 104]

First foods

Action: Implement the WHO 2016 Guidance on Ending the Inappropriate Promotion of Foods for Infants and Young Children (contained in World Health Assembly resolution 69.9), which regulates the marketing of foods and beverages to children under the age of 36 months.[100, 105]

Rationale: The inappropriate marketing of foods and beverages to children under the age of 36 months can undermine complementary feeding practices that support healthy growth and development.[100]

Food in schools

Action: In schools and pre-schools, implement mandatory standards for meals, foods and beverages, and provide access to free, safe and palatable water. In and around schools, ban the provision, sale and promotion of unhealthy foods and beverages and ban marketing by the ultra-processed food and beverage industry, including sponsorship.[106]

Rationale: Children's exposure to unhealthy foods and beverages should be controlled in pre-schools and schools to improve dietary intake and help children establish lifelong nutritious, healthy and safe dietary practices.[106]

Food marketing

Action: Implement the World Health Organization's guideline on 'Policies to Protect Children from the Harmful Impact of Food Marketing' through mandatory policies that cover all forms of marketing, all forms of media and all settings to which children under 18 years of age may be exposed.[107, 108]

Rationale: The marketing of unhealthy foods and beverages directly influences children's food and drink preferences, purchase requests and diets.[109]

Food labelling

Action: Implement mandatory labelling standards, including front-of-pack nutrition labelling, to help children, adolescents and families identify foods and beverages that are high in free sugars, salt, unhealthy fats and other harmful ingredients, and make healthier purchasing decisions.[110, 111]

Rationale: Food labelling can provide children, adolescents and families with convenient, relevant and readily understood nutrition information to make informed food purchases and can encourage manufacturers to reformulate and produce healthier products.[110, 112]

Food subsidies

Action: Implement targeted agricultural, trade and consumer subsidies to incentivize the production, distribution and consumption of affordable, nutritious and healthy foods. These measures should prioritize supply chains that improve access for vulnerable populations.[113, 114]

Rationale: Targeted food subsidies can contribute to healthier diets by enhancing the availability, accessibility and affordability of nutritious and healthy foods for children, adolescents and their families.[113–115]

Food taxes

Action: Implement taxes to discourage the purchase and consumption of unhealthy foods and beverages such as sugar-sweetened beverages.[113, 116]

Rationale: Taxes can reduce the purchase and consumption of unhealthy foods and beverages.[113, 115] For example, taxes on sugar-sweetened beverages can reduce the purchase of sugary drinks and reduce population sugar intake.[117–119]

Food reformulation

Action: Implement mandatory regulations on the nutritional composition of processed foods and beverages to eliminate industrially produced trans-fat and reduce other potentially harmful ingredients such as salt.[120]

Rationale: Food product reformulation can provide a healthier food supply and improve the nutritional quality of foods, when combined with other regulatory measures.[120]

BOX 5

PROTECTING CHILDREN'S RIGHT TO FOOD AND NUTRITION

The United Nations Convention on the Rights of the Child establishes the legal and moral obligations of governments to safeguard children's rights, including their right to food, nutrition, health, information and protection from harmful influences and exploitation.[121] Several articles within the Convention on the Rights of the Child assert children's right to a healthy food environment.[122, 123]

Protecting children's food, nutrition and health: All children have the right to survive and develop (*article 6*), to adequate food, nutrition and health *(article 24)*, and to a standard of living, including nutrition *(article 27)*. To meet these rights, governments have an obligation to ensure children's access to affordable, nutritious food and to regulate the sales and marketing of unhealthy foods and beverages in the physical and digital spaces where children live, play, learn and gather.

Protecting children from harmful influences and exploitation: Children's right to protection from harmful information *(article 17)* and exploitation *(article 36)* must not be violated by the aggressive marketing of foods and beverages that do not contribute to a nutritious and healthy diet. This calls for governments to protect children up to the age of 18 years *(article 1)* from the marketing of these foods and beverages through all media, including protecting their privacy and preventing behavioural manipulation and the inappropriate use of personal data via digital marketing *(article 16)*.

Protecting children's access to education and information: Children and their parents or guardians must have access to accurate, clear and age-appropriate information to make informed decisions about the foods and beverages they purchase and consume. Mandating the accurate labelling of products and banning misleading health and nutrition claims helps children and families to identify unhealthy products *(articles 17, 18, 28 and 29)*. In addition, building awareness of the marketing tactics used by the ultra-processed food and beverage industry helps children and families identify manipulative marketing and hold industry actors accountable for practices that may harm children's health.

Best interests of the child: The Convention on the Rights of the Child asserts that the best interests of the child must be a primary consideration in all issues concerning children *(article 3)*. This has the potential to conflict with the profit-driven motives of the private sector and calls for governments to ensure that the food and beverage industry does not interfere with government policies and regulations to protect children and their families from unhealthy foods and beverages.

These obligations are reinforced by the broader human rights framework, including the right to adequate food, as recognized in the Universal Declaration of Human Rights (*article 25*) and the International Covenant on Economic, Social and Cultural Rights *(article 11)*. This right requires States to ensure access to food that is safe, nutritious, culturally acceptable and free from harmful substances. Governments must not incentivize the consumption of unhealthy foods and beverages, and failure to regulate industry practices that undermine health may constitute a violation of the right to health.[124]

In addition, international human rights law affirms the obligation of States to protect policymaking processes from private interests that conflict with public health. This obligation is particularly relevant to multinational food and beverage corporations and their influence over food systems governance and requires States to "establish rules of engagement and adopt measures relevant to good food systems governance".[125] States must also take effective measures to prevent undue corporate influence over food systems and ensure that food-related laws, policies, and governance structures are designed to serve public health and uphold human rights – particularly the rights of children.

The concentration of corporate power in global food systems undermines access to adequate food, drives the proliferation of ultra-processed products, distorts food environments and constrains democratic participation in food policy. In line with their obligations under international human rights law, States must take effective measures to prevent undue corporate influence over food systems and ensure that food-related laws, policies, and governance structures are designed to serve public health and uphold human rights, particularly the rights of children.[126]

What does this report aim to contribute?

The impact of changing food environments on children and adolescents is causing growing alarm among the global nutrition and health community. And yet the scale of the global, regional and national response is inadequate, uneven and fragmented. We must bring greater visibility to the scale of the problem across the globe, define what it means for children, adolescents, families and societies, and mobilize commitment to act.

In this report, UNICEF sets out to answer the following questions:

1. How is the global pandemic of overweight and obesity evolving among children and adolescents, and at what point will obesity overtake underweight as the more dominant form of malnutrition across the world?
2. To what extent have unhealthy foods and beverages, including those that are ultra-processed, become embedded in the diets of children and adolescents in the world today?

3. How are food environments increasing the exposure of children and adolescents to unhealthy foods and beverages, including those that are ultra-processed, in settings across the world?
4. What must be done to transform food environments and build accountability to protect the food and nutrition rights of children and adolescents?

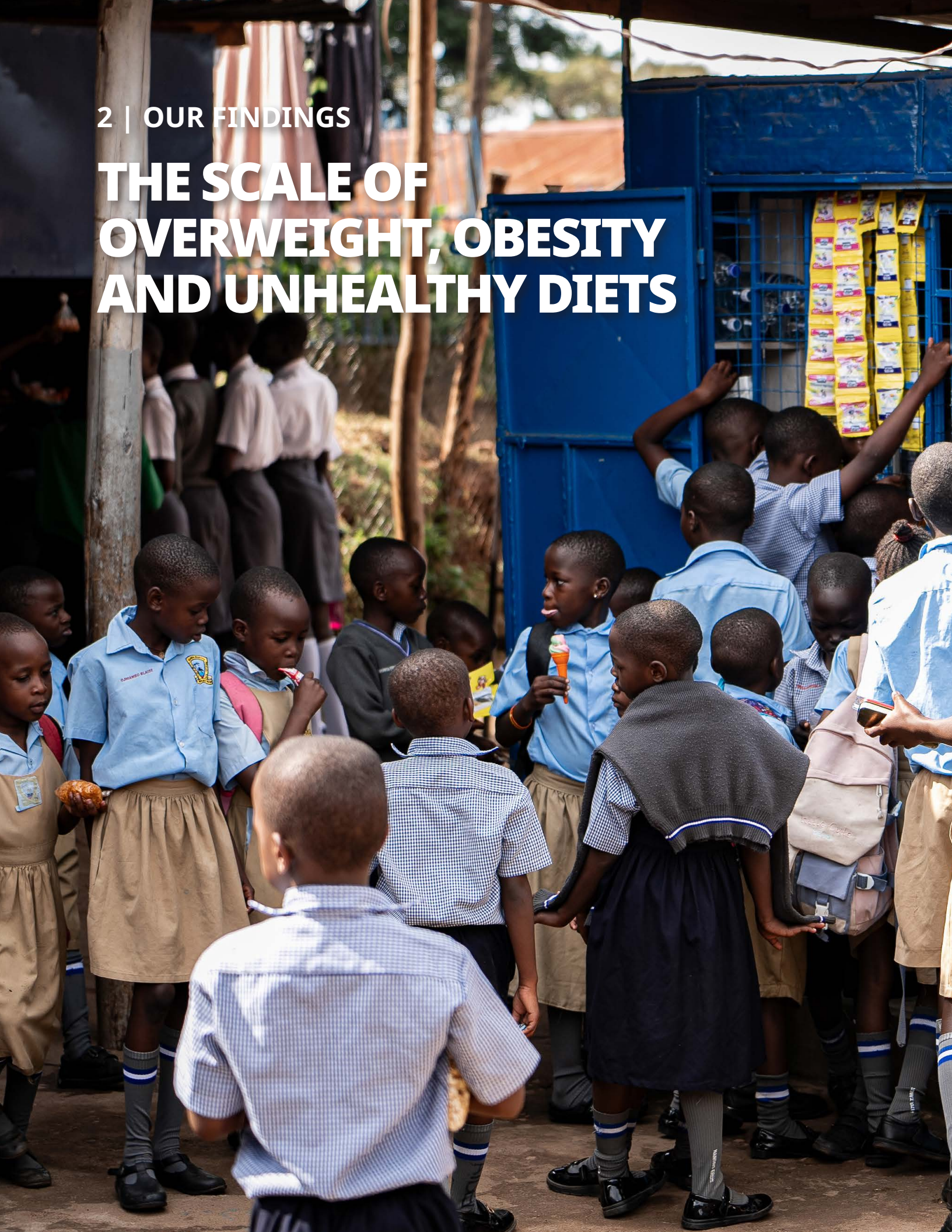
To answer our four questions, we used the following sources of data, information and evidence:

1. **Quantitative data on nutritional status:** Estimates of nutritional status for more than 160 countries and territories, representing more than 90 per cent of children and adolescents globally, were obtained from the UNICEF, World Health Organization (WHO) and World Bank Joint Child Malnutrition Estimates database for children aged less than 5 years, and from the Non-Communicable Disease Risk Factor Collaboration (NCD-RisC) for children and adolescents aged 5–19 years.[2, 127] Data were analysed to examine the current status, trends and inequities in overweight and obesity, and to project when obesity will overtake underweight as the more prevalent form of malnutrition.
2. **Quantitative data on diets:** The analysis on the diets of children under 2 years used data from the UNICEF Global Infant and Young Child Feeding databases, which cover more than 130 countries and territories, representing more than 90 per cent of children under 2 years globally. For adolescent girls and boys aged 15–19 years, data from the Global Diet Quality Project were compiled and analysed. This project collects data through the Gallup World Poll using face-to-face or telephone surveys, covering 88 per cent of the world's population of adolescents aged 15–19 years.[128]
3. **Quantitative data on exposure to marketing of unhealthy foods and beverages:** UNICEF conducted a global U-Report poll in 2024 among more than 64,000 adolescents and young people aged 13–24 years in 171 countries to seek insights on their exposure to advertisements for sugary drinks, snacks and fast food.[129] The poll was administered via SMS and social media platforms, and explored the frequency of exposure to advertisements, the types of advertisements, celebrity endorsement, and how such advertisements and endorsements affect the desire for these foods and beverages.
4. **Country-level studies on food environments:** During the last five years, UNICEF has conducted a suite of studies to build the evidence base on the drivers of nutrient-poor, unhealthy diets, including the role of children's and adolescents' food environments. These include studies of food and beverage properties and labels; the retail food environment and school food environments; the marketing of unhealthy foods and beverages to children and adolescents; and interviews with children, adolescents and their parents to learn about their experiences with food environments at school and in the community.
5. **Evidence reviews:** UNICEF collaborated with global experts to conduct state-of-the-art evidence reviews on commercially produced complementary foods and ultra-processed foods and beverages.[24] The reviews synthesized evidence on the trends in consumption among children and adolescents, the impact on their nutrition and well-being, how the ultra-processed food and beverage industry influences purchasing behaviours, and the effectiveness of legal measures and policies that are designed to improve food environments.

The analysis in this report focuses predominantly on the role of unhealthy food environments in contributing to the rise in childhood overweight and obesity. However, it is crucial to understand that unhealthy food environments also contribute to other forms of child malnutrition, such as stunting and micronutrient deficiencies, by denying children's access to foods rich in vitamins, minerals, protein, fibre and other health-promoting substances. In addition, while there is clear evidence that poor diets and unhealthy environments are the leading driver of the surge in overweight and obesity globally, they act alongside and interact with other biological, psychological, social and economic vulnerabilities, as well as broader structural determinants.[88, 130]

The following chapters present the findings of our synthesis of data, information and evidence from these five sources. In Chapter 2, we share key findings on the status, trends and inequities in overweight and obesity, and the diets of children and adolescents. In Chapter 3, we analyse the role of the food environment in influencing the foods and beverages that children and their families find available, affordable, accessible and desirable, and in Chapter 4, we conclude with a set of recommended actions to transform food environments for children and adolescents in ways that protect their right to food and nutrition.

THE SCALE OF OVERWEIGHT, OBESITY AND UNHEALTHY DIETS



This chapter examines the status, trends and inequities in overweight and obesity among children and adolescents using data from global databases. It also explores data and evidence on the consumption of unhealthy foods and beverages, including those that are ultra-processed, during early childhood and adolescence.

Our findings expose the current scale of overweight and obesity among children and adolescents in all regions of the world today, the rapidly increasing prevalence of overweight in low- and middle-income countries, and how obesity is overtaking underweight as the more dominant form of malnutrition among those aged 5–19 years. They also reveal how unhealthy foods and beverages, including those that are ultra-processed, have become entrenched in children's diets in early life and persist into late adolescence.

FINDING 1.

The global surge in overweight is affecting children and adolescents in every region of the world

Governments and societies have a legal and moral obligation to uphold children's right to food and nutrition. Yet the rising prevalence of overweight among children and adolescents worldwide demonstrates that this right is being denied on a massive scale. Anthropometric measures of nutritional status (*see Box 6*) reflect the extent to which children and adolescents access nutritious diets and nutrition services and benefit from positive nutrition practices.

BOX 6

ASSESSING THE NUTRITIONAL STATUS OF CHILDREN AND ADOLESCENTS

In this report, we present data on the prevalence and burden of overweight and obesity in children and adolescents and compare trends in obesity with trends in severe wasting or underweight, depending on the age of the child.

Children aged less than 5 years:

- **Overweight** is defined as a weight-for-height greater than 2 standard deviations above the WHO Child Growth Standards median
- **Obesity (or severe overweight)** is defined as a weight-for-height greater than 3 standard deviations above the WHO Child Growth Standards median
- **Severe wasting** is defined as a weight-for-height less than 3 standard deviations below the WHO Child Growth Standards median

Children and adolescents aged 5–19 years:

- **Overweight** is defined as a body mass index-for-age (BMI-for-age) greater than 1 standard deviation above the WHO Growth Reference median
- **Obesity** is defined as a BMI-for-age greater than 2 standard deviations above the WHO Growth Reference median
- **Thinness** is defined as a BMI-for-age less than 2 standard deviations below the WHO Growth Reference median. In this report, thinness is referred to as **underweight**

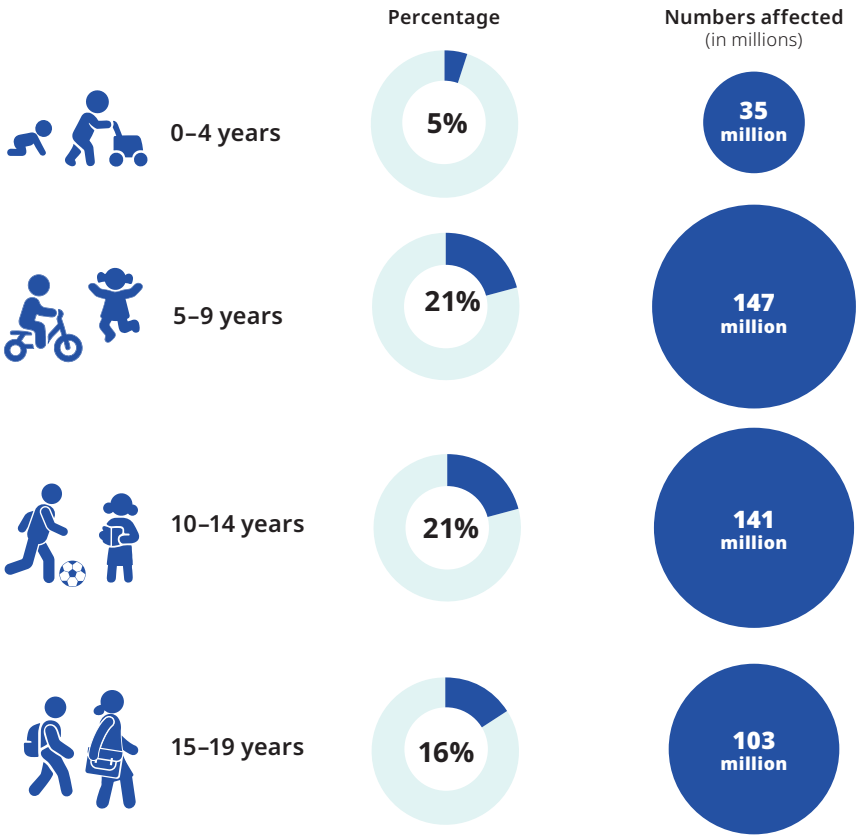
The term 'overweight' includes children and adolescents who are living with obesity, a more severe form of overweight. Children and adolescents living with obesity are therefore a subset of all those living with overweight.

In this report, we compare the prevalence of obesity with the prevalence of severe wasting in children aged less than 5 years because the thresholds for these forms of malnutrition are 3 standard deviations above (obesity) or below (severe wasting) the WHO Child Growth Standards median. In addition, we compare the prevalence of obesity with the prevalence of underweight in school-aged children and adolescents aged 5–19 years because the thresholds for these forms of malnutrition are 2 standard deviations above (obesity) or below (underweight) the WHO Growth Reference median.

FIGURE 2:
Percentage and numbers (in millions) of children and adolescents with overweight, by age group, globally

Note: Latest estimates are from the year 2024 for children under 5 and from the year 2022 for children and adolescents 5–19 years.

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



Globally, one in five children and adolescents aged 5–19 years are living with overweight

Globally, one in twenty children under 5 years of age (5 per cent) and one in five children and adolescents aged 5–19 years (20 per cent) are living with overweight. This amounts to a staggering 35 million children under 5 years of age, 391 million children and adolescents aged 5–19 years, and 427 million children and adolescents in total (*Figure 2*).

Children and adolescents are affected by overweight and obesity in all regions of the world, though not equally. Latin America and the Caribbean, the Middle East and North Africa, and North America rank in the top three regions for the prevalence of overweight across all age groups (*Figure 3*). However, the burden (i.e., numbers of children and adolescents affected) is concentrated in East Asia and the Pacific, Latin America and the Caribbean and South Asia; these three regions account for more than half of all children and adolescents aged 0–19 years who are living with overweight globally (241 million out of 427 million).

One in twenty children aged less than 5 years are living with overweight (5 per cent) globally, compared with one in five children aged 5–9 years (21 per cent), one in five adolescents aged 10–14 years (21 per cent), and one in six adolescents aged 15–19 years (16 per cent). As explained in *Box 6*, the indicator definitions and thresholds for overweight in children aged less than 5 years are different to those used for older children and adolescents, so the data are not comparable.

Globally and across regions, overweight is more common in boys than in girls across all age groups, except among adolescents aged 15–19 years, where the prevalence is higher in girls (see the data tables that accompany this report). In East Asia and the Pacific, Eastern Europe and Central Asia, and Latin America and the Caribbean, the prevalence of overweight among boys aged 5–9 and/or 10–14 years exceeds that of girls by more than 5 percentage points. In Eastern and Southern Africa, Latin America and the Caribbean, and West and Central Africa, the prevalence of overweight among adolescent girls aged 15–19 years exceeds that of boys by around 5 percentage points.

Within regions, the prevalence of overweight varies considerably among countries (*see data tables*). For example, in South Asia, where only 12 per cent of children aged 5–19 years are living with overweight, the prevalence ranges from 8 per cent in Bangladesh to 32 per cent in the Maldives, while in Latin America

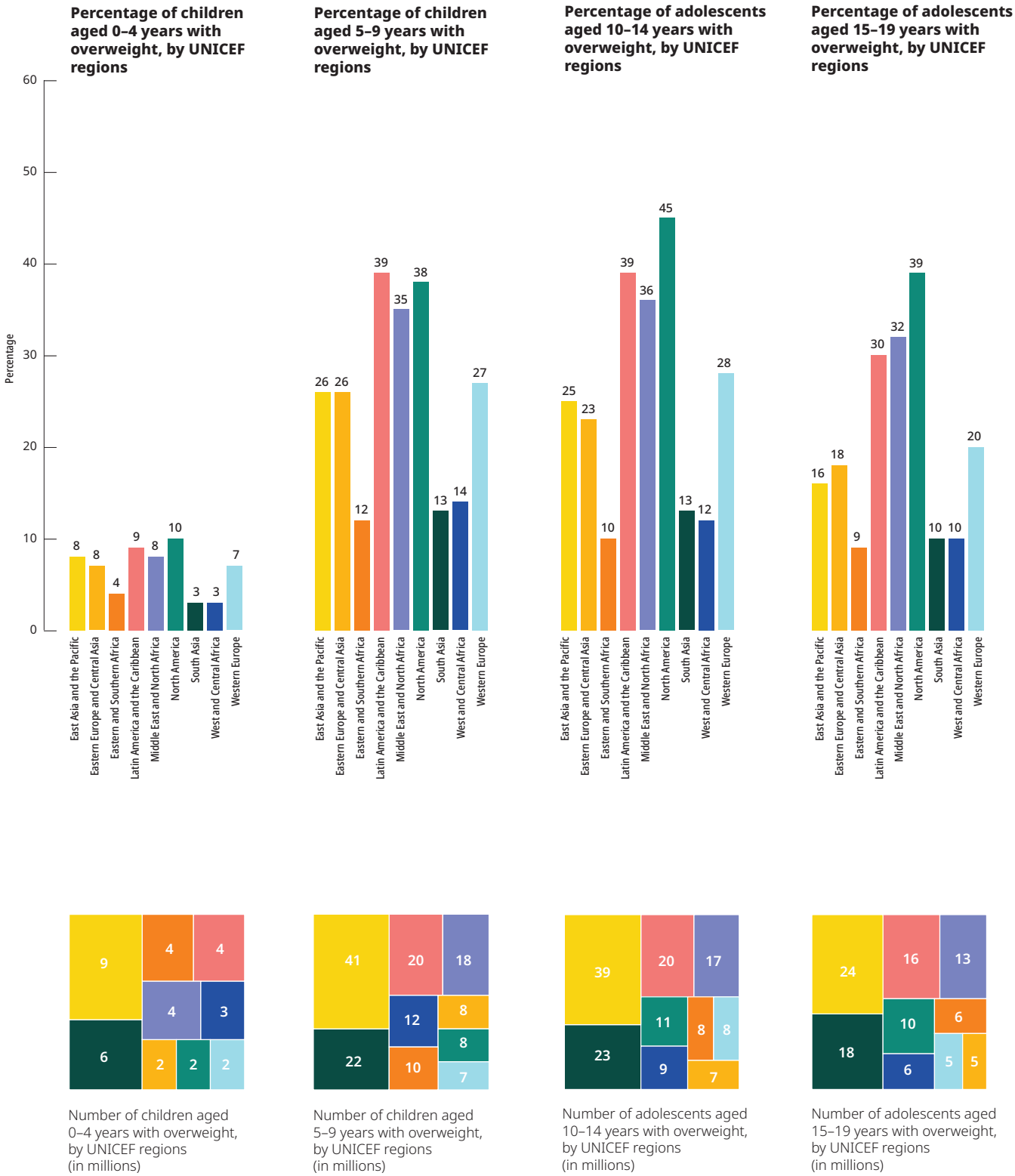


FIGURE 3:

Percentage and numbers (in millions) of children and adolescents with overweight, by age group, by UNICEF regions

Note: Latest estimates are from the year 2024 for children under 5 and from the year 2022 for children and adolescents 5–19 years.

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

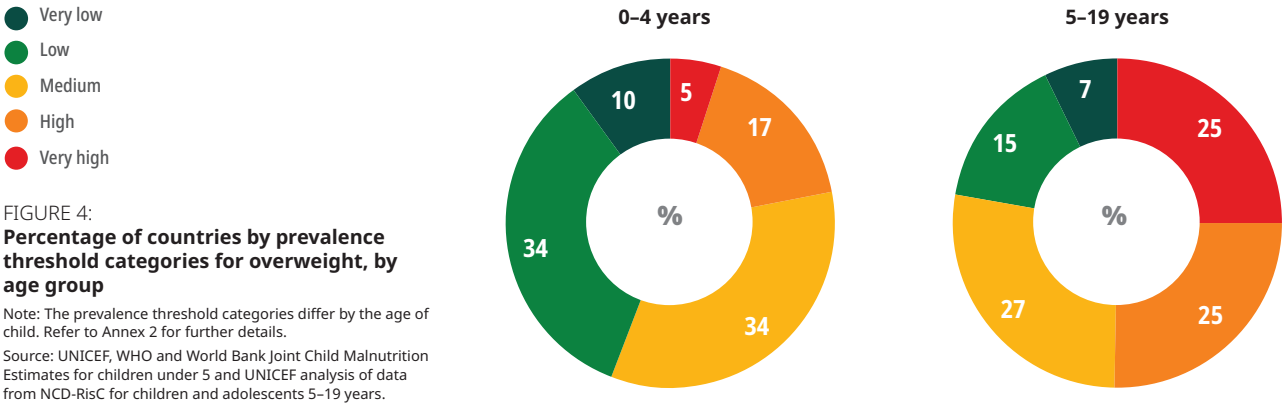


FIGURE 4:
Percentage of countries by prevalence threshold categories for overweight, by age group

Note: The prevalence threshold categories differ by the age of child. Refer to Annex 2 for further details.

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

and the Caribbean, where 36 per cent of children aged 5–19 years are living with overweight, the prevalence ranges from 23 per cent in Guatemala to 58 per cent in Chile.

The public health significance of overweight in a specific population is determined using prevalence thresholds from 'very low' to 'very high'.[2, 131] Among countries with data, one in five (21 per cent) have a 'high' or 'very high' prevalence of overweight among children aged less than 5 years, whereas one in two countries (50 per cent) have a 'high' or 'very high' prevalence among children aged 5–19 years (*Figure 4*).

Since 2000, the number of children and adolescents aged 5–19 years living with overweight has more than doubled

Between 2000 and 2022, the global prevalence of overweight almost doubled among children aged 5–9 years (11 per cent to 21 per cent), adolescents aged 10–14 years (12 per cent to 21 per cent) and adolescents aged 15–19 years (9 per cent to 16 per cent) (*Figure 5*). In terms of numbers affected, there were twice as many children and adolescents aged 5–19 years living with overweight in 2022 than in 2000 (increasing from 194 million in 2000 to 391 million in 2022).

Some regions have experienced a much steeper rise in overweight than others. In South Asia, the region with the lowest prevalence of overweight in 2000, the prevalence increased almost fivefold in children aged 5–9 years, 10–14 years and 15–19 years by 2022. In addition, the prevalence increased by at least 10 percentage points across these age groups in East Asia and the Pacific, Latin America and the Caribbean, and the Middle East and North Africa.

Meanwhile, there are signs that the rise in overweight among children and adolescents aged 5–19 years is levelling off in North America and Western Europe; both these regions started the 2000s with a higher overweight prevalence than all other regions, following a rapid rise during the late twentieth century. In Western Europe, the prevalence of overweight among children and adolescents aged 5–19 years levelled off at below 30 per cent. This is noticeably lower than in North America, where the trend stabilized at around 40 per cent, and lower than in Latin America and the Caribbean and the Middle East and North Africa, where prevalence already exceeds 30 per cent and is on a trajectory to rise further.

Some countries have experienced a particularly rapid rise in overweight during the last two decades. For example, the prevalence of overweight among children and adolescents aged 5–19 years at least tripled between 2000 and 2022 and reached medium levels (from 15 per cent to less than 25 per cent) in nine countries, five of which are in South Asia: Afghanistan, Bhutan, the Democratic Republic of the Congo, Indonesia, Liberia, the Maldives, Pakistan, Sri Lanka and Viet Nam (*see data tables*).

Among children aged less than 5 years, the global prevalence of overweight barely changed between 2000 and 2022, with around 5 per cent of children affected (*Figure 5*). But with each passing year, the world moves further away from the Sustainable Development Goal target of reducing overweight in children under 5 to less than 3 per cent by 2030.[132] Currently, only one in five countries (21 per cent) are on track to meet this target.[133]

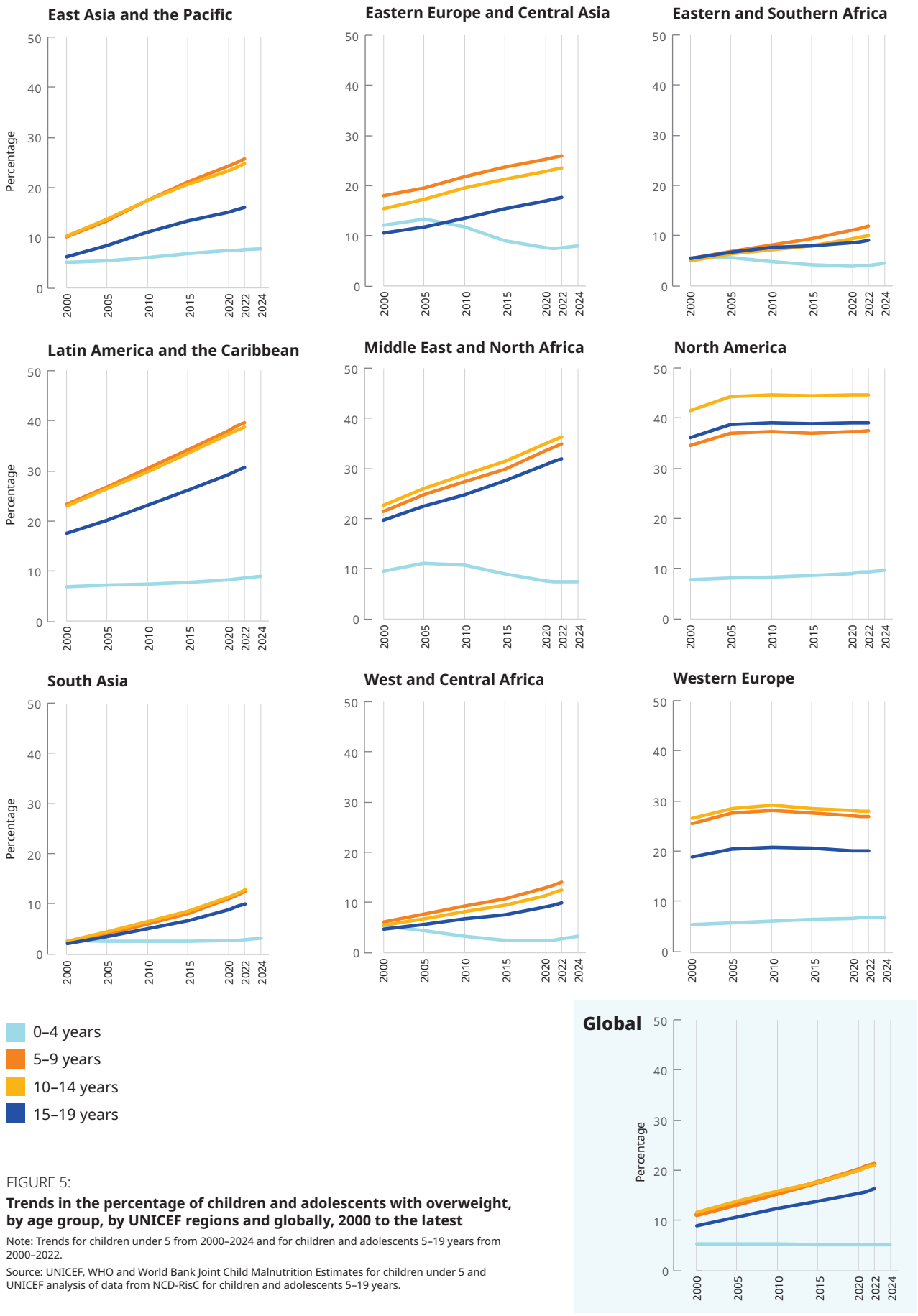


FIGURE 5:

Trends in the percentage of children and adolescents with overweight, by age group, by UNICEF regions and globally, 2000 to the latest

Note: Trends for children under 5 from 2000–2024 and for children and adolescents 5–19 years from 2000–2022.

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

FINDING 2.

Low- and middle-income countries are experiencing the steepest rise in overweight in school-age children and adolescents

Overweight in children and adolescents became a major public health and nutrition concern among high-income countries during the 1980s and 1990s.[134] While these countries continue to dominate the global discourse on overweight, low- and middle-income countries now bear a growing share of the global burden. Without urgent and effective intervention, these countries will face severe health, social and economic consequences in the years ahead.

The gap in overweight prevalence between high-income countries and low- and middle-income countries is rapidly closing

Between 2000 and 2022, the percentage of children and adolescents aged 5–19 years living with overweight more than doubled in low- and middle-income countries, compared to a more modest increase (1.2 times) in high-income countries (*Figure 6*).

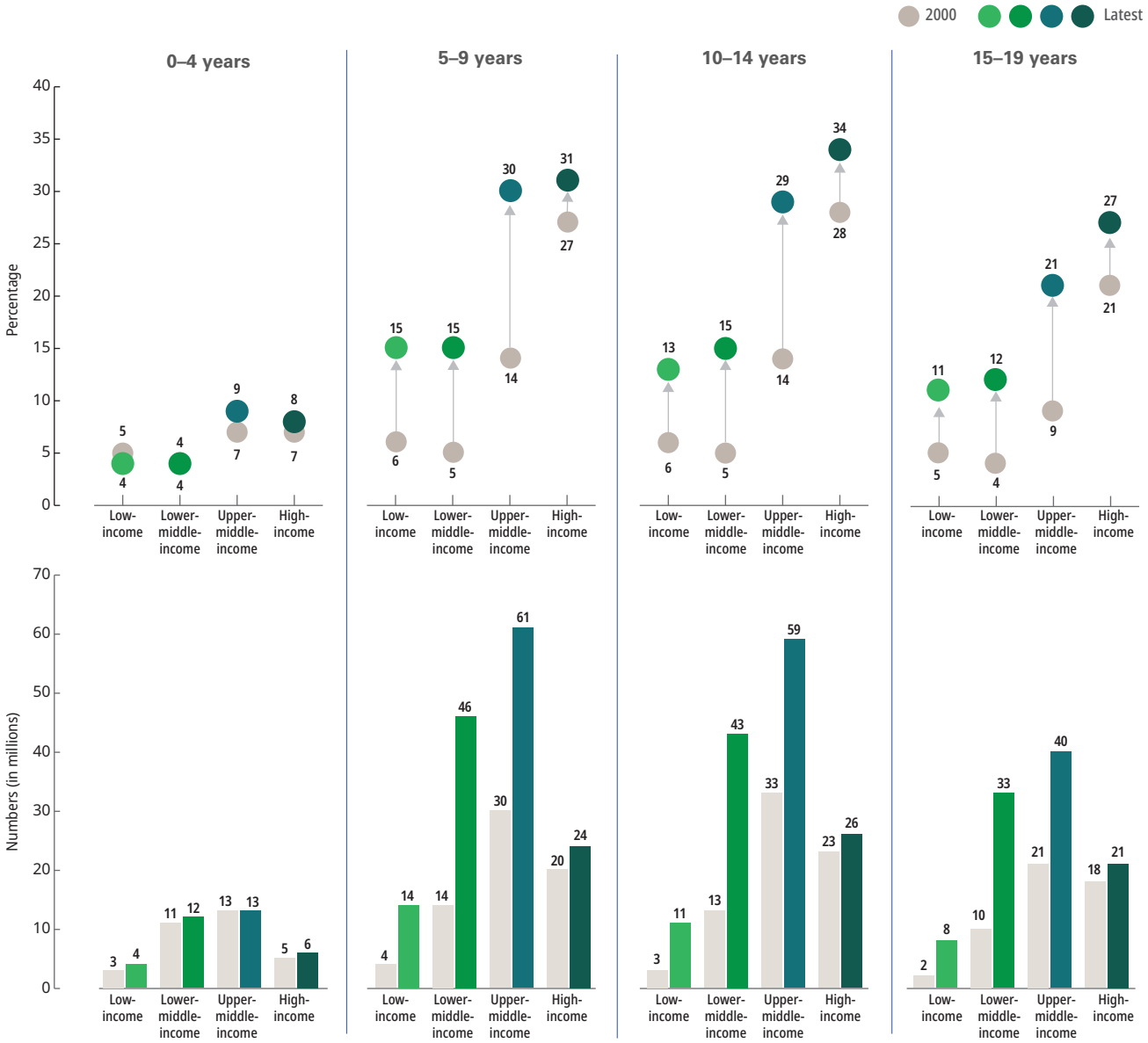


FIGURE 6:
Trends in percentage and numbers (in millions) of children and adolescents with overweight, by age group and by country income classification, 2000 and latest

Note: Latest estimates are from the year 2024 for children under 5 and from the year 2022 for children and adolescents 5–19 years.

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

High-income countries continue to have the highest prevalence of overweight across all age groups from 5 years to 19 years. However, the gap in prevalence between these countries and low- and middle-income countries has narrowed considerably. For example, the prevalence of overweight among children aged 5–9 years in high-income countries was 13 percentage points higher than upper-middle-income countries in 2000, but this gap fell to just 1 percentage point in 2022.

Population growth in low- and middle-income countries has intensified these trends. Between 2000 and 2022, the number of children and adolescents aged 5–19 years living with overweight more than quadrupled in low-income countries (from 8 million to 34 million), more than tripled in lower-middle-income countries (from 37 million to 123 million) and nearly doubled in upper-middle-income countries (from 84 million to 160 million). In stark contrast, the burden increased minimally from 62 million to 71 million in high-income countries during this period.

As a result, low- and middle-income countries account for a growing share of the global burden of overweight in children aged 5–19 years. Between 2000 and 2022, their share jumped from 66 per cent to 81 per cent. These figures challenge the common perception that high-income countries remain at the forefront of the overweight crisis in children and adolescents.

As nations develop economically, the burden of child overweight shifts from wealthier to poorer households

We examined inequities in the prevalence of overweight among adolescents aged 15–19 years across 10 low- and middle-income countries, using household wealth quintile as a measure of socioeconomic status. We find a similar pattern across these countries, with overweight rising as household wealth increases (*Figure 7*).

In low-income countries, wealthier households can afford greater quantities of food, including commercially produced energy-dense foods that are often considered aspirational. In contrast, poorer households are more likely to experience food insecurity and lack the resources to consume excess calories.[135] As countries transition to middle-income status, households gain greater purchasing power and globalization brings ultra-processed foods and beverages to street kiosks, convenience stores and supermarkets.[135] While overweight rises across all income levels during this transition, wealthier households are typically the first to shift to energy-rich diets high in ultra-processed foods and beverages and fast foods, sustaining the wealth-related disparities in overweight,[136] which are evident in *Figure 7*.

However, the inequities are reversed in high-income countries: overweight is concentrated among children and adolescents in the poorest households and

is a marker of poverty, not affluence.[137–140] Poorer households in high-income countries are more likely to live in deprived areas that are saturated with convenience stores and fast food outlets selling an abundance of unhealthy foods ('food swamps') or in areas devoid of affordable, nutritious and healthy foods ('food deserts').[141, 142] Meanwhile, wealthier households are more likely to live in areas with better access to whole and minimally processed foods, can afford these higher-quality foods, and are less reliant on ultra-processed, calorie-dense convenience foods.

If low- and middle-income countries follow the same pattern as high-income countries, economic development will bring the steepest rise in overweight among children and adolescents from poorer households in the coming decades. *Figure 7* suggests these shifts may already be underway in some upper-middle-income countries. For example, the prevalence of overweight among adolescents aged 15–19 years belonging to wealth quintile 1 (the poorest households) in the Maldives and wealth quintile 2 in South Africa is higher than all other wealth quintile groups except the wealthiest households (wealth quintile 5). Evidence from other upper-middle-income countries, such as Brazil and Mexico, also shows that child overweight and obesity are increasingly concentrated among households with lower socioeconomic status,[143, 144] and that these households are more likely to live in areas characterized as food swamps or deserts.[145–148]

Such shifts will harm the health and well-being of children and contribute to the growing burden of diet-related diseases among people experiencing poverty – such as cardiovascular disease and type 2 diabetes – placing increasing pressure on strained health systems. The high prevalence of undernutrition in low- and middle-income countries is an additional vulnerability for children and adolescents: stunting increases the future risk of obesity, and children who are undernourished in the first 2 years of life and gain weight rapidly in later childhood are at high risk of diet-related non-communicable diseases.[149, 150] These countries must act now to prevent a future where the poorest children and adolescents will suffer disproportionately.

FINDING 3.
Globally, obesity has overtaken underweight as the more dominant form of malnutrition among school-age children and adolescents

Malnutrition has reached a critical tipping point globally. Obesity has risen rapidly among school-age children and adolescents worldwide, surpassing underweight for the first time in 2025. This unprecedented shift represents one of the most significant and alarming nutrition transitions of the twenty-first century and demands immediate action.

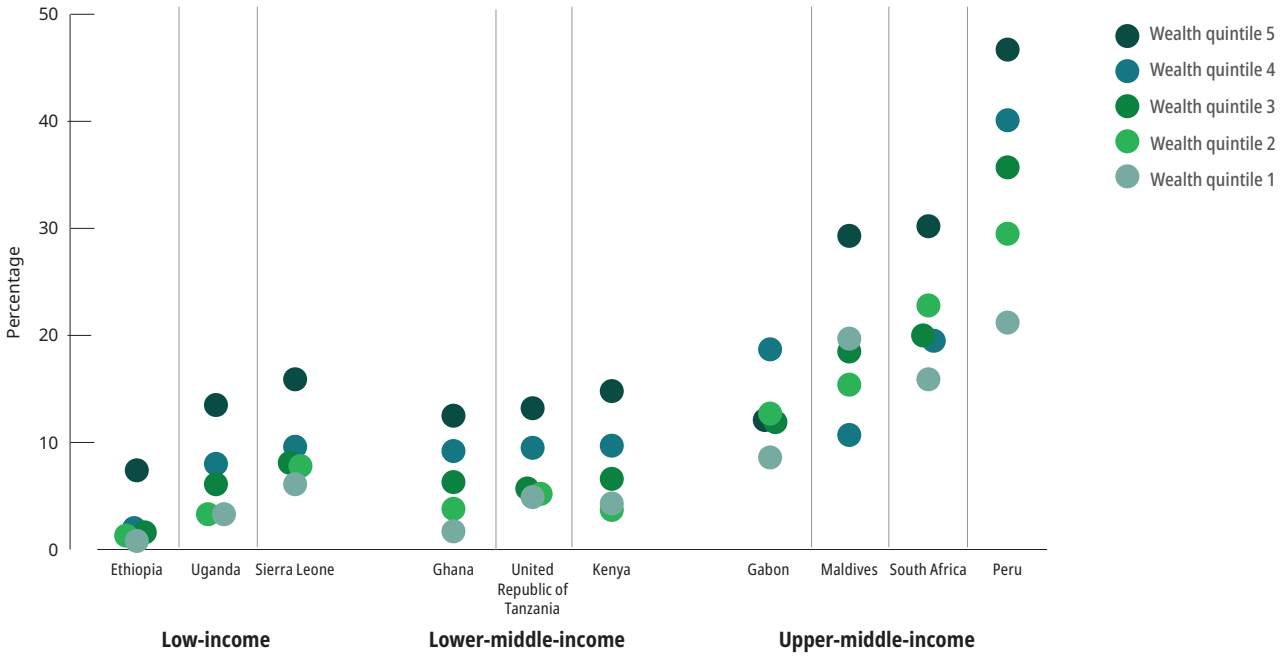


FIGURE 7:
Percentage of adolescents aged 15–19 years with overweight by wealth quintile, by country income classification

Note: Wealth quintile 1 is the poorest group, and wealth quintile 5 is the wealthiest group.
Source: Demographic and Health Surveys.

Obesity is rising at a faster rate than overweight among school-age children and adolescents

Globally, 8 per cent of children and adolescents aged 5–19 years were living with obesity in 2022, compared with just 3 per cent in 2000 (*Figure 8*). This increase is alarming because it is rising at a faster rate than overweight. Between 2000 and 2022, the prevalence of obesity increased by at least 2.5 times across all age groups (5–9 years, 10–14 years and 15–19 years), while the prevalence of overweight increased by less than twofold. As a result, obesity now represents a larger share of all overweight cases: in 2022, 42 per cent of all children and adolescents aged 5–19 years living with overweight had obesity (163 million out of 391 million), up from 30 per cent in 2000 (58 million out of 194 million) (*Figure 9*).

The rise in obesity is particularly pronounced in some countries and regions: since 2000, the prevalence of obesity among children aged 5–19 years tripled, reaching high levels (at least 10 per cent), in 17 countries. Of these 17 countries, 58 per cent are in East Asia and the Pacific and Latin America and the Caribbean.

The high percentage of children aged 5–9 years affected by obesity is particularly concerning. In 2022, almost half of all children aged 5–9 years affected by overweight were classified as living with obesity (48 per cent or 70 million out of 147 million). The earlier obesity begins in childhood, the longer the child is exposed to serious health risks, and the greater the likelihood that these risks will persist into adulthood.[151]

Only 1 per cent of children aged less than 5 years are living with obesity globally. As indicated in *Box 6*, obesity in children aged less than 5 years is defined using a different indicator and different threshold than in children and adolescents aged 5–19 years, and therefore the data are not comparable.

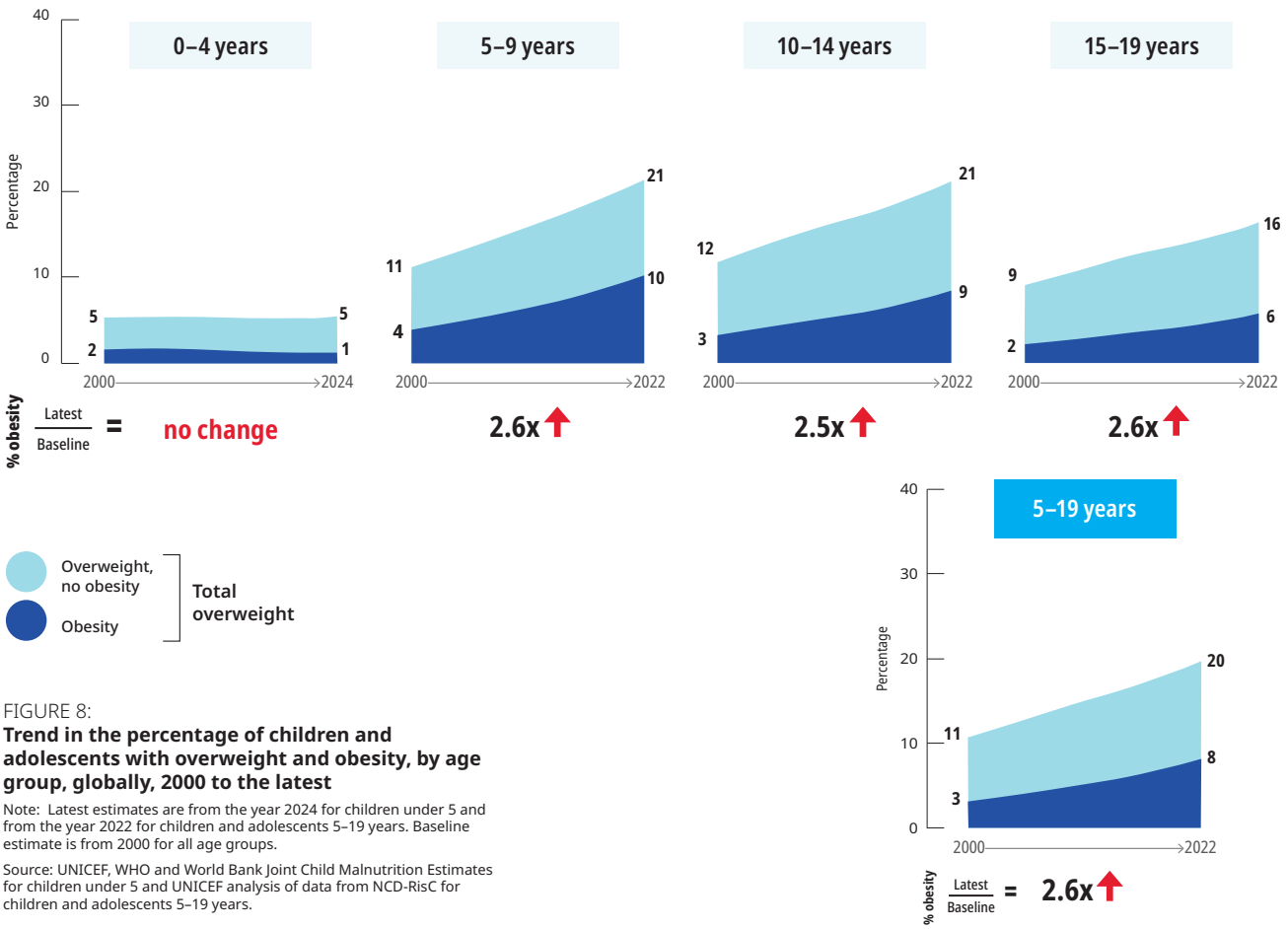


FIGURE 8:
Trend in the percentage of children and adolescents with overweight and obesity, by age group, globally, 2000 to the latest

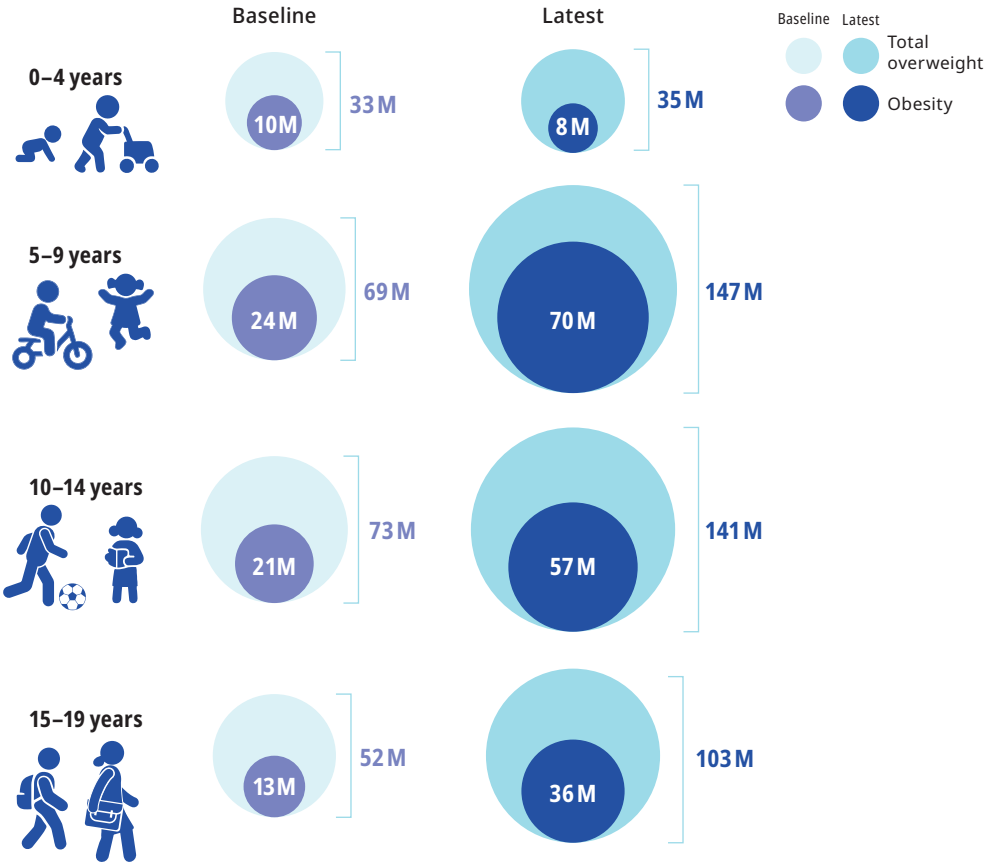
Note: Latest estimates are from the year 2024 for children under 5 and from the year 2022 for children and adolescents 5–19 years. Baseline estimate is from 2000 for all age groups.

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

FIGURE 9:
Trends in number of children and adolescents with overweight and obesity, by age group, globally (in millions)

Note: Latest estimates are from the year 2024 for children under 5 and from the year 2022 for children and adolescents 5–19 years. Baseline estimate is from 2000 for all age groups. M = millions.

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



In 2025, the global prevalence of obesity among school-age children and adolescents exceeded underweight for the first time

As the prevalence of obesity continues to rise, there has been a steady fall in the prevalence of underweight among children and adolescents aged 5–19 years (*Figure 10*); this shift signals a global transition from a predominance of underweight to a predominance of obesity.

The year 2025 marks a historic turning point: for the first time, the global prevalence of obesity among school-age children and adolescents has surpassed that of underweight (9.4 per cent versus 9.2 per cent). This amounts to an estimated 188 million children and adolescents aged 15–19 years living with obesity in 2025, compared with 184 children and adolescents living with underweight. Obesity now exceeds underweight in all regions of the world, except sub-Saharan Africa and South Asia (*see Annex 1*).

Different age groups are at varying stages of the transition from a predominance of underweight to a predominance of obesity. Globally, the 'crossover'– the point at which the prevalence of underweight no longer exceeds obesity – took place in 2019 for children aged 5–9 years. If current trends continue, the crossover is projected to occur in 2028 for adolescents aged 15–19 years, 2029 for adolescents aged 10–14 years, and beyond 2030 for children aged less than 5 years.

Annex 1 shows the estimated timings of the crossovers by region. The crossovers took place last century for all age groups of school-age children and adolescents in Latin America and the Caribbean, the Middle East and North Africa, North America and Western Europe; by 2008 in Eastern Europe and Central Asia; and by 2020 in East Asia and the Pacific. In Eastern and Southern Africa and West and Central Africa, crossovers for children aged 5–9 years are projected to take place by 2027 and after 2030, respectively, and beyond 2030 for adolescents aged 10–14 years and 15–19 years. Of all regions, South Asia had the widest gap between the prevalence of underweight and obesity at the start of the 2000s; while this gap has narrowed considerably across all age groups, crossovers will not occur for any age group until after 2030.

With obesity projected to rise among school-age children and adolescents between 2025 and 2030 both globally (*Figure 10*) and across all regions, except

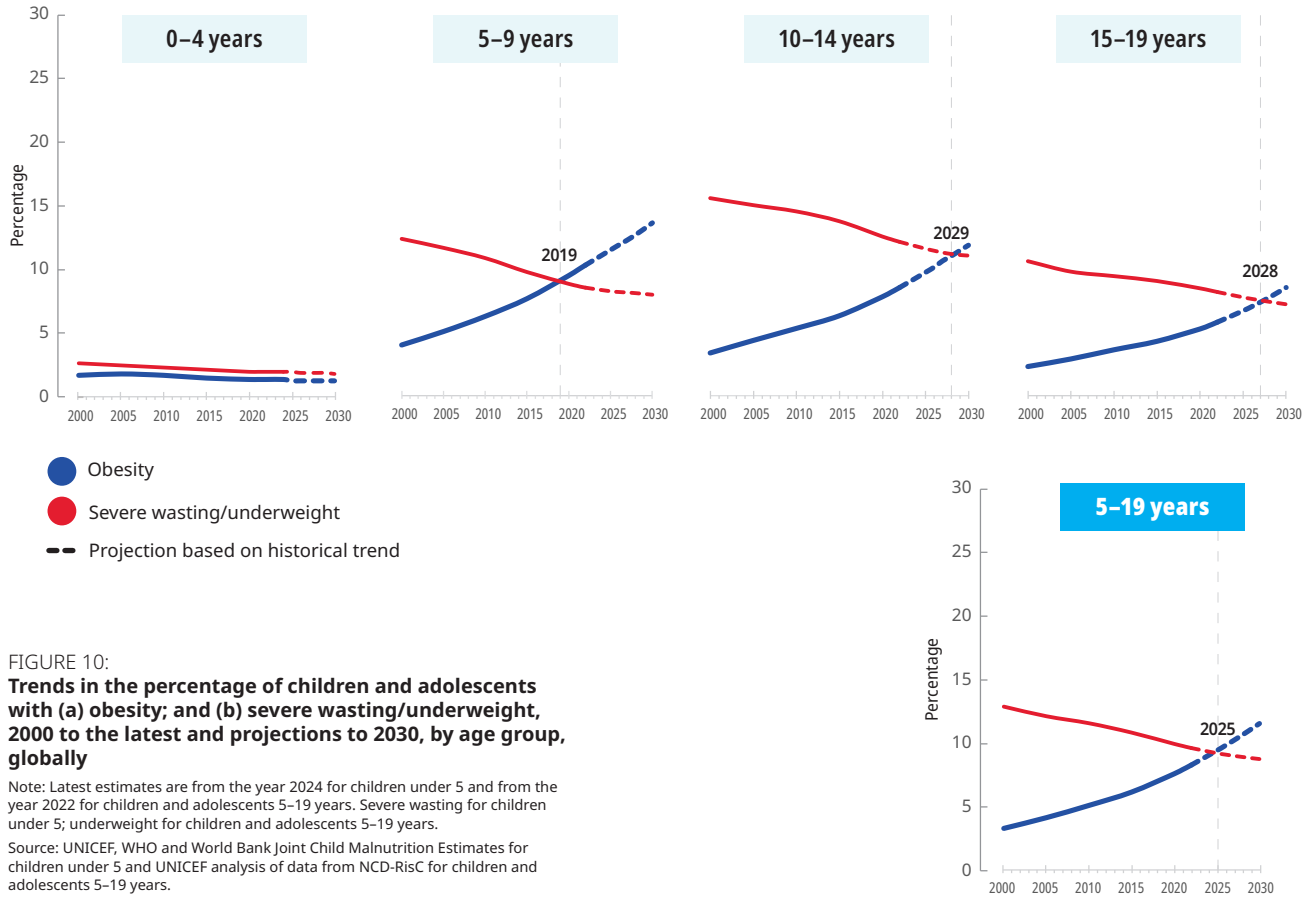


FIGURE 10:
Trends in the percentage of children and adolescents with (a) obesity; and (b) severe wasting/underweight, 2000 to the latest and projections to 2030, by age group, globally

Note: Latest estimates are from the year 2024 for children under 5 and from the year 2022 for children and adolescents 5–19 years. Severe wasting for children under 5; underweight for children and adolescents 5–19 years.

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

for North America and Western Europe, urgent action is needed to halt this upward trend.

FINDING 4.

The diets of children and adolescents are loaded with unhealthy foods and beverages, including ultra-processed foods

The urgent and growing global problem of overweight and obesity is closely linked with shifting dietary patterns among children and adolescents. While unhealthy diets have been a concern in high-income countries for several decades, they are now affecting children and adolescents in low- and middle-income countries, as food environments become increasingly dominated by ultra-processed, energy-dense and nutrient-poor foods and beverages.

Unhealthy foods and beverages are embedded in children's diets from early life

Children's first foods and early food experiences can either help or hinder their growth and development.[1, 46] They can also shape young children's taste preferences and dietary practices in ways that can be beneficial or harmful. For example, repeated exposure to vegetables increases acceptance and intake, while frequent consumption of sweet foods and beverages amplifies young children's innate preference for sweetness.[13, 14] These early-established dietary preferences and practices often persist into adolescence and adulthood, impacting nutrition and health outcomes in later life.[14, 15]

In response to growing concerns about nutrient-poor, unhealthy diets in early childhood, UNICEF and WHO introduced new indicators in 2021 to monitor the consumption of sweet, salty and fried foods and sweet beverages in children aged 6–23 months. While current data are insufficient to produce regional or global estimates, data from 20 low- and middle-income countries reveal concerning patterns (*see Spotlight 1*). In two-thirds of these countries, more than 50 per cent of young children consumed sweet foods or beverages during the previous day (*Figure 11*). Consumption of these sweet foods and beverages is particularly high in upper-middle-income countries, where such products are more widely available and affordable, compared to low-income countries.

SPOTLIGHT 1

CONSUMPTION OF UNHEALTHY FOODS AND BEVERAGES IN EARLY LIFE

In response to growing concerns about shifting dietary patterns among young children, UNICEF and WHO introduced a set of new indicators to monitor their diets in 2021.[163] These indicators capture data on the consumption of sweet foods and beverages (e.g., sweet beverages, confectionery, cakes, biscuits and frozen treats), salty and fried foods (e.g., chips, savoury snacks and instant noodles) and the absence of nutritious and healthy foods (e.g., no vegetables or fruits).

National data on the consumption of these unhealthy foods and beverages is available for 20 low- and middle-income countries (*Figure 11*). Our analysis shows that in two-thirds of these countries, more than 50 per cent of children aged 6–23 months consumed a sweet beverage or food during the previous day. The percentage is considerably higher among young children living in upper-middle-income countries (more than 60 per cent in Azerbaijan, Ecuador and Thailand) than in low-income countries (33 per cent or less in Burkina Faso and Mozambique). This disparity may be linked to greater availability, affordability and promotion of commercially produced sweet products in upper-middle-income countries compared to low-income countries. Across all countries, the percentage of young children consuming salty and fried foods is lower than sweet products, but exceeds 25 per cent in approximately two in five countries.

We also examined the percentage of children aged 6–23 months consuming no eggs or flesh foods and no vegetables or fruits. Eggs or flesh foods should be eaten daily by children aged 6–23 months because they provide a dense, high-quality source of protein and essential micronutrients for growth and development.[164, 165] Vegetables and fruits are an important source of micronutrients and fibre, and consuming them protects children against diet-related non-communicable diseases in later life.[164] *Figure 11* shows that young children in low-income countries are more likely than those in upper-middle-income countries to lack these nutritious foods in their diets. For example, about two-thirds of children in Burkina Faso and Mozambique did not consume eggs or flesh foods during the previous day, compared to less than one in four children in Azerbaijan, Ecuador and Thailand. Eggs, flesh foods, vegetables and fruits tend to be relatively expensive in lower-income countries.[166] Therefore, the same income constraints that limit young children's access to unhealthy foods in low-income countries may also limit access to these nutritious and healthy foods.

Several lower-middle-income countries – such as Kenya, Lebanon, Nepal and Senegal – have a high percentage of children consuming sweet and salty/fried foods and a high percentage of children missing nutritious and healthy foods in their diets. For example, 73 per cent of children in Nepal consumed a sweet product during the previous day, yet 63 per cent did not consume eggs or flesh foods and 33 per cent did not consume fruits or vegetables. Young children in these countries are particularly exposed to the triple burden of malnutrition (stunting, overweight and micronutrient deficiencies) because their diets are more likely to contain inadequate quantities of essential nutrients and excessive amounts of sugar, salt and fat.

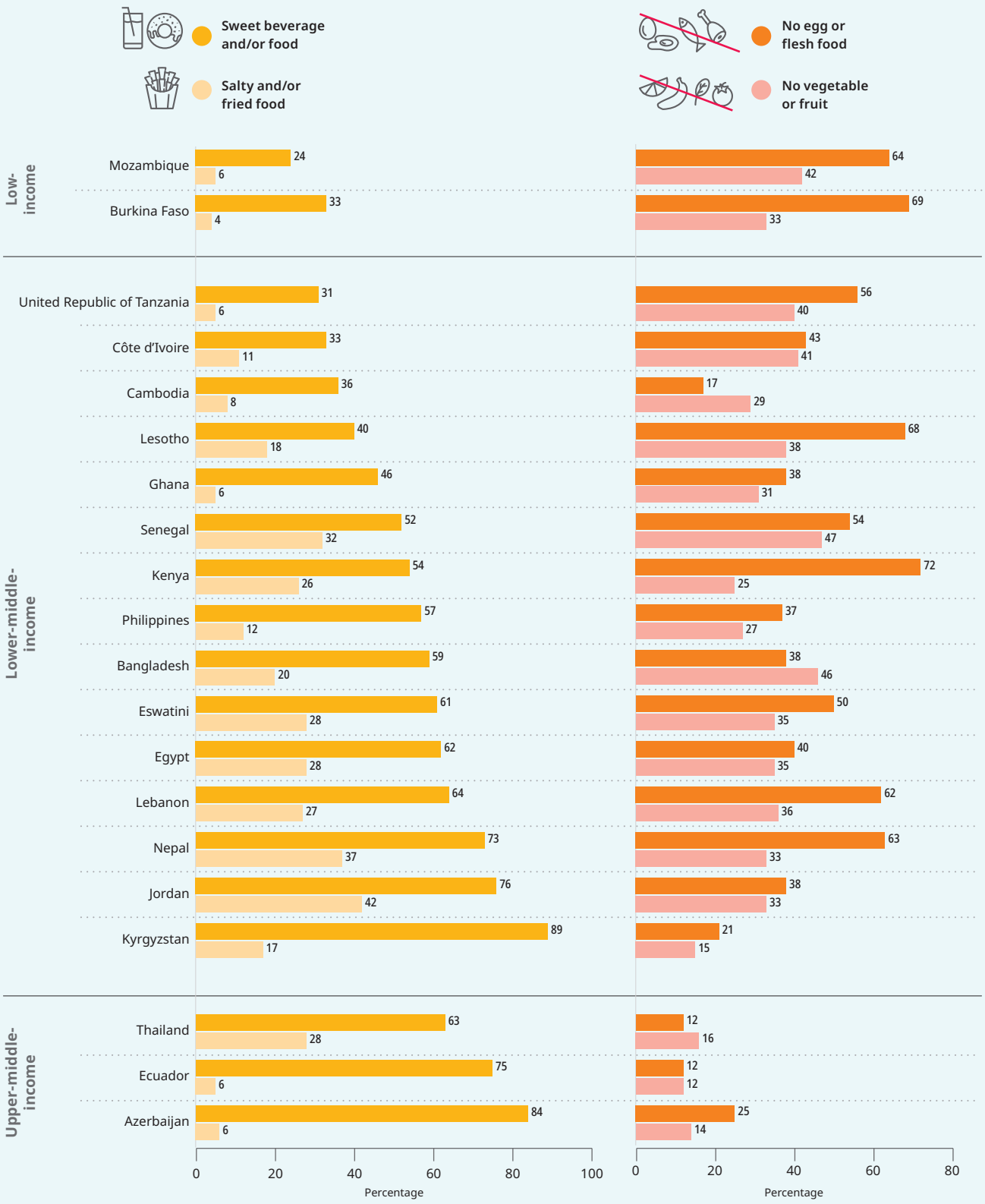


FIGURE 11:
Percentage of children aged 6–23 months consuming sweet beverages and/or foods, salty and/or fried foods, not consuming vegetables or fruit and not consuming eggs or flesh foods, by country

Source: UNICEF Global Databases on Infant and Young Child Feeding, 2024.

In several lower-middle-income countries – including Kenya, Lebanon, Nepal and Senegal – a large percentage of young children are consuming sweet, salty and fried foods, while few are consuming nutritious foods such as vegetables, fruits, eggs and flesh foods (e.g., meat, poultry and fish). This dietary imbalance increases the risk of the triple burden of child malnutrition – stunting, micronutrient deficiencies and overweight – three forms of malnutrition that sometimes co-exist in the same country, community, household and even individual.

The commercial sector plays a central role in manufacturing the unhealthy foods and beverages that shape young children's diets in low- and middle-income countries. For example, evidence shows that more than one in three children aged 6–23 months consumed a commercial snack food or beverage during the previous 24 hours in Côte d'Ivoire and Mali, while more than one in two children consumed these products in Dakar, Senegal, and Phnom Penh, Cambodia.[152, 153] A multi-country study across nine low- and middle-income countries found that commercial snack foods and beverages contributed between 13 per cent and 38 per cent of children's total energy intake.[154]

Children are increasingly fed ultra-processed foods and beverages from a very young age – in the form of commercially produced complementary foods, snack foods and beverages.[155] Studies have found that ultra-processed foods and beverages contribute to 38 per cent of energy intake among children aged 12–24 months in Brazil, 39 per cent among pre-school-aged children in Mexico, and 46 per cent among children aged 21 months in the United Kingdom.[156–158] Such products can displace more nutritious and healthy foods from young children's diets, including breastmilk, and increase the risk of all forms of malnutrition.[24]

Regional and global data are available on the absence of nutritious and healthy food groups in the diets of young children. Globally, 54 per cent of children aged 6–23 months did not consume eggs or flesh foods on the previous day and 39 per cent did not consume any vegetables or fruits (*Figure 12*). These nutritious foods are more likely to be absent from the diets of children in South Asia, Eastern and Southern Africa and West and Central Africa – regions with the highest prevalence of stunting and wasting in young children.[2]

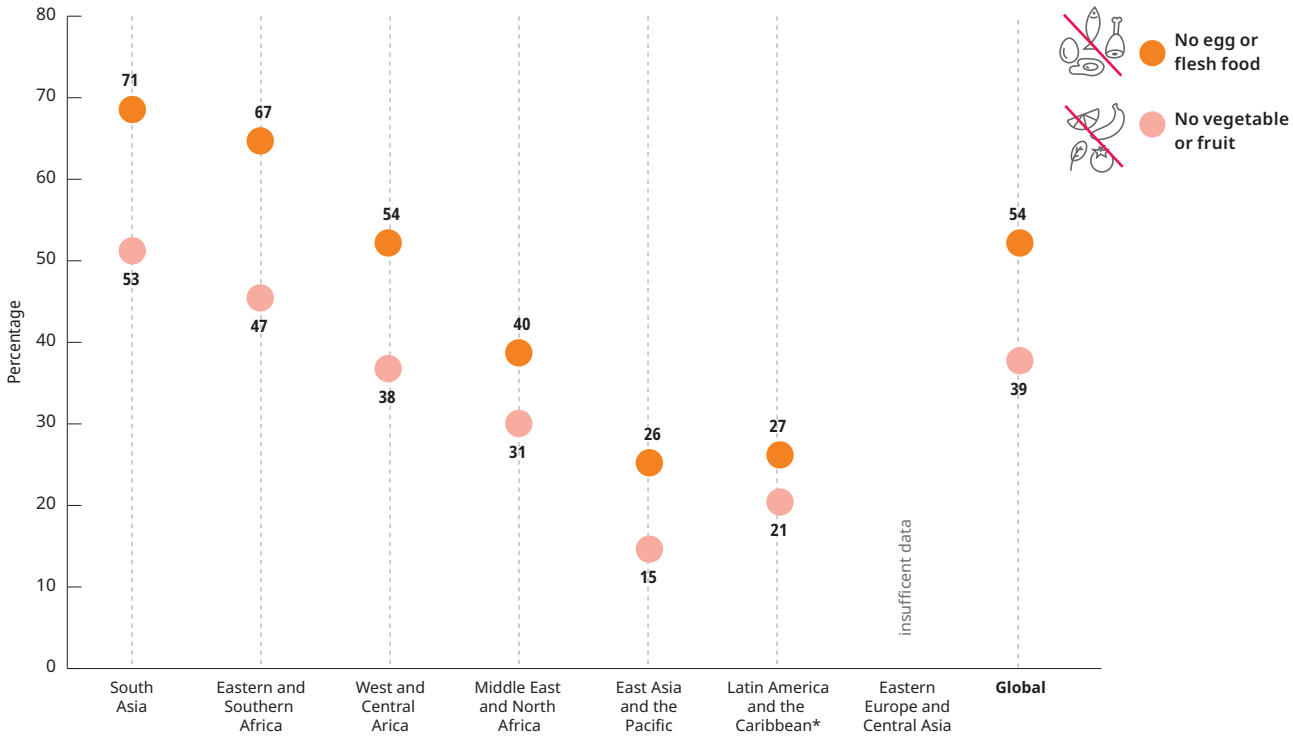


FIGURE 12:
Percentage of children aged 6–23 months not consuming vegetables or fruit and not consuming eggs or flesh foods, by UNICEF region and globally

Note: *Interpret with caution; low population coverage.
Source: UNICEF Global Databases on Infant and Young Child Feeding, 2024.

Globally, children living in rural areas and belonging to the poorest households are more likely to miss out on these nutritious foods, compared with those in urban areas and belonging to the wealthiest households (*Figure 13*). There is no significant difference at the global level between boys and girls.

Unhealthy foods and beverages, including those that are ultra-processed, are becoming staples in adolescents' diets

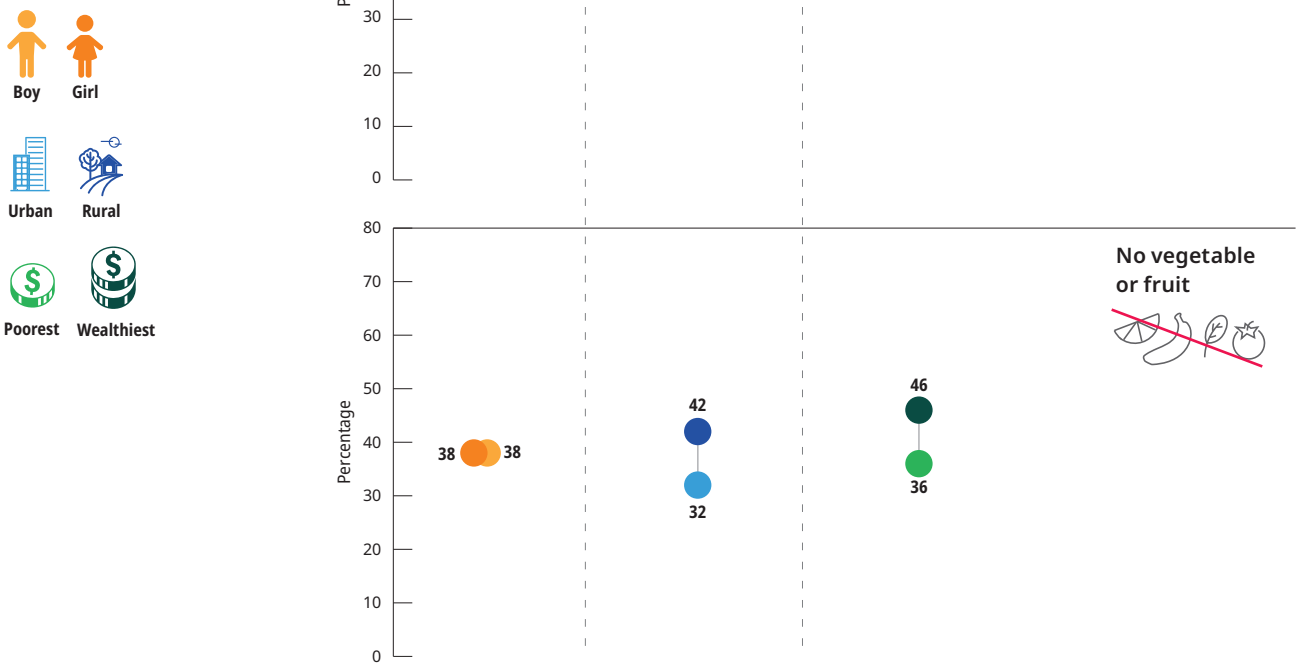
For children and adolescents aged 2–14 years, cross-country comparisons of dietary data are constrained by the lack of standardized indicators, data collection methods and age group categories, as well as the absence of any nationally representative data in some countries.[159] However, dietary data on older adolescents aged 15–19 years are being collected across countries through the Gallup World Poll.[128]

We analysed data from the Gallup World Poll to examine the diets of older adolescents. Evidence suggests that these adolescents are more likely to exceed the WHO guidance on sugar intake if they consume a single soft drink or more than one sugary food or beverage and are more likely to exceed the WHO guidance on salt intake if they consume more than one salty processed food.[160] *Figure 14* shows that globally, a staggering 60 per cent of adolescents consumed more than one sugary food/beverage during the previous day, 32 per cent consumed soft drinks, and 25 per cent consumed more than one salty processed food during the previous day. These data show how common these markers of nutrient-poor, unhealthy diets have become.

Some regions are more affected by unhealthy diets than others. Eastern Europe and Central Asia, the Middle East and North Africa and Latin America and the Caribbean rank in the top three regions for the percentage of adolescents consuming soft drinks and sweet beverages and foods. The consumption of these foods and beverages is lower in South Asia and sub-Saharan Africa but is still alarmingly high. For example, in Eastern and Southern Africa, about half of adolescents consumed more than one sweet food or beverage during the previous day, and about one in four consumed soft drinks and more than one salty, processed food.

FIGURE 13:
Percentage of children aged 6–23 months not consuming vegetables or fruit and not eating eggs or flesh foods, by sex, residence, and wealth group, globally

Source: UNICEF Global Databases on Infant and Young Child Feeding, 2024



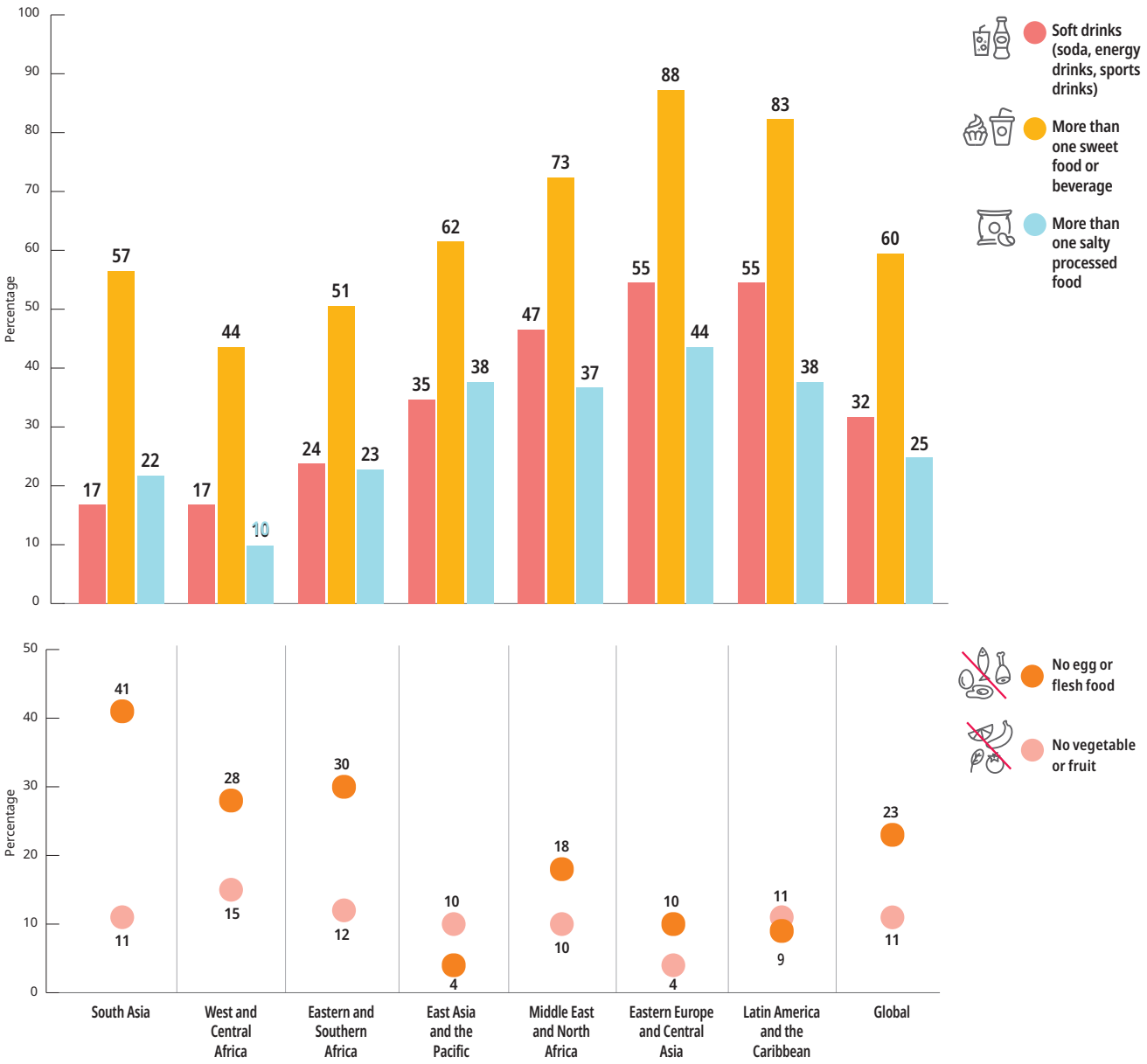


FIGURE 14:
Percentage of adolescents aged 15–19 years (a) consuming soft drinks, more than one sugary food or beverage and more than one salty processed food; (b) not consuming vegetables or fruit and not consuming eggs or flesh foods, by UNICEF region and globally

Source: Gallup World Poll surveys between 2021 and 2024.

Globally, adolescents in urban areas and those from the wealthier households are more likely to consume foods and beverages high in sugar and salt than their peers in rural areas and those belonging to the poorest households. However, the percentages for rural areas and the poorest households are surprisingly high (*Figure 15*). For example, more than half of adolescents in rural areas (53 per cent) and belonging to the poorest households (52 per cent) consumed more than one sugary food/beverage during the previous day. This analysis shows just how exposed adolescents are to unhealthy foods and beverages, regardless of where they live and the economic status of their households. Consumption levels are similar among girls and boys; however, a slightly higher percentage of boys than girls consumed soft drinks during the previous day (36 per cent versus 28 per cent).

Adolescents are the largest consumers of ultra-processed foods in most upper-middle and high-income countries with available data. Ultra-processed foods and beverages account for at least one-third of total energy intake of adolescents in Argentina,

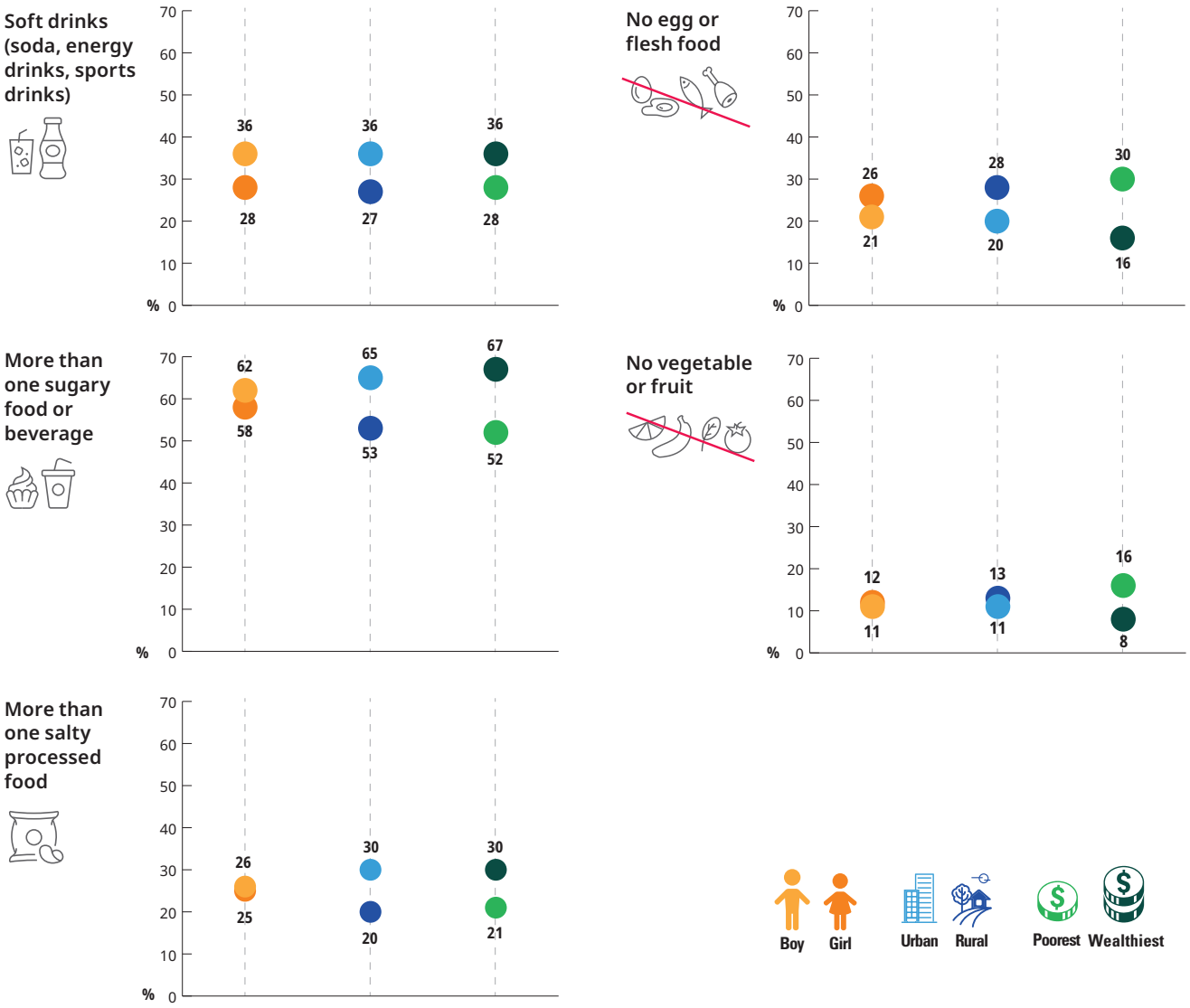


FIGURE 15:
Percentage of adolescents aged 15–19 years consuming soft drinks, consuming more than one sugary food or beverage, consuming more than one salty processed food, not consuming vegetables or fruit and not consuming eggs or flesh foods, by sex, residence, and wealth group, globally

Source: Gallup World Poll surveys between 2021 and 2024.

Belgium, Chile and Mexico and at least half of total energy intake in Australia, Canada, the United States and the United Kingdom.[24, 161] Such high levels of consumption seemingly fit the description of a staple food – i.e., "one that is eaten regularly and in such quantities as to constitute the dominant part of the diet and supply a major proportion of energy and nutrients".[162]

We examined the extent to which nutritious foods are absent from the diets of adolescents. *Figure 14* shows that Eastern and Southern Africa, South Asia and West and Central Africa have a higher percentage of adolescents that are missing eggs and flesh foods in their diets (greater than 25 per cent) compared with other regions (less than 20 per cent).

There is a pressing need to increase availability of high-quality data on the diets of children and adolescents worldwide to monitor progress, inform policies and guide effective interventions to address nutrient-poor and unhealthy diets.[159] Nationally representative datasets using standardized indicators of children's and adolescents' diets are essential to enable comparisons both within and between countries.

THE DRIVERS OF UNHEALTHY FOOD ENVIRONMENTS

This chapter analyses how food environments across the world are increasing children's and adolescents' exposure to unhealthy foods and beverages, including those that are ultra-processed, even during humanitarian crises.

These foods and beverages are widely available, inexpensive and aggressively marketed in the places where children live, learn and play. Unethical business practices of the food and beverage industry undermine efforts to implement legal measures and policies to protect children from nutrient-poor, unhealthy diets. However, with determined action, governments and partners can reshape food environments and uphold children's right to food and nutrition.

ANALYSIS 1.
Inexpensive ultra-processed foods and beverages are flooding retail markets and infiltrating schools

Households are increasingly reliant on food purchases rather than homegrown or self-produced foods – a trend that affects not only urban families but also farming households and the rural poor.[167, 168] As a result, children's and adolescents' diets are shaped by what foods and beverage are available and affordable in retail settings and in schools.[169]

Cheap, ultra-processed foods and beverages increasingly dominate food retail environments, especially in poorer neighbourhoods

Over recent decades, food retail environments have transformed.[170] What was once a locally supplied sector of family- and community-run shops, markets and street vendors is increasingly being displaced by modern convenience stores, supermarkets, hypermarkets, fast food chains and online food platforms, fed by global supply chains.[85, 171–173] The ultra-processed food and beverage industry uses these modern food retailers as key channels for market expansion, given their considerable potential to increase sale volumes.[86]

In high-income countries, the transition to modern food retailers began in the mid-twentieth century.[174] As these countries became increasingly saturated with ultra-processed foods and beverages, the growth momentum shifted to emerging and developing economies.[85, 86] Our analysis of trends from 2009 to 2023 shows that the density of modern food retailers in upper-middle-income countries has risen rapidly alongside diminishing yet resilient traditional retailers (*see Spotlight 2*).[170]

Modern food retailers are also establishing a foothold in low- and lower-middle-income countries, including in sub-Saharan Africa, though traditional retailers continue to play a vital role in food access.[175] The ultra-processed food and beverage industry also leverages traditional retailers throughout the world to deepen market penetration, using extensive local distribution networks to reach rural and remote areas.[86]

Worldwide sales of ultra-processed foods and beverages are rising rapidly, driven by rapid growth in middle-income countries.[85, 86] For example, UNICEF studies in the United Republic of Tanzania and Zimbabwe – both lower-middle-income countries – found that retail sales of unhealthy, ultra-processed foods, sugary beverages and fast food increased by 30 per cent and 39 per cent, respectively, between 2021 and 2024.[176, 177] Our analysis of packaged foods and beverages in these countries revealed that 82 per cent of these products are ultra-processed, highlighting the overwhelming dominance of these products in retail environments.[178, 179]

Even commercially produced complementary foods for young children are often ultra-processed, such as commercial cereals, purees, snacks and beverages.[24, 180, 181] While consumption of these products is highest in high-income countries, it is also rising rapidly in low- and middle-income countries.[24, 180, 181] Our research across seven Southeast Asian countries found that nearly half (48 per cent) of commercially produced complementary foods marketed as suitable for children under 3 years of age are ultra-processed

and almost one-third contain additives not permitted under Codex Alimentarius standards and guidelines.[181] Such practices raise serious concerns about the quality and safety of these foods for children during a critical period in their growth and development.

Evidence from both high- and middle-income countries shows that poorer neighbourhoods are disproportionately exposed to ultra-processed foods and beverages through retail settings. These neighbourhoods often have a higher density of convenience stores, fast food outlets and unhealthy food marketing, while access to affordable nutritious and healthy foods is limited.[182–185] Supermarkets tend to promote ultra-processed foods more heavily in low-income areas.[85, 186]

For example, our research in Argentina, Brazil, Chile, Costa Rica and Mexico found that retailers were more likely to display sweet snacks and sugary cereals prominently at entrances and within children's reach in poorer communities than in wealthier communities (*Figure 17*).[187]

Adolescents are particularly vulnerable to unhealthy retail environments as they acquire discretionary spending power and greater autonomy in food choices, often without parental oversight. Our study in Chengdu Province (China), Indonesia, the Philippines and Thailand found that nine out of ten adolescents making food purchases from supermarkets or convenience stores most frequently bought sweet and salty snacks from these retailers – such as confectionery, biscuits, chips and ice-cream (*see Spotlight 2*).[188–191]

SPOTLIGHT 2

CHILDREN AT RISK IN RETAIL FOOD ENVIRONMENTS

During the past five years, UNICEF has explored how retail environments are evolving and shaping food purchases by and for children. This Spotlight highlights key findings from a series of studies at global level and across countries in East Asia and the Pacific, Eastern and Southern Africa, Europe and Central Asia, and Latin America and the Caribbean.

The shift to modern food retailers is making it easier for children and adolescents to access ultra-processed foods and beverages

Traditional retail markets – such as family-run and community-run shops, fresh food markets, kiosks, street vendors and mobile vendors – once dominated food sales in many parts of the world. But they are being displaced by modern retail outlets, especially modern convenience stores, groceries, supermarkets and hypermarkets – alongside the expansion of the ultra-processed food and beverage industry.

UNICEF and Deakin University examined trends in retail food environments across 97 countries from 2009 to 2023.[170] The analysis found a marked rise in the density of 'chain' outlets (convenience stores, supermarkets and hypermarkets with more than 10 outlets) alongside a decline in the density of 'non-chain' outlets (small grocery stores, kiosks and market stalls) (*Figure 16a and 16b*). These trends were observed across all regions except for North America, where the density of chain outlets has fallen slightly.

In high-income countries, the shift to modern retail outlets began more than 50 years ago, though the density of these outlets continues to grow, except in North America. Upper-middle-income countries are experiencing the steepest rise in the density of modern outlets, and there has also been a steady increase in low-income and lower-middle-income countries – albeit from a low baseline. These trends have contributed to a 17 per cent increase in grocery sales from chain outlets and an 11 per cent increase in the share of unhealthy food sold through chain outlets.

Chain outlets have considerable market power and maintain strong ties with multinational food manufacturers. They influence food access and diets by facilitating the widespread availability and promotion of unhealthy foods and beverages, including those that are ultra-processed. More than half of unhealthy food purchases are now made in chain outlets in East Asia and the Pacific, Europe and Central Asia, the Middle East and North Africa, Latin America and the Caribbean, and North America (*Figure 16c*).

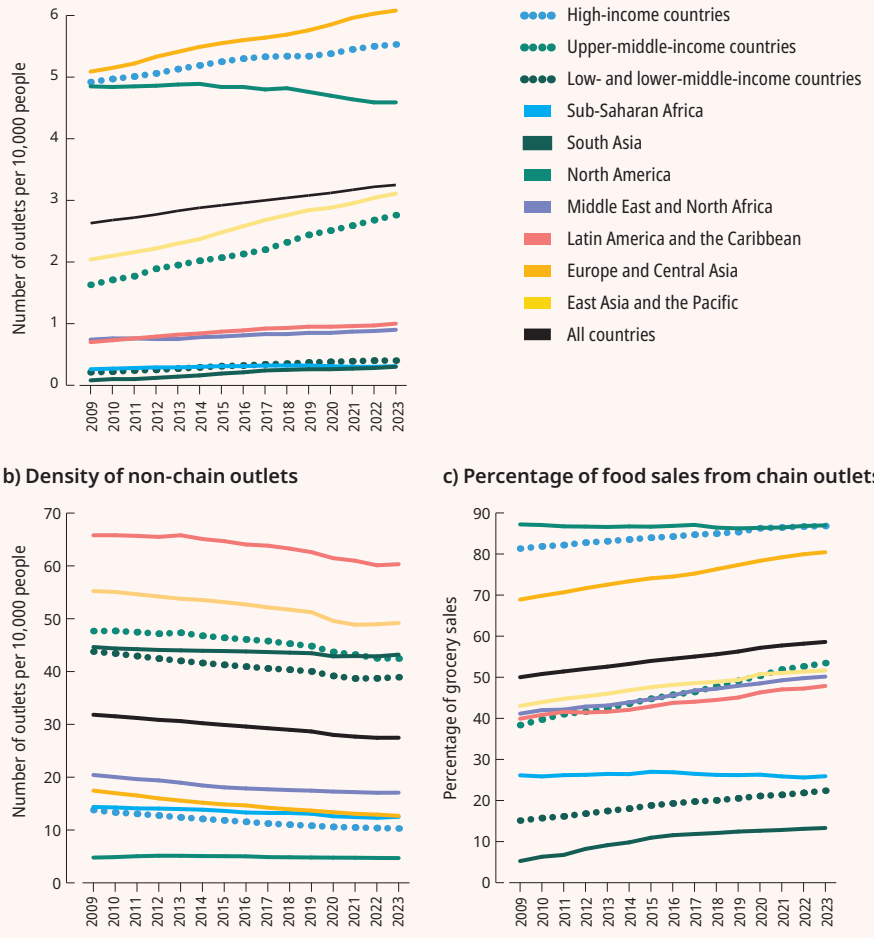
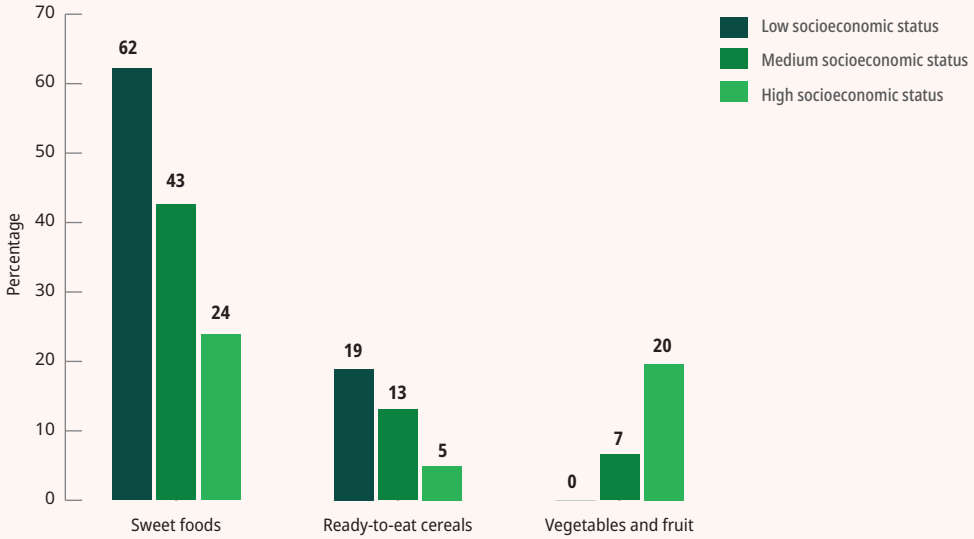


FIGURE 16: **Trends over time (2009–2023) by region and country income group in the (a) density of chain outlets; (b) density of non-chain outlets; and (c) percentage of food sales from chain outlets**

Source: Adapted from Scapin, Tailane et al., 'Global food retail environments are increasingly dominated by large chains and linked to the rising prevalence of obesity', *Nature Food,* vol. 6, no. 3, 2025, pp. 283–295.

FIGURE 17:
Percentage of stores offering sweet snacks, ready-to-eat cereals, and vegetables and fruit in the reach of children and adolescents in the entrance of stores, by the socioeconomic status of the area, Argentina, Brazil, Chile, Costa Rica and Mexico



However, non-chain outlets also sell these ultra-processed foods and beverages, and while they may lack the sophisticated marketing strategies used by chains, they have substantial market penetration, especially in lower-income countries.

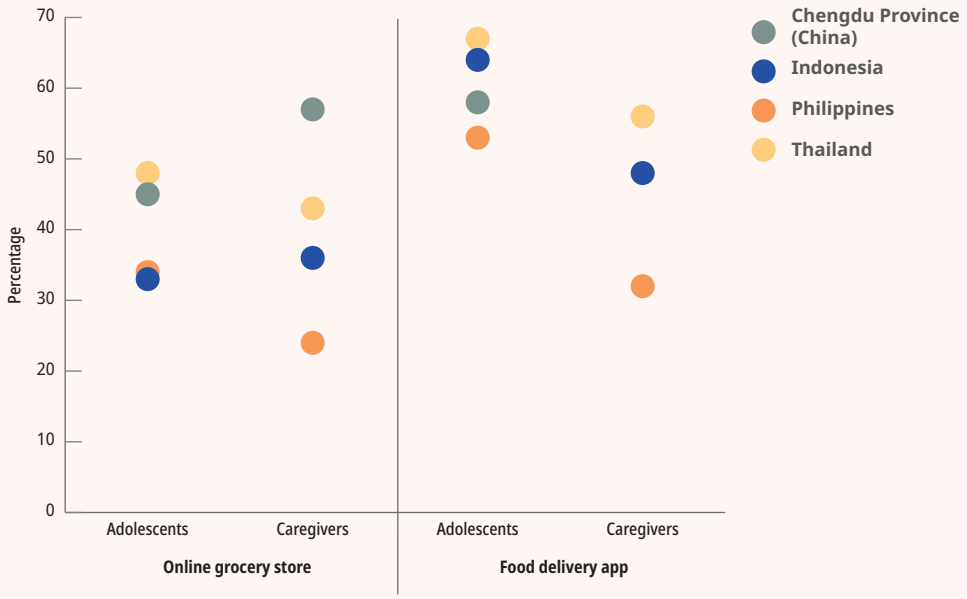
UNICEF and Deakin University also conducted in-depth analyses in four emerging economies in East Asia and the Pacific – China, Indonesia, the Philippines and Thailand – all of which have experienced a rapid rise in the number of modern food outlets and per capita sales of ultra-processed foods and beverages.[192–195] As the number of modern food outlets grows, so too do opportunities for adolescents to access ultra-processed foods and beverages. In these countries, more than two-thirds of adolescents (13–19 years) and caregivers of younger children (<12 years) purchase food from supermarkets or convenience stores.[188–191]

Nine in ten adolescents (87 per cent to 93 per cent) said that their most frequent buys were unhealthy packaged snacks, such as confectionery, biscuits, chips and ice-cream.

Children and adolescents are deliberately targeted by retailers, especially in poorer communities

Modern retailers – working in close collaboration with manufacturers – strategically

FIGURE 18:
Percentage of adolescents aged 13–17 years and caregivers of children aged less than 12 years who used online grocery stores or food delivery apps to purchase food in 2022, by type and country



decide what foods to sell and how to display them. They often deliberately target children and adolescents, prioritizing profit over public health nutrition, especially in low-income areas.

A UNICEF study across Argentina, Brazil, Chile, Costa Rica and Mexico found that in-store product placement varied by neighbourhood wealth.[187] In poorer areas, sweet snacks and sugary cereals were prominently displayed at entrances and within children's reach. In contrast, fruits and vegetables took these prime positions in wealthier communities (*Figure 17*). Such practices exploit economic vulnerability and deepen inequities in access to nutritious food for children.

Another UNICEF study in Argentina, Brazil, Colombia and Mexico found that retailers use a barrage of tactics to target children with unhealthy foods: product displays at children's eye level, branded displays, cartoon characters, prize giveaways and limited-time discounts.[187] In contrast, retailers rarely use these tactics for healthier products.

However, it is not just modern retailers that target children. Our research in the United Republic of Tanzania and Zimbabwe shows that traditional outlets operating around schools – such as kiosks, mobile vendors, tuck shops and school canteens – are rapidly adapting to meet growing market demand from children.[176, 177] They offer inexpensive ultra-processed snacks and sugary beverages that exploit children's limited purchasing power, taste preferences and routines. The ultra-processed food and beverage industry strategically invests in this market by supplying branded fridges, umbrellas and child-targeted promotions to ensure products are visible and appealing to children.

The growth of online grocery stores and food delivery apps is expanding access to unhealthy foods and beverages

The digital shift in food environments is making things worse for children. Online grocery stores and food delivery apps are most common in high-income countries but are expanding fast in middle-income countries – accelerated by COVID-19-era lockdowns. Adolescents are now regular users across several large countries in East Asia and the Pacific: the UNICEF survey in Chengdu Province (China), Indonesia, the Philippines and Thailand found that more than one-third used online grocery platforms the previous week and more than half ordered through food delivery apps (*Figure 18*).[188–191] Caregivers with children under 12 years of age also used these services, albeit less frequently.

A 2023 supermarket audit covering Azerbaijan, Kazakhstan and North Macedonia in Europe and Central Asia found online food retail platforms at varying stages of development and growth.[196] In Azerbaijan, processed meats featured most prominently on the home page of these platforms, while in North Macedonia, chips and savoury biscuits made up between 55 per cent and 100 per cent of home page product listings. In Kazakhstan, up to 69 per cent of products displayed on promotional web pages were chips, confectionery, sweet biscuits or soft drinks.

Online grocery stores and meal delivery platforms offer even more opportunity to access ultra-processed and fast foods: one-third of adolescents used online grocery platforms the previous week, and more than half ordered food or drinks through delivery apps (*Figure 18*).

Ultra-processed products are not only increasingly available throughout the world but also tend to be more affordable than other foods. As illustrated in *Figure 19*, the relative caloric price of sugary snacks and salty snacks is lower than vegetables/fruits and eggs/flesh foods across all country income groupings.[166] Additional analysis shows that ultra-processed foods are on average 47 per cent less expensive than unprocessed or minimally processed foods and 50 per cent less expensive than processed foods.[197] These price disparities are partly driven by agricultural subsidies – especially in high-income countries – that artificially lower the international commodity prices of key ingredients, such as corn, soy and wheat, as well as the widespread use of preservatives and stabilizers that extend shelf-life.[197–199]

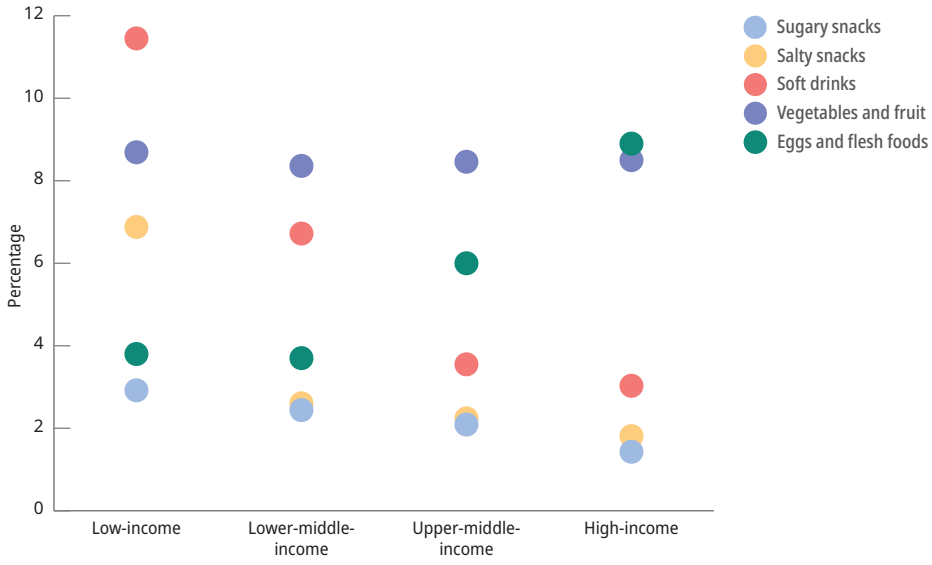
Figure 19 also shows that affordability of sugary and salty snacks and soft drinks increases as countries develop economically, as indicated by the lower relative caloric price in high-income versus low-income countries. This may partly explain why the burden of child overweight shifts from wealthier households to poorer households as countries develop economically.

Refugees displaced by conflict and political instability face unique challenges in meeting their dietary needs due to economic vulnerability, restricted access to nutritious and healthy foods, and reliance on food aid commodities that prioritize calories over quality. In *Spotlight 3*, we report how 10-year-old Rimas and her mother, Eman, struggle to access an affordable, nutritious and healthy diet in the Qushtapa refugee camp on the outskirts of Erbil, Iraq.

FIGURE 19
Relative caloric price of sugary snacks, salty snacks, soft drinks, vegetables and fruit, eggs and flesh foods, by country income status

Source: Headey, Derek D, and Harold H Alderman, 'The relative caloric prices of healthy and unhealthy foods differ systematically across income levels and continents', *Journal of Nutrition,* vol. 149, July 2019, pp. 2020–2033.

Note: Caloric prices are compared with starchy staples.



SPOTLIGHT 3

A MOTHER'S BATTLE FOR NUTRITIOUS AND HEALTHY DIETS IN A REFUGEE CAMP[200]

Ten-year-old Rimas sits cross-legged beside her mother, Eman, in their home in Qushtapa refugee camp on the outskirts of Erbil, Iraq. They are among the more than 175,000 people who fled the civil war in the Syrian Arab Republic and now live in camps across Iraq.

Like many families in the camp, Rimas and her family struggle to afford the fresh foods that are on offer in the shops in the camp. *"Sometimes I go with my mother to the store and see fruits I like, such as strawberries,"* Rimas says. *"But my mother says we can't afford them."*

Eman clarifies, *"I want to cook healthy food for my children. Of course, there are things I wish I could afford – fruit like oranges and bananas because they're really good for children. We can't afford meat every day. But I do my best and I get them what I can afford."*

Refugee camps, often thought of as temporary shelters, have become long-term homes for many displaced families in the region. Over time, they've developed small economies – shops, food stalls, even fast food restaurants. While these provide convenience and a sense of normalcy, they have also introduced an abundance of ultra-processed foods and beverages to the local food environment. Nearly one in three school-age children and adolescents in Iraq (30 per cent) are living with overweight or obesity – a trend that extends to the refugee camps.

"The refugees that are living here came mainly from the small towns in the north of Syria," explains Falah Wadi, Health and Nutrition Officer with UNICEF Iraq. *"They used to have a healthier environment than in the camps, more access to healthy foods like fruits and vegetables. Inside the camp, there are a lot of mini-markets that are selling a lot of unhealthy foods."*

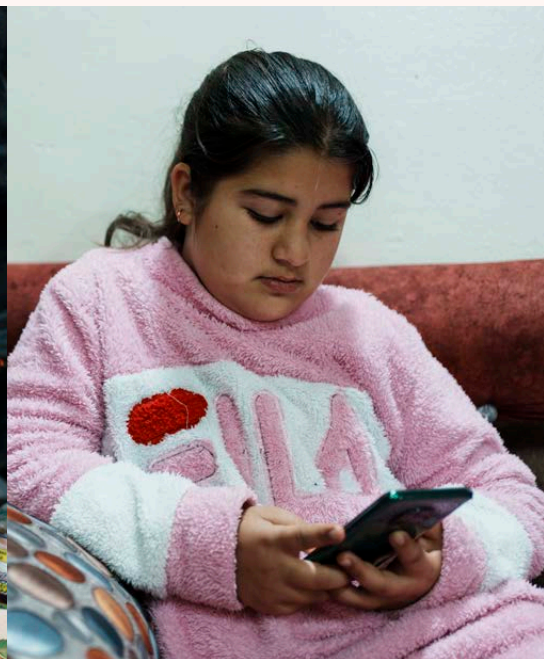
Rimas is well-aware of the unhealthy foods on offer. *"Sometimes I'll come home and then go to the store to buy biscuits or chips. I know these foods are unhealthy. My mother tells me not to eat them, but I crave them."*

Eman does her best to push back. *"My children will buy things and I throw them away and tell them that's unhealthy,"* she says. *"Most children, not just my children, prefer to eat the food they love. They like to order takeout, but I always tell them home-cooked food is healthier".*

Rimas agrees. Still, temptation is everywhere, aided and abetted by the marketing of unhealthy foods. *"I see lots of different things on my phone. I see chocolates, I see cake. I want to ask my mother to buy them for me, but then I shake it off and say, 'no, I can't.'"*

The struggle for healthy food in refugee camps reflects a broader crisis. Decades of conflict and displacement have left millions of displaced families across Iraq and the region facing food poverty, unable to afford the nutritious and diverse diets. Sugary, salty and starchy snacks and soft drinks are often inexpensive compared to whole and minimally processed nutritious foods, such as fruits, vegetables, eggs and poultry.

Despite the difficulties, Eman is determined to give her children the best diet possible. In their small home in Qushtapa camp, she prepares meals with the nutritious foods she can afford and teaches her children the value of home-cooked food.



SPOTLIGHT 4

NAVIGATING SCHOOL FOOD ENVIRONMENTS IN SOUTH ASIA

In South Asia, the prevalence of overweight among school-age children and adolescents is among the lowest of all regions but is rising at a fast pace, while undernutrition and micronutrient deficiency remain major concerns (*see Finding 1*). To better understand the food environments in and around schools, UNICEF conducted a U-Report poll in 2023 among adolescents aged 13–19 across eight South Asian countries – Afghanistan, Bangladesh, Bhutan, India, the Maldives, Nepal, Pakistan and Sri Lanka. The poll explored both the availability and marketing of food in secondary schools.[201]

Nearly half (48 per cent) of school-going adolescents reported that their schools offer food services, such as canteens or tuck shops. Among these adolescents, about three-quarters (77 per cent) said freshly cooked meals are available. However, less than half (49 per cent) reported access to fresh vegetables and/or fruit (*Figure 20*). In contrast, unhealthy foods and beverages were disturbingly common, including packaged snacks (61 per cent), fast foods (55 per cent) and sugar-sweetened beverages (55 per cent). In fact, more students reported these products as available than fresh vegetables/fruit in Bangladesh, India, Pakistan and Sri Lanka.

There are notable differences between countries. In Bhutan, adolescents reported relatively high availability of freshly cooked meals and fresh vegetables and/or fruit, compared to packaged foods, fast foods and sugar-sweetened beverages. This pattern was reversed in Bangladesh, where packaged and fast foods were more prevalent than healthier alternatives.

Marketing also plays a powerful role in shaping food choices. Almost one in two respondents (47 per cent) reported seeing food brands and logos within their schools – ranging from one in four students in Afghanistan to more than half in India. More than half (53 per cent) of adolescents said that these advertisements influenced their food choices. Reflecting their awareness of this influence, nearly two-thirds (64 per cent) of adolescents expressed support for banning the advertising of unhealthy foods on school grounds.

Adolescents attending schools without food service facilities had even fewer opportunities for healthy meals. Only one in two (52 per cent) reported the availability of freshly cooked meals within walking distance of the school (*Figure 21*). These adolescents were also more likely to report the presence of packaged snacks (76 per cent) and sugar-sweetened beverages (62 per cent).

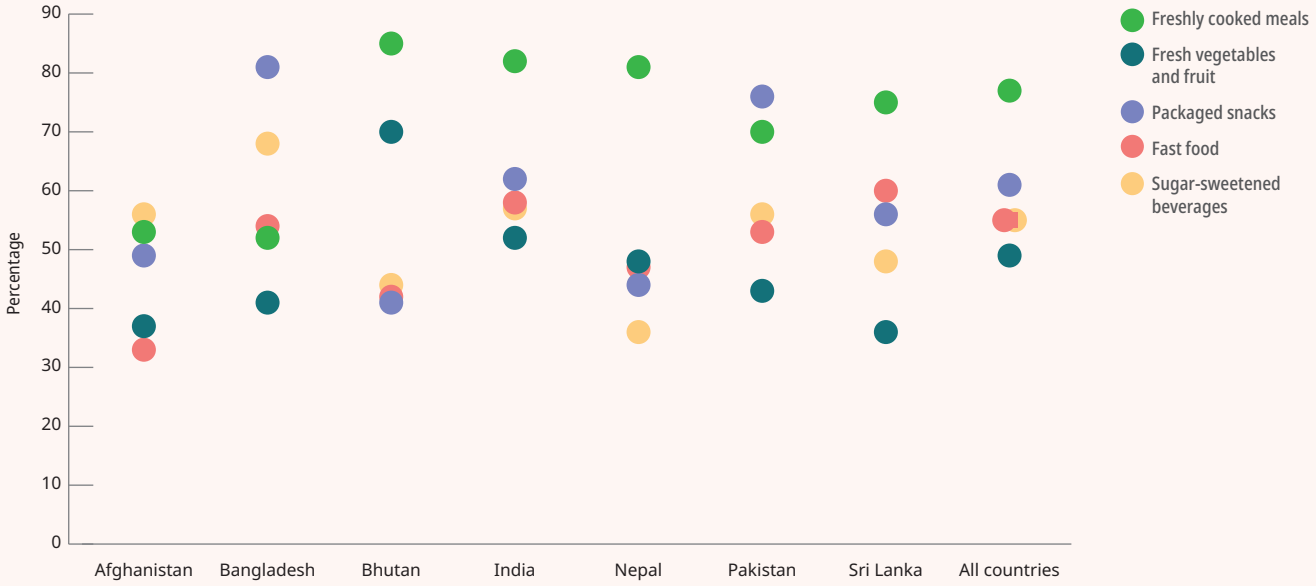


FIGURE 20:
Types of foods and beverages available at food service facilities in schools, by country, South Asia, 2023

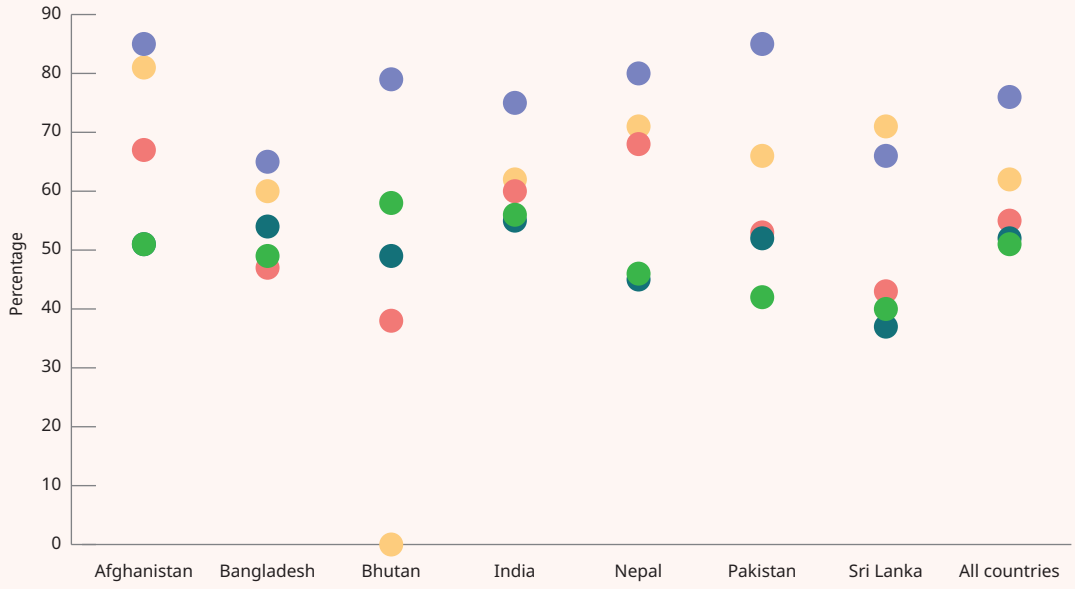


FIGURE 21:
Types of foods and beverages available near schools without food service facilities, by country, South Asia, 2023

Schools are not protecting children from unhealthy foods and beverages, including those that are ultra-processed

Schools are not just centres of learning – they are environments where children and adolescents spend significant time and which shape their social, emotional, physical and cultural development. The availability and affordability of food and beverages in these school food environments influence young people's dietary practices and can have lasting effects on their nutrition and health.[202]

According to the 2024 Global Survey of School Meal Programs, one in four school meal programmes serve processed meat (25 per cent), about one in five serve sweets/ice-cream (21 per cent) and deep-fried foods (19 per cent) and 14 per cent provide sugar-sweetened beverages (*Figure 22*).[203] While these values are lower than the percentage of programmes offering nutritious foods, such as legumes (76 per cent), dark green leafy vegetables (69 per cent), fruits (61 per cent) and eggs (46 per cent), the fact that these unhealthy foods and beverages are part of school meal programmes is alarming. Access to these unhealthy options increases with a country's income level.

To complement these data, UNICEF sought insights from adolescents themselves. Our findings in South Asia reveal that the situation is more alarming than expected, considering most countries in the region have lower-middle-income status (*see Spotlight 4*).[201] More than half of adolescents attending schools with food service facilities reported the availability of packaged snacks (61 per cent) and sugar-sweetened beverages (55 per cent). In schools without food service facilities, an even higher percentage of adolescents had access to packaged snacks (76 per cent) and sugar-sweetened beverages (62 per cent). These findings were echoed in our conversations with adolescents.[200] Neta, a 14-year-old girl living in New Delhi, India explained, *"When we leave school, we're surrounded by cold drinks, chips, ice-cream. If we go a little further, we see coconut water and healthy food like fresh fruit and so on. But near the school, we mostly see unhealthy food."*

A lack of safe and palatable drinking water in schools can increase children's reliance on sugar-sweetened beverages, especially if bottled water is equally or more expensive.[204, 205] Globally, 447 million children do not have access to a basic drinking water service at school,[206] and in some settings where water is available, school children may avoid it because they worry it is unsafe or dislike the taste.

In the absence of effective legal measures and policies, schools are infiltrated by unhealthy foods and beverages, including those that are ultra-processed, as well as food marketing and sponsorship by the ultra-processed food and beverage industry, which

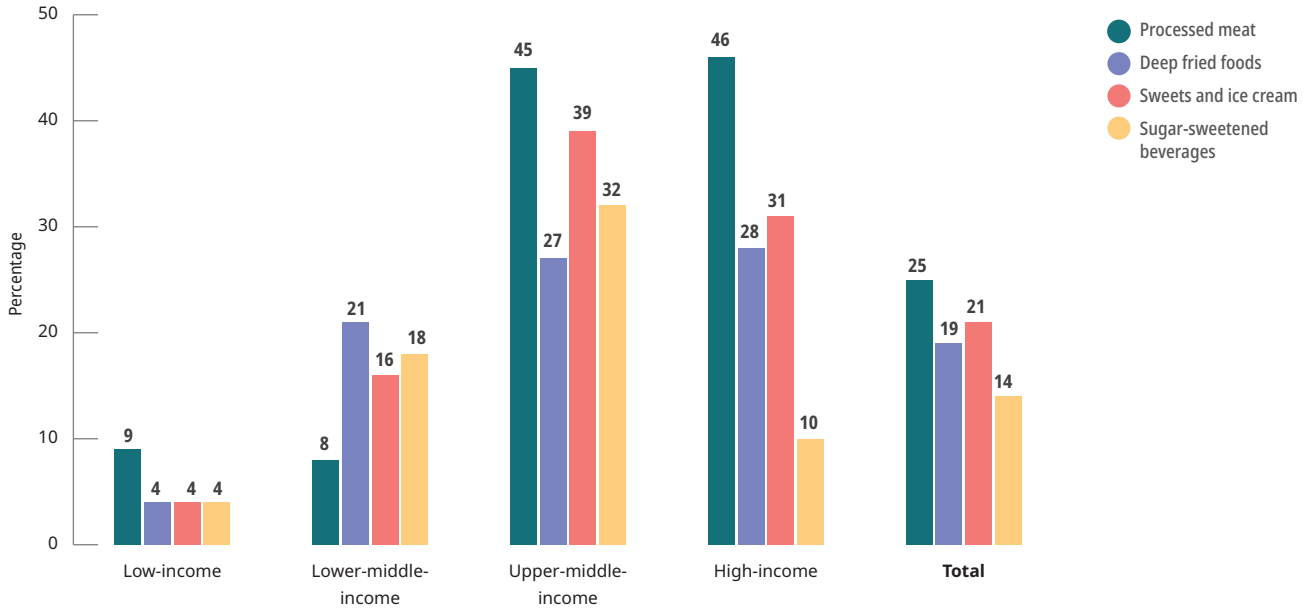


FIGURE 22:
Percentage of school meal programmes offering unhealthy foods and beverages, by country income status, 2024
Source: Adapted from: Global Child Nutrition Foundation, *School Meal Programs Around the World: Results from the 2024 global survey of school meal programs,* GCNF, February 2025.

undermine the role of schools as safe spaces for children and adolescents. For example, in the United Republic of Tanzania and Zimbabwe, our research found that the ultra-processed food and beverage industry pursues direct partnerships with school tuck shops and canteens, sponsoring events, supplying branded products and embedding their presence in school routines.[176, 177] Combined with colourful packaging, promotional giveaways and child-friendly pricing, these tactics exploit children's limited agency and purchasing power, normalizing the daily consumption of ultra-processed foods and sweetened drinks within learning environments.

ANALYSIS 2.

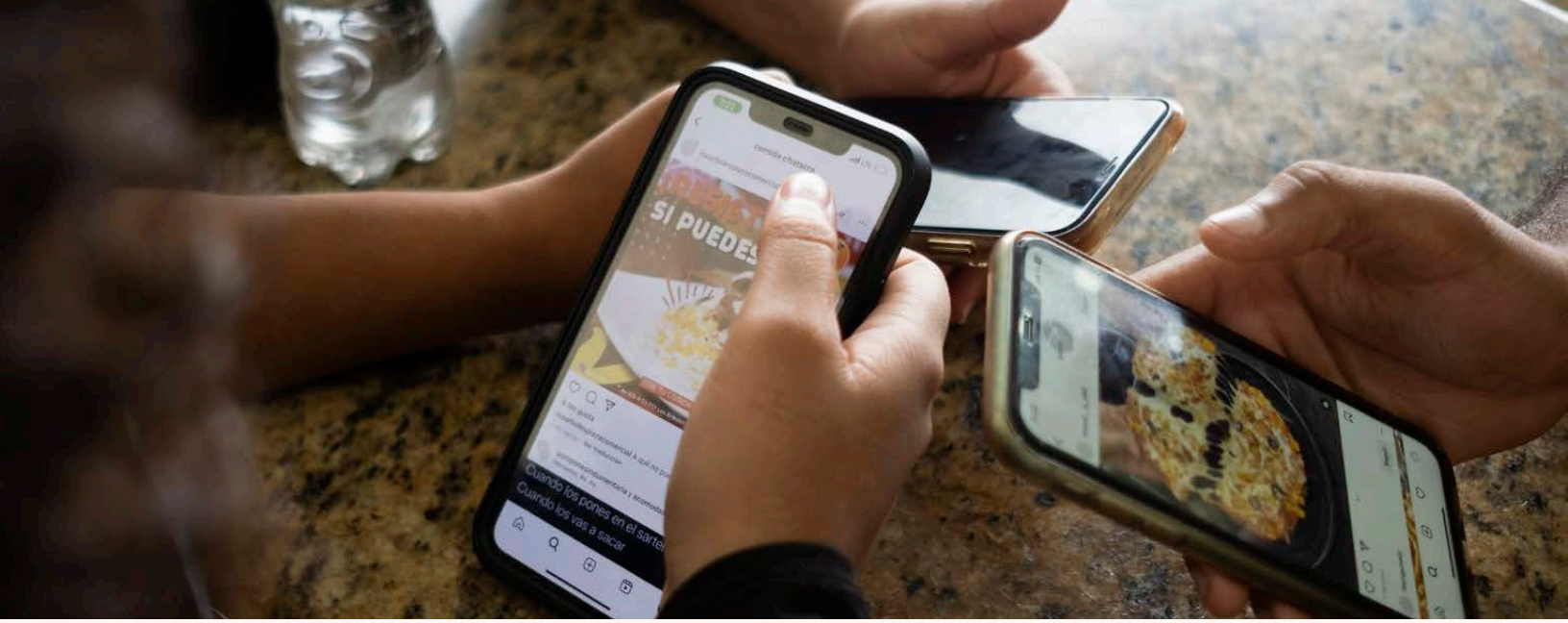
Children are highly exposed to the marketing of ultra-processed foods and beverages at home, school and play, particularly digital marketing

Children and adolescents are valuable targets for the ultra-processed food and beverage industry. Their cognitive vulnerability and brand loyalty drive both immediate sales and long-term profitability.[206–209] With expanding digital marketing and limited regulation, they face increasingly sophisticated marketing tactics that undermine multiple child rights, including the right to information, privacy, food and nutrition and the highest attainable standard of health.[123, 210, 211]

Children, adolescents and young people experience temptation, pressure and powerlessness in the face of relentless marketing by the ultra-processed food and beverage industry

Around the world, children and adolescents encounter food environments that are heavily shaped by the ultra-processed food and beverage industry. As a primary commercial audience, they are specifically targeted by products, packaging and advertising that is designed to appeal to them. These tactics aim to build brand loyalty early and embed ultra-processed foods into their daily consumption habits.

Our 2024 global U-Report poll across 171 countries found that three out of four young people (75 per cent) aged 13–24 years saw advertisements for sugary drinks, snacks or fast food during the previous week through a range of platforms and settings – social media, websites, television, billboards, shops, schools, sports events and videogames (*see Spotlight 5*). While marketing exposure is highest among those living in upper-middle-income countries (90 per cent), it is also unacceptably high in low-income countries (65 per cent) and even in countries affected by conflict (68 per cent).



SPOTLIGHT 5

MORE THAN TWO-THIRDS OF ADOLESCENTS AND YOUNG ADULTS ARE EXPOSED TO FOOD ADVERTISING, EVEN IN COUNTRIES AFFECTED BY CONFLICT

A 2024 global poll conducted by UNICEF via its U-Report platform among more than 64,000 young people aged 13–24 years across 171 countries reveals the startling scale of food advertising exposure. While participants in this poll may not represent all young people – given that participation requires access to a digital platform or a mobile phone – it offers insights into extent of exposure among those who are connected online.

Our findings show that the reach of food advertising transcends low-, middle- and high-income contexts. Three in four young people (75 per cent) reported seeing advertisements for sugary drinks, fast food or snacks in just the previous week (*Figure 23*). Exposure is highest in upper-middle-income countries, where a staggering 90 per cent of young respondents said they had seen such advertisements. But among low-income countries, exposure was also alarmingly high at 65 per cent. Considering that these foods are not necessary for a nutritious and healthy diet – and often displace nutritious and healthy foods – the ideal level of marketing exposure is zero.

Even young people in conflict-affected countries are heavily exposed to unhealthy food and beverage marketing. Overall, 68 per cent of young people in such settings had encountered these advertisements, with extremely high exposure in Iraq (82 per cent), Lebanon (81 per cent) and Ukraine (84 per cent).

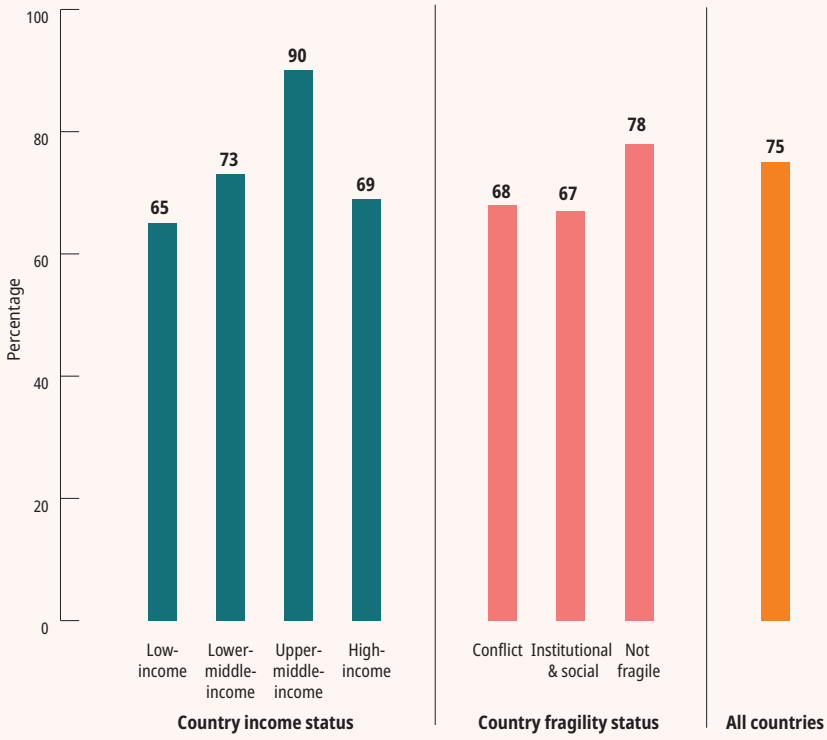


FIGURE 23:
Percentage of young people aged 13–24 years who saw advertisements for sugary/energy drinks, fast food or snacks during the previous week, by country income status and country fragility status, 2024

While television still plays a role, today's advertising battleground is clearly digital (*Figure 24*). Social media is the top source of food and drink advertisements (52 per cent), followed by other internet websites (46 per cent) and television (43 per cent). Strikingly, these patterns were consistent across countries regardless of income status. Exposure to advertising via screens was highest among children living in upper-middle-income countries and lowest among those living in low-income countries.

The role of celebrities and influencers in food and beverage marketing is particularly strong in middle-income countries. In both lower- and upper-middle-income settings, almost 30 per cent of respondents noted seeing food or beverage endorsements from celebrities, and a similar percentage also saw endorsements from influencers in upper-middle-income countries (*Figure 25*).

Perhaps the most concerning finding is that three in five young people agreed that these advertisements made them want to consume the products they saw either sometimes (38 per cent), often (12 per cent) or always (11 per cent). The differences by country income status were marginal.

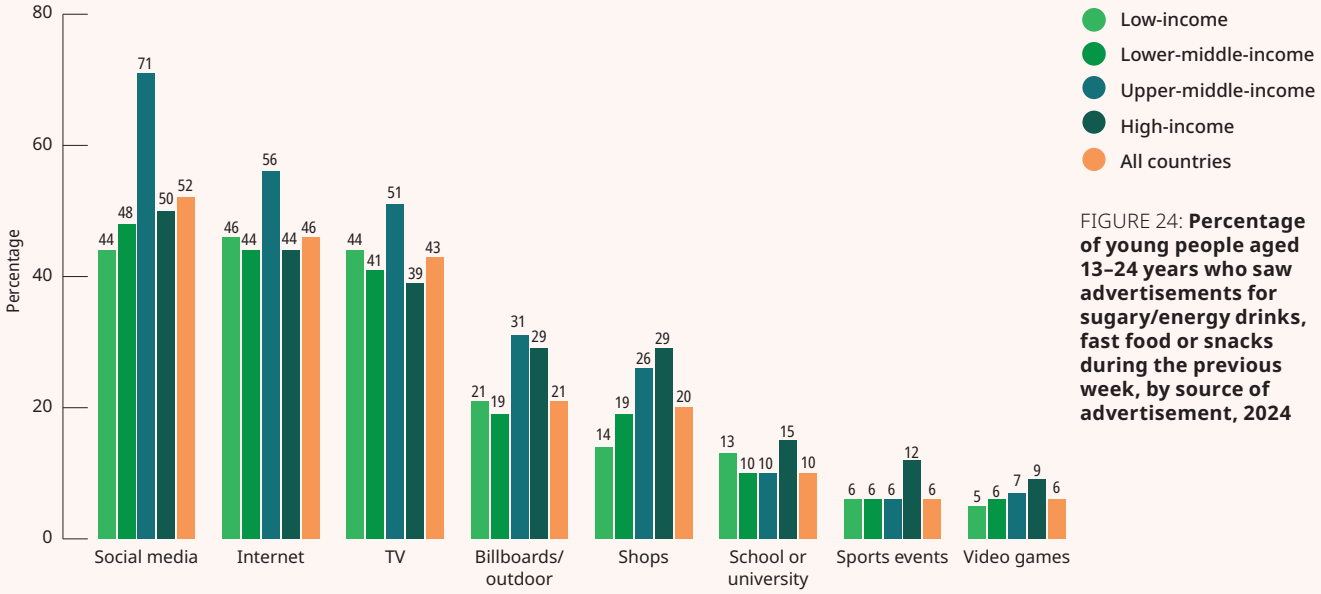


FIGURE 24: **Percentage of young people aged 13–24 years who saw advertisements for sugary/energy drinks, fast food or snacks during the previous week, by source of advertisement, 2024**

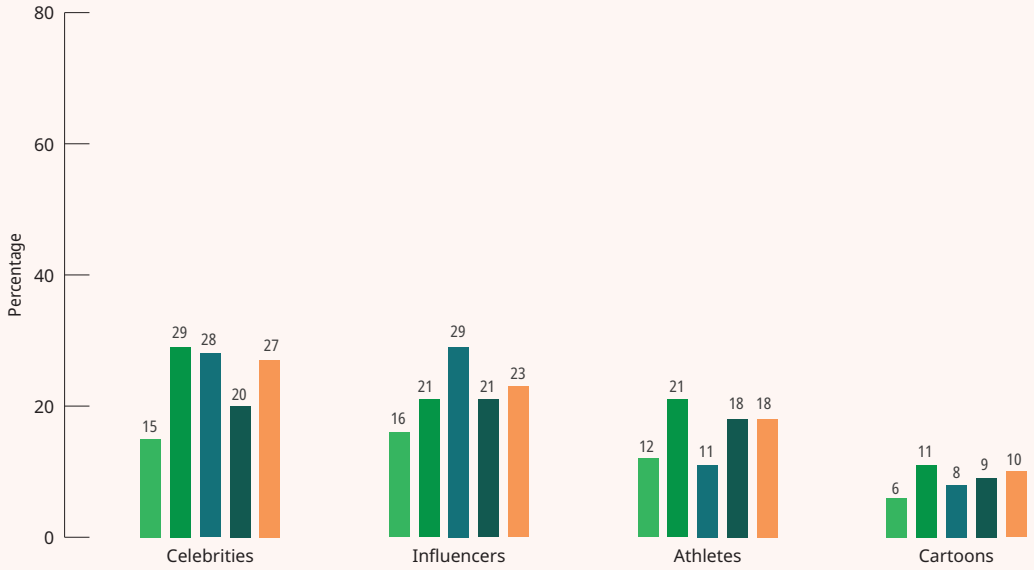


FIGURE 25: **Percentage of young people aged 13–24 years who saw celebrities, influencers, athletes or cartoons in advertisements for sugary/energy drinks, fast food or snacks during the previous week, by county income status, 2024**

This marketing ecosystem is designed to exploit vulnerabilities. Children, especially those under age 8, lack the cognitive ability to recognize persuasive intent and to distinguish between entertainment and advertising.[93, 212] They often interpret what they see in television commercials, advergames and animated content as factual and trustworthy, unaware that these messages are designed to influence their preferences.

Adolescents are more cognitively advanced than younger children but still lack fully developed critical reasoning abilities and remain highly impressionable.[93, 213, 214] As their identities are still forming, they are especially sensitive to peer approval, social trends and emotional appeals. Marketers skilfully take advantage of these vulnerabilities to build brand loyalty and shape long-term food preferences.[206, 207]

We find that children and adolescents in the Dominican Republic, India, the Maldives, South Africa and Viet Nam experience a mix of emotions – excitement, temptation, frustration and helplessness – when exposed to the marketing of unhealthy foods and beverages (*see Spotlight 6*). Parents, meanwhile, often feel overwhelmed and powerless to counteract the constant influence of this marketing on their children and to resist their purchase requests.[215, 216]

Parents are also targeted by unhealthy food and beverage marketing. Packaging and advertisements that make nutrition or health claims, leverage emotional appeals, emphasize convenience or portray products as desirable for children can influence parents' purchasing decisions, even without requests from their children.[217–219] Our studies of food labels on commercially produced complementary foods for children aged 6 months to 3 years found that almost all sampled products in four countries in Eastern and Southern Africa (more than 97 per cent) and seven countries in Southeast Asia (more than 98 per cent) carried inappropriate nutrition and health claims.[220–223]

A large body of research has established a clear link between the marketing of unhealthy foods and beverages and the diets of children and adolescents.[224–230] Exposure to marketing for sugary drinks, salty snacks and fast food influences children's and adolescents' brand preferences, food preferences and choices and increases purchase requests and intake. Studies show that the more frequently children and adolescents are exposed to such marketing, the more likely they are to consume these foods and beverages.[231–233]

SPOTLIGHT 6

HOW UNHEALTHY FOOD AND BEVERAGE MARKETING IS SHAPING CHILDHOODS AROUND THE WORLD: THE VOICES OF CHILDREN, ADOLESCENTS AND PARENTS[200]

When Aishath, a mother of two in the Maldives, went grocery shopping with her children, she heard a familiar refrain: *"I've seen this on TV!"* This is how cup noodles ended up in her shopping basket that day – not because she planned to buy them, but because her children had seen them in a colourful television advertisement.

In bustling New Delhi, Rakhi has seen how digital platforms are reshaping the way adolescents, like her daughter, choose what to eat. *"You open a food delivery app and you have so many options with photos. They pick whatever they want, and, with one click, it's done."*

For Aishath, Rakhi and other parents, the battle over what their children eat no longer starts in the kitchen – it begins on screens. In today's hyper-connected world, food marketing floods every corner: on television, Instagram, Facebook, YouTube and TikTok.

Constant bombardment

It is not just parents who are feeling the pressure – adolescents, too, express frustration at the constant barrage of ads they face in their daily lives.

When Dalsey, a 16-year-old from Bani in the Dominican Republic, walks through the door after a long day, she's tired and hungry. Like many teenagers, she instinctively grabs her phone for a few minutes of distraction. But what she finds isn't just entertainment – it's temptation.

"I start scrolling through Instagram. And all I see is reels of hamburgers with melted cheese. And videos featuring all kinds of food will keep showing up in my feeds. The videos keep coming and coming and coming."

Unhealthy deals

For Genesis, age 19, also from Bani, the temptation often starts with a discount pop-up. *"It's super common that you're browsing, and you'll see an advertisement telling you that X food is 50 per cent off so you end up opening the app",* she says.

In Pretoria, South Africa, 19-year-old Lulutho has a similar experience. *"There's this delivery app we have here, and they're always sending me notifications about deals and discounts",* he says.

From irresistible discounts to flashy Instagram reels, food marketing is a powerful, persuasive force – targeting young people around the globe with uncanny precision and purpose.

Emotional appeal

What makes these ads so hard to resist? Lulutho has given it some thought. Not only are the ads engaging and the vibrant packaging enticing, but he also sees the emotional pull at play.

"That's what a lot of junk food marketing has tapped into…they encapsulate an experience and an emotion around a specific product. It really grows a culture around it, and it makes you want to buy into that culture."

Children and adolescents are especially vulnerable to marketing that features their favourite celebrities. *"Drinks from various brands are flooding the TV and it's their idols in the advertisements"*, says Thuy, mother of a 13-year-old boy in Hanoi, Viet Nam.

These food ads promise instant joy and belonging, turning unhealthy treats into symbols of freedom and fun. Adolescents – still forging identities and swayed by peer approval – feel this pull intensely. Bright visuals, catchy tunes, celebrities and influencers create a powerful emotional tug, making resistance feel like denying themselves a vital rite of adolescence.

The global thread

Whether it is cup noodles on television in the Maldives, discount pizzas in the Dominican Republic or celebrity-endorsed soda in Viet Nam, one thing is clear: children and adolescents across the world are growing up in food environments shaped by relentless marketing. It is vibrant, engaging, emotional, aspirational and dangerously unhealthy.

For parents and young people alike, resisting the pull of this persuasive marketing is a daily struggle against a global ultra-processed food system that is engineered and digitally programmed to win.

This evidence highlights a pressing need to equip children, adolescents and parents with critical awareness and media literacy to navigate manipulative marketing by the ultra-processed food and beverage industry. Social and behaviour change strategies can help expose the industry's tactics and dismantle their misleading narratives. Furthermore, empowering young people to question and challenge the industry's attempts to control their food choices lays the groundwork for youth-led advocacy and public demand for stronger legal and policy protections.[234]

Digital marketing gives the ultra-processed food and beverage industry unprecedented power to target children and adolescents.

With increasing access to digital devices and widespread use of online platforms, children and adolescents are more exposed than ever to persistent and persuasive marketing of unhealthy foods and beverages. The ultra-processed food industry and food retailers use multiple channels – such as social media, video games and food delivery apps – to reach and engage children, adolescents and their families.

Our narrative review of the evidence[232] and studies in middle-income countries (*see Spotlight 7*),[235–241] together with the global literature,[206, 242–244] found several factors that explain why digital food marketing is uniquely harmful to children and adolescents.

First, it is highly personalized and largely invisible. Digital marketing uses algorithms and artificial intelligence to collect and analyse children's online behaviours, allowing companies to deliver highly personalized and persuasive food advertisements. Because digital food marketing to children and adolescents is often hidden within private feeds, it remains largely invisible to parents.

Second, it blurs the boundaries between entertainment and food advertising. Digital food marketing is often embedded in online entertainment and social media content via trusted celebrities, influencers, advergames, branded viral food challenges and peer recommendations. These blurred lines make it hard for children and adolescents to recognize that they are being subjected to marketing.

Third, it is interactive, engaging and constantly accessible. Digital platforms encourage children to actively participate in marketing – via hashtags, liking, sharing, commenting or playing – making the experience interactive, immersive and harder to disengage from (*see Spotlight 7*). With mobile devices and multiple platforms – social media, streaming services and games – children are constantly exposed to the marketing of unhealthy foods and beverages.

Fourth, it is poorly regulated. The majority of countries lack mandatory legal measures and policies to protect children and families from inappropriate digital marketing (see Analysis 4). Even where such mandatory measures exist, they are not comprehensive and do not adequately hold all actors in the digital value chain accountable.

Fifth, it is associated with nutrient-poor, unhealthy diets. There is specific evidence linking the digital marketing of unhealthy foods and beverages with increased frequency of consumption of these products.[232, 233, 245]

The ability to reach millions of children and adolescents at minimal cost – and to secure lifelong consumers from an early age – makes digital marketing a highly cost-effective strategy. The scale and growth of digital marketing efforts by the ultra-processed food and beverage industry underscore just how profitable, influential and harmful this strategy has become.[246]

SPOTLIGHT 7

EXPOSURE OF CHILDREN AND ADOLESCENTS TO DIGITAL MARKETING: EVIDENCE FROM SIX MIDDLE-INCOME COUNTRIES

Digital food marketing has become a powerful driver in the promotion of ultra-processed foods and beverages, particularly in middle-income countries where government regulation is weak, and where children and adolescents are spending increasing amounts of time online. Through social media platforms, food and beverage companies use persuasive, interactive and often subtle marketing strategies to reach young audiences. UNICEF research conducted in Argentina, Kenya, Indonesia, Mexico, the Philippines and Uganda reveals high levels of exposure to digital advertising for unhealthy foods and beverages, along with the use of tactics designed to appeal specifically to children and adolescents.

In **Argentina**, children acquire their first web-enabled device – such as a smartphone, tablet or laptop – at around 9 years old.[247] UNICEF analysed food advertising targeting children and adolescents on three popular social media platforms prior to the approval of the Healthy Eating Promotion Law.[236] The most frequently advertised products included cookies, cakes, snacks, confectionery and fast food – many of which were high in at least one nutrient of concern (e.g., sugar or salt). Common marketing techniques included engagement tactics (e.g., hashtags and prompts to like, share or comment) and emotionally resonant themes, such as fun, family and friendship.

In **Kenya**, more than 26 per cent of the population is active on social media platforms, with adolescents and young people aged 14–20 years estimated to spend 2–3 hours on social media daily.[248–250] A UNICEF study exploring digital food marketing analysed 137 social media posts and found that 88 per cent promoted products high in saturated fats, sugars and salt that failed to meet standards set by WHO for marketing to children in the African region.[251] This digital marketing is uniquely tailored to Kenya, uses emotionally resonant themes such as family bonding, entertainment, social status and personal identity formation, and exploits adolescents' developmental vulnerabilities.

In **Indonesia**, internet access among adolescents aged 13–18 is nearly universal (99 per cent) and higher than in all other population groups.[252] UNICEF analysed advertisements of major brands of snacks, processed foods, soft drinks and fast foods across leading social media platforms (Facebook, Instagram and Twitter).[240] Marketers used a wide range of techniques, including branded content, stickers, geotags, hashtags, emotional and playful appeals and promotional offers. Images of children, adolescents and adults were often used to enhance relatability. Of the 20 brands reviewed, 85 per cent promoted products that exceeded WHO-recommended thresholds for nutrients of concern.

In **Mexico**, 60 per cent of children aged 6–11 years and 90 per cent of adolescents aged 12–17 years are internet users.[253] UNICEF assessed their exposure to food and beverage marketing during recreational screen time.[239] Nearly 70 per cent of children and adolescents encountered food advertisements within just 45 minutes online, averaging 2.7 exposures per hour – equivalent to 47 per week and over 2,400 annually. More than 90 per cent of the advertised products failed to meet nutritional standards for marketing to children. Frequently used marketing techniques included brand characters, celebrity endorsements and competitions, all of which are highly appealing to young audiences.

In the **Philippines**, 78 per cent of the population actively uses social media.[254] UNICEF examined digital food marketing to children on popular social media platforms.[255] Despite a general dislike for advertising, children expressed enjoyment of food-related content – especially for burgers, pizza, fried chicken, doughnuts and instant noodles. Of the 1,035 food advertisements analysed, 99 per cent promoted products that did not meet WHO standards for marketing to children. Most advertisements portrayed unhealthy foods as fun, tasty, family-oriented, physically energizing and even healthy. Influencers played a key role, using taste tests, challenges and sponsorships to engage audiences, while one in five ads featured Filipino sporting and media celebrities.

In **Uganda**, 28 per cent of the population uses the internet and 5 per cent use social media.[256] Children typically first use the internet at 13 years of age; eight in ten children use internet-enabled mobile phones, primarily to share images on social media.[257] UNICEF analysis of 233 social media posts revealed that 97 per cent promoted unhealthy foods high in sugar, fat or salt, which is not permitted according to the standards set by the WHO for marketing to children in the African region.[258] One-third of posts showcased brands, not specific products, bypassing regulatory approaches that focus on nutrient profiling individual products. Marketing strategies relied heavily on emotional appeals such as taste, fun, peer relationships and aspirational lifestyles.

ANALYSIS 3.
The unethical practices of the ultra-processed food and beverage industry undermine government action and exploit children, even in times of crisis

The dominance of ultra-processed foods and beverages in children's food environments reflects deliberate industry strategies. Motivated largely by profit maximization, the business practices of the ultra-processed food and beverage industry undermine efforts to protect child nutrition and public health. These unethical practices are extremely widespread, even impacting those affected by humanitarian crises.

The ultra-processed food and beverage industry obstructs and subverts government action to improve children's food environments and diets

Comprehensive, national, mandatory legal measures and policies can shape healthier food environments for children. But these measures clash directly with the ultra-processed food and beverage industry's core objectives – to expand its market, maximize profit and meet shareholder demands.[259–261]

The ultra-processed food and beverage industry comprises a complex web of actors that together shape food environments – powerful transnational corporations, food processing and packaging firms, retailers, food service chains, meal delivery services, marketing firms and industry trade associations.[261, 262] In addition, the industry funds think-tanks, academic institutions and front groups – entities that are made to appear independent, but which covertly promote their interests.[261–264] The industry's global network shows that a small number of powerful corporations are at the core, which coordinate the activities of affiliated organizations and interest groups worldwide (*Figure 26*).[262]

This vast interconnected industry, with its high market concentration, has considerable economic power and influence.[126] Ultra-processed products generate much greater profits than other foods and beverages due to low-cost or subsidized ingredients, additives that extend shelf-life and aggressive marketing.[198, 260] Trade and investment liberalization has further amplified this profitability and power by reducing tariffs, eliminating quotas, encouraging foreign direct investment, granting legal protections and constraining national regulatory action.[265, 266]

Across the globe, the industry leverages its power and influence to out-manoeuvre governments and resist meaningful policy change.[126, 261] Our study across 24 countries found that 70 per cent of government officials and civil society representatives reported that industry influence is a major barrier to introducing government-led food marketing controls.[267] As described in *Spotlight 8*, the industry uses a mix tactics to delay, weaken, block and evade government policies to improve children's food environments and diets.[86, 268–277]

However, valuable strategies have emerged across a range of country contexts for addressing industry opposition to and interference in government policies.[269–272, 278] Crucially, international and national policy processes must be insulated from industry influence by establishing clear conflict-of-interest safeguards and empowering governments and civil society to resist corporate interference. International organizations must also lead by example.[279] UNICEF has issued guidance[280] that clearly states its principles for engaging with the industry across all programmes (*see Box 7*); however, unified efforts are needed across all international organizations concerned with upholding children's food and nutrition rights.

There is also a pressing need to address the considerable economic and political influence of the ultra-processed food and beverage industry. This includes redirecting agricultural subsidies for crops that make ultra-processed foods disproportionately cheap (such as corn, soy and wheat) to support healthier diets.[114, 281] In addition, international trade and investment agreements that favour corporate profit over children's food and nutrition rights must be re-evaluated and reformed.[265, 266]

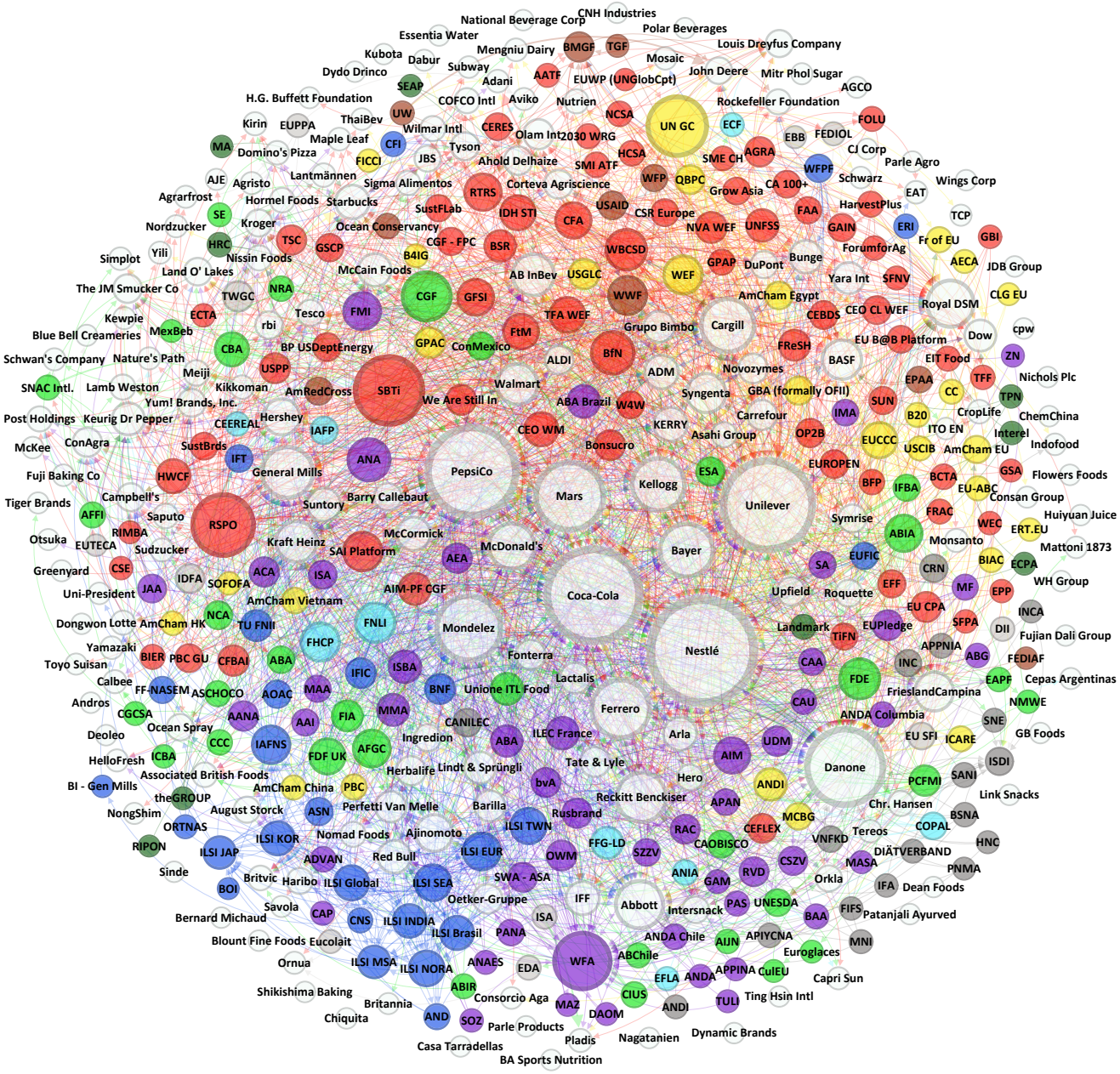


FIGURE 26: **The ultra-processed food and beverage industry's global network of corporations, affiliated organizations and interest groups**

Source: Reproduced with permission from Slater, Scott et al., 'Corporate interest groups and their implications for global food governance: Mapping and analysing the global corporate influence network of the transnational ultra-processed food industry', *Globalization and Health*, vol. 20, no.1, February 2024, art. 16.

Notes: The lines represent the links between ultra-processed food corporations and the lobby groups and other affiliated organizations across the network. Circle size is proportionate to the number of 'links' with others in the network, showing that a small number of corporations are central to coordinating activities across the network. White circles – ultra-processed food corporations, including manufacturers, ingredients suppliers and distributors; purple circles – branding and advertising associations; yellow circles – general business and trade associations; green circles – food manufacturing and retail associations; light grey circles – primary production, processing and ingredients associations; red circles – corporate funded sustainability, corporate social responsibility and multi-stakeholder initiatives organizations; blue circles – corporate funded research and science communication organizations; brown circles – other; dark green circles – lobbying, legal and public relations firms; dark grey circles – specialized nutrition and baby food associations; light blue circles – general food industry associations.

SPOTLIGHT 8

TACTICS USED BY THE ULTRA-PROCESSED FOOD AND BEVERAGE INDUSTRY TO CHALLENGE GOVERNMENT POLICIES AND LEGAL MEASURES

The ultra-processed food and beverage industry frequently interferes with public policy to protect its commercial interests, often at the expense of children's nutrition and health. Through lobbying, misinformation and legal threats, the industry delays, weakens or blocks regulations aimed at improving nutrition, reducing harmful consumption and promoting healthier food environments for all. This Spotlight summarizes evidence on some of the main tactics used by the industry.[86, 268–276]

DELAY: Slow down policy action

- Demand excessive evidence, even when scientific consensus exists, and longer consultation periods to stall regulatory processes.
- Promote industry-led self-regulation, such as non-binding guidelines on advertising or labelling instead of mandatory policies.
- Influence global standard-setting bodies, such as Codex Alimentarius or World Trade Organization committees, to challenge public health regulations.

DILUTE: Weaken the impact of policies

- Lobby for less effective legislation, such as weaker taxes on sugar-sweetened beverages, loopholes in labelling laws, limited marketing restrictions or voluntary measures.
- Shape technical standards or enforcement rules to ensure policies are vague, poorly enforced or easy to circumvent.
- Push for long transition periods and exemptions for certain products or companies, reducing immediate policy impact.

DEFLECT: Shift blame away from the industry

- Promote claims that overweight and obesity are due to individual lifestyle choices (e.g., unhealthy dietary choices, low physical activity), and that the industry desires to be 'part of the solution'.
- Frame ultra-processed foods and beverages as part of a 'balanced diet' and promote 'healthier' versions (e.g., products with added vitamins or reduced sugar) to forestall stronger regulation.
- Protect industry's reputation and legitimize its presence in policy discussions through corporate washing (e.g., corporate social responsibility and association with social causes).

DIVIDE: Exploit policy and stakeholder fragmentation

- Create divisions among policymakers (e.g., health versus trade ministries) to stall or block cohesive action.
- Pit countries against each other in trade negotiations or standards-setting bodies.
- Encourage fragmentation within civil society and scientific communities to dilute opposition.

DENY: Challenge the evidence and silence critics

- Fund biased research and enlist academics to support industry views, while delegitimizing independent evidence on the risks of ultra-processed foods and beverages.
- Use legal threats to intimidate governments, researchers, health professionals and advocates, and silence dissent by accusing regulators of bias and discrediting experts.
- Drown out criticism through industry-backed media campaigns, sponsored think-tanks and counter-campaigns.

DISTRACT: Create noise and false debate

- Establish front groups and grassroots coalitions that appear independent but advance corporate positions.
- Use trade and economic arguments to frame public health policies as threats to jobs, small businesses or economic growth.
- Misrepresent the scope or intent of policies to stir public resistance (e.g., 'nanny state' criticisms to portray government policy action as interference in free choice).

BOX 7

UNICEF PROGRAMME GUIDANCE ON ENGAGING WITH THE FOOD AND BEVERAGE INDUSTRY

UNICEF recognizes the significant positive impact that the food and beverage industry can play in improving access to nutritious and healthy foods for children and their families. For example, the industry has substantial expertise in technology, research, innovation and supply chain efficiencies that can enhance the availability of nutritious, safe, affordable and sustainable first foods and food supplements for young children and fortified staple foods for children and their families.[282, 283]

However, the product portfolios, marketplace practices and lobbying activities of a subset of powerful actors in the food and beverage industry – whose primary business model is the production, distribution, marketing and retailing of UPF – are of concern.

UNICEF's engagement on and with the food and beverage industry is based in child rights and driven by the principle that the best interests of the child must be the primary consideration. The **UNICEF Programme Guidance on Engaging with the Food and Beverage Industry** sets out the following 10 parameters for engagement, which are applied as a minimum common standard for all UNICEF programming areas and contexts, including in development, fragile and humanitarian settings.[280]

1. UNICEF's primary strategy to transform food systems for children is to strengthen public policy.
2. UNICEF will continue to engage responsibly with selected food and beverage industries on better foods for children.
3. UNICEF will engage with selected food and beverage retailers on improving children's food environments and diets.
4. UNICEF will continue to advocate for the food and beverage industry not to be included in public policy making.
5. UNICEF will continue to avoid all partnerships with food and beverage industries that violate the International Code of Marketing of Breast-milk Substitutes and subsequent World Health Assembly resolutions.
6. UNICEF will not engage in partnerships, branded and/or funded interactions with ultra-processed food industries.
7. UNICEF will not include Code violators and ultra-processed food and beverage industries in UNICEF-led business platforms.
8. UNICEF will engage responsibly with multi-stakeholder platforms involving the food and beverage industry.
9. UNICEF will engage responsibly with the food and beverage industry in humanitarian response.
10. UNICEF Programme Group leads UNICEF programmatic engagement with the food and beverage industry.

The ultra-processed food and beverage industry exploits public health crises and humanitarian crises for market growth

The ultra-processed food and beverage industry is highly resilient in times of crisis.[284] During the COVID-19 pandemic, the industry swiftly expanded its reach across low- and middle-income countries, capitalizing on the widespread disruption of food supply chains.[284, 285] As lockdowns and supply chain breakdowns limited access to fresh food, multinational food corporations moved in to fill the void – positioning their packaged snacks, instant meals and sugary drinks not only as essential products, but as legitimate relief items.[284, 285] In doing so, they cultivated a public image as indispensable actors in managing the crisis.

Under the guise of corporate social responsibility, these companies donated branded ultra-processed foods to vulnerable low-income populations, including children and adolescents, in settings already grappling with nutrient-poor, unhealthy diets and child overweight and obesity.[284, 285] Companies also gave substantial financial contributions to boost their public image and gain social legitimacy. These

highly publicized donations blurred the line between humanitarian support and strategic brand marketing, offering companies both visibility and credibility under the banner of philanthropy (*see Spotlight 9*).

At the same time, the ultra-processed food and beverage industry intensified digital marketing during the pandemic, capitalizing on the sharp increase in screen time during lockdowns – particularly among children unable to attend school.[284, 285] Qualitative analysis of social media posts – including our study in Uruguay (*see Spotlight 10*) – revealed that the industry used emotionally charged messaging linking comfort, resilience and solidarity to the consumption of unhealthy products.[284, 285] In some cases, it advertised products as immunity boosters or aligned its advertising with public health messaging on COVID-19 preventive measures, such as social distancing, to reinforce its image as a socially responsible actor.[284, 285] Together, these tactics proved effective: sales of products rose across low- and middle-income countries during and following the pandemic.[86]

Industry actors also used the pandemic as an opportunity to delay or weaken policies meant to protect children and families from their products. In several low- and middle-income countries, planned policies such as front-of-pack food labels and sugar taxes were paused or weakened under the pretext of addressing economic hardship and food insecurity.[284, 285] For example, ultra-processed food companies attempted to delay implementation of new front-of-pack labelling laws during the peak of the pandemic in Mexico, and were successful in lobbying for a one-year extension of the deadline for implementing the printed octagons on the front-of-pack food labels in Peru.[274, 287, 288]

SPOTLIGHT 9

CORPORATE CAPTURE IN SCHOOLS: HOW FOOD INDUSTRY PARTNERSHIPS UNDERMINE CHILD NUTRITION IN SOUTH AFRICA

A recent UNICEF analysis has raised serious concerns about the growing influence of multinational food and beverage companies in public schools in South Africa through their partnerships with the Department of Basic Education.[286]

The analysis reviewed partnerships between five major food and beverage companies and the Department of Basic Education, of which four are governed by memoranda of understanding. While the companies publicly position their involvement as support to the Government's National School Nutrition Programme, these partnerships prioritize corporate interests over children's nutrition and health.

Presented as corporate social responsibility, the partnerships have enabled the distribution of ultra-processed foods and beverages in schools, built brand loyalty among young learners and sustained corporate presence in public education spaces. Seven out of ten breakfast items donated by these companies contain excessive sugar, salt or artificial additives – making them inappropriate for marketing to children, let alone serving in schools.

Yet such donations qualify companies for tax deductions, in some cases worth millions of South African Rand. Over time, these partnerships have granted companies significant control over media exposure, programme content and school access.

This dynamic exemplifies a form of corporate capture, where companies exert disproportionate influence over public systems – often in the absence of clear regulatory frameworks. In this case, the National School Nutrition Programme lacks formal guidelines to govern corporate involvement, leaving schools and students vulnerable to marketing disguised as nutrition support.

Meanwhile, these public–private partnerships bolster corporate reputation, help meet governance compliance obligations and appeal to socially responsible investors by showcasing their involvement in 'nutrition' and 'sustainable' initiatives. In effect, companies profit on multiple fronts: financially, politically and reputationally, while simultaneously contributing to unhealthy food environments in schools.

This pattern of crisis capitalism is not new. Beyond the pandemic, the ultra-processed food and beverage industry has repeatedly used humanitarian crises to build brand image, expand markets and even offload products that are close to expiry.[289] For example, McDonalds launched a campaign to donate a portion of sales from its meals to assist those affected by floods in South Africa in 2022, while the World Instant Noodle Association "donates instant noodles as emergency rations to people in disaster-hit areas", including earthquakes in Morocco, Türkiye and the Syrian Arab Republic in 2023.[290, 291] Donations during humanitarian crises normalize the distribution of ultra-processed foods and beverages to vulnerable populations and are widely publicized online by the companies or their associations, positioning them as benevolent actors and masking their primary profit-making objectives.

In an increasingly fragile world, marked by conflict, climate shocks and economic instability, the ultra-processed food and beverage industry will continue to exploit crises unless stronger public health safeguards are put in place. To respond to these concerns, the Healthy Caribbean Coalition developed guidelines to guide donations from the commercial food sector during humanitarian crises.[292] These efforts represent an important step towards closing this policy blind spot and protecting vulnerable populations from exploitative corporate practices.

SPOTLIGHT 10

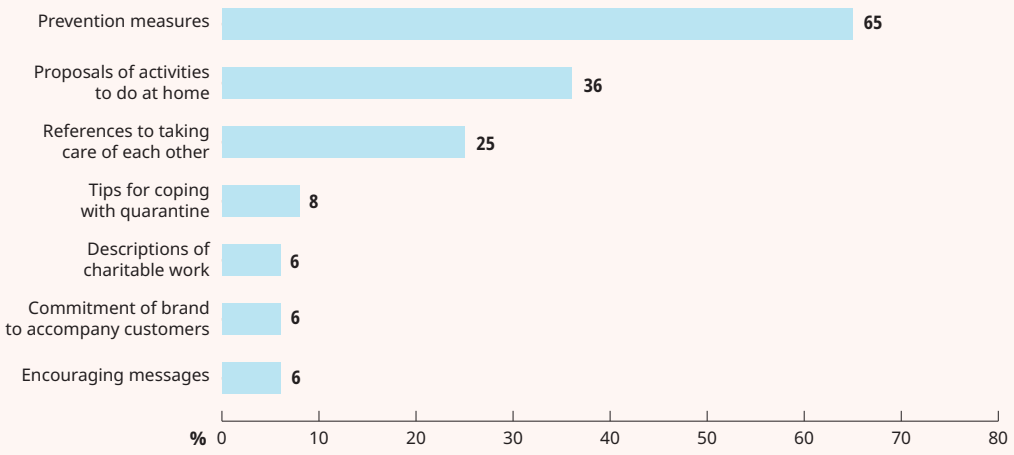
COVID-WASHING OF ULTRA-PROCESSED FOODS AND BEVERAGES: EVIDENCE FROM DIGITAL MARKETING IN URUGUAY

In 2020, UNICEF examined how companies used Facebook to market ultra-processed foods and beverages during the first four months of the COVID-19 pandemic in Uruguay.[293] Of 1,749 total posts across 135 Facebook brand accounts, 35 per cent made direct references to COVID-19, social distancing measures or their consequences (*Figure 27*). Two-thirds (65 per cent) of the posts referenced COVID-19 prevention measures, such as social distancing and staying at home. About one-third (36 per cent) suggested at-home activities, often framed as part of a healthy lifestyle. Some posts encouraged the consumption of ultra-processed foods and beverages after exercise or featured simple recipes using ultra-processed foods to associate them with home-made meals.

About 12 per cent of posts highlighted either the brand's charitable actions, such as food donations to civil society organizations, or their efforts to ensure continued food availability during the pandemic. Tracking these food donations through the social media accounts of these organizations revealed that the items were consumed by vulnerable children.

These findings show just how quickly ultra-processed food companies adapted their digital marketing strategies to use the pandemic to strengthen their brand image and position ultra-processed foods and beverages in a positive light. By aligning their marketing with public health messaging and social support, they were able to appear caring and community-focused – even while advertising products that are often linked to poor nutrition and health outcomes.

FIGURE 27:
Frequency of messaging among Facebook posts that made direct references to COVID-19, Uruguay, 2020



ANALYSIS 4.
Inadequate legal measures and policies enable the ultra-processed food and beverage industry to manipulate children's food environments

Mandatory national legal measures and policies are vital to creating food environments that protect children and adolescents from unhealthy foods and beverages. Such measures also create a level playing field among competitors within the ultra-processed food industry and shield them from shareholder and investor pressure to prioritize short-term profits over children's rights. Yet, no governments have enacted a comprehensive and coherent set of mandatory measures, allowing the ultra-processed food and beverage industry to continue shaping children's food environments to its advantage.

No country has a comprehensive set of mandatory legal measures and policies to protect children from unhealthy food environments

There is no single legal measure or policy that acts as a 'silver bullet' for improving children's food environments. A set of complementary, coherent and mandatory legal measures and policy measures is needed that together influence the availability, accessibility, affordability and desirability of foods and beverages for children and their families.[98, 99]

Using global datasets, we examined the status of 202 countries and areas for a set of 10 legal measures and policies spanning breastfeeding and first foods, school food environments, marketing to children, food reformulation, food labelling, food subsidies

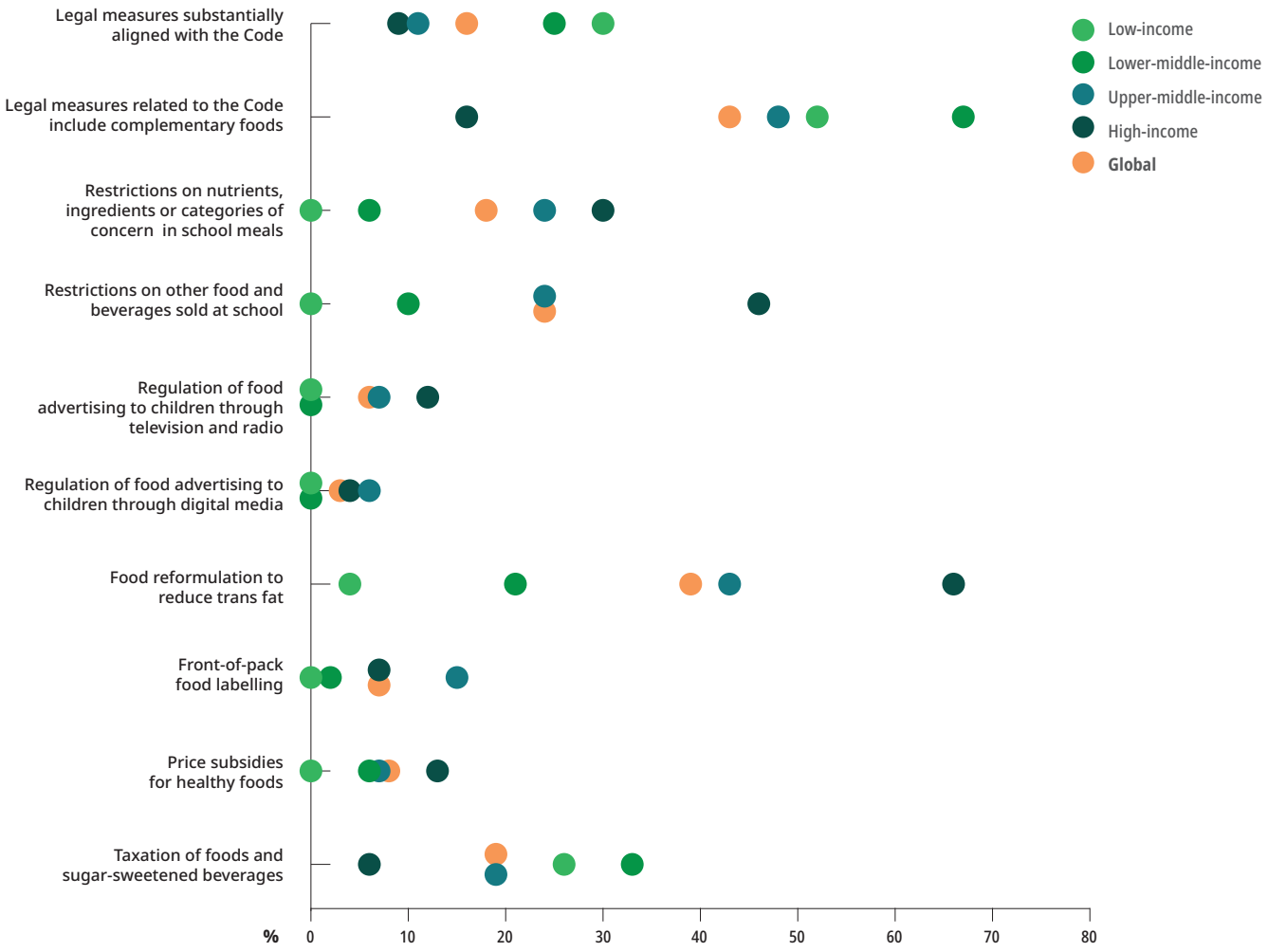


FIGURE 28: **Percentage of countries with mandatory legal measures or policies to protect children from unhealthy food environments, by country income status**

Note: See Annex 2 for the set of policies and sources of data. The Code refers to the International Code of Marketing of Breast-milk Substitutes and subsequent World Health Assembly resolutions.

and taxation (*Figure 28*).[294] While this set does not encompass all necessary measures, the analysis provides insight into current progress worldwide. Only mandatory measures were considered because research has consistently shown that voluntary measures are considerably less effective.[295–298]

The results reveal widespread policy inaction. Fewer than one in ten countries have mandatory regulations for marketing to children through digital platforms (3 per cent), television or radio (6 per cent), front-of-pack labelling (7 per cent), or food subsidies that make healthy food more affordable (8 per cent) (*Figure 28*). Only 16 per cent of countries have national legal measures that are substantially aligned with the International Code of Marketing of Breast-milk Substitutes and subsequent World Health Assembly resolutions (the 'Code'). Just 18 per cent have mandatory nutrition standards for school meals and 24 per cent have mandatory restrictions on the sale of other foods and beverages in schools, while 19 per cent have national taxes for both unhealthy foods and sugar-sweetened beverages. Slightly better – but still underwhelming – are mandatory policies for food reformulation to reduce trans-fat (39 per cent) and Code-related measures on complementary foods (43 per cent).

Comparing country income groups, low-income and lower-middle-income countries are more likely to have Code-related policies and national taxation of unhealthy foods and sugar-sweetened beverages, while upper-middle-income and high-income countries tend to lead on school food policies, food reformulation to reduce trans-fat and front-of-pack labelling. Mandatory legal measures or policies on food marketing to children through television, radio and digital media are abysmally rare across all country income groupings.

This analysis shows that governments are not fulfilling their obligations to adopt these mandatory legal measures and policies to address nutrient-poor, unhealthy diets and overweight and obesity among children. Not a single country has adopted all 10 legal measures or policies and a staggering 88 per cent of countries have implemented three or fewer of them. A major driver of this widespread inaction is the persistent interference and influence of the ultra-processed food and beverage industry (*see Analysis 3*).

Other studies have shown that policy and programme approaches are skewed towards individual lifestyle factors, such as nutrition education or counselling on dietary practices and physical activity, rather than addressing unhealthy food environments.[299–301]

The lack of effective legal measures and policies leaves countries woefully unprepared to safeguard children and adolescents from harmful food environments. Further delays in effective policy action will only allow the drivers of nutrient-poor, unhealthy diets to become more deeply entrenched and more challenging to reverse.

With determined action, governments can implement effective mandatory measures to improve food environments for children

While many countries struggle to introduce mandatory legal measures and policies to improve children's diets, there are encouraging examples that prove progress is possible across low-, middle- and high-income settings (*see Spotlight 11*).

However, isolated measures are insufficient. To achieve lasting improvements in children's food environments, governments must adopt a comprehensive set of mutually reinforcing, mandatory legal measures and policies. *Spotlight 12* outlines how Chile, Mexico and Brazil have each introduced a suite of measures – pioneering front-of-pack food labels, restricting food marketing to children and reshaping school food environments, while specifically targeting ultra-processed foods and beverages.

These country successes share several common factors that are essential for the development, defence and implementation of mandatory measures:[270–272]

- **Independent, locally relevant evidence.** The experience in Latin America shows the importance of local research institutions in generating independent, locally relevant evidence and contextualizing global evidence to local realities. The Instituto Nacional de Salud Pública in Mexico and the Instituto de Nutrición y Tecnología de los Alimentos in Chile not only provided the evidence for policies, such as sugar-sweetened beverage taxes and adoption of front-of-package warning labels, but also strengthened public debate and helped governments withstand strong industry opposition.[302–304]
- **Robust policy design.** Legal measures and policies must be comprehensive, mandatory, enforceable and free from loopholes, aligned with political realities and supported by independent evidence that is free from conflicts of interest. For example, in Chile and Mexico, synergies between mandatory front-of-pack labels, restrictions on food marketing and school food regulations, created a stronger, more coherent suite of policies for healthy food environments.[302, 303]
- **Government-led, multisectoral collaboration.** Effective policy reforms require coordination across ministries – health, education, finance, trade and agriculture – along with engagement from researchers and advocacy groups. For example, while the National Treasury led the process to design a sugar-sweetened beverage tax in South Africa, it was enabled by the Ministry of Health's strategic plan for the prevention and control of non-communicable diseases and evidence from academics and civil society.[272]
- **Broad base of support.** Civil society organizations, media campaigns and international bodies, such as UNICEF and WHO, play a vital role in mobilizing public demand and ensuring accountability for protecting children's nutrition rights. For example, in Mexico, public relations campaigns organized by civil society organizations generated public demand for taxes on sugar-sweetened beverages.[305]

  In addition, young people also have a crucial role in championing healthier food environments in their schools, communities and nations.[306] **Fix My Food** is youth-led advocacy movement, currently active in 18 countries worldwide, that empowers young people to recognize the exploitative tactics of the ultra-processed food industry and advocate for policy reform to create healthier food environments.[307]
- **Preparedness for industry pushback.** Governments, academia and civil society must anticipate and resist industry interference during policy development and implementation, when backsliding can occur. Transparency mechanisms and conflict-of-interest safeguards are essential to protect public health. For example, in Chile, policymakers expected resistance and proactively engaged experts, civil society and legal advisers to defend reforms.[302, 308]

SPOTLIGHT 11

COUNTRY SUCCESS IN IMPLEMENTING POLICIES TO STRENGTHEN FOOD ENVIRONMENTS FOR CHILDREN AND FAMILIES

Across the globe, countries are taking bold steps to improve children's food environments. The following examples highlight successful government action to implement policies that help children and their families access healthier diets.

Breastfeeding protection in Sierra Leone: To safeguard breastfeeding and support further progress in strengthening breastfeeding, as well as to combat high levels of formula marketing, Sierra Leone's parliament enacted the Breastmilk Substitutes Act in July 2021. The Act is substantially aligned with the International Code of Marketing of Breast-milk Substitutes and subsequent World Health Assembly resolutions, and is one of the strongest in the world, scoring 99 points out of a possible 100.[309]

Complementary feeding protection in Lebanon: Lebanon's law on Organizing the Marketing of Infant and Young Child Feeding Products and Tools bans the promotion of commercial complementary foods for children under 3 years of age.[310] It also bans health and nutrition claims on commercial complementary foods and restricts cross-promotion with breastmilk substitutes, in alignment with World Health Assembly resolution 69.9. In addition, it mandates that labels carry messages supporting continued breastfeeding and appropriate complementary feeding.

School food environments in Spain: The Royal Decree for Healthy and Sustainable School Canteens, a national regulation effective since September 2025, requires all schools with lunch services to provide healthy meals.[311] The regulation mandates daily fruit and vegetables, fish one to three times weekly, vegetarian options and free access to water, and promotes seasonal produce, legumes and whole grains. It also bans the sale of foods and beverages containing sugar, saturated fat, trans-fat and salt above specified limits and restricts the provision of fried foods and pre-cooked meals.

Food marketing to children in Chile: The Food Labelling and Advertising Law restricts the marketing of unhealthy foods and beverages to children under 14 years of age. Products high in sugar, sodium, saturated fat or calories that carry warning labels are banned from advertising on television, radios and in cinemas between 6 a.m. and 10 p.m., in newspapers, in schools and through child-targeted digital marketing (including websites, apps and social media). Use of child-directed marketing hooks, such as toys or incentives, are also banned. Research shows that these measures reduce children's exposure to unhealthy food advertising and reduce purchases of unhealthy foods and beverages.[312–314]

Food reformulation to eliminate trans-fats in India: The Food Safety and Standards Authority of India progressively reduced permitted trans-fat levels in the food supply. In 2022, this culminated in a national mandatory 2 per cent limit for industrial trans-fats in edible oils and fats, including those present in food products, making India the first lower-middle-income country to implement WHO's recommended best-practice policy to limit trans-fats.[315] This policy provides protection from the harmful impacts of trans-fats to approximately 1.4 billion people.

Food labelling in Latin American countries: Chile pioneered the use of front-of-pack hexagonal warning labels in 2016, introducing bold black signs to alert consumers when products are high in sugar, sodium, saturated fats or calories. The policy has been associated with a reduction in the purchase of sugar-sweetened beverages and regulated foods and has prompted product reformulation to reduce sugar and salt content.[314, 316–318] Following Chile's lead, several countries – including Argentina, Mexico, Peru and Uruguay – adopted similar front-of-pack food labelling systems, building on the lessons learned.

Food subsidies in Fiji: Fiji introduced targeted food subsidies, together with other food-related strategies, to promote nutritious and healthy diets and combat diet-related non-communicable diseases. In 2013, the Government removed import taxes on all imported vegetables and lowered import duties on locally-grown fruit, such as bananas, mangoes and pineapples. In the years following the introduction of these food subsidies, the volume of vegetables and fruit imported to Fiji increased.[319]

Sugar-sweetened beverage tax in South Africa: South Africa enacted the Health Promotion Levy on sugar-sweetened beverages in 2018 to reduce sugar intake, obesity and diet-related non-communicable diseases. The tax, which amounts to 10 per cent to 11 per cent of the beverage price, reduced beverage purchases by about 29 per cent, lowered their sugar content by about 51 per cent (as the industry reformulated products) and raised ZAR5.8 billion (US$319 million) in the first two years.[320, 321]

SPOTLIGHT 12

BRAZIL, CHILE AND MEXICO – LEADING THE WAY TOWARDS MORE COMPREHENSIVE MEASURES TO IMPROVE CHILDREN'S FOOD ENVIRONMENTS

Brazil, Chile and Mexico have emerged as global leaders in protecting children, adolescents and families from unhealthy foods and beverages, including those that are ultra-processed.[322] Faced with a high prevalence of overweight and obesity among children and adolescents, and a growing burden of diet-related non-communicable diseases among the adult population, each country overcame considerable industry pushback to implement a suite of complementary, mandatory measures to improve food environments.

Brazil

In 2014, the Ministry of Health published the second edition of the *Dietary Guidelines for the Brazilian Population*.[323, 324] These guidelines broke new ground internationally by adopting the NOVA food classification system, which groups foods according to the nature, extent and purpose of industrial processing, rather than focusing solely on nutrient content. The Guidelines promote diets based on fresh and minimally processed foods, discourage the consumption of ultra-processed products and highlight the importance of socially and culturally grounded approaches to healthy diets.

The release of the Guidelines spurred regulatory momentum.[325] The Government has progressively restricted the purchase of ultra-processed products through the National School Meals Programme, and since 2023, the municipalities of Rio de Janeiro and Niterói have banned the provision and sale of ultra-processed foods in schools. The *Brazil Without Hunger Plan* and the *National Basic Food Basket* align with the Guidelines, promoting minimally processed foods in social protection programmes and shaping fiscal policies – including tax reductions on healthy foods and a selective tax on sugary beverages.

Brazil has also taken steps to protect the diets of young children specifically. In 2019, the Ministry of Health released the *Dietary Guidelines for Brazilian Children Under 2 Years of Age,* which explicitly discourage offering ultra-processed foods and beverages to these children.[326] In addition, Brazil co-sponsored a resolution at the WHO Executive Board to support restrictions on the digital marketing of breastmilk substitutes; the resolution was approved at the Seventy-eighth World Health Assembly in May 2025.

Together with other mandatory measures – including restrictions on marketing to children, front-of-pack food labelling and a ban on industrial trans-fats – these actions have created a crucial intersection between public health, nutrition and food security in Brazil. While there is scope for improvement and a need for continued vigilance against industry interference,[327] these achievements demonstrate Brazil's gradual and progressive commitment to prioritize nutrition, public health and social equity, particularly regarding children. Beyond Brazil, the Dietary Guidelines have influenced the design of guidelines in other countries, including in Canada, Chile, Ecuador, India, Mexico, Peru and Uruguay.[325]

Chile

Chile's approach to protecting children's food environments is regarded as one of the most comprehensive packages of reforms ever enacted. The cornerstone is the Law of Food Labelling and Advertising, passed in 2012 and implemented in 2016. This law introduced three complementary sets of measures:

- **Mandatory warning labels:** Packaged foods that exceed defined thresholds for sugars, sodium, saturated fats or calories must display a black, hexagonal warning label on the front of the package to alert consumers.
- **Restrictions on marketing to children:** Any product carrying a warning label is banned from being advertised to children under 14 years of age. This includes a ban on advertising in schools, on television and in cinemas between 6 a.m. and 10 p.m., and on child-targeted marketing hooks and digital marketing that drive children's demand for unhealthy products. In addition, there are restrictions on marketing through other formats (e.g., radio, print and billboards).
- **Restrictions on foods in school:** Products with warning labels cannot be sold, promoted or offered in schools, including in cafeterias and vending machines, and in the school feeding programme. This ban ensures that educational settings reinforce public health messages and prevents contradictions between policy and practice.

In addition, Chile reformed its existing sugar-sweetened beverages in 2014. Taxes on beverages with more than 6.25 grams of sugar per 100 ml increased from 10 to 18 per cent, while taxes on beverages below the threshold decreased from 13 to 10 per cent.[328] Independent evaluations show a reduction in children's exposure to the marketing of unhealthy foods and beverages and shifts in purchasing behaviour. For example, children's exposure to television advertisements for unhealthy foods fell by 73 per cent, and there has been a measurable decrease in the purchase of foods high in energy, sodium, sugar and saturated fat.[313, 314, 329] Furthermore, evidence shows that the industry has responded by reformulating products to reduce salt levels in foods and sugar levels in foods and beverages.[318, 330]

Chile's comprehensive, multi-pronged approach – supported by monitoring and evaluation – has not only garnered widespread international attention and recognition but has also served as a model for action. Elements of the Chilean strategy, such as front-of-package warning labels, restrictions on marketing to children and bans on unhealthy food sales in schools, have been adopted or adapted by several countries across Latin America and in regions beyond.[331]

Mexico

In 2014, Mexico became one of the first countries in the world to introduce taxes on both sugar-sweetened beverages and non-essential high-calorie foods (containing at least 275 kilocalories per 100 grams), covering many unhealthy, ultra-processed products. These taxes – approximately 10 per cent on the retail price of sugary drinks and 8 per cent on high-calorie foods – resulted in a decline in purchases of taxed products, particularly among lower-income households.[332–336]

Mexico did not stop there. In 2020, it introduced one of the world's strictest front-of-pack labelling systems.[337] Packaged foods and beverages high in free sugars, saturated fat, trans-fat, salt or calories are required to display large, black-and-white octagonal warning labels. These labels alert consumers with phrases such as 'excess calories' or 'excess sugar' and other tags warn about the presence of caffeine or artificial sweeteners, advising that they are not recommended for children. Graphic elements, such as characters, illustrations and celebrities, cannot be used for products with one or more tags. Research indicates the labels influence consumers to avoid these products and can motivate the industry to reformulate them.[338, 339]

Regulations on the marketing of foods and beverages were strengthened in 2020 to align with the new food labelling laws. Any product that carries a front-of-pack label cannot be advertised to children on any platform, including television and digital platforms, and cannot use marketing techniques that are designed to appeal to young audiences, such as cartoon characters, celebrity endorsements or promotional games. Furthermore, these products cannot make nutrition or health claims, such as 'high in fibre'.

The country has also addressed unhealthy food environments in schools, recognizing them as critical spaces for shaping children's and adolescents' dietary practices. In March 2025, a nationwide policy came into effect banning the sale, distribution and advertising of ultra-processed foods and beverages, sugar-sweetened beverages and other foods and beverages with one or more warning labels in schools and in the vicinity of schools.[340] The policy also aims to ensure that schools offer healthier alternatives, such as beans, vegetables, fruits and drinking water.

AN AGENDA TO TRANSFORM CHILDREN'S FOOD ENVIRONMENTS

Across the world, children and adolescents are growing up in food environments dominated by unhealthy foods and beverages, including those that are ultra-processed. These foods are often cheap, accessible and aggressively marketed – especially to children and adolescents. The surge in childhood overweight and obesity reflects this reality and signals a failure to uphold children's right to food and nutrition.

At the root of the problem lies a lack of effective policy and the unchecked influence of an industry that profits from unhealthy foods and beverages. Countries must act now to prevent a future in which unhealthy food environments deepen nutrition and health inequities among children and adolescents. Countries such as Brazil, Chile and Mexico demonstrate that with strong political will, governments can create policy conditions for healthier food environments for children.

Eight key recommendations

Immediate and transformative actions are needed to improve food environments and protect children's right to food and nutrition. The following eight recommendations are universally applicable, including in humanitarian contexts:

1. **Implement the International Code of Marketing of Breast-milk Substitutes and subsequent World Health Assembly resolutions to protect and promote breastfeeding and appropriate complementary feeding.** This includes the WHO guidance on regulatory measures aimed at restricting the digital marketing of breastmilk substitutes, and the guidance on ending the inappropriate promotion of foods for infants and young children.
2. **Implement comprehensive, mandatory measures to transform food environments for children and adolescents.** These encompass legal measures and policies that protect children's diets by limiting the availability, marketing and purchase of unhealthy foods and beverages, including ultra-processed foods. They include school food environments, food marketing restrictions, food labelling, taxes on unhealthy foods and beverages, and food reformulation that limits both unhealthy ingredients and harmful substitutes.
3. **Implement comprehensive policies to improve the availability and affordability of locally produced nutritious foods for children and adolescents.** These include redirecting agricultural, trade and consumer incentives and subsidies towards nutritious and healthy foods; strengthening systems and infrastructure to support the production, processing and distribution of nutritious and healthy foods, including large-scale mandatory fortification of appropriate food vehicles; and improving access to safe and palatable drinking water in schools and communities.
4. **Establish robust safeguards to protect public policy processes from interference by the ultra- processed food industry.** This includes conflict-of-interest safeguards, the exclusion of ultra-processed food and beverage industry actors from involvement in policy development and implementation, and the mandatory reporting of industry lobbying activities and membership in trade and business associations.
5. **Implement social and behaviour change initiatives that empower families and communities to claim their right to healthy food environments,** raise awareness of the harm caused by diets high in ultra-processed foods and beverages and build public support for legal measures and policies to transform food environments for children.
6. **Strengthen social protection programmes to address income poverty and increase children's access to nutritious and healthy diets** through social transfers (food, cash, vouchers) and other forms of social protection (e.g., parental benefits, affordable childcare and labour market programmes).
7. **Engage young people in public policymaking on food justice by fostering youth-led advocacy.** Support young advocates to share their lived experiences of unhealthy food environments and amplify their voices to demand healthier food and beverage options in schools, communities and beyond.
8. **Strengthen global and national data and surveillance systems to monitor food environments, diets and overweight among children and adolescents using standardized indicators and data collection methods.** In addition, track the implementation of legal measures and policies to protect children and adolescents from unhealthy food environments.

Five key systems – food, health, water and sanitation, education and social protection – must work in synergy to deliver these recommendations (*see Box 8*).

BOX 8

SYSTEM-WIDE APPROACHES TO THE PREVENTION OF OVERWEIGHT AND OBESITY IN CHILDREN AND ADOLESCENTS

Coordinated efforts across five key systems are essential to strengthen food environments, improve diets and safeguard children and adolescents from overweight and obesity in all settings, including humanitarian contexts.[341]

The **food system** determines whether food environments make nutritious, healthy, diverse and safe foods available, affordable and desirable to children, adolescents and their families. Mandatory policies and legal measures that promote nutritious foods and protect against unhealthy foods and beverages, including those that are ultra-processed, are essential (e.g., food labelling regulations, food marketing restrictions and food subsidies and taxes).

The **health system** supports child and adolescent weight monitoring to track overweight and obesity and enable early intervention; promotes nutritious and healthy diets and physical activity; and guides the development of mandatory policies and legal measures to promote breastfeeding and complementary feeding and protect children and adolescents from unhealthy foods and beverages, including those that are ultra-processed.

The **water and sanitation system** is responsible for ensuring that children and adolescents have access to safe and palatable drinking water and safely managed sanitation services in all food environments where they live, learn and play. It supports efforts to promote water drinking that may in turn reduce the consumption of sugar-sweetened beverages.

The **education system** plays a vital role in ensuring nutritious and healthy foods and free, safe and palatable drinking water are available in schools; restricting the availability and marketing of unhealthy foods and beverages, including those that are ultra-processed, in and around schools; banning sponsorship by the ultra-processed food and beverage industry; and building the knowledge and skills of children and adolescents on food and nutrition.

The **social protection system** protects vulnerable children and their families against poverty and social exclusion. By providing social transfers (food, cash or vouchers) and other forms of support (e.g., maternity benefits, affordable childcare and labour market programmes), it can improve financial and physical access to nutritious diets, while reducing reliance on nutrient-poor, unhealthy foods.

Commitment and accountability for action

Governments bear the primary responsibility for protecting children's right to food and nutrition; however, achieving swift, impactful change towards healthier food environments demands unified action from multiple stakeholders.

Governments, alongside civil society and media, development and humanitarian organizations, donors and financial partners, academia and the food and beverage industry, must urgently commit to a comprehensive and bold response. These stakeholders must hold themselves and one another accountable for transparent decision-making and measurable progress to create equitable, healthy food environments for all children and adolescents, everywhere.

Governments must:

- Enact, implement, monitor and enforce a comprehensive set of mandatory legal measures and policies to protect children and adolescents from unhealthy foods and beverages, including ultra-processed foods and beverages, and improve equitable access to nutritious and healthy foods.
- Enact, implement, monitor and enforce legal frameworks to prevent interference by the ultra-processed food and beverage industry in public policy processes, including conflict-of-interest safeguards, mandatory transparency measures and restrictions on lobbying and influence.
- Strengthen national monitoring and accountability systems through regular data collection on children's diets and nutrition, the implementation of legal measures and policies, and industry practices impacting children's food environments.

Civil society and the media must:

- Raise public awareness of the harm caused by unhealthy foods, beverages and diets, amplify the voices of children and families affected by unhealthy food environments, and build public demand for legal measures and policies to transform food environments.
- Advocate for comprehensive, mandatory and enforceable legal measures and policies that protect children, adolescents and families from unhealthy food environments and improve access to nutritious and healthy foods, and demand that public policy processes be free from commercial influence.
- Investigate and serve as a public watchdog to publicly expose the harmful commercial practices of the ultra-processed food and beverage industry, including policy interference, misleading marketing practices and other tactics that undermine children's right to food and nutrition.

Development and humanitarian organizations must:

- Set global standards and guidance to improve food environments, including reducing industry interference in policymaking; and strengthening government capacity to implement legal measures and policies to transform food environments for children.
- Advocate for agricultural and trade policies that reduce incentives for ultra-processed food production and improve access to nutritious and healthy foods; and invest in systems and infrastructure that promote equitable access to nutritious and healthy foods.
- Track global and country progress on strengthening food environments, improving diets and reducing overweight and obesity among children and adolescents, using standardized indicators and data collection methods.

Donors and other financial partners must:

- Declare the prevention of childhood and adolescent overweight and obesity as a key priority within organizational agendas, policies, strategies and investments for improving children's and adolescents' nutrition, health, well-being and prosperity.
- Secure global and national commitments to transform food environments through legal measures and policies that restrict access to unhealthy foods and beverages, including ultra-processed foods and beverages, and enhance the availability and supply of nutritious and healthy foods.
- Commit to and deliver financial investments that strengthen institutional and regulatory capacities to improve food environments, particularly in under-resourced settings, including support for systems and infrastructure that improve equitable access to nutritious and healthy foods.

Academic and research organizations must:

- Undertake independent studies and research – free from conflicts of interest – on the trends, inequities and drivers of nutrient-poor, unhealthy diets, overweight and obesity in children and adolescents, and the impacts on children, families, societies and nations.
- Undertake independent studies, research and evaluations – free from conflicts of interest – on legal measures and policies to improve food environments and diets among children and adolescents.
- Train multidisciplinary professionals – including agriculturists, nutritionists, public health experts, educators and economists – to lead and sustain national efforts to improve food environments for children and adolescents.

Food and beverage industry actors must:

- Ensure that company policies, practices and products fully comply with human rights treaties, normative guidance issued by United Nations agencies, and legal measures and policies to protect children and adolescents from unhealthy food environments.
- Invest in the production, processing and promotion of nutritious, healthy, affordable and sustainable foods for children, adolescents and their families that are low in free sugars, refined starches, salt, unhealthy fats, additives and other harmful ingredients.
- Never seek to delay, prevent or weaken global or national legal measures and policies to protect children and adolescents from unhealthy food environments.

ANNEX 1

REGIONAL PROFILES

EAST ASIA AND THE PACIFIC

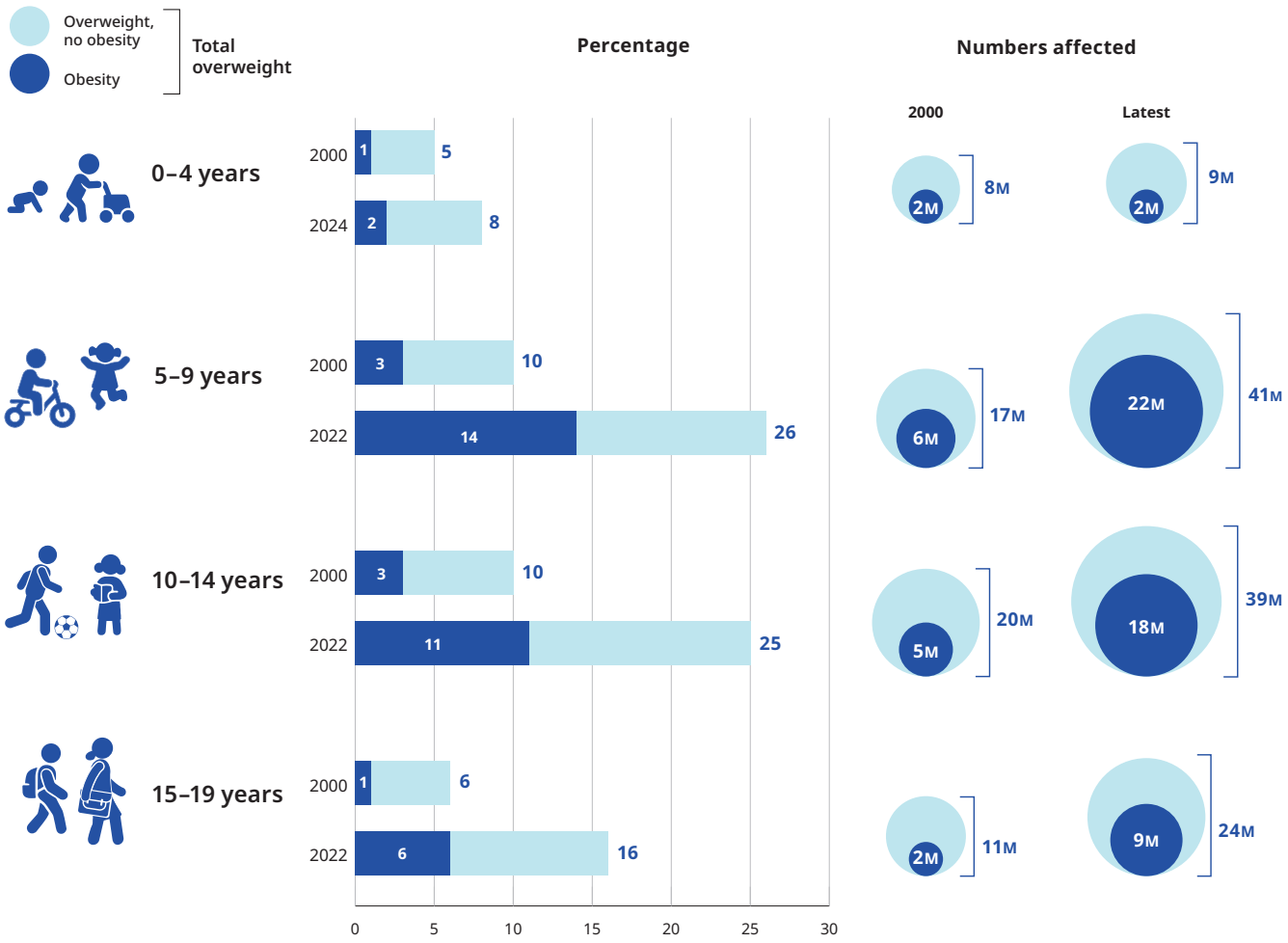


FIGURE A1: **Trend in the percentage and number (in millions) of children and adolescents living with overweight and obesity, by age group, East Asia and the Pacific, 2000 and latest**

Note: Latest estimates are from the year 2024 for children under 5 and from the year 2022 for children and adolescents 5–19 years. M = million.
Source: UNICEF, WHO and World Bank Joint Child Malnutrition Estimates for children under 5, and UNICEF analysis of data from NCD-RisC for children and adolescents 5–19 years.

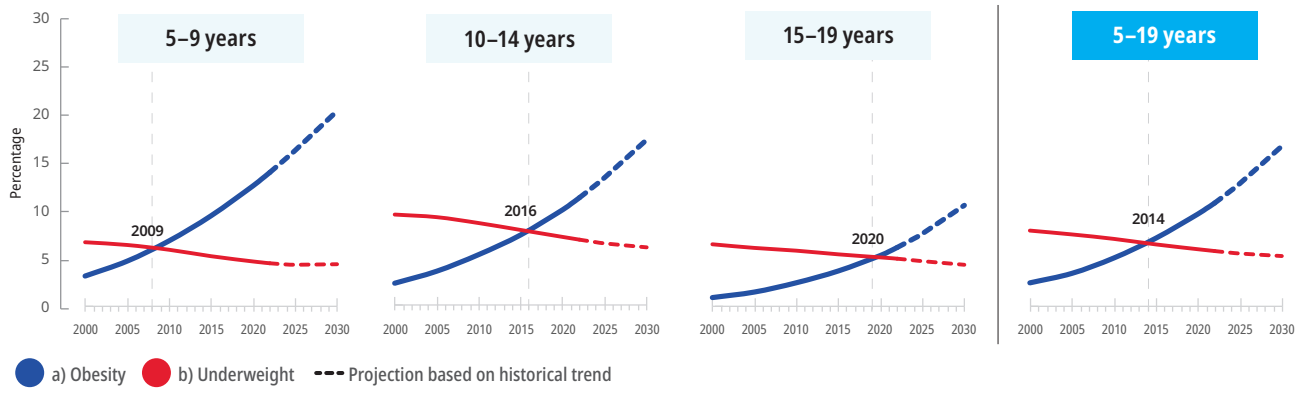


FIGURE A2: **Trends in the percentage of children and adolescents living with (a) obesity, (b) underweight, 2000–2022, and projections to 2030, by age group, East Asia and the Pacific**

Source: UNICEF analysis of data from NCD-RisC for children and adolescents 5–19 years.

FIGURE A3: **Percentage of countries by prevalence threshold categories for overweight, by age group, East Asia and the Pacific**

Note: The prevalence threshold categories differ by the age of child. Refer to Annex 2 for further details.

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

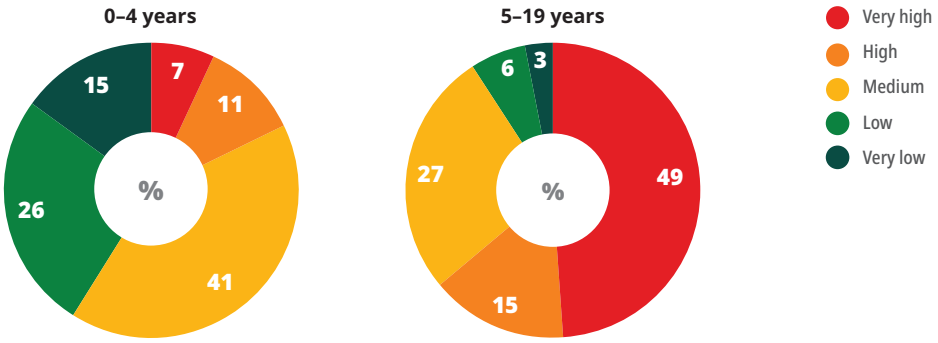


FIGURE A4: **Percentage of children aged 6–23 months and adolescents aged 15–19 years not consuming vegetables or fruit and not consuming eggs or flesh foods, and percentage of adolescents aged 15–19 years consuming soft drinks, more than one sugary food or beverage and more than one salty processed food, by place of residence and wealth group, East Asia and the Pacific**

Note: *Insufficient data to compute regional aggregate on consumption of unhealthy foods and beverages for children aged 6–23 months.

Source: *UNICEF Global databases and **Gallup World Poll surveys.

EASTERN EUROPE AND CENTRAL ASIA

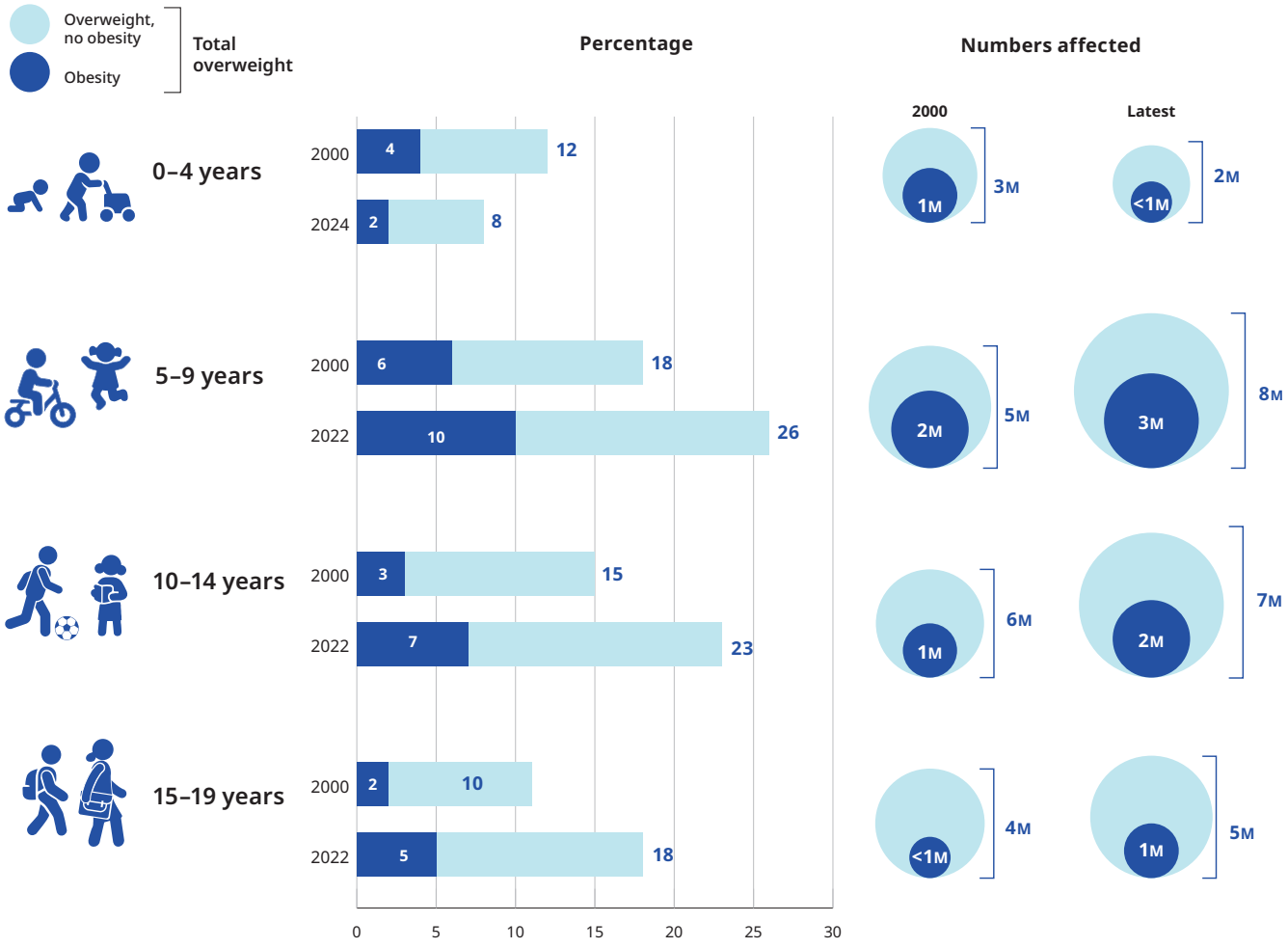


FIGURE A5: **Trend in the percentage and number (in millions) of children and adolescents living with overweight and obesity, by age group, Eastern Europe and Central Asia, 2000 and latest**

Note: Latest estimates are from the year 2024 for children under 5 and from the year 2022 for children and adolescents 5–19 years. M = million.
Source: UNICEF, WHO and World Bank Joint Child Malnutrition Estimates for children under 5, and UNICEF analysis of data from NCD-RisC for children and adolescents 5–19 years.

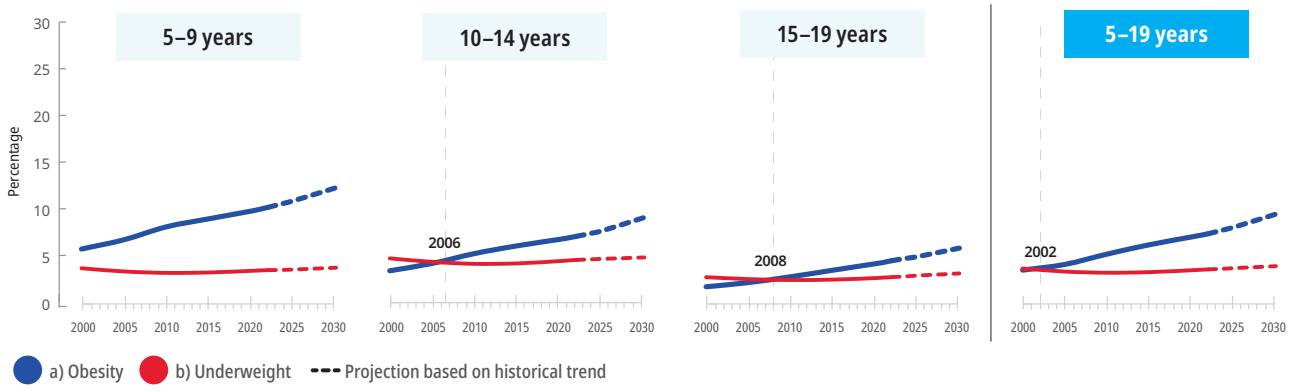


FIGURE A6: **Trends in the percentage of children and adolescents living with (a) obesity, (b) underweight, 2000–2022, and projections to 2030, by age group, Eastern Europe and Central Asia**

Source: UNICEF analysis of data from NCD-RisC for children and adolescents 5–19 years.

FIGURE A7: **Percentage of countries by prevalence threshold categories for overweight, by age group, Eastern Europe and Central Asia**

Note: The prevalence threshold categories differ by the age of child. Refer to Annex 2 for further details.

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

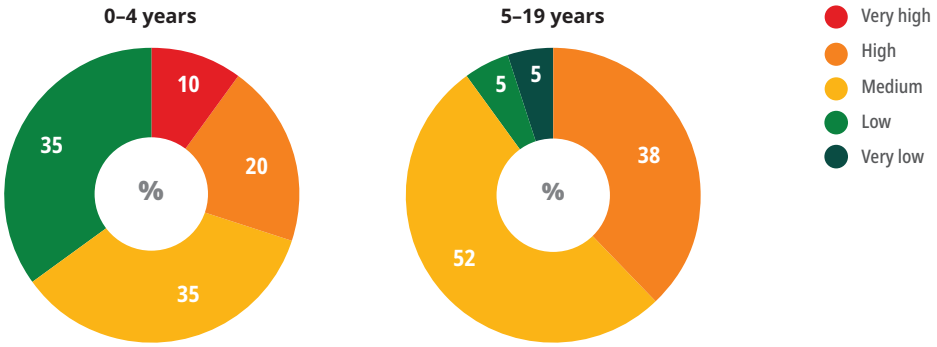


FIGURE A8: **Percentage of children aged 6–23 months and adolescents aged 15–19 years not consuming vegetables or fruit and not consuming eggs or flesh foods, and percentage of adolescents aged 15–19 years consuming soft drinks, more than one sugary food or beverage and more than one salty processed food, by place of residence and wealth group, Eastern Europe and Central Asia**

Note: *Insufficient data to compute regional aggregate on consumption of unhealthy foods and beverages for children aged 6–23 months.

Source: *UNICEF Global databases and **Gallup World Poll surveys.

EASTERN AND SOUTHERN AFRICA

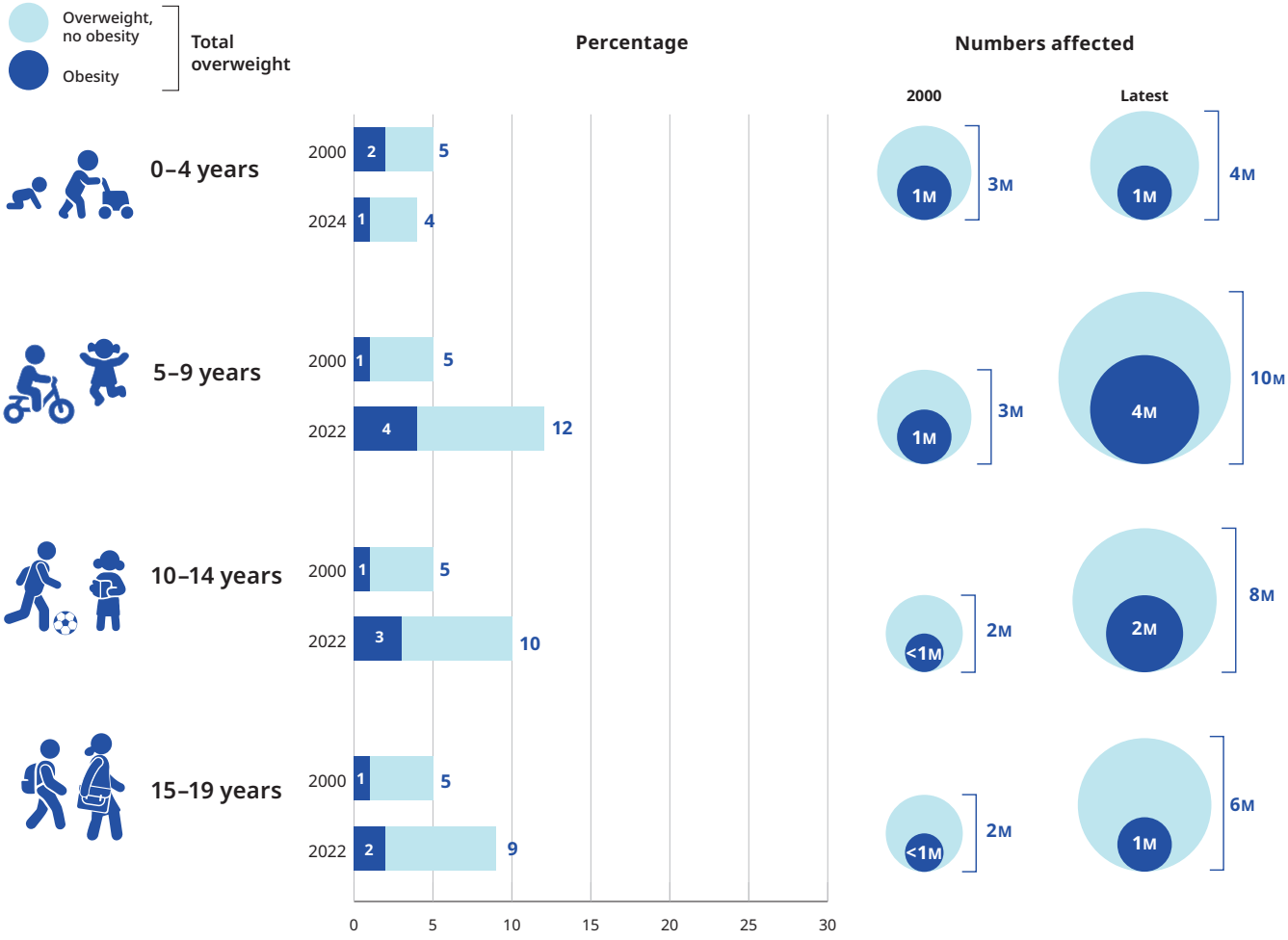


FIGURE A9: **Trend in the percentage and number (in millions) of children and adolescents living with overweight and obesity, by age group, Eastern and Southern Africa, 2000 and latest**

Note: Latest estimates are from the year 2024 for children under 5 and from the year 2022 for children and adolescents 5–19 years. M = million.
Source: UNICEF, WHO and World Bank Joint Child Malnutrition Estimates for children under 5, and UNICEF analysis of data from NCD-RisC for children and adolescents 5–19 years.

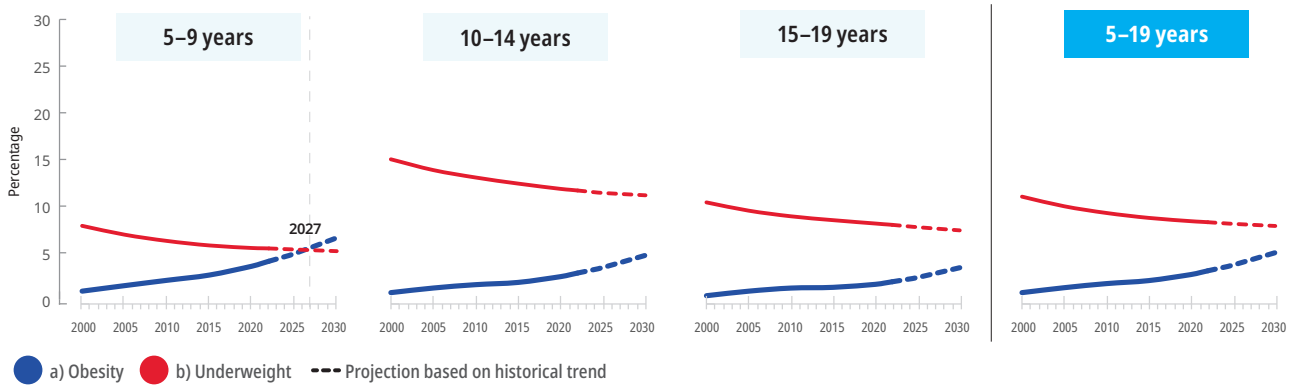


FIGURE A10: **Trends in the percentage of children and adolescents living with (a) obesity, (b) underweight, 2000–2022, and projections to 2030, by age group, Eastern and Southern Africa**

Source: UNICEF analysis of data from NCD-RisC for children and adolescents 5–19 years.

FIGURE A11: **Percentage of countries by prevalence threshold categories for overweight, by age group, Eastern and Southern Africa**

Note: The prevalence threshold categories differ by the age of child. Refer to Annex 2 for further details.

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

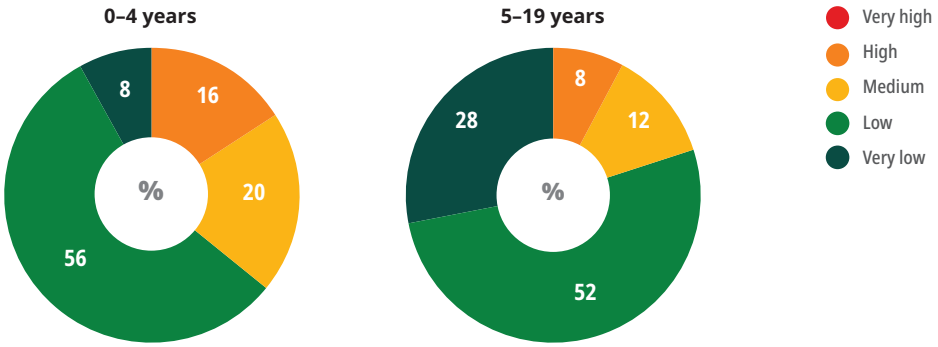


FIGURE A12: **Percentage of children aged 6–23 months and adolescents aged 15–19 years not consuming vegetables or fruit and not consuming eggs or flesh foods, and percentage of adolescents aged 15–19 years consuming soft drinks, more than one sugary food or beverage and more than one salty processed food, by place of residence and wealth group, Eastern and Southern Africa**

Note: *Insufficient data to compute regional aggregate on consumption of unhealthy foods and beverages for children aged 6–23 months.

Source: *UNICEF Global databases and **Gallup World Poll surveys.

LATIN AMERICA AND THE CARIBBEAN

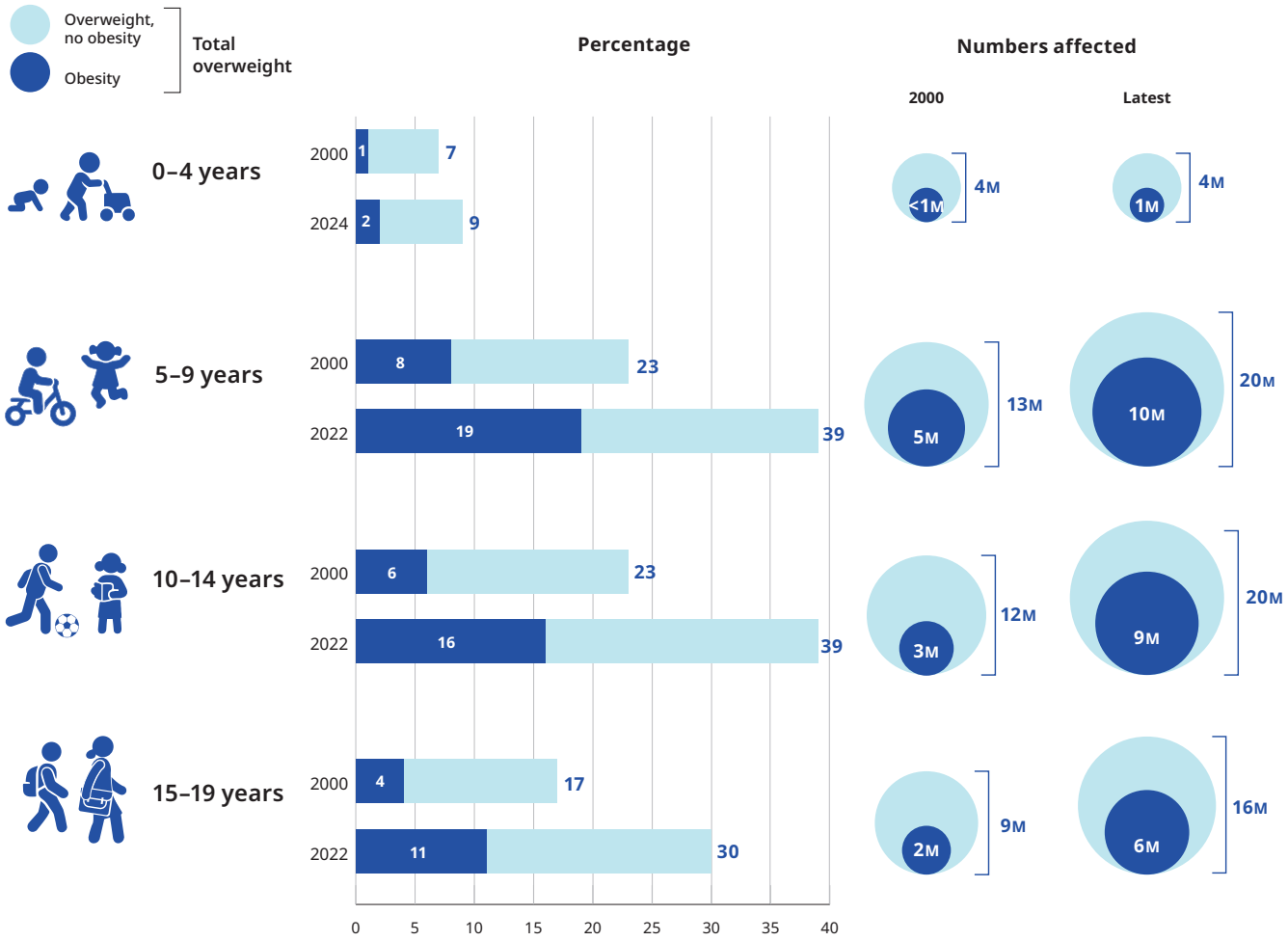


FIGURE A13: **Trend in the percentage and number (in millions) of children and adolescents living with overweight and obesity, by age group, Latin America and the Caribbean, 2000 and latest**

Note: Latest estimates are from the year 2024 for children under 5 and from the year 2022 for children and adolescents 5–19 years. Interpret with caution; low population coverage.
M = million.
Source: UNICEF, WHO and World Bank Joint Child Malnutrition Estimates for children under 5, and UNICEF analysis of data from NCD-RisC for children and adolescents 5–19 years.

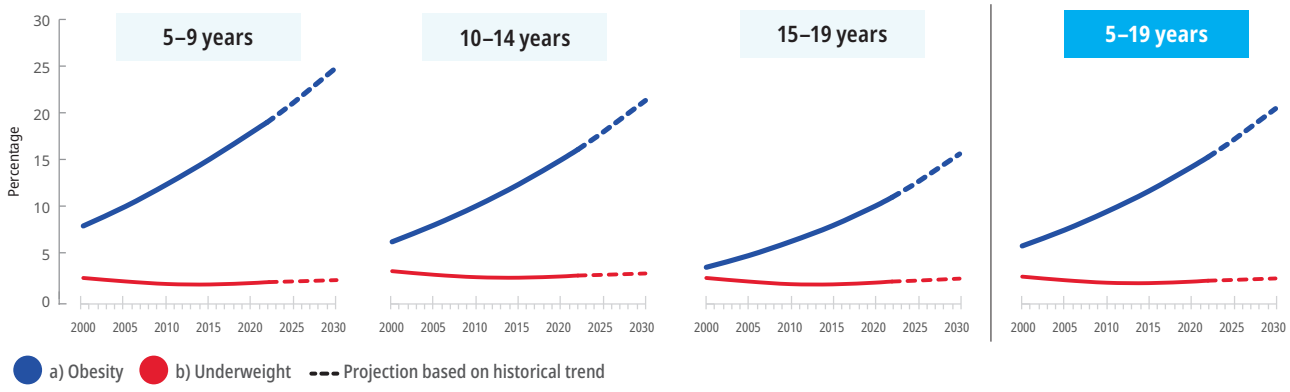


FIGURE A14: **Trends in the percentage of children and adolescents living with (a) obesity, (b) underweight, 2000–2022, and projections to 2030, by age group, Latin America and the Caribbean**
Source: UNICEF analysis of data from NCD-RisC for children and adolescents 5–19 years.

FIGURE A15: **Percentage of countries by prevalence threshold categories for overweight, by age group, Latin America and the Caribbean**

Note: The prevalence threshold categories differ by the age of child. Refer to Annex 2 for further details.

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

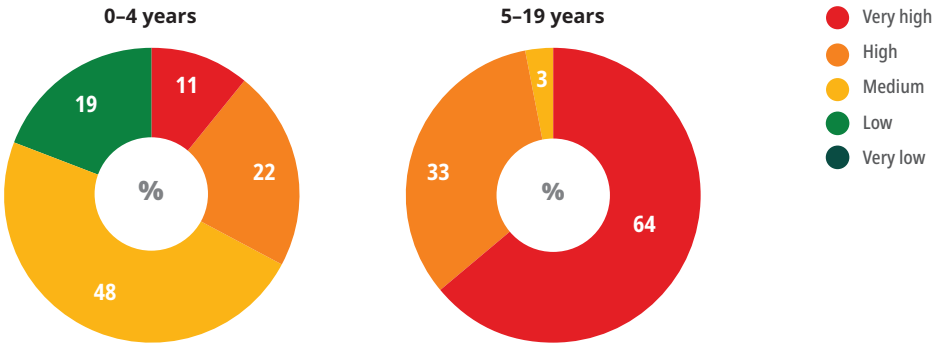


FIGURE A16: **Percentage of children aged 6–23 months and adolescents aged 15–19 years not consuming vegetables or fruit and not consuming eggs or flesh foods, and percentage of adolescents aged 15–19 years consuming soft drinks, more than one sugary food or beverage and more than one salty processed food, by place of residence and wealth group, Latin America and the Caribbean**

Note: *Insufficient data to compute regional aggregate on consumption of unhealthy foods and beverages for children aged 6–23 months. Interpret with caution; low population coverage.
Source: *UNICEF Global databases and **Gallup World Poll surveys.

MIDDLE EAST AND NORTH AFRICA

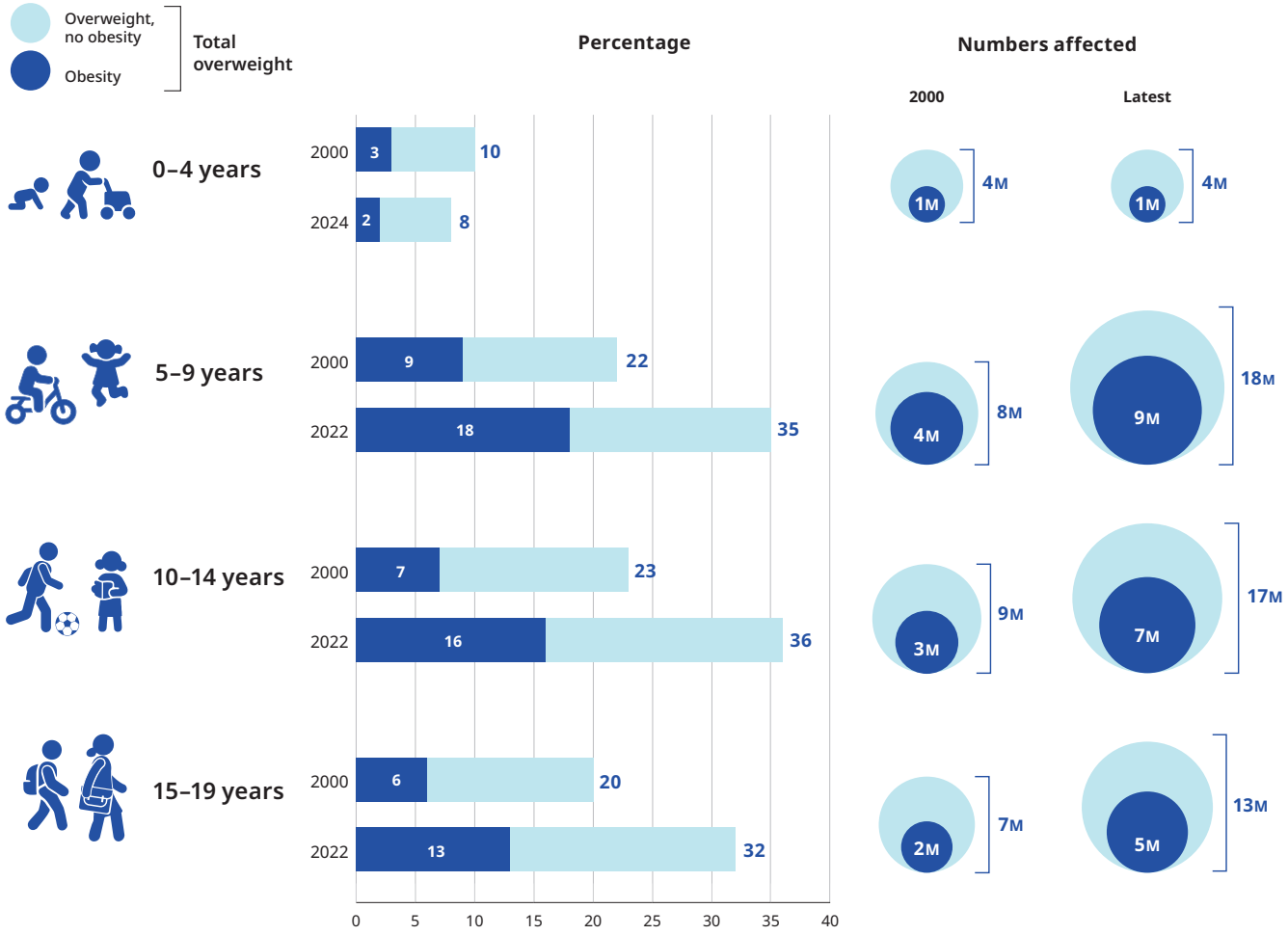


FIGURE A17: **Trend in the percentage and number (in millions) of children and adolescents living with overweight and obesity, by age group, Middle East and North Africa, 2000 and latest**

Note: Latest estimates are from the year 2024 for children under 5 and from the year 2022 for children and adolescents 5–19 years. M = million.

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

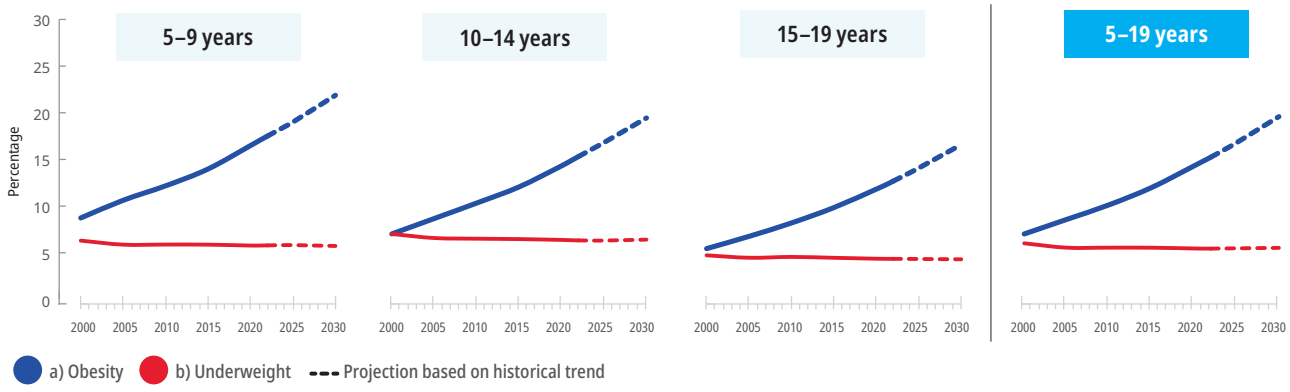


FIGURE A18: **Trends in the percentage of children and adolescents living with (a) obesity, (b) underweight, 2000–2022, and projections to 2030, by age group, Middle East and North Africa**

Source: UNICEF analysis of data from NCD-RisC for children and adolescents 5–19 years.

FIGURE A19: **Percentage of countries by prevalence threshold categories for overweight, by age group, Middle East and North Africa**

Note: The prevalence threshold categories differ by the age of child. Refer to Annex 2 for further details.

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

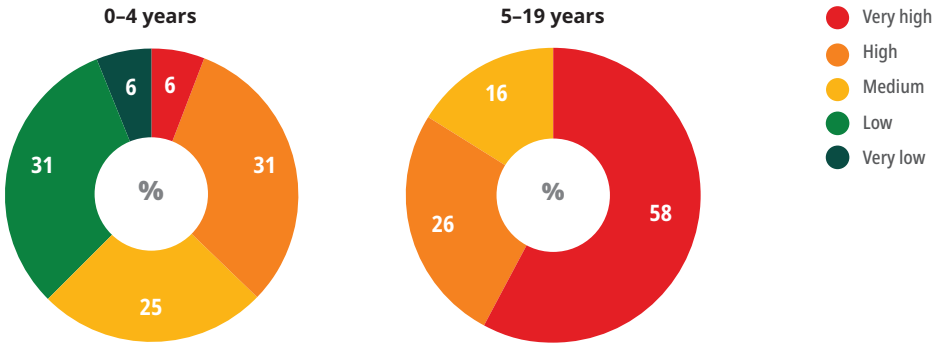


FIGURE A20: **Percentage of children aged 6–23 months and adolescents aged 15–19 years not consuming vegetables or fruit and not consuming eggs or flesh foods, and percentage of adolescents aged 15–19 years consuming soft drinks, more than one sugary food or beverage and more than one salty processed food, by place of residence and wealth group, Middle East and North Africa**

Note: *Insufficient data to compute regional aggregate on consumption of unhealthy foods and beverages for children aged 6–23 months.

Source: *UNICEF Global databases and **Gallup World Poll surveys.

NORTH AMERICA

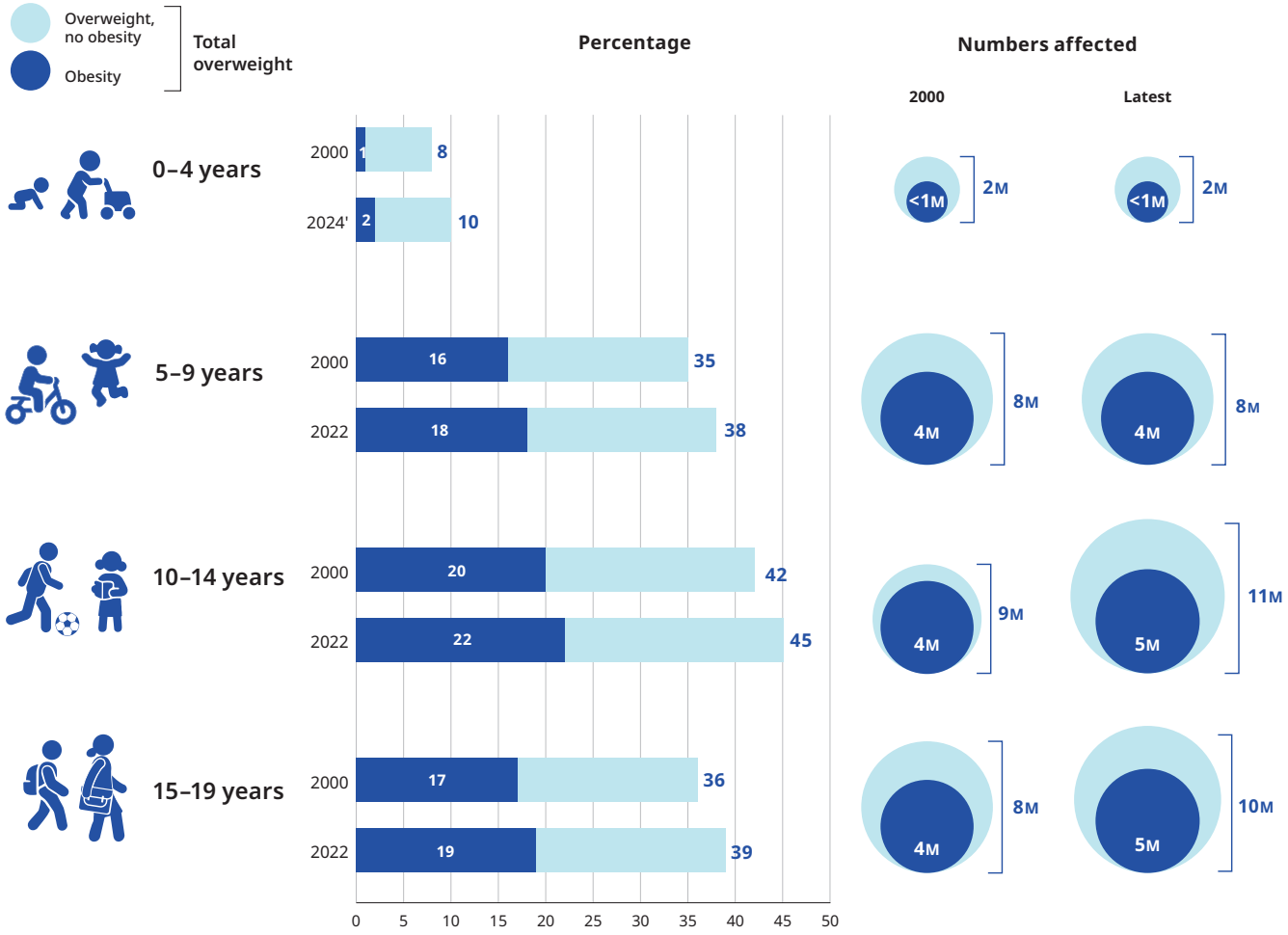


FIGURE A21: **Trend in the percentage and number (in millions) of children and adolescents living with overweight and obesity, by age group, North America, 2000 and latest**

Note: Latest estimates are from the year 2024 for children under 5 and from the year 2022 for children and adolescents 5–19 years. M = million.
Source: UNICEF, WHO and World Bank Joint Child Malnutrition Estimates for children under 5, and UNICEF analysis of data from NCD-RisC for children and adolescents 5–19 years.

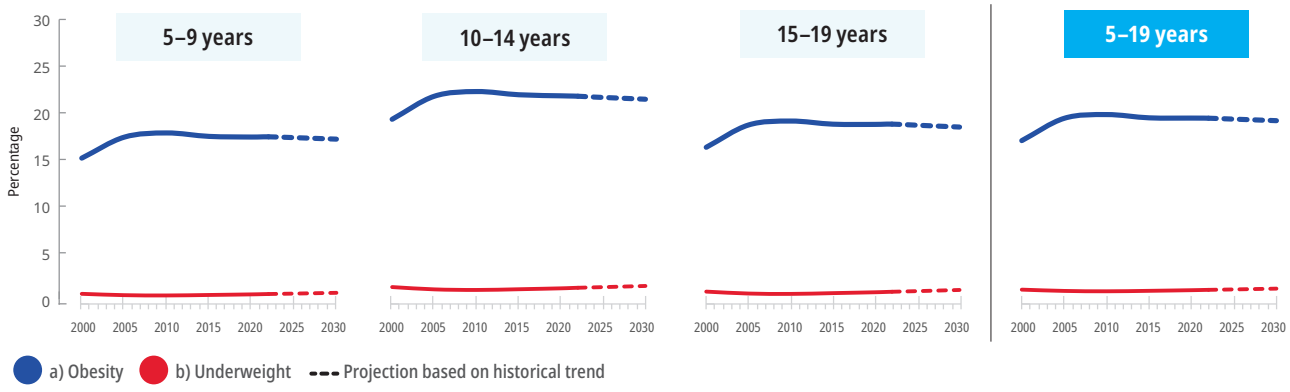


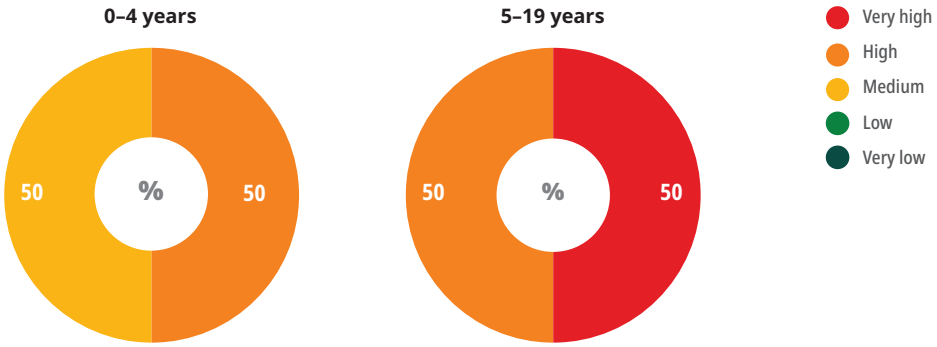
FIGURE A22: **Trends in the percentage of children and adolescents living with (a) obesity, (b) underweight, 2000–2022, and projections to 2030, by age group, North America**

Source: UNICEF analysis of data from NCD-RisC for children and adolescents 5–19 years.

FIGURE A23: **Percentage of countries by prevalence threshold categories for overweight, by age group, North America**

Note: The prevalence threshold categories differ by the age of child. Refer to Annex 2 for further details.

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



SOUTH ASIA

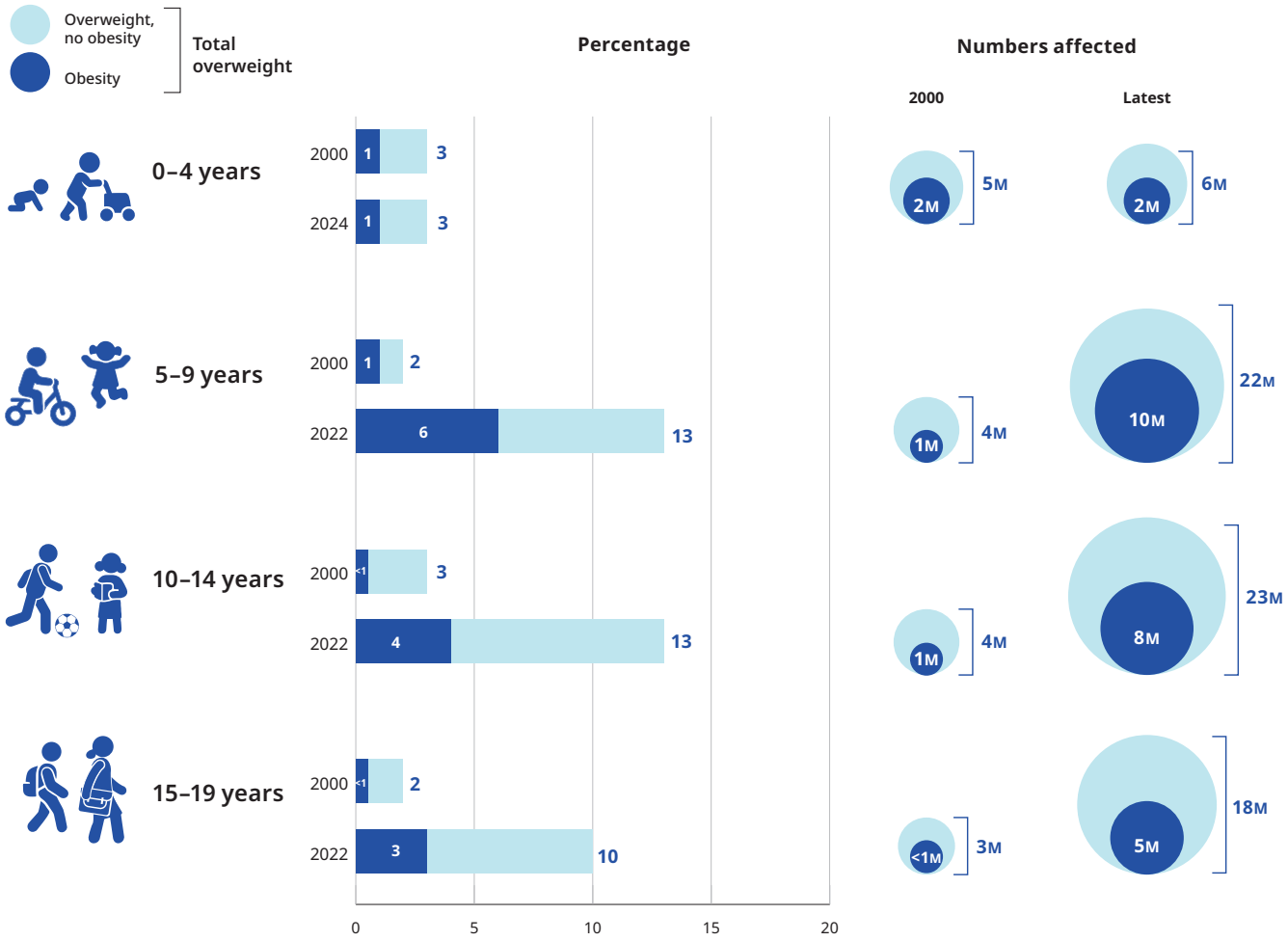


FIGURE A24: **Trend in the percentage and number (in millions) of children and adolescents living with overweight and obesity, by age group, South Asia, 2000 and latest**

Note: Latest estimates are from the year 2024 for children under 5 and from the year 2022 for children and adolescents 5–19 years. M = million.
Source: UNICEF, WHO and World Bank Joint Child Malnutrition Estimates for children under 5, and UNICEF analysis of data from NCD-RisC for children and adolescents 5–19 years.

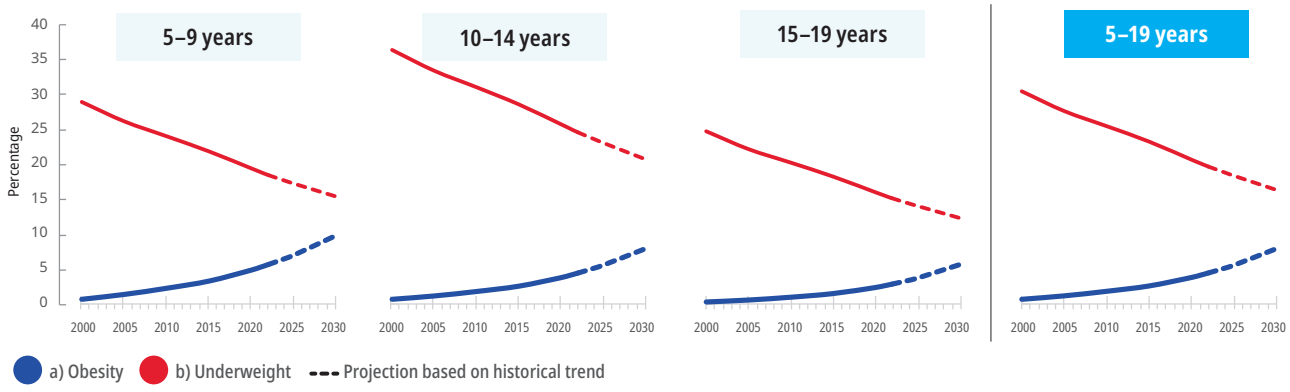


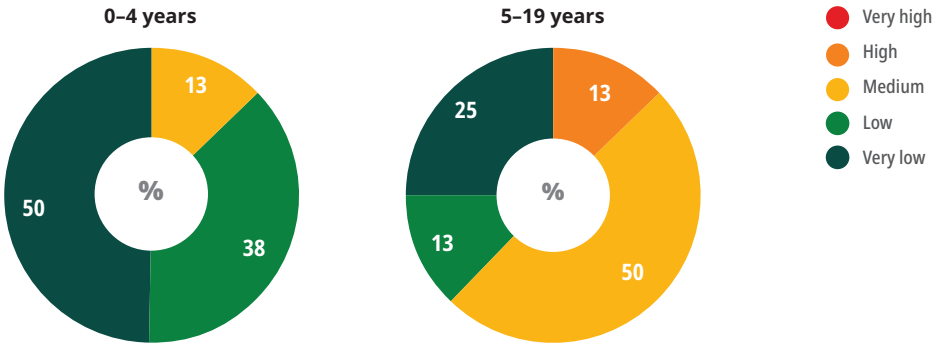
FIGURE A25: **Trends in the percentage of children and adolescents living with (a) obesity, (b) underweight, 2000–2022, and projections to 2030, by age group, South Asia**

Source: UNICEF analysis of data from NCD-RisC for children and adolescents 5–19 years.

FIGURE A26: **Percentage of countries by prevalence threshold categories for overweight, by age group, South Asia**

Note: The prevalence threshold categories differ by the age of child. Refer to Annex 2 for further details.

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



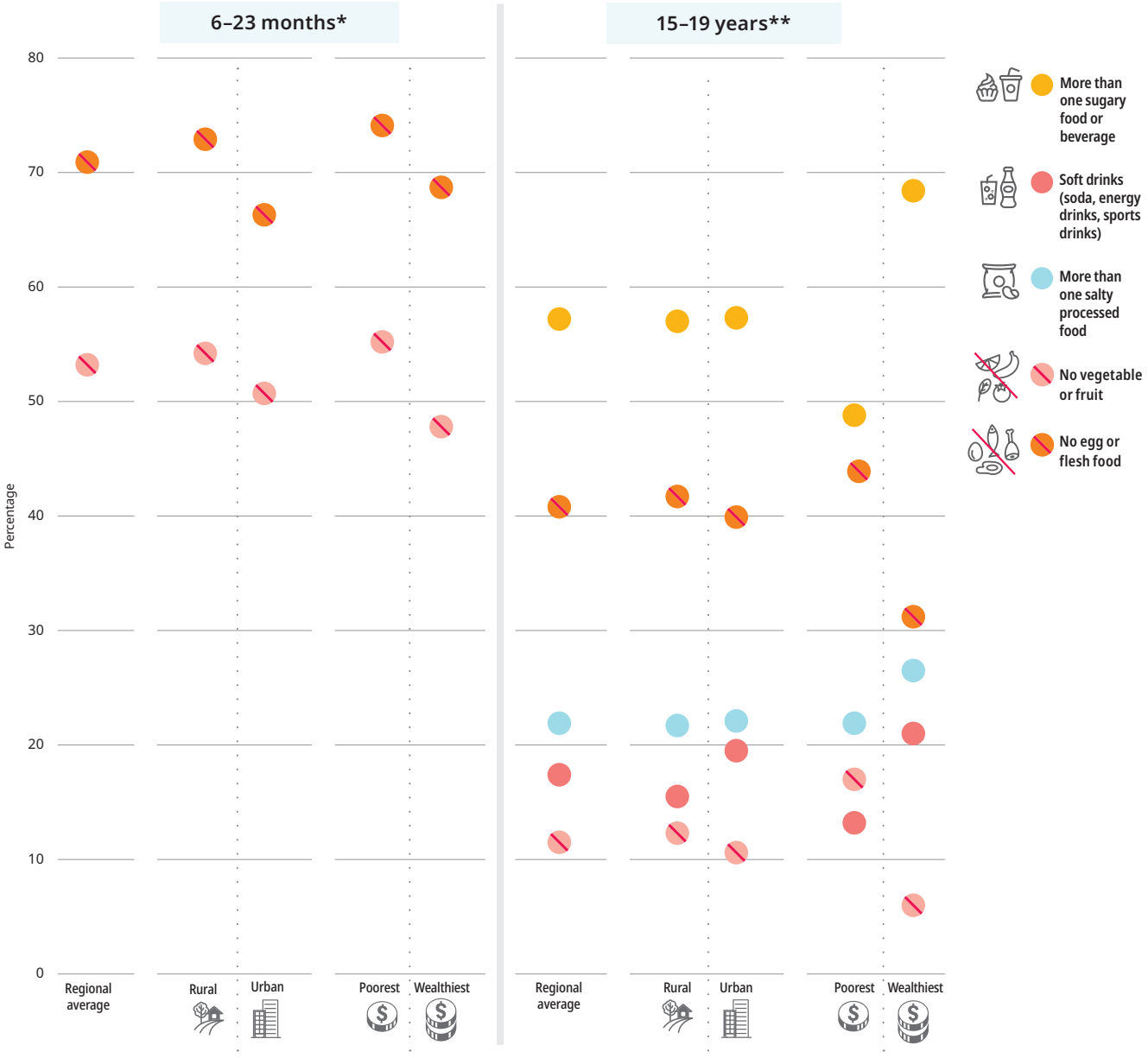


FIGURE A27: **Percentage of children aged 6–23 months and adolescents aged 15–19 years not consuming vegetables or fruit and not consuming eggs or flesh foods, and percentage of adolescents aged 15–19 years consuming soft drinks, more than one sugary food or beverage and more than one salty processed food, by place of residence and wealth group, South Asia**

Note: *Insufficient data to compute regional aggregate on consumption of unhealthy foods and beverages for children aged 6–23 months.

Source: *UNICEF Global databases and **Gallup World Poll surveys.

WEST AND CENTRAL AFRICA

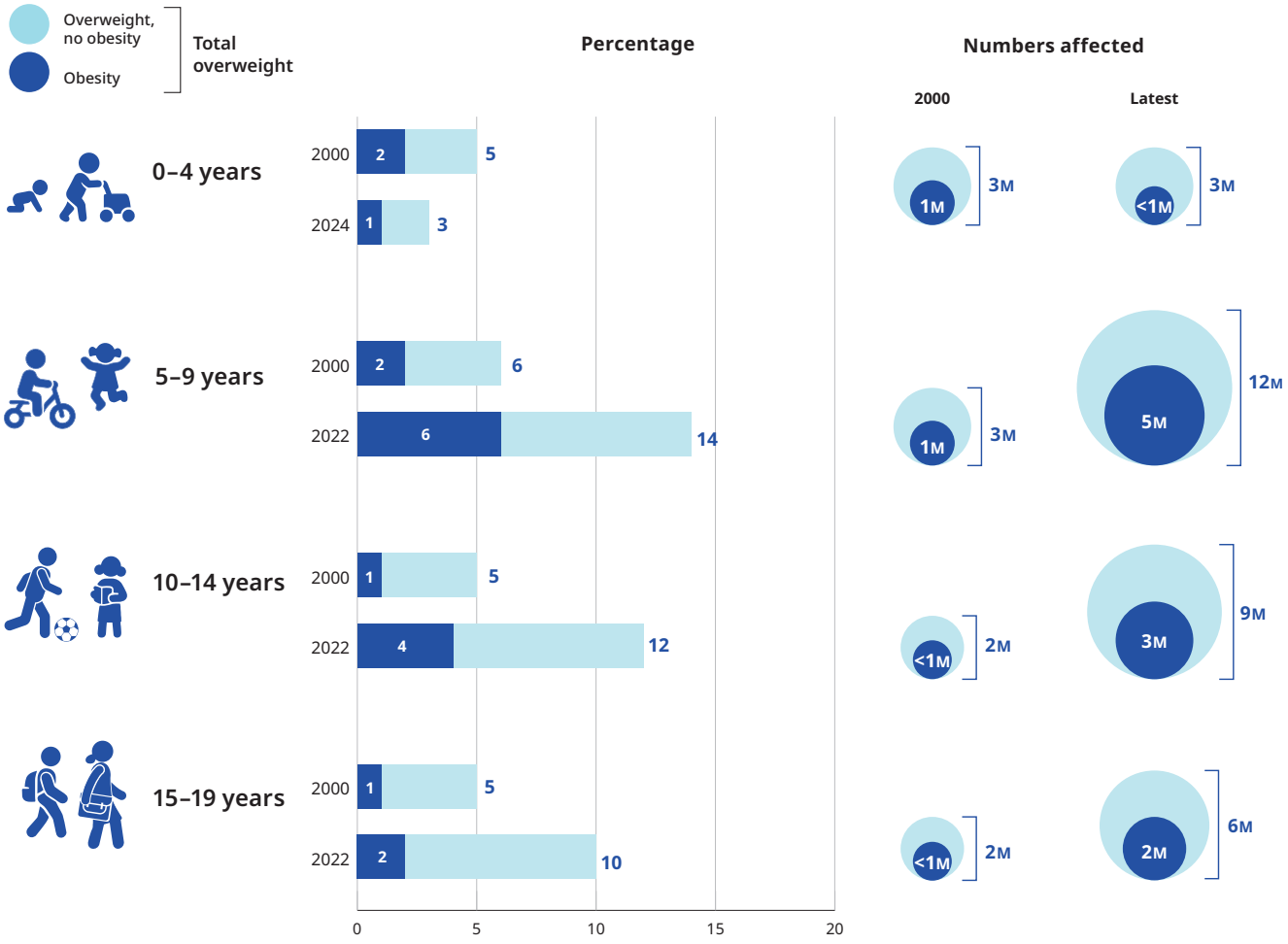


FIGURE A28: **Trend in the percentage and number (in millions) of children and adolescents living with overweight and obesity, by age group, West and Central Africa, 2000 and latest**

Note: Latest estimates are from the year 2024 for children under 5 and from the year 2022 for children and adolescents 5–19 years. M = million.
Source: UNICEF, WHO and World Bank Joint Child Malnutrition Estimates for children under 5, and UNICEF analysis of data from NCD-RisC for children and adolescents 5–19 years.

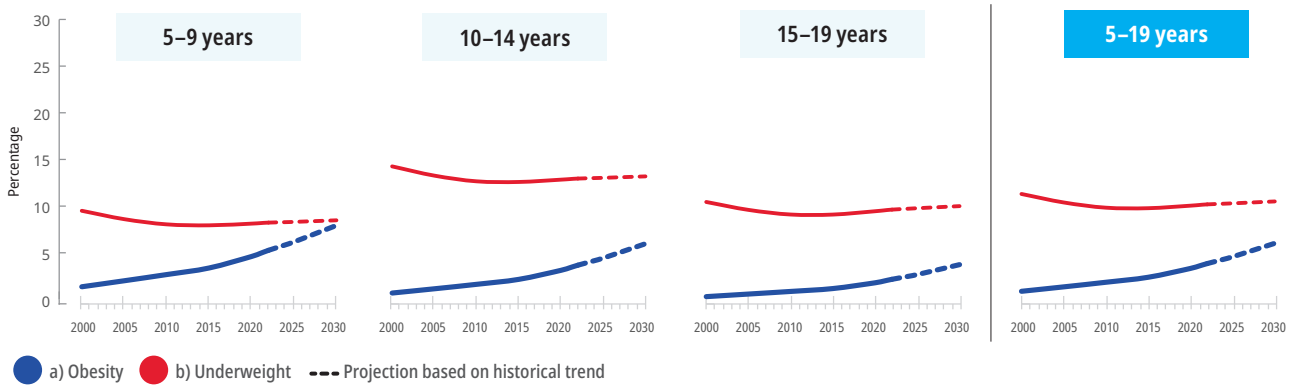


FIGURE A29: **Trends in the percentage of children and adolescents living with (a) obesity, (b) underweight, 2000–2022, and projections to 2030, by age group, West and Central Africa**

Source: UNICEF analysis of data from NCD-RisC for children and adolescents 5–19 years.

FIGURE A30: **Percentage of countries by prevalence threshold categories for overweight, by age group, West and Central Africa**

Note: The prevalence threshold categories differ by the age of child. Refer to Annex 2 for further details.

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

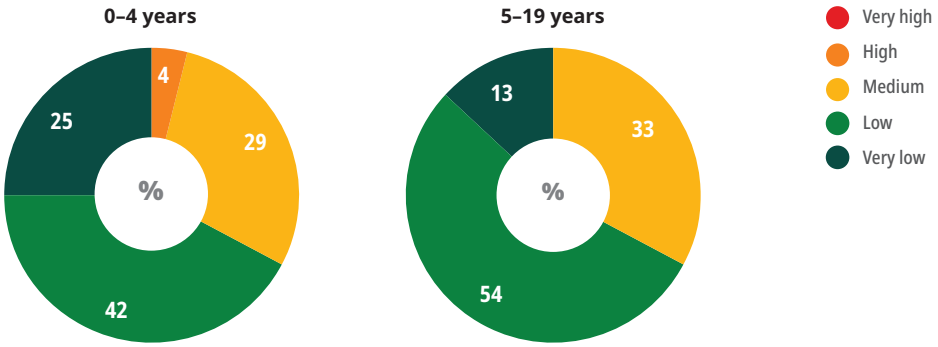


FIGURE A31: **Percentage of children aged 6–23 months and adolescents aged 15–19 years not consuming vegetables or fruit and not consuming eggs or flesh foods, and percentage of adolescents aged 15–19 years consuming soft drinks, more than one sugary food or beverage and more than one salty processed food, by place of residence and wealth group, West and Central Africa**

Note: *Insufficient data to compute regional aggregate on consumption of unhealthy foods and beverages for children aged 6–23 months.

Source: *UNICEF Global databases and **Gallup World Poll surveys.

WESTERN EUROPE

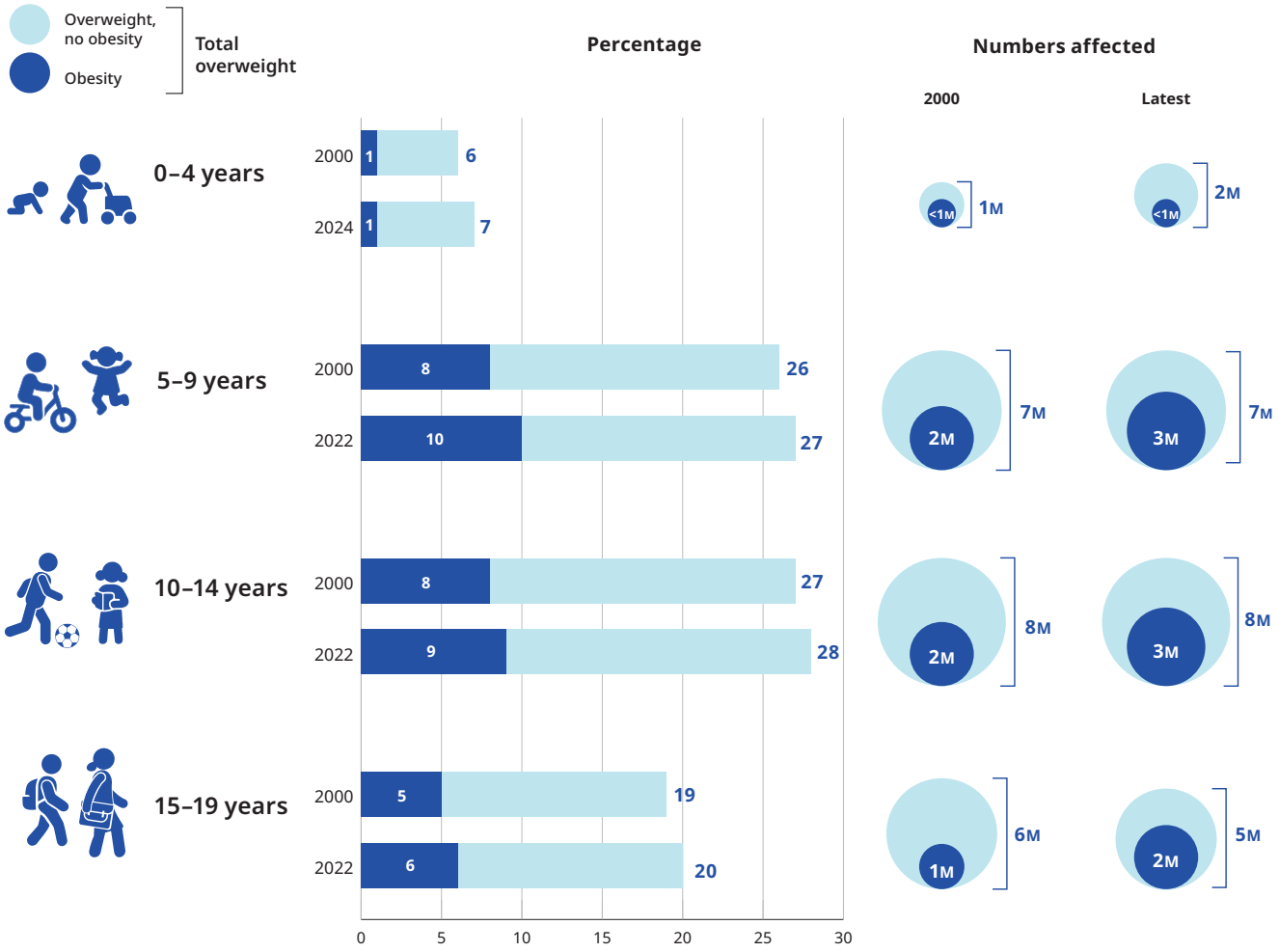


FIGURE A32: **Trend in the percentage and number (in millions) of children and adolescents living with overweight and obesity, by age group, Western Europe, 2000 and latest**

Note: Latest estimates are from the year 2024 for children under 5 and from the year 2022 for children and adolescents 5–19 years. M = million.
Source: UNICEF, WHO and World Bank Joint Child Malnutrition Estimates for children under 5, and UNICEF analysis of data from NCD-RisC for children and adolescents 5–19 years.

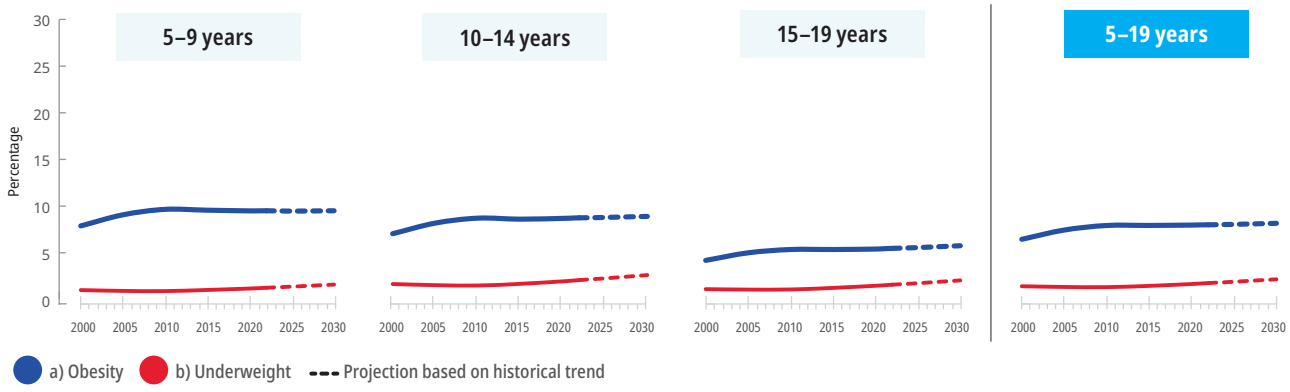


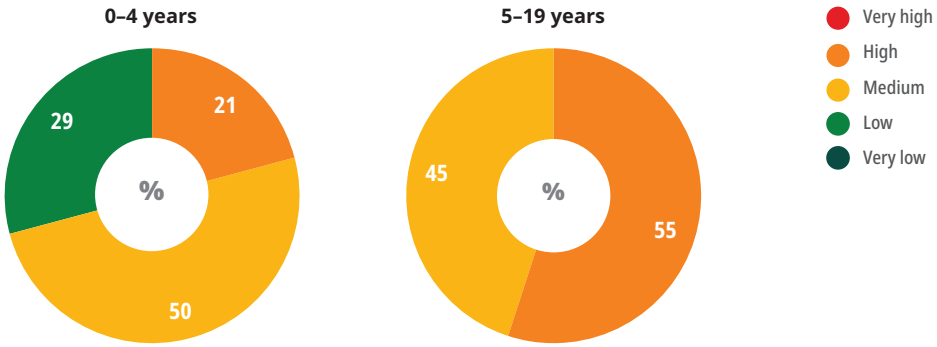
FIGURE A33: **Trends in the percentage of children and adolescents living with (a) obesity, (b) underweight, 2000–2022, and projections to 2030, by age group, Western Europe**

Source: UNICEF analysis of data from NCD-RisC for children and adolescents 5–19 years.

FIGURE A34: **Percentage of countries by prevalence threshold categories for overweight, by age group, Western Europe**

Note: The prevalence threshold categories differ by the age of child. Refer to Annex 2 for further details.

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



ANNEX 2

NOTES ON FIGURES

Population-weighted global and regional estimates

The regional estimates of the various indicators presented in this report are based on UNICEF reporting regions. Further details on the composition of these geographical regions are available at <https://data.unicef.org/regionalclassifications/>.

Overweight, obesity and severe wasting among children under 5 years

The regional and global population-weighted estimates for overweight, obesity and severe wasting for children under 5 years were weighted using the annual population by age interpolated datasets from the World Population Prospects: 2024 Revision and based on the UNICEF, WHO and World Bank Joint Child Malnutrition Estimates, 2025 edition.[342]

Further details about the generation of global and regional estimates of overweight and severe wasting are available at <https://data.unicef.org/resources/jme-standard-methodology>. Regional and global estimates of obesity were developed using the same methodology as overweight.

Overweight, obesity and underweight among children and adolescents aged 5-19 years

The regional and global population-weighted estimates for overweight, obesity and underweight for children and adolescents aged 5–19 years were weighted using the annual population by age interpolated datasets from the World Population Prospects: 2022 Revision.[343]

The population-weighted estimates of the percentage of children and adolescents aged 5–19 years by indicator and age group in each UNICEF region and globally were generated by (a) multiplying the percentage of children and adolescents in a given age group who are living with overweight (or obesity or underweight) for each country with available data by the number of children in a given age group in that country to determine the estimated the number of children and adolescents living with overweight (or obesity or underweight); (b) summing all of the country specific values for the estimated number of children and adolescents in a given age group living with overweight (or obesity or underweight) in a region or globally; and (c) dividing the estimated number of children and adolescents in a given age group living with overweight (or obesity or underweight) in a region or globally by the total population of children and adolescents in a given age group in the countries with data in the region or globally.

Dietary intake among children aged 6–23 months and adolescents aged 5–19 years

The regional and global population-weighted estimates for dietary indicators for children 6–23 months and adolescents 15–19 years were weighted using the annual population by age interpolated datasets from the World Population Prospects: 2024 Revision.[342]

The population-weighted estimates of the percentage of children and adolescents by age group consuming foods and beverages in each UNICEF region and globally were generated by (a) multiplying the percentage of children and adolescents in a given age group consuming various foods and beverages for each country with available data by the number of children and adolescents in a given age group in that country to determine the estimated number of children and adolescents consuming various foods and beverages; (b) summing all of the country specific values for the estimated number of children and adolescents in a given age group consuming various foods and beverages in a region or globally; and (c) dividing the estimated number of children and adolescents in a given age group consuming various foods and beverages in a region or globally by the total population of children and adolescents in a given age group in the countries with data in the region or globally.

Notes on individual figures

Figure 4: Percentage of countries by prevalence threshold categories for overweight, by age group

The prevalence thresholds for overweight for children under 5 were established through the WHO-UNICEF Technical Advisory Group on Nutrition Monitoring. The thresholds for children and adolescents aged 5–19 years are based on those summarized in the paper published in 2021 by Lobstein and Jewell.[131]

Prevalence thresholds	Children under 5	Children and adolescents 5–19 years
Very low	<2.5	<10
Low	2.5 – <5	10 – <15
Medium	5 – <10	15 – <25
High	10 – <15	25 – <35
Very high	≥15	≥35

Figure 6: Trends in percentage and numbers (in millions) of children and adolescents with overweight, by age group and by country income classification, 2000 and latest

The prevalence of overweight by country income status is population-weighted for all groups. The source of information on country income status is the World Bank country classification for fiscal year 2025.[344]

Figure 10: Trends in the percentage of children and adolescents with (a) obesity; (b) severe wasting/ underweight, 2000 to the latest and projections to 2030, by age group, globally

Projections in the prevalence of obesity and severe wasting from 2024 onwards for children under 5 are based on the UNICEF, WHO and World Bank Joint Child Malnutrition Estimates, 2025 edition. Projections are based on average annual rate of reduction of all estimates from 2012 to 2024.

Projections in the prevalence of obesity and underweight for children and adolescents aged 5–19 years are determined by applying the average change in probit-transformed prevalence from the baseline year of 2010 to 2022.[345]

Figure 12: Percentage of children aged 6–23 months not consuming vegetables or fruit and not consuming eggs or flesh foods, by UNICEF region and globally

Estimates of no eggs or flesh food and no vegetable or fruit are population-weighted and based on the most recent national survey between 2017 and 2024 for a subset of 90 countries available in the UNICEF Global Databases on Infant and Young Child Feeding, covering 76 per cent of the global population of children aged 6–23 months. Only regions where available data represent at least 50 per cent of the region's population of children aged 6–23 months are displayed, with the exception of Latin America and the Caribbean.

Figure 13: Percentage of children aged 6–23 months not consuming vegetables or fruit and not eating eggs or flesh foods, by sex, residence, and wealth group, globally

Estimates are population-weighted and based on the most recent national survey between 2017 and 2024 for a subset of 88 countries with disaggregated data by sex of the child, 84 countries with disaggregated data by place of residence, and 81 countries with disaggregated data by wealth group, available in the UNICEF Global Databases on Infant and Young Child Feeding. Wealth status is based on a household's ownership of various assets and the characteristics of its dwelling.

The 'poorest' group refers to children belonging to households in wealth quintile 1, and the 'wealthiest' group refers to children belonging to households in wealth quintile 5.

Figure 14: Percentage of adolescents aged 15–19 years (a) consuming soft drinks, more than one sugary food or beverage and more than one salty processed food; (b) not consuming vegetables or fruit and not eating eggs or flesh foods, by UNICEF region and globally

Estimates of the various indicators are population-weighted and based on Gallup World Poll surveys conducted between 2021 and 2024 in 93 countries covering 88 per cent of the global population of adolescents aged 15–19 years. Only regions where available data represent at least 50 per cent of the region's population of adolescents aged 15–19 years are displayed.

Figure 15: Percentage of adolescents aged 15–19 years consuming soft drinks, consuming more than one sugary food or beverage, consuming more than one salty processed food, not eating vegetables or fruit and not eating eggs or flesh foods, by sex, residence, and wealth group, globally

Estimates are population-weighted and based on Gallup World Poll surveys conducted between 2021 and 2024 for a subset of 93 countries with disaggregated data by sex of the child, place of residence and wealth group.

Wealth group is based on household income. The 'poorest' group refers to adolescents belonging to households in income quintile 1, and the 'wealthiest' group refers to adolescents belonging to households in income quintile 5.

Figure 19: Relative caloric price of sugary snacks, salty snacks, soft drinks, vegetables and fruit, eggs and flesh foods, by country income status

The caloric prices of foods and beverages are compared with starchy staples. For example, a relative caloric price of three for a specific food group means that it is three times as expensive to obtain a calorie from this food group as it is to obtain a calorie from starchy staples. The values for vegetables and fruits are the unweighted means of the values for vitamin A-rich fruits and vegetables, dark green leafy vegetables and other vegetables and fruit. The values for eggs and flesh foods are the unweighted means of the values for eggs, white meat, unprocessed red meat, and fish and seafood. For further details see Headey et al., 2019.[166]

Figure 23: Percentage of young people aged 13–24 years who saw advertisements for sugary/energy drinks, fast food or snacks during the previous week, by country income status and country fragility status, 2024

The global poll was deployed between June and September 2024 on eight U-Report platforms, including U-Report Global, and gathered the perspectives of 64,000 young people from across 171 countries. These poll data reflect the information provided by the respondents aged 13–24 years and are not statistically representative of young people globally, or in any specific country or region. U-Report as a community does not have a goal of statistical representativeness among its membership and no sampling stratification was employed. Post-stratification weighting was not applied during the analysis of this poll. U-Report data should not be used as a single source of information to make decisions but rather should be used to complement more statistically robust methods of gathering data.

UNICEF values the voices of young people and seeks to recognize their experiences and views. The data are considered a reliable reflection of the information the respondents have provided to U-Report. U-Report is UNICEF's community for young people, by young people, where they can raise their voices on issues that matter, access trusted information and take action in their communities. It is active as a programme in more than 90 countries and is accessible worldwide via its global platform, enabling young people everywhere to use real-time data to shape policies and decisions. Once registered, participants, known as U-Reporters, respond voluntarily and anonymously to short polls and receive important and lifesaving information on issues such as nutrition, health, education, climate change and emergencies via SMS, social media (e.g., Instagram, Facebook Messenger, U-Report App, Telegram, Viber and WhatsApp) or the U-Report website or app.

The source of information on country income status is the World Bank country classification for fiscal year 2025.[344] The source of information on country fragility status is the World Bank list of fragile and conflict affected countries for fiscal year 2025.[346]

Figure 24: Percentage of young people aged 13–24 years who saw advertisements for sugary/energy drinks, fast food or snacks during the previous week, by source of advertisement, 2024

See data notes for *Figure 23*.

Figure 25: Percentage of young people aged 13–24 years who saw celebrities, influencers, athletes or cartoons in advertisements for sugary/energy drinks, fast food or snacks during the previous week, by county income status, 2024

See data notes for *Figure 23*.

Figure 28: Percentage of countries with mandatory legal measures or policies to protect children from unhealthy food environments, by country income status

The source of information on country income status is the World Bank country classification for fiscal year 2025.[344] The data on legal measures and policies to protect children from unhealthy food environments were obtained from the following sources.

Legal measures substantially aligned with the Code

Inclusions: Countries and areas with legal measures substantially aligned with the International Code of Marketing of Breast-milk Substitutes and subsequent World Health Assembly resolutions (the Code).

Source: World Health Organization and United Nations Children's Fund, *Marketing of Breast-milk Substitutes: National implementation of the International Code, status report 2024,* WHO, Geneva, 2024.

Scope of the Code includes complementary foods

Inclusions: Countries and areas with legal measures aligned with the Code that include complementary foods.

Source: World Health Organization and United Nations Children's Fund, *Marketing of Breast-milk Substitutes: National implementation of the International Code, status report 2024,* WHO, Geneva, 2024.

Restrictions on nutrients, ingredients or categories of concern in school meals

Inclusions: Countries and areas with mandatory restrictions on nutrients, ingredients or categories of concern in school meals.

Source: Global Food Research Program, 'National Policies Regulating the School Food Environment,

updated March 2024', Global Food Research Program, University of North Carolina, Chapel Hill, 2024, <www.globalfoodresearchprogram.org/resource/maps-school-food-environment-policies-around-the-world>, accessed 15 January 2025.

Restrictions on other food and beverages sold at school

Inclusions: Countries and areas with mandatory restrictions on competitive foods (i.e., any foods or beverages sold in schools outside of the school meal programme), including foods sold in canteens, tuck shops, vending machines and from vendors coming onto school grounds.

Source: Global Food Research Program, 'National Policies Regulating the School Food Environment, updated March 2024', Global Food Research Program, University of North Carolina, Chapel Hill, 2024, <www.globalfoodresearchprogram.org/resource/maps-school-food-environment-policies-around-the-world>, accessed 15 January 2025.

Regulation of food advertising to children through television and radio

Inclusions: Countries and areas with mandatory regulation of food advertising to children through television and radio. Includes countries identified as having provisions that cover the exposure to and/or power of food advertising

Source: Global Food Research Program, 'National Policies Regulating Food Marketing to Children, updated March 2024', Global Food Research Program, University of North Carolina, Chapel Hill, 2024. < www.globalfoodresearchprogram.org/resource/maps-restrictions-on-marketing-food-to-children>, accessed 19 June 2025.

Regulation of food advertising to children through digital media

Inclusions: Countries and areas with mandatory regulation of food advertising to children through digital media (internet and social media). Includes countries identified as having provisions that cover the exposure to and/or power of food advertising

Source: Global Food Research Program, 'National Policies Regulating Food Marketing to Children, updated March 2024', Global Food Research Program, University of North Carolina, Chapel Hill, 2024, <www.globalfoodresearchprogram.org/resource/maps-restrictions-on-marketing-food-to-children>, accessed 19 June 2025.

Food reformulation to reduce trans-fats

Inclusions: Countries and areas with mandatory regulations to reduce industrially produced trans-fats in foods.

Source: World Health Organization, 'Food Product Reformulation', The Global database on the Implementation of Food and Nutrition Action, WHO, Geneva, <https://gifna.who.int/summary/reformulation>, accessed 24 June 2025.

Front-of-pack food labelling

Inclusions: Countries and areas with mandatory front-of-pack nutrition labelling. Includes countries and areas with mandatory labelling and those with both mandatory and voluntary labelling.

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Taxation of foods and sugar-sweetened beverages

Inclusions: Countries and areas with national-level taxes on both foods and sugar-sweetened beverages.

Source: World Health Organization, 'Taxes on Foods and Non-Alcoholic Beverages', The Global database on the Implementation of Food and Nutrition Action (GIFNA), WHO, Geneva, <https://gifna.who.int/summary/FNABtax>, accessed 24 June 2025.

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