

Case Study

Mexico City



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Introduction

Mexico is one of the countries with the highest prevalence of overweight and obesity in the world: 75.2 per cent of adults¹ and 35 per cent of children and adolescents aged 5-19 years have excess of weight (overweight and obesity),² and 6.3 per cent of young children under the age of 5 are overweight.³ These figures tend to be higher in urban settings in low- and middle-income countries.⁴ In Mexico City, for example, the prevalence of obesity in children under the age of 5 is 6.9 per cent, while the prevalence of overweight and obesity in children aged 5-11 years is 40.4 per cent in boys and 35.3 per cent in girls; and 43.6 per cent in boys and 48.8 per cent in girls in adolescents aged 12-19 years.⁵

In recent decades, childhood overweight and obesity have increased steadily in Mexico and are associated with increased consumption of sugary and high-calorie-dense foods and beverages, as well as sedentary lifestyles.⁶ In addition, economic growth and population migration from rural to urban areas have had a negative impact, as seen in the adoption of the Western diet, which is characterized by the consumption of unhealthy foods (high in sugar, salt and/or fat) and reduced levels of physical activity.

Currently, Mexican children are growing up and developing in obesogenic food environments that do not consider their nutrition rights and needs when determining what foods are produced, processed, packaged and marketed. Obesogenic environments that promote the consumption of unhealthy foods, ultra-processed products and sedentary behaviours are the main drivers of the childhood overweight epidemic. In urban settings and low-income households, the situation is more acute. Urban food environments are characterized by increased availability of unhealthy or ultra-processed products; the higher cost of healthy foods compared to more affordable unhealthy products; and aggressive and persuasive marketing techniques (directed to children and their parents/caregivers) influence eating patterns and encourage the consumption of unhealthy foods.

In the prevention of childhood overweight, UNICEF recognizes the central role of the following systems: food; health; water, sanitation and hygiene (WASH); education; social protection and urban systems. In addition, it recommends measures related to improving the environment through formulating policies, regulatory frameworks and strategies; implementing interventions throughout the life cycle, especially during pregnancy, early childhood (under the age of 5), school age (aged 5-9 years) and adolescence (aged 10-19 years); and generating and using evidence, including intervention monitoring and reporting.^{7, 8}

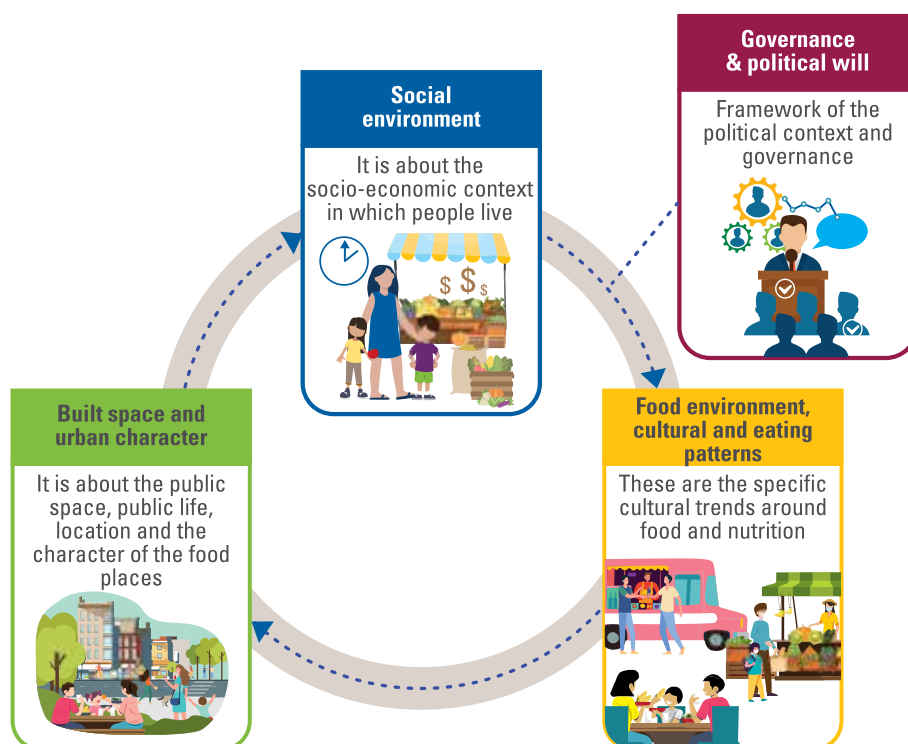
UNICEF promotes and supports governments to adopt the necessary policies and regulatory frameworks to create healthy food environments and positively influence the accessibility, availability, affordability, and acceptability of healthy foods, as well as to protect children from unhealthy foods from an early age. As this document shows, UNICEF is also beginning to work with cities committed to improving urban food environments and preventing childhood overweight and obesity.

Methodology

In September 2021, the Latin America and the Caribbean Regional Office commissioned [Gehl](#) (an urban design and research consultancy), to carry out a series of activities in selected cities of the region for a diagnosis and elaboration of recommendations directed to UNICEF and key stakeholders to improve urban food environments and prevent childhood overweight and obesity.

In order to study the foodscapes* of selected cities of Latin America and the Caribbean a practical framework was developed by the consultant team, including some elements of the [Innocenti Framework on Food Systems for Children and Adolescents](#). In the development of this framework, the following four pillars were prioritized: governance and political will; built space and urban character; food environment, cultural and eating patterns; and social environment.

Figure 1. Framework for studying and redesign foodscapes in Latin America and the Caribbean



*The foodscape is one's surrounding environment and defines the food experience of neighbourhoods and communities. It is comprised of three main components: public space, public life, and food places. Public space is the city network of streets, squares, parks, city spaces between buildings in which public life takes place. The quality of public space often determines the perception of public safety, helps promote community cohesion and establishes a framework for activities or programmes, and invites people outside. Public life is what people create when they connect with each other in public spaces. It is about the everyday activities that people naturally take part in when they spend time with each other outside the home, car or workplace. Food places are the direct interface between the food system and the consumer, such as grocery stores, restaurants or cafes, food banks, farmers markets, convenience stores and street vendors.⁹

In the first phase of the investigation, two cities in the region were selected that met the following criteria: high prevalence of childhood overweight, availability of data on childhood overweight and obesity, institutional capacity, political will and interventions in place at the national and local levels to prevent and control childhood overweight. During this phase Mexico City was selected as a strategic city to study and include in the second phase of strategic engagement with key informants and the community.

In the second phase, interviews with key informants and community activities were carried out. The consultant team interviewed 14 key people from local government (5), United Nations agencies (1), civil society (5) and academia (3) in order to identify: (a) the main causes of overweight and obesity in children and adolescents in the city; (b) the main challenges to address childhood overweight and obesity; (c) the opportunities to improve the current situation; (d) how the built environment can help improve this problem; e) projects that informants believe can be implemented to stop childhood overweight and obesity in the city. A local partner of the consultant team, [*Oficina de Resiliencia Urbana*](#) (ORU) carried out a series of activities with the community of Iztapalapa, including 25 interviews with children and parents/caregivers. During these activities, information was collected about the influence of the built environment on children's nutrition at home and at school, as well as physical activity.

Results were analysed to identify key challenges and opportunities, and recommendations were developed for UNICEF and key stakeholders to improve urban food environments and contribute to the prevention of childhood overweight and obesity in Mexico City.

Main findings based on interviews with key informants of Mexico City and activities with the community of Iztapalapa

■ Main causes of childhood overweight and obesity, challenges and opportunities to improve urban food environments and prevent childhood overweight and obesity

The complex food system in Mexico City is affected by different factors and urban dynamics that directly impact the population. These factors tend to be more acute in the peripheral neighbourhoods of the city, such as Iztapalapa. During the strategic engagement with key informants, it was repeatedly reported that the **oversaturation of the market and public spaces with ultra-processed foods, as well as the ever-increasing cost of healthy foods, determine the unhealthy eating choices and patterns in families.** In addition, **urban sprawl, density and lack of urban planning have directly affected people's daily lives, increasing commuting times for parents up to 3 hours a day, leaving limited time for physical activity and for household chores related to food** (meal planning, food purchase, cooking and cleaning). These factors have critically reduced culinary knowledge in the communities (healthy diets and traditional cooking methods), **contributing to the normalization of the intake of ultra-processed products. This has occurred over the generations, affecting the nutrition and health of children.**

On the other hand, the **growing insecurity in and lack of safe and high-quality public spaces limit the opportunities for children and their families to engage in physical activity,** consolidating sedentary lifestyles in the communities. **Gender inequity around diet and physical activity in public spaces** was also reported. **Many public spaces are often designed and built around soccer,** a sport that primarily appeals to young boys, **which accentuates the gender gap in access to sport for girls in public spaces. For women, inequity manifests itself at home,** where they bear the burden of household chores, childcare and meal preparation (since men do not generally do the cooking at home). This leaves women very little time for personal activities or professional development and spills over into other areas where they are disadvantaged compared to men. **For both men and women, but particularly women, insecurity in public spaces is a common barrier to accessing healthy food and physical activity. These factors are felt most acutely in low-income families** that reside in peripheral areas of the city and have few healthy food options at hand. Moreover, measures implemented during the COVID-19 pandemic, such as **mandatory confinement and online classes, increased children's screen exposure and reduced their daily physical activity.** Also, it was reported that **the price of food is the main factor influencing family diets.** During the strategic engagement with the community, informants reported that the consuming six times more sugary drinks and sweet snacks the previous day than fruits (this data should be interpreted carefully, since it is not consistent with the literature or representative at the population level).



Some strengths identified in **this city include the decentralized government system, which allows both state and municipal authorities to set their own policies; and the existence of strong civil society organizations**, such as [El Poder del Consumidor](#) and [Alianza por la Salud Alimentaria](#), which advocate for improvement of food systems and actively participate in accountability processes.

In terms of opportunities, public spaces offer great potential to improve the local foodscape in Mexico City, since it is in the streets and parks where food is offered and marketed for the communities. Although during this investigation, no engagement was done with food vendors, this should be considered in future investigations under the pillar of food environment, as food is one of the main drivers of street life in this city in particular.

It is recommended that the process begin by redesigning the foodscape of Iztapalapa, combining a multi-level approach with the implementation of initiatives that promote healthy eating and physical activity, evaluating and adjusting interventions when necessary. The same process could be applied to other communities in Mexico City that share similar challenges and opportunities. Regarding **improvements to the public realm**, it is recommended to **recover *tianguis* (open-air markets held on specific days in urban or rural neighbourhoods) and *chinampas* (an agricultural technique which relies on small rectangular areas to grow crops on the shallow lake beds in the Valley of Mexico) to support local food production and sales, as well as improving micromobility (means of sustainable transport for short distances) to promote daily physical activity in children.** The process of improving public space should be inclusive and used as a tool to strengthen and generate a sense of belonging and ownership in communities. It is also important **to continue to engage with local communities and key stakeholders in the city to create spaces for interaction and communication.**

Recommendations and roadmap to transform food systems, improve urban food environments and prevent childhood overweight and obesity in Mexico City

To have a positive impact on the health and well-being of Mexican children, and contribute to the transformation towards a healthier food system that accounts for the the rights of children to adequate nutrition and health, it is necessary to implement a series of coordinated actions at the local level. It is important to note that schools are essential places to provide healthy and nutritious foods, as well as to promote healthy lifestyles that include physical activity. For this reason, several of the recommendations proposed below focus on or school settings and their surroundings.

I. Governance and political will




| Recommendation | Aimed at |
|--|---|
| <p>Support and create coordination mechanism for food system transformation. The coordination mechanism for the transformation of the food system should involve all levels of government including key actors that are responsible for children's nutrition.</p> <p>EXAMPLE OF BEST PRACTICE: Food Security and Nutrition Coordination (COSAN), São Paulo, Brazil</p> | <p>UNICEF</p> <p>Regional government</p> |
| <p>Promote surplus food sales in public spaces and trusted institutions. This will help reduce food waste and increase access to fresh, healthy produce.</p> <p>EXAMPLE OF BEST PRACTICE: Red plato lleno (information in Spanish), Buenos Aires, Argentina; Food Rescue, USA.</p> | <p>Regional or local government</p> <p>Ministry of Social Development</p> <p>Ministry of Agriculture</p> <p>Food businesses</p> |
| <p>Promote partnerships with local producers of nutritious foods to increase the supply of fresh food.</p> <p>EXAMPLE OF BEST PRACTICE: Huertas de Abastecimiento (information in Spanish), Medellín, Colombia.</p> | <p>UNICEF</p> <p>Regional or local government</p> <p>Ministry of Agriculture</p> <p>Food businesses</p> |

| | |
|--|--|
| <p>Ensure compliance with established regulations on the commercialization and marketing of ultra-processed products in and around schools, including food outlets and street vendors near these locations. For this It is recommended to have public authorities in public space, such as inspectors who monitor, control and impose fines when necessary; or use digital tools and cameras, as many cities do to control vehicle speed on roadways.</p> <p>EXAMPLE OF BEST PRACTICE: Evaluation report of the implementation of the Law on nutritional composition of food and its advertising (2017), (information in Spanish) Chile; The Netherlands Nutrition Centre Canteen Scan.</p> | <p>Regional or local government</p> <p>Ministry of Education</p> <p>Ministry of Health</p> <p>Municipal inspectors</p> |
| <p>Create a framework for the design and management of public spaces for children, beyond parks and playgrounds. This could be achieved by building public and private partnerships (without conflict of interest, avoiding any type of partnership or collaboration with the unhealthy or processed and/or ultra-processed food and beverage industry) to rehabilitate vacant lots in communities where large concentrations of children lack access to decent public spaces. Where space is limited, sections of the street should be redesigned to include play facilities or simply painted to encourage children to have fun and explore the city in a different way.</p> <p>EXAMPLE OF BEST PRACTICE: Guide to public spaces of the Ministry of Housing and Urbanism (information in Spanish) Santiago, Chile; KABOOM Plays Everywhere, USA.</p> | <p>Regional or local government</p> <p>Ministry of Housing and Urban Planning</p> |
| <p>Implement the “Schools on the Move” model to promote healthy diets and physical activity. Classrooms and school canteens may be transformed by incorporating elements of this model to encourage healthy diets, active learning, reduced sitting time and daily physical activity as part of the curriculum.</p> <p>EXAMPLE OF BEST PRACTICE: Schools on the Move, Finland.</p> | <p>Regional or local government</p> <p>Ministry of Education</p> |

II. Built space and urban character



| Recommendation | Aimed at |
|--|---|
| <p>Redesign public spaces adjacent to schools by implementing measures to reduce traffic on surrounding streets, including services and play areas to encourage children to move and have fun in an urban environment.</p> <p>EXAMPLE OF BEST PRACTICE: Streets for Kids, Santiago, Chile.</p> | <p>Regional or local government</p> <p>Ministry of Housing and Urban Planning</p> |

| <p>Design areas where children and parents/caregivers learn to ride a bicycle with the support of experts in “cycling areas” or “biking playgrounds”. It is important to ensure that no one is left behind and guarantee equitable access for all, providing low-cost or recycled bicycles to participants who do not have access to new bicycles; and to ensure that educational activities on safety for drivers and cyclists are offered. It is recommended to install playgrounds in areas frequented by families, such as residential areas around parks, plazas or schools. It is recommended to offer the programme in key public spaces on weekends to attract more people, rotating spaces to ensure coverage throughout the city.</p> <p>EXAMPLE OF BEST PRACTICE: Dejá tus rueditas (information in Spanish), Buenos Aires, Argentina; Biking Playgrounds, Copenhagen, Denmark.</p> | <p>Regional or local government</p> <p>Ministry of Housing and Urban Planning</p> <p>Ministry of Transportation</p> <p>Private sector</p> |
|--|--|
| <p>Create safe biking routes (bike lanes) for children to bike to school. It is recommended to add measures to reduce the traffic, and traffic lights and signs to improve the safety of public spaces/streets; and promote greater participation by providing bike racks, indoor bike rooms, lockers and bike repair shops in and around the schools. This initiative should be offered on weekdays. Educators and parents/caregivers should promote the use of helmets and reflective clothing in children for maximum safety.</p> <p>EXAMPLE OF BEST PRACTICE: Bicibús (information in Spanish), Barcelona, Spain.</p> | <p>Regional or local government</p> <p>Ministry of Transportation</p> <p>Ministry of Education</p> <p>Private sector</p> |
| <p>Launch a supervised walking routes programme for children to and from school.</p> <p>EXAMPLE OF BEST PRACTICE: Senderos Escolares (information in Spanish), Buenos Aires, Argentina.</p> | <p>Regional or local government</p> <p>Ministry of Transportation</p> <p>Ministry of Education</p> |
| <div> <div data-bbox="168 1230 1036 1276"> <h3>III. Food environment, cultural and eating patterns</h3> </div> <div data-bbox="1222 1146 1438 1356">  </div> </div> | |
| Recommendation | Aimed at |
| <p>Ban marketing of unhealthy foods and drinks on public transport. It is recommended to prohibit marketing of unhealthy foods and drinks (high in fat, sugar and/or salt) in the transport system (including buses, metro, and train) in cities. This intervention has proven successful¹⁰ in London, where consumption of unhealthy foods has decreased banning the marketing of these products on the public transport.</p> <p>EXAMPLE OF BEST PRACTICE: Ban marketing of unhealthy food and beverages across the public transport in London, UK.</p> | <p>Regional or local government</p> <p>Ministry of Transportation</p> <p>Public Health Organizations</p> <p>Private sector</p> <p>Universities</p> |

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| <p>Offer seasonal foods and programmes in public spaces to promote mindful and healthy eating. It is recommended to promote seasonal foods, mindful and healthy eating through programmes and campaigns aimed at children in public spaces and through activities organized by the city. Improve nutrition literacy through free nutritional classes and fun activities directed to children and parents/caregivers. Market fresh, healthy and seasonal foods at the events/activities organized by the city.</p> <p>EXAMPLE OF BEST PRACTICE: Estaciones saludables (information in Spanish), Buenos Aires, Argentina; SplashJam, Lexington, USA.</p> | <p>Regional or local government</p> <p>Ministry of Housing and Urban Planning</p> <p>Private sector</p> |
| <p>Install free and safe drinking water fountains in and around schools and in public spaces.</p> <p>EXAMPLE OF BEST PRACTICE: Refill revolution, London, UK.</p> | <p>Regional or local government</p> <p>Ministry of Housing and Urban Planning</p> <p>Ministry of Education</p> <p>Private sector</p> |
| <p>Improve the infrastructure of local fresh food markets. For this, it is recommended to provide financing mechanisms to improve the infrastructure, installations and operating hours of local fresh produce markets, adapting the operating hours of these markets to the daily routine/schedule of parents and caregivers.</p> <p>EXAMPLE OF BEST PRACTICE: Mejora del Mercado Agrícola de Montevideo (information in Spanish), Uruguay.</p> | <p>Regional or local government</p> <p>Ministry of Housing and Urban Planning</p> <p>Local fresh food markets</p> <p>Private sector</p> |
| <p>Deploy mobile farmers markets in remote areas. Create a subsidy or grant programme for local food vendors to distribute fresh and healthy produce on wheels. This can be done by retrofitting old vehicles or buses with colourful and consistent branding, food displays, and folding tables to reach neighbourhoods in need of fresh and healthy food. It is recommended to deploy the buses to strategic locations with a bi-monthly rotation and collect feedback from vendors and consumers to replicate and improve the experience.</p> <p>EXAMPLE OF BEST PRACTICE: Ferias de abastecimiento barrial programme (information in Spanish), Buenos Aires, Argentina.</p> | <p>Regional or local government</p> <p>Ministry of Social Development</p> <p>Ministry of Housing and Urban Planning</p> <p>Local fresh food markets</p> <p>Private sector</p> |

IV. Social environment



| Recommendation | Aimed at |
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| <p>Offer pop-up classes on healthy eating and cooking in key city locations. This can be done by creating a mobile school that travels around the city offering nutrition education and cooking classes in strategic locations of the city. It is recommended to install an electric stove and kitchen items in a retrofitted truck or bus. Chefs and health professionals/nutritionists drive around the city preparing seasonal, easy-to-make and affordable foods, while children watch and learn.</p> <p>EXAMPLE OF BEST PRACTICE: Cocina Uruguay programme (information in Spanish), Montevideo, Uruguay.</p> | <p>Regional or local government</p> <p>Ministry of Health</p> <p>Ministry of Social Development</p> <p>Civil society organizations</p> |
| <p>Develop low-cost recipe books with seasonal foods and disseminate them widely in spaces where children gather (school events, social media, health care centres and public spaces). For this it is recommended to promote partnerships between central markets and the agricultural sector to provide a list of fresh seasonal produce to local chefs for the compilation of a simple and innovative cookbook for the whole family.</p> <p>EXAMPLE OF BEST PRACTICE: Recetario Picadas de verano (information in Spanish), National Food Institute, Uruguay.</p> | <p>UNICEF</p> <p>Civil society organizations</p> <p>Ministry of Health</p> <p>Ministry of Social Development</p> |
| <p>Promote the development of applications for children and parents/caregivers on healthy foods and nutrition literacy.</p> <p>EXAMPLE OF BEST PRACTICE: Escáner nutrimental (information in Spanish), Mexico; Yuka; Héroes en tu plato (information in Spanish), Spain.</p> | <p>UNICEF</p> <p>Ministry of Health</p> <p>Ministry of Social Development</p> <p>Food businesses</p> |
| <p>Duplicate the capacity of influencers to promote change.</p> <p>EXAMPLE OF BEST PRACTICE: Bite Back 2030, UK.</p> | <p>UNICE</p> <p>UNICEF Ambassadors</p> <p>Influencers without conflicts of interest</p> <p>Civil society organizations</p> <p>Regional or local government</p> |

In the process of redesigning the foodscape in Mexico City, it is recommended to follow the measure-test-refine approach and to empower local communities and stakeholders for the successful implementation of interventions. For this approach the following steps are recommended:

- 1. Data collection:** Information gathering is essential to understand the local context of daily life and ensure a multi-stakeholder planning process.
- 2. Understand the user experience:** Instead of evaluating things and objects, consider and share experiences, stories and narratives.
- 3. Develop a healthy food strategy:** Based on the stories observed and the participation of key informants and the community, the aim is to develop a series of strategies that have a “lasting impact” on a neighbourhood. Coordination with local authorities is recommended in this step.
- 4. Test with pilot projects:** Test interventions on a small scale at the neighbourhood level. Pilots provide the opportunity to make necessary adjustments and improve interventions before making larger, longer-term investments.
- 5. Evaluate and define success criteria:** Evaluate the success of local projects with key performance indicators, together with local stakeholders.
- 6. Scale strategy and policy advocacy for citywide impact:** The success criteria and results of the pilot project will be used to attract further investment in infrastructure and scale the strategy and policies citywide.

UNICEF is currently on the development of a healthy food strategy in Mexico City. To advance the redesign of the foodscape in this city, it will be necessary to involve key stakeholders and local authorities.

Where to start in Mexico City?

As a starting point, the projects/programmes and recommendations included in this document as best practices should be tested through pilot projects in some of the most vulnerable neighbourhoods and public spaces surrounding the following three trusted institutions:

1. Plaza de Ermita Iztapalapa: agricultural-urban land and community kitchen of Pilares.
2. General Lázaro Cárdenas del Río primary school, Coapa.
3. La Inmaculada Concepción rectory.



A typical day for a child in a community in Mexico City (a specific case based on interviews and observations in the neighbourhood of Iztapalapa)

Figure 2. A typical day for a child in a community of Mexico City (at the time of the evaluation)



What should a typical day look like in a healthy environment for children of the community studied in Mexico City?

Figure 3. A typical day for children in a community in Mexico City after implementing recommendations and interventions



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