

Diagnosis and recommendations to improve urban food environments and prevent childhood overweight and obesity in Latin America and the Caribbean



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and prevent childhood overweight and obesity
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Introduction

Latin America and the Caribbean (LAC) is the second most urbanized region in the world,¹ with 81 per cent of the total population residing in urban areas.² This region is also one of the most affected by childhood overweight and obesity, with 7.5 per cent (nearly 4 million) of children under the age of 5 overweight,³ and 30 per cent of children and adolescents aged 5-19 years overweight and obese.⁴ These figures exceed global averages, which estimate that 5.6 per cent of children under the age of 5 are overweight³ and 18 per cent of children and adolescents are overweight and obese.⁴

Childhood overweight and obesity affect almost all countries in LAC.⁵ This public health problem is concerning, not only because it increases the risk of non-communicable diseases, such as cardiovascular disease, diabetes, cancer and premature mortality but also because it affects the mental and emotional well-being of children.

The causes of overweight in the region are mainly related to unhealthy urban lifestyles and obesogenic food environments.⁵ Obesogenic food environments are characterized by low availability, accessibility, acceptability and affordability of healthy foods; aggressive marketing; and the increasingly large portion sizes of unhealthy foods. Recurring exposure to obesogenic food environments shape unhealthy food preferences and consumption patterns, contributing to weight gain.

Guided by the Convention on the Rights of the Child and aligned with the 2030 Agenda for Sustainable Development, [The UNICEF Nutrition Strategy 2020-2030](#) envisions a world where all children, adolescents and women realize their right to adequate nutrition, in all settings.⁶ However, the reality is that children are growing up and developing in food systems and food environments that are failing to account for their nutrition rights and needs when determining what foods are produced, processed, packaged and marketed.

UNICEF promotes and supports actions with governments towards the adoption of 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.

In the prevention of childhood overweight, UNICEF recognizes the central role of 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.^{5, 7}

In LAC, several national governments have responded by implementing policies for the prevention of overweight and obesity, such as taxes on sugary drinks, front-of-package labelling and restrictions on the marketing of unhealthy food and beverages directed to children.^{5, 8} This is a good practice that will require further strengthening, but it is also necessary to implement measures at the city level since the majority of children in LAC live in urban areas. In this sense, the Latin American and the Caribbean Regional Office (UNICEF LACRO) commissioned [Gehl](#) (an urban design and research consultancy), to conduct an investigation in selected cities to support local governments and key stakeholders to

improve urban food environments and prevent childhood overweight and obesity at the city level in LAC. This document aims to describe the different phases of the investigation, highlights the main findings and provides a series of recommendations for the selected cities, applicable to the regional context.

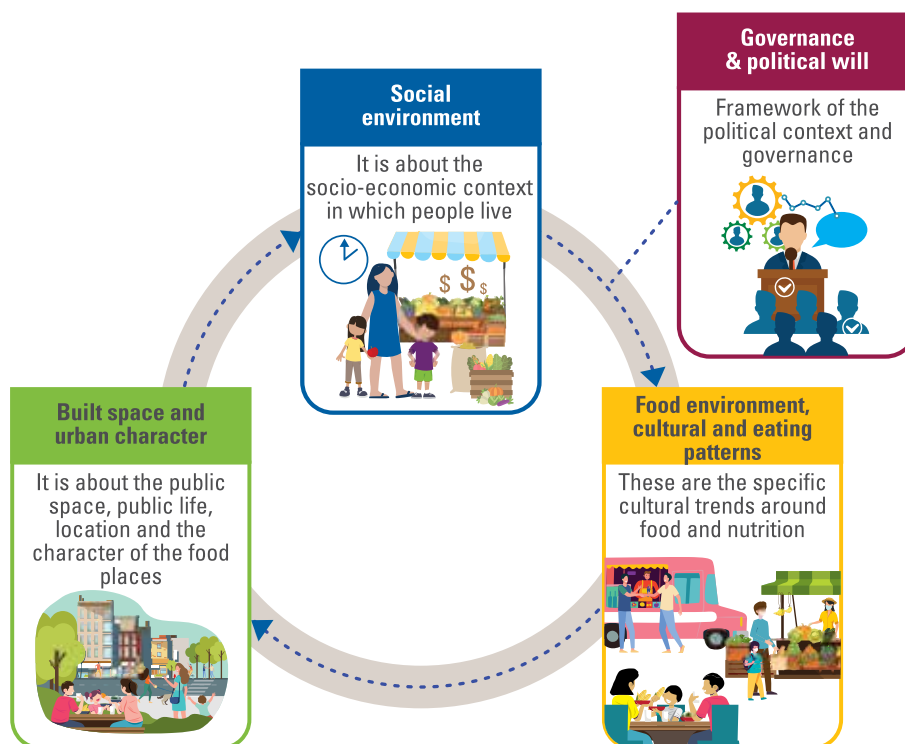
Methodology

1. Development of a practical framework for the study and redesign of foodscapes in Latin America and the Caribbean

The investigation began by developing a practical framework for the study and redesign of foodscapes. This framework is based on a methodology proposed by the consultancy team and includes elements of the [Innocenti Framework on Food Systems for Children and Adolescents](#). With appropriate adaptation to the local context and resources available, this framework is flexible and may be implemented in other cities seeking to improve urban food environments and the nutrition and health of children. The framework prioritized the following four pillars: governance and political will; built space and urban character; food environment, cultural and eating patterns; and social environment (*see Figure 1*).

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 and 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, 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 of 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

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



2. Strategic mapping and selection of cities (phase 1)

Secondly, a strategic mapping was carried out, including all cities in LAC that met the following criteria:

- Population greater than 2 million people
- Proportion of children over 20 per cent
- Prevalence of childhood overweight and obesity above regional estimates
- Availability of data on childhood overweight and obesity at the local level
- Interest, political will and institutional capacity at the local level to work on the prevention of childhood overweight and obesity
- Cities in LAC with the [“Child-Friendly Cities Initiative”](#) and
- Cities included in the [“Cities Changing Diabetes Programme”](#)

The mapping collected information for 17 cities in the region through a structured search of official information sources in each country. For the strategic selection of cities, criteria were defined as high priority (percentage of overweight and obese children; political interest and institutional capacity of the city; key stakeholders available), intermediate priority (remaining term of local administrations) and low priority (proportion of children; availability of data on childhood overweight and obesity at the local level; bureaucracy/feasibility of collaboration). Five cities (Santiago, Buenos Aires, Bogota, Mexico City and

Montevideo) were pre-selected and met the largest number of pre-established criteria. Country offices (COs) in Chile and Mexico were then invited to participate as these countries accounted for the highest percentages of children affected by overweight and obesity, have implemented previous interventions and demonstrated the political will to address this issue. These offices agreed to participate and commit to strategic engagement with key stakeholders and the community in their respective capitals.

3. Strategic engagement with key stakeholders and the community (phase 2)

During this phase, participating COs developed a list of key informants to interview at the local level to collect information related to: (a) the main causes of childhood overweight and obesity; (b) the main challenges to address the problem at the local level; (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.

A total of 24 key informants were invited by email. The consultant team interviewed 23 people, 9 from Santiago and 14 from Mexico City. The key informants interviewed in Santiago were from civil society (4), academia (3), parliament (1) and local government (1). The key informants interviewed in Mexico City were from civil society (5), academia (3), local government (5) and UN agencies (1). The information was then analysed and organized according to the five topics discussed.

Regarding strategic engagement with the community, the consultancy's local partners ([*Ciudad Emergente*](#) in Santiago and [*Oficina de Resiliencia Urbana*](#) (ORU) in Mexico City) carried out activities and interviewed children and parents/caregivers to analyse the influence of the built environment on healthy diets. To this end, a brief questionnaire was developed to survey the eating patterns and physical activity of children and parents/caregivers on an average weekday and on weekends. The survey uses an established methodology called "Drawing the food environment" that applies a graphic scale to evaluate certain aspects related to eating patterns and physical activity in children (*see Annex 1*). An image board of healthy and unhealthy foods was also prepared from which children selected the foods they had consumed the previous day to the activity.

In Santiago, the strategic engagement with the community and data collection process was carried out during the implementation of the “[Streets for Kids](#)” pilot programme in the communities of Independencia and Renca. This included 34 interviews with adults and children of the neighbourhood of Juan Antonio Ríos (primarily middle- to low-income population) in Independencia, and 12 children participated in the image board activity.



Pictures taken by the consultant team during the community participation in Independencia, Santiago, Chile.

In Mexico City, the strategic engagement with the community and data collection process took place in Iztapalapa, a peripheral neighbourhood with a primarily low-income population. Approximately 25 people (children and parents/caregivers) participated in the activity; 12 adults completed the “Drawing the food environment” exercise, and 13 children were interviewed and participated in the image board activity.



Pictures taken by the consultant team during the community engagement in Iztapalapa, Mexico City.

Focal points from UNICEF COs attended and participated in this phase. The information collected during the first and second phases of this investigation was used to diagnose foodscapes in the two selected cities and to elaborate recommendations to improve urban food environments and prevent childhood overweight and obesity in the region of Latin America and the Caribbean.

Note to UNICEF country offices interested in conducting a foodscape analysis in their cities:

The methodology described in this document is flexible and may be adapted to other contexts in function of the local priorities and resources available. It is highly recommended that a multidisciplinary team include urban planning or design specialists as part of the local working team.

During the first phase or strategic mapping and selection of cities, countries may use the criteria set out in this document (in addition to others, if necessary and relevant at the local level). For the second phase, the strategic engagement with cities, the steps outlined in this document may be replicated as is. For the third phase, corresponding to the elaboration of a case study with main results and recommendations, the case studies of Santiago and Mexico City could serve as examples for other cities in the region that share similar challenges and opportunities.

In the process of redesigning a foodscape in a selected city, it is recommended to follow the measure-test-refine approach described in this document (*see section Roadmap for UNICEF: From strategy to action*) and to empower local communities and stakeholders for the successful implementation of the recommendations and interventions.



Results

Although childhood overweight and obesity in LAC are strongly influenced by the current food environment, including the high availability, affordability, marketing of unhealthy and ultra-processed products, the diagnosis revealed other factors specific to Santiago and Mexico City, often related to local historical and cultural patterns. The findings presented below are derived from interviews with key informants and activities conducted with the community in both selected cities.



Santiago, Chile

■ Main causes and challenges of childhood overweight and obesity

The food system in Santiago is characterized by a **lack of linkages between food producers and consumers, and there is not enough information that compares the benefits of fresh foods to the risks of ultra-processed products**. Social protection policies implemented to reduce undernutrition strengthened the belief in Chilean society that very thin children came from families that could not provide adequate food for their children, which in turn stigmatized being thin.

Despite the comprehensive package of interventions established by the national government (front-of-package labelling, taxes on sugary drinks, restrictions on the marketing of unhealthy foods and non-alcoholic beverages high in calories, sodium, sugar, fat and/or saturated fat to children; and the ban on the sale and marketing of unhealthy foods and beverages in school settings), **there is still an oversupply of unhealthy foods and beverages/ultra-processed products, which remain more affordable and readily available than healthy foods**. In general, families face many challenges in accessing healthy diets, as **fresh foods are generally more expensive and there are additional limitations to accessing and preparing them at home**.

During the interview and strategic community engagement phase, it was frequently reported that one of the main challenges for families to access healthy diets was related to the operating hours of fresh produce markets. These markets are generally closed when people return from work, and the only stores open at this time are those that sell ultra-processed products. On the other hand, **the main determining factor of family purchases is the taste preference of young children**, and therefore, the food environment provides easy, convenient and more affordable access to ultra-processed products, compared to healthier options.

In general, low-income neighbourhoods are the most affected **since parents/caregivers travel long distances between home and work** (60 to 120 minutes per trip or commute), **and this reduces the time available for food preparation and playing with children at home**. Regarding physical activity,

it was reported that opportunities were limited in the educational system and in the community, and that the city lacks attractive public spaces that encourage exercise. This was compounded by the negative effects of the COVID-19 pandemic, with 75 per cent of the people interviewed reporting that they they did not engage in any physical activity during the confinement. In terms of dietary intake, informants reported consuming more sugary drinks than water, as well as approximately the same amount of snacks and sweets as fruit, the previous day.

In terms of challenges, Chile has a centralized government system that leaves little space for local governments to implement projects or establish local regulations. Likewise, civil society organizations do not appear to influence decision-making or participate in accountability processes related to the prevention of childhood overweight, according to key informants.

■ Main opportunities

In regards to opportunities, the creation of a regional government offers great potential to position child well-being and health at the centre of the governance agenda. The new government that came to power in March 2022 could change the discourse and contribute to the prevention of childhood overweight and obesity through the empowerment of local governments and the allocation of financial resources to implement and evaluate interventions to improve urban food environments.

At the local level, the main opportunities observed include **increasing the territorial coverage, operating hours and infrastructure of fresh produce markets; improving the infrastructure around schools and school feeding programmes at the municipal level; providing local government assistance to local producers to lower prices and shorten fresh produce supply chains by exempting local fresh food vendors from urban agricultural land taxes.**

Likewise, governors **and local authorities can promote welfare policies** by developing smaller-scale projects with municipalities that could later be scaled to the city and national levels. **The education sector also has a fundamental role in in the expansion of school feeding programmes to promote healthy diets, particularly in the most vulnerable neighbourhoods and households.** Lastly, local **influencers can serve as advocates for the development of networks of healthier communities.**



Mexico City

■ Main causes and challenges of 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 phase, key informants repeatedly reported that the **oversaturation of the market and public spaces with ultra-processed products, 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 to up to three 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 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 the 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 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 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).

Despite the comprehensive regulatory package of interventions established by the federal government (taxes on sugar-sweetened beverages, front-of-package labelling, restrictions on the marketing of unhealthy foods and beverages high in calories, sodium, sugar, fat and/or saturated fat to children; ban on the sales of unhealthy foods and beverages in school settings), **children continue to be highly exposed to ultra-processed products, and unhealthy eating patterns are widely accepted by the population.**

The aforementioned challenges are real barriers to eating healthy in Mexico City. Front-of-package labelling appears to have a positive effect on families' preference at points of sale and supports findings in the scientific literature, however, it is not enough on its own to prevent childhood overweight and obesity. **Some strengths identified in Mexico 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 the [Alianza por la Salud Alimentaria](#), which advocate for the improvement of food systems and actively participate in accountability processes.

■ Main opportunities

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, as food is one of the main drivers of street life throughout Latin America and 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 where necessary. The same process could be applied to other communities in Mexico City that share similar challenges and opportunities. Regarding **improvements in 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.**

After completing the strategic engagement phase (interviews with key informants and community activities) in both cities, one scenario per city was illustrated, which summarizes the information gathered during this project and showcases the challenges and opportunities for children in a vulnerable community of Santiago and Mexico City.

A typical day for a child in a community of Santiago, Chile (a specific case based on interviews and observations in the neighbourhoods of Independencia and Renca)

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



What should a typical day look like in a healthy environment for children of the community studied in Santiago, Chile?

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



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



Recommendations for UNICEF and key stakeholders

Gradual changes to the food systems are needed to positively impact the nutrition, health and well-being of children in LAC. In order to contribute to the transformation towards a healthier food system that accounts for the rights of children to adequate nutrition and health, it is necessary to implement a series of coordinated actions at the local level under the four pillars proposed by this investigation: governance and political will; built space and urban character; food environment, cultural and eating patterns; and social environment.

This section synthesizes a series of interventions considered as examples of good practices, implemented in different cities in the region, as well as in North America and Europe, and applicable to the context of Latin American and the Caribbean. Each intervention considers the following aspects: impact, success metric and main partner (identified as a potential partner for the implementation of said project or intervention). Given that the two selected cities share similar challenges and opportunities, the proposed recommendations and best practices may be applied to both (and in other cities in the region that share similarities in terms of challenges and opportunities), except for one that is applicable only to Mexico City.

The proposed recommendations should be evaluated and prioritized on a case-by-case basis in the selected cities prior to implementation. The prioritization exercise should be carried out with local authorities and key stakeholders to establish a solid basis for action and ensure their engagement in the process. Successful implementation of the proposed recommendations requires strong political will and commitment to improve urban food environments and prevent childhood overweight and obesity, as well as the allocation of resources to establish periodic monitoring and evaluation mechanisms.



Recommendations and best practices by pillar

Governance and political will



1. Support a coordination mechanism for food system transformation

Support the local governments of Santiago and Mexico City to create a coordination mechanism to transform the food system at all levels of government and target the different key actors responsible for child nutrition.

IMPACT: All levels of government will focus on a food system that provides nutritious, safe and affordable diets for all, and contributes to the prevention of childhood overweight and obesity by integrating policies from different sectors.

SUCCESS METRIC: Creation of a coordination mechanism for food system transformation at the local level.

BEST PRACTICE: [Food Security and Nutrition Coordination \(COSAN\)](#), São Paulo, Brazil.

TO BE IMPLEMENTED IN: Santiago, Chile and Mexico City.

MAIN PARTNER/DIRECTED TO: Regional government of Santiago + UNICEF; Local government of Mexico City + UNICEF.

2. Promote the sale of surplus food in public spaces and trusted institutions

Reintroducing nutritious and minimally processed foods into the system will help reduce food waste and increase people's access to fresh, healthy produce.

Implement a strategy that supports a circular economy that reintroduces the most nutritious and minimally processed foods, as well as foods that look unattractive or different, in nearby markets, restaurants and groceries, and promote their sale at lower prices in popular public spaces and trusted institutions.

Training of employees and the development of cultural programmes that highlight the value of unattractive foods is key, as is the identification of partners to establish pantry or warehouse locations, which could serve as community centres or safe spaces.

The development of digital tools can help connect businesses to resale organizations and customers. To ensure product safety, it is important to implement food handling regulations.

IMPACT: Reduces food waste and emissions while increasing food security for children.

SUCCESS METRIC: Reduced food waste in landfills. Increased income for local food businesses and the creation of new jobs.

BEST PRACTICE: [Red plato lleno](#) (information in Spanish), Buenos Aires, Argentina; [Food Rescue](#), USA.

TO BE IMPLEMENTED IN: Mexico City

MAIN PARTNER/DIRECTED TO: Ministry of Social Development/Ministry of Agriculture/Regional or local government/Food businesses or establishments.

3. Promote partnerships with local producers of nutritious fresh foods to increase distribution

Building partnerships between local food producers and vendors could help increase the distribution of nutritious foods where needed while empowering local farmers. By shortening food supply chains between local farms and the communities, small and medium-sized farmers could increase their profits. It is also important to consider the power of public food sources to provide healthy and nutritious foods in other settings such as hospitals and schools.

Promoting business relations between fresh produce vendors and area farmers could improve short supply chain connections and ensure community access to fresh and nutritious foods. To ensure maximum quality and safety, a health agreement and a platform for local businesses and producers to register and have access to information should be created.

IMPACT: Nutritious food is distributed where it is needed. Farmers sell their fresh produce at fair prices.

SUCCESS METRIC: People in remote locations have greater access to fresh seasonal produce.

BEST PRACTICE: [Huertas de Abastecimiento](#) (information in Spanish), Medellín, Colombia.

TO BE IMPLEMENTED IN: Santiago, Chile and Mexico City.

MAIN PARTNER/DIRECTED TO: Ministry of Agriculture/Food businesses or establishments.

4. Ensure compliance with established regulations on the commercialization and marketing of ultra-processed foods in and around schools

Local authorities can support the enforcement of policies and review local ordinances to increase the availability of healthy food and restrict commercialization and marketing of ultra-processed foods in and around schools, including by street vendors.

Although some countries in the region (Brazil, Chile, Costa Rica, Ecuador, Uruguay) regulate the marketing of unhealthy food in and around schools, the implementation and evaluation processes

remain challenging. In this sense, [The Canteen Scan](#) could serve as an example of a tool for assessing the healthiness, availability and accessibility of food in schools and sports canteens.

Two strategies are recommended to monitor and control this initiative in the city. The first is the placement of public authorities in public spaces, essentially municipal staff and inspectors who monitor, control and impose fines when necessary. The second is to resort to digital tools and cameras, as many cities do to control vehicle speed on roadways. Using cameras is effective because it provides surveillance of the school environment to ensure that unhealthy and ultra-processed products are not being marketed or sold. The digital tool is effective because it monitors store activity throughout the day and not just during an inspection. However, there is a crucial need for municipal inspectors to ensure that these products are not commercialized and marketed in and around schools. Implementation of this measure will depend on the budget and capacity of each city.

IMPACT: Enforcement of national policies restricting commercialization and marketing of ultra-processed products at the local level.

SUCCESS METRIC: Children are not exposed to ultra-processed products in and around schools.

BEST PRACTICE: [Evaluation report on the implementation of the law on nutritional content of food and its marketing \(2017\)](#) (information in Spanish), Chile; [The Netherlands Nutrition Centre Canteen Scan](#).

TO BE IMPLEMENTED IN: Santiago, Chile and Mexico City.

MAIN PARTNER/DIRECTED TO: Ministry of Education/Ministry of Health/Municipal inspectors.

5. Create a framework for the design and management of public spaces for children

It is important to design and build safe spaces that invite children to play and be physically active everywhere, not just in parks or playgrounds. A child-centred framework that guides the management and design of public space could enhance children's experience in the public realm, motivating them to socialize and actively move around the city. Different play and recreational facilities should appeal to children without resorting to the use of branding and logos of unhealthy products.

It is important to promote public and private collaborations (without conflict of interest, avoiding any type of partnership or collaboration with unhealthy, processed and/or ultra-processed foods and beverages 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.

IMPACT: Overall improvement of the public realm and a greater sense of safety for children and parents/caregivers.

SUCCESS METRIC: More children visit parks, plazas or walk in the street. Increased sense of belonging and socialization among children.

BEST PRACTICE: [KABOOM Plays Everywhere](#), USA; [MINVU public space guide](#) (information in Spanish), Santiago, Chile.

TO BE IMPLEMENTED IN: Santiago, Chile and Mexico City.

MAIN PARTNER/DIRECTED TO: Ministry of Housing and Urban Planning/Regional or local government.

6. 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 the “[Schools on the Move](#)” model to encourage healthy diets, active learning, reduced sitting time and daily physical activity as part of the curriculum.

Schools are essential to the development and maintenance of healthy habits in childhood, therefore it is critical to expand the role of the school in encouraging children to lead more active and healthy lifestyles.

IMPACT: Schools are agents of change, and health is considered a parameter of educational performance.

SUCCESS METRIC: Children participate in daily physical activities and eat healthy foods at school.

BEST PRACTICE: [Schools on the Move](#), Finland.

TO BE IMPLEMENTED IN: Santiago, Chile and Mexico City.

MAIN PARTNER/DIRECTED TO: Ministry of Education/Regional or local government.

Built space and urban character



1. Redesign public spaces adjacent to schools

Safe, active and high-quality public spaces motivate children to engage in physical activity, positively impacting their well-being. To this end, it is recommended to improve the public space around schools in key locations around the city; implement measures to reduce traffic on surrounding streets; include services and play areas to encourage children to move and have fun in an urban environment; and have a programme of frequent recreational activities and regular maintenance. It is also important to adapt operating hours to the schedules of children parents/caregivers.

IMPACT: An active and healthy daily routine around schools is established for children and their families.

SUCCESS METRICS: Improved quality of public space and increased physical activity in children.

BEST PRACTICE: [Streets for Kids](#), Santiago, Chile.

TO BE IMPLEMENTED IN: Santiago, Chile and Mexico City.

MAIN PARTNER/DIRECTED TO: Ministry of Housing and Urban Planning/Regional or local government.

2. Design areas where children and parents/caregivers learn to ride a bicycle

For this initiative, “cycling areas” should be designated where expert cyclists teach children and parents/caregivers to ride a bicycle around the city. It is important to ensure that no one is left behind and guarantee equitable access to bicycles for all, providing low-cost or recycled bicycles to participants who do not have access to new bicycles. In addition, educational activities on safety for drivers and cyclists will be offered.

It is recommended to teach motorcyclists and cyclists road safety measures and implement a reward system that encourages participants to take classes; install playgrounds in areas frequented by families, such as residential areas around parks, plazas or schools; and offer the programme in key public spaces on weekends to attract more people, rotating spaces to ensure coverage throughout the city.

IMPACT: More children and parents/caregivers use bicycles in the city.

SUCCESS METRICS: Increased school bike sharing programme and confidence among children and caregivers around bicycle use.

BEST PRACTICE: [Dejá tus rueditas](#) (information in Spanish), Buenos Aires, Argentina; [Biking Playgrounds](#), Copenhagen, Denmark.

TO BE IMPLEMENTED IN: Santiago, Chile and Mexico City.

MAIN PARTNER/DIRECTED TO: Ministry of Housing and Urban Planning/Ministry of Transportation/Regional or local government/Private sector.

3. Create safe biking routes (bike lanes) for children to bike to school

Active mobility depends on the existence of infrastructure, security in public spaces and user safety, particularly when it comes to children. It is recommended to create a safe bike lane for children that connects schools with residential areas (including vulnerable areas); add measures to reduce traffic and install traffic lights and signs to improve safety in public spaces and 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 and be inclusive to avoid leaving anyone behind. Educators and parents/caregivers should promote the use of helmets and reflective clothing in children for maximum safety.

IMPACT: Cultural and behavioural change. Widespread awareness on the benefits of cycling to school and around the city.

SUCCESS METRIC: Use of the “measure-test-refine” approach (see section *Roadmap for UNICEF: From strategy to action*) in monitoring bike lanes to introduce changes and ensure user satisfaction.

BEST PRACTICE: [Bicibús](#) (information in Spanish), Barcelona, Spain.

TO BE IMPLEMENTED IN: Santiago, Chile and Mexico City.

MAIN PARTNER/DIRECTED TO: Ministry of Transportation/Ministry of Education/Regional or local government/Private sector.



4. Launch a “supervised walking routes” programme for children to and from school

It is recommended to develop safe walking routes for children to and from school, supervised by municipal staff or trained volunteers. Routes should be determined in function of the location of the school and bus stops. Supervised walking routes educate students on public safety and to avoid potential safety hazards. In addition, the programme helps school and local authorities identify problems and risks on the streets more quickly. This initiative allows children to discover their city and participate in the community while engaging in physical activity and maintaining a healthy weight.

IMPACT: Increases physical activity in children and empowers them to move on their own, creating leadership and responsibility.

SUCCESS METRICS: Increased presence of children in public realm, as well as social interaction and community cohesion.

BEST PRACTICE: [*Senderos Escolares*](#) (information in Spanish), Buenos Aires, Argentina.

TO BE IMPLEMENTED IN: Santiago, Chile and Mexico City.

MAIN PARTNER/DIRECTED TO: Ministry of Transportation/Ministry of Education/Regional or local government.





1. Ban marketing of unhealthy food and drinks on public transport

It is recommended to prohibit the marketing of unhealthy food and drinks (high in fat, sugar and/or salt) in the public transport system (including buses, subways and trains) in cities. This [intervention](#)¹⁰ has proven successful in London where consumption of unhealthy foods has decreased since banning the marketing of these products on public transport.

IMPACT: Reduces the exposure and consumption of unhealthy foods in children and their families.

SUCCESS METRIC: Decreased exposure to and consumption of unhealthy foods in children and their families.

BEST PRACTICE: [Ban marketing of unhealthy food and beverages across the public transport in London](#), UK.

TO BE IMPLEMENTED IN: Santiago, Chile and Mexico City.

MAIN PARTNER/DIRECTED TO: Local authorities (mayors, governors)/Ministry of Transportation/Public health organizations/Private sector/Universities.

2. Offer seasonal foods and programmes in public spaces to promote mindful and healthy eating

It is recommended to promote seasonal foods and mindful and healthy eating through programmes and campaigns aimed at children in public spaces and through activities organized by the city; develop activities around seasonal foods and where children of different ages are invited to engage in physical activity and fun games in teams, including families of different sizes in convenient locations; improve food education through free or affordable nutrition and healthy eating classes for families; and to market fresh, healthy and seasonal foods during events/activities organized by the city.

Partnerships or collaboration can be established with fresh food producers to facilitate the sale of fruits and vegetables at lower or fixed prices and replace ultra-processed products in kiosks or grocery stores.

IMPACT: Increases consumption of fresh and healthy foods in children. Families learn about the benefits of eating fresh and seasonal foods.

SUCCESS METRIC: Increased participation of children and their families. Increased supply of seasonal healthy foods.

BEST PRACTICE: [Estaciones saludables](#) (information in Spanish), Buenos Aires, Argentina; [SplashJam](#), Lexington, USA.

TO BE IMPLEMENTED IN: Santiago, Chile and Mexico City.

MAIN PARTNER/DIRECTED TO: Ministry of Housing and Urban Planning/Regional or local government/Private sector.



3. Install free and safe drinking water fountains in and around schools and in public spaces

Install accessible free and safe drinking water fountains for children of different ages in all schools, their surroundings and in public spaces. Access to free and safe water is essential to reduce the consumption of sugary drinks and the associated risks of overweight, obesity, type 2 diabetes and other health problems in children.

Public spaces or schools with limited access to free and safe water and limited options for hydration should be prioritized, and children should be encouraged to drink water by giving them refillable water bottles for daily use, avoiding plastic bottles.

IMPACT: Increases water consumption in children.

SUCCESS METRIC: Children drink more water throughout the day.

BEST PRACTICE: [Refill revolution](#), London, UK.

TO BE IMPLEMENTED IN: Santiago, Chile and Mexico City.

MAIN PARTNER/DIRECTED TO: Ministry of Housing and Urban Planning/Ministry of Education/Regional or local government/Private sector.



4. Improve the infrastructure of local fresh food markets

Having safe, clean public markets with extended operating hours will make it easier for people to buy fresh produce at convenient times. For this, it is recommended to provide financing mechanisms to improve the infrastructure, installations and operating hours of local fresh produce markets.

It is also recommended to improve lighting conditions so that people feel safe at night; install furniture for socialization and eating on site; establish incentives for food vendors to extend or adapt their operating hours at least twice a week to accommodate shoppers early in the morning or later in the day, thus improving the access of parents/caregivers to fresh and healthy foods; and create and implement waste disposal guidelines and regulations for vendors to ensure that public spaces are kept clean before and after market hours.

IMPACT: Increases the consumption of fresh products by expanding the hours of local markets.

SUCCESS METRICS: Increased access to children and their families to fresh, healthy produce. Increased sales of fresh produce by local farmers and producers. Increased number of customers in local markets.

BEST PRACTICE: [Mejora del Mercado Agrícola de Montevideo](#) (information in Spanish), Uruguay.

TO BE IMPLEMENTED IN: Santiago, Chile and Mexico City.

MAIN PARTNER/DIRECTED TO: Ministry of Housing and Urban Planning/Local fresh produce markets/Private sector/Regional or local government.

5. Deploy mobile farmers markets in remote areas

Mobile farmers markets can help improve access to fresh and healthy produce in peripheral neighbourhoods and remote communities. The city should be encouraged to create a subsidy or grant programme for local food vendors to distribute fresh and healthy produce on wheels.

For this initiative, it is recommended to retrofit old vehicles or buses with colourful and consistent branding, food displays and folding tables to reach neighbourhoods in need of fresh and healthy food; deploy buses to strategic locations with a bi-monthly rotation; and collect feedback from vendors and consumers to replicate and improve the experience.

IMPACT: Increases availability and access to fresh fruits and vegetables in remote areas.

SUCCESS METRIC: Farmers markets on wheels are an established brand, and more children and their families frequent them every year.

BEST PRACTICE: [Ferias de abastecimiento barrial](#) programme (information in Spanish), Buenos Aires, Argentina.

TO BE IMPLEMENTED IN: Santiago, Chile and Mexico City.

MAIN PARTNER/DIRECTED TO: Ministry of Social Development/Ministry of Housing and Urban Planning/Local fresh food markets/Regional or local government/Private sector.

Social environment

1. Offer pop-up classes on healthy eating and cooking in key city locations



Culinary education is a pillar for maintaining healthy habits at home, but lack of time prevents families from preparing healthier food. It is recommended to retrofit a truck with an electric stove and kitchen items to create a mobile school that travels around the city offering nutrition education and cooking classes in key locations. Chefs and health professionals/nutritionists drive around the city preparing seasonal, easy-to-make and affordable foods, while children watch and learn.

This programme could expand knowledge, skills and healthy habits related to nutrition in communities. When implemented in conjunction with urban farms and public awareness campaigns, it can help to improve food knowledge and overall well-being at the city level.

IMPACT: Classes are offered to street food vendors and school canteen operators who are in contact with children.

SUCCESS METRICS: Participation of male family members and children. More people participate in the classes each year.

BEST PRACTICE: [Cocina Uruguay](#) programme (information in Spanish), Montevideo, Uruguay.

TO BE IMPLEMENTED IN: Santiago, Chile and Mexico City.

MAIN PARTNER/DIRECTED TO: Ministry of Health/Ministry of Social Development/Regional or local Government/Civil society organizations.

2. Develop low-cost recipe books with seasonal foods and disseminate them widely in spaces where children gather

Seasonal recipe books that include easy recipes prepared with affordable and fresh produce could be very useful for families with limited time to cook. It is recommended to promote partnerships between central markets and the agricultural sector to provide a list of fresh seasonal produce to local cooks or chefs for the compilation of a cookbook with simple and innovative recipes for the whole family. The cookbooks should then be shared and disseminated at events held in schools, health centres and public spaces, as well as across social media.

IMPACT: Increased intake of fresh fruits and vegetables and reduced consumption of processed and ultra-processed foods.

SUCCESS METRIC: Revaluing of local traditions and increased awareness of the benefits of eating seasonal foods prepared with local recipes.

BEST PRACTICE: [Recetario Picadas de verano](#) (information in Spanish), National Food Institute, Uruguay.

TO BE IMPLEMENTED IN: Santiago, Chile and Mexico City.

MAIN PARTNER/DIRECTED TO: Ministry of Health/Ministry of Social Development.

3. Promote the development of applications for children and parents/caregivers on healthy foods and nutrition

Sharing information through innovative means helps to expand access to nutritional information. Given the increasing use of electronic devices, it is recommended to develop digital applications (apps) and games to teach children and parents/caregivers about the benefits of healthy foods and to help them make informed decisions at points of sale. Today, there are very few apps of this type for children. When developing these apps, it is important to consider the way in which children learn and include attractive elements for children, such as special characters, colours and movement.

Partnerships with academia are recommended in developing apps and to collect user feedback.

IMPACT: Increases awareness and use of front-of-package labelling to inform consumers at points of sale.

METRIC OF SUCCESS: Citizens change their purchasing decisions using the information provided by the app.

BEST PRACTICE: [Escáner nutrimental](#) (information in Spanish), Mexico; [Yuka](#); [Héroes en tu plato](#) (information in Spanish), Spain.

TO BE IMPLEMENTED IN: Santiago, Chile and Mexico City.

MAIN PARTNER/DIRECTED TO: Ministry of Health/Ministry of Social Development/Food businesses and establishments.

4. Duplicate the capacity of influencers to promote change

Goodwill ambassadors or influencers (without conflicts of interest) can help raise awareness and transform how childhood overweight and obesity are perceived and the relationship with the obesogenic environment. It is important to consider how the age and gender of influencers may inspire some parents and children more effectively.

In parallel, local civil society organizations should be supported to engage in advocacy, social behaviour change communication and accountability efforts to increase outreach and generate political commitment. The support of regional and local authorities will be key to the communication of a consistent message at all levels of government.

IMPACT: Increases public awareness of childhood overweight and obesity and its relationship with obesogenic environments.

SUCCESS METRIC: Civil society organizations develop social communication campaigns for the prevention of child overweight and obesity.

BEST PRACTICE: [Bite Back 2030](#), UK.

TO BE IMPLEMENTED IN: Santiago, Chile and Mexico City.

MAIN PARTNER/DIRECTED TO: Regional Government of Santiago + UNICEF/Local Government of Mexico City + UNICEF/UNICEF Ambassadors/Influencers without conflicts of interest/Civil society organizations.

Roadmap for UNICEF: From strategy to action

This section compiles all the learnings and information of the phases carried out during this investigation to create a roadmap to action and implementation of the recommendations, best practices and interventions in the two selected cities of LAC region.

In the process of redesigning a foodscape in LAC cities, it is recommended to follow the **measure-test-refine approach** and 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 interventions 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 working on the development of a healthy food strategy in the two selected cities. The prioritization of the recommendations will be carried out once the findings of this study have been shared with key informants, local authorities and other relevant stakeholders in Santiago and Mexico City.



Where to start in Santiago, Chile?

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 schools:

1. Nueva Zelandia school (Independencia)
2. Juana Atala de Hirmas school (Renca)
3. Pedro Aguirre Cerda school (Cerrillos)



Where to start in Mexico City?

As a starting point, the projects/programmes 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 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



Table 1. Matrix of programmes interventions in Santiago, Chile and Mexico City to improve urban food environments and prevent childhood overweight and obesity

This matrix provides a framework to prioritize interventions (programmes and projects) that could transform the public realm in Santiago and Mexico City. It also serves as a tool to assess and consolidate key stakeholders, key performance indicators and potential partners for each project and policy. This matrix will contribute to more effective and strategic planning, selection of partners, application for funding and creation of a robust strategy to improve foodscapes in both selected cities.

Pillar and time period for impact	Project	Programme	Impact	Key Performance Indicator/s	Existing programme to be used as a starting point	Key actors/potential partners	Best practice
Governance and political will Short term	Coordination mechanism for food system transformation.	N/A	All levels of government are focused on the prevention of childhood overweight and obesity, integrating policies in different sectors.	Creation of a coordination mechanisms for the transformation of the food system at the local level.	" <i>Elige Vivir Sano</i> ", Santiago; Consejo de Desarrollo Social del Distrito Federal, Mexico City.	Local and regional government UNICEF	Food Security and Nutrition Coordination , Sao Paulo, Brazil.
Built space and urban character Short term	Redesign of public spaces in and around schools.	N/A	Creation of an active and healthy daily routine around schools for children and their families.	Children increase their physical activity.	"Streets for Kids", Santiago, Chile.	Ministry of Housing and Urban Space	Streets for Kids , Santiago, Chile.
Built space and urban character Short term	N/A	Design areas in which children and their parents/ caregivers learn to ride a bicycle.	More children use bicycles to go to school.	Increased school bike sharing to go to school and the confidence among children and caregivers around bicycle use.	" <i>Elige Vivir Sano</i> ", Santiago, Chile.	Ministry of Transportation Ministry of Housing and Urban Space	Dejá tus rueditas programme , Buenos Aires, Argentina (information in Spanish). Biking Playgrounds , Copenhagen, Denmark.
Social environment Short term	N/A	Development of low-cost recipes and a cookbook with seasonal products.	Increased intake of fresh and seasonal foods.	Revaluing of local traditions and increased awareness and knowledge about the benefits of eating seasonal and fresh foods.	<i>Cocinando aprendo</i> , TV EDUCA, Chile.	Chefs Ministry of Health Ministry of Social Development Municipality	Recetario picadas de verano , Uruguay (information in Spanish).

<p>Social environment</p> <p>Short term</p>	<p>Promote the development of apps for children and caregivers/parents to expand their knowledge about healthy eating and nutrition.</p>	<p>N/A</p>	<p>Increased awareness and use of front-of-package labelling to inform consumers at points of sale.</p>	<p>Citizens change their purchasing decisions using the information provided by the app.</p>	<p><i>Pedidos Sanos</i>, Santiago, Chile.</p>	<p>Public and private partnership (PPP)</p> <p>Municipality</p> <p>Civil society organizations</p> <p>National Institute of Public Health (Mexico City)/ Institute of Nutrition and Food Technology (Santiago)</p> <p>Ministry of Social Development</p> <p>Ministry of Health</p>	<p>Escáner nutricional, Mexico (information in Spanish)</p> <p>Pedidos Sanos, Santiago, Chile (information in Spanish)</p> <p>Héroes en tu plato, Spain (information in Spanish)</p>
<p>Governance and political will</p> <p>Medium term</p>	<p>N/A</p>	<p>Promote the sale of surplus food in public spaces and trusted institutions (only in Mexico City).</p>	<p>Reduces food waste and emissions; increases food security for children.</p>	<p>Reduced food waste; creation of new jobs.</p>	<p>N/A</p>	<p>PPP</p> <p>Ministry of Housing and Public Space</p> <p>Ministry of Agriculture</p> <p>Municipality</p> <p>Food businesses</p>	<p>Red plato lleno, Buenos Aires, Argentina (information in Spanish)</p> <p>Food Rescue, USA</p>
<p>Governance and political will</p> <p>Medium term</p>	<p>N/A</p>	<p>Promote partnerships with local food producers to increase the fresh food supply.</p>	<p>Food is distributed where it is needed. Farmers sell their fresh produce at fair prices.</p>	<p>Children and their families living in remote areas have greater access to fresh seasonal produce.</p>	<p>Soil recarbonization programme, FAO, Mexico.</p>	<p>Ministry of Agriculture</p> <p>Local food businesses</p>	<p>Huertas de Abastecimiento Medellín, Colombia (information in Spanish)</p>
<p>Governance and political will</p> <p>Medium term</p>	<p>Ensure compliance with established regulations on ultra-processed foods.</p>	<p>N/A</p>	<p>National policies are enforced at the local level.</p>	<p>Ultra-processed foods are not sold at or around schools.</p>	<p>N/A</p>	<p>Santiago Metropolitan Region</p> <p>Government of Mexico City</p> <p>Ministry of Health (Chile)</p> <p>COFEPRIS (Mexico)</p>	<p>Evaluation report on the implementation of the Law on nutritional composition of food and their advertising (2017), Chile (information in Spanish)</p>

Governance and political will Medium term	Create a framework for the design and management of public spaces for children	N/A	Overall improvement of the public realm and a greater sense of safety for children and their parents/ caregivers.	More children visit parks and plazas or walk in the street. Increased sense of belonging and socialization.	N/A	Ministry of Housing and Urban Space	KABOOM Plays Everywhere, USA Public spaces guide of the MINVU, Santiago, Chile (information in Spanish)
Governance and political will Medium term	N/A	Implementation of the “Schools on the Move” model to encourage active lifestyles.	Increased physical activity in school settings; children lead active lifestyles.	Health is considered as a parameter of educational performance. Increased physical activity in children.	School feeding programme “ <i>Salud en tu vida, salud para el bienestar</i> ”, Mexico City.	Ministry of Education	Schools on the Move, Finland Centros Comunitarios Pilares, Mexico (information in Spanish)
Built space and urban character Medium term	N/A	Creation of safe cycling routes for children to bike to school.	Cultural and behavioural change toward healthier lifestyles.	The “measure-test-refine” approach is used to introduce modifications and ensure user satisfaction.	Bike paths, Santiago, Chile. <i>Muévete en Bici</i> , Mexico City.	Ministry of Transportation Ministry of Education	Bicibús, Barcelona, Spain (information in Spanish)
Built space and urban character Medium term	N/A	Launch a supervised walking routes programme for children to and from school.	Increases physical activity in children and empowers them to move on their own, creating leadership and responsibility.	Increased presence of children in the public realm, as well as social interaction and community cohesion.	N/A	Ministry of Transportation Ministry of Education	Senderos escolares, Buenos Aires, Argentina (information in Spanish)
Food environment, cultural and eating patterns Medium term	N/A	Offer seasonal foods and programmes related to healthy eating in public spaces.	Increases consumption of healthy foods in children. Families learn about of the benefits of eating fresh and seasonal products.	Increased participation of children and their families. Increased supply of seasonal foods throughout the city.	“ <i>Elige vivir sano</i> ”, Santiago, Chile.	Ministry of Housing and Urban Space <i>Ciudad Emergente</i> (Santiago)	Estaciones saludables, Buenos Aires, Argentina (information in Spanish) SplashJam, Lexington, USA
Food environment, cultural and eating patterns Medium term	Install free and safe drinking water fountains in and around schools.	N/A	Increases water consumption.	Students/ children drink more water throughout the day.	N/A	Ministry of Housing and Urban Space Ministry of Education	Refill revolution, London, UK

<p>Food environment, cultural and eating patterns</p> <p>Medium term</p>	Improve the infrastructure of local fresh food markets.	N/A	Increases demand for and consumption of fresh foods.	Increased sales of fresh foods by local producers/farmers. Increased supply of fresh foods in local markets.	<i>Ferias Libres, Elige Vivir Sano,</i> Santiago, Chile.	<p>Ministry of Social Development</p> <p>Ministry of Housing and Urban Space</p> <p>Local fresh food markets</p>	<p>Mejora del Mercado Agrícola de Montevideo, Uruguay (information in Spanish)</p>
<p>Food environment, cultural and eating patterns</p> <p>Medium term</p>	Deploy mobile farmers markets in remote areas.	N/A	Increases availability and access to fresh fruits and vegetables in remote areas.	Farmers markets on wheels are an established brand, and more children and their families frequent them every year.	<i>Ferias Libres, Elige Vivir Sano,</i> Santiago, Chile.	<p>Ministry of Social Development</p> <p>Ministry of Housing and Urban Space</p> <p>Local fresh food markets</p>	<p>DC Greens, Washington, DC, USA</p>
<p>Social environment</p> <p>Medium term</p>	N/A	Offer pop-up classes on healthy eating and cooking.	Classes are offered to street food vendors and school canteen operators who are in contact with children.	Participation of male family members and children. More people participate in the classes each year.	<i>Cocinando aprendo, TV EDUCA,</i> Chile.	<p>Chefs</p> <p>Ministry of Health</p> <p>Ministry of Social Development</p> <p>Municipality</p>	<p>Programa Cocina Uruguay, Montevideo, Uruguay (information in Spanish)</p> <p>Cocinando Aprendo, Chile (information in Spanish)</p>
<p>Social environment</p> <p>Medium term</p>	N/A	Duplicate the capacity of influencers to promote change.	Increases public awareness and perception of childhood overweight and obesity and its relationship with obesogenic environments.	Civil society organizations develop social communication campaigns for the prevention of child overweight and obesity.	UNICEF Goodwill Ambassadors and other local influencers without conflict of interest.	N/A	N/A

References

1. Economic Commission for Latin America and the Caribbean, United Nations Children's Fund, 'La Ciudad y los derechos de niñas, niños y adolescentes', *Boletín de la infancia y adolescencia*, no. 23, ECLAC, UNICEF, 2020, <crm.cepal.org/civicrm/mailling/view?reset=1&id=686>, accessed April 2022.
2. United Nations, Department of Economic and Social Affairs, *World Urbanization Prospects 2018: Highlights*, United Nations, New York, 2019.
3. United Nations Children's Fund, World Health Organization, International Bank for Construction and Development, World Bank, *Levels and trends in child malnutrition: Key findings of the 2021 edition of the joint child malnutrition estimates*, UNICEF, WHO, World Bank, New York, 2021.
4. United Nations Children's Fund, *The State of the World's Children 2021: On my mind - Promoting, protecting and caring for children's mental health*, UNICEF, New York, October 2021.
5. United Nations Children's Fund, *Childhood overweight: A call for prevention in Latin America and the Caribbean*, UNICEF, Panama City, 2021.
6. United Nations Children's Fund, *A roadmap for action to support nutritious diets and healthy environments for all Children in urban settings*, UNICEF, New York, 2020.
7. United Nations Children's Fund, *Prevention of overweight and obesity in children and adolescents: UNICEF programming guidance*, UNICEF, New York, August 2019.
8. Sandoval, Rosa Caterina, et al., 'Excise taxes on sugar-sweetened beverages in Latin America and the Caribbean', *Pan American Journal of Public Health*, vol. 45, 2021, <doi.org/10.26633/RPSP.2021.21>, accessed April 2022.
9. GEHL, 'What does a healthy foodscape looks like?', GEHL Blog, 21 August 2021, <Gehlpeople.com/blog/healthy-foodescapes/>, accessed April 2022.
10. Yau, Amy, et al., 'Changes in household food and drink purchases following restrictions on the advertisement of high fat, salt, and sugar products across the Transport for London network: A controlled interrupted time series analysis', *PLOS Medicine*, vol. 19, no. 2, 2022, <doi.org/10.1371/journal.pmed.1003915>, accessed April 2022.

Annexes

Annex 1. Resources for data collection during the strategic engagement with the community

Guide for questionnaire: A day in the life of a child

Using the following guide, explore the activities that children do and the food they eat on an average day (weekday) and on weekends.

Name of the child:

Age:

Family:

Occupation/employment of parent or caregiver:

Neighbourhood:

Household: ____ Rooms ____ Bathrooms ____ Number of people

In the morning at the **house**... (describe foods and activities)

In the morning at **school**... (describe foods and activities)

In the afternoon after **school** ... (describe foods and activities)

In the afternoon at the **park, plaza or recreational place**... (describe foods and activities)

In the evening at **home**...

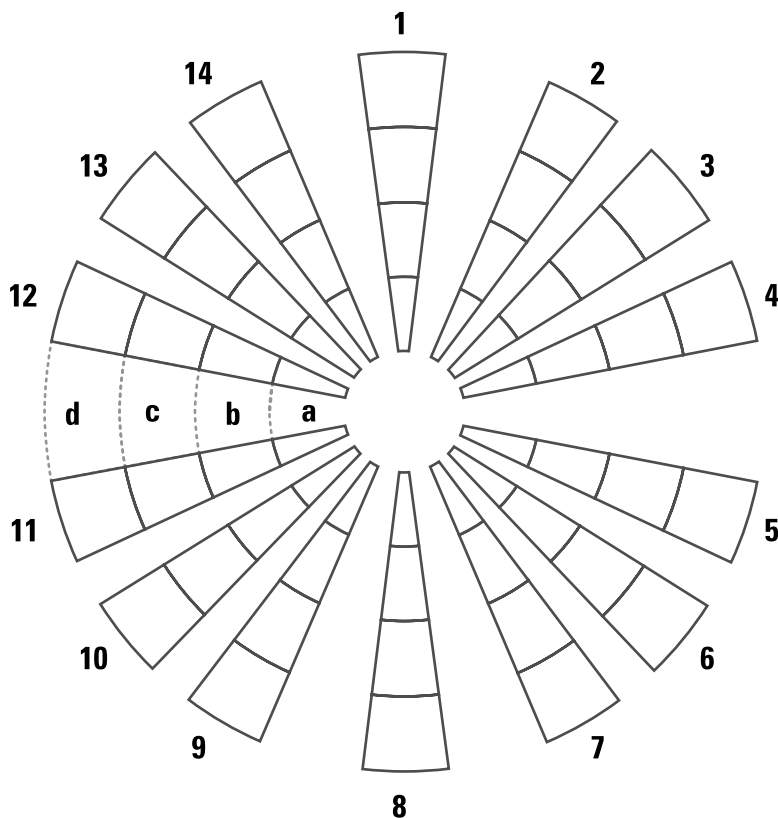
On **weekends**

Tool “Drawing the food environment” – adapted from the Drawing wellbeing tool.

Part A - Color your answers in the graphic on the next page.

1. How often does the man in the household prepare food or meals for the family?
 - a. Never
 - b. Rarely
 - c. Almost always
 - d. Always
2. When you buy food, how important is it to you that it is healthy?
 - a. Not at all
 - b. A little
 - c. A lot
 - d. Absolutely
3. Do you change your purchase option when finding foods with “EXCESS/HIGH IN” octagons?
 - a. Never
 - b. Rarely
 - c. Almost always
 - d. Always
4. Do the stores in your neighbourhood offer foods like fresh fruits and vegetables?
 - a. Never
 - b. Rarely
 - c. Almost always
 - d. Always
5. How often do you prepare food together with your family?
 - a. Never
 - b. Rarely
 - c. Almost always
 - d. Always
6. How often do you eat at home with your family?
 - a. Never
 - b. Rarely
 - c. Almost always
 - d. Always
7. How often do you eat at work with your colleagues/ coworkers?
 - a. Never
 - b. Rarely
 - c. Almost always
 - d. Always
8. How often do you eat in public spaces like parks and plazas?
 - a. Never
 - b. Rarely
 - c. Almost always
 - d. Always
9. How often do you eat fresh foods, such as fruits and vegetables?
 - a. Never
 - b. Rarely
 - c. Almost always
 - d. Always
10. How often did you practice physical activity during the pandemic?
 - a. Never
 - b. Rarely
 - c. Almost always
 - d. Always
11. How often do you bike, use public transportation or walk to work or school?
 - a. Never
 - b. Rarely
 - c. Almost always
 - d. Always
12. How often do you use public spaces in your neighbourhood, such as parks and plazas?
 - a. Never
 - b. Rarely
 - c. Almost always
 - d. Always
13. How often do you practice physical activity, such as walking, biking or other sports?
 - a. Never
 - b. Rarely
 - c. Almost always
 - d. Always
14. In general, do you feel safe using public spaces such as parks and plazas in your neighborhood?
 - a. Never
 - b. Rarely
 - c. Almost always
 - d. Always

Graphic for Part A - Color the circle according to the answers on the previous page.



Part B - Characterization of the food environment

1. When deciding which foods to buy, which of the following is most important?

- Price
- I am familiar with them/previous experience
- The children like them
- That they are healthy

2. In what kind of store do you find fresh produce (fruits, vegetables, dairy, meats) every day?

- Kiosk
- Street vendor
- Central/food market
- Supermarket

3. How far from your house are stores selling fruits and vegetables?

- Very close (less than 100 meters)
- Close (from 100 to 500 meters)
- Far (from 500 meters to 1 km)
- Very far (more than 1 km)

Gender: Female:___ Male:___ Other:___

Age: _____

What is your current occupation (choose only one): Student:___ Worker:___ Retired:___
Other: _____

Date:__ /__ /____

Annex 2. Information and profiles of the consultant team's local partners in Santiago and Mexico City

Santiago

Javier Vergara is a co-founder and the CEO of [Ciudad Emergente](#), a Lab of Tactics and Tools for Citizen Urbanism. He specializes in combining social innovation projects, entrepreneurship, citizen participation and technologies to improve the quality of life in cities. He has worked on several urban development projects in Chile, Europe and the United States. Javier is also a co-founder of [Plataforma Urbana](#), [Plataforma Arquitectura](#) and CitiSent. In 2006, he was voted one of the 100 Young Leaders of Chile by the publication El Sabado and the Centre for Strategic Leadership of Universidad de Adolfo Ibañez.

Javier is currently a professor of Tactical Urbanism at the Universidad Diego Portales, of Urban Start-Ups at Universidad del Desarrollo, and of the Masters in Urban Design (MPUR) at the Pontificia Universidad Católica de Chile. He has presented papers on Tactical Urbanism at the Universidad Autónoma de México, Columbia University and the Latin GSD of Harvard University. To learn more about Javier see his [TEDxUDD talk with Marisol García](#): "Collaborate, Try and Share: There are no secrets in urban innovation".

Mexico City

Carolina Crespo Uribe is the Studio Leader at [Oficina de Resiliencia Urbana](#) (ORU), a position she has had for two years. ORU is an urban design and applied research practice specializing in resilience and climate-sensitive landscape infrastructures. The ORU team consolidates more than ten years of experience in the academic, public and private sectors and various multilateral organizations. The office explores the possibility of an urban-environmental integration at different scales within multiple social, economic and political contexts. ORU works from a collaborative approach, teaming up with the most experienced professionals in various fields of knowledge to effectively connect the best available solutions to the most pressing needs of global urban communities and regions. Carolina is currently a professor at Tecnológico de Monterrey's School of Architecture, Art and Design. The expertise that she and ORU contribute, as well as the resulting network in Mexico City, were essential to establishing contact with key actors and stakeholders for the interviews and the public engagement in Iztapalapa. Her knowledge and experience in the city, and more specifically in disadvantaged communities, have been extremely valuable in the research and recommendations phases.



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