Social norms, nutrition and body image in Latin America and the Caribbean: A study in Colombia, Guatemala and Mexico

Overview

Latin America and the Caribbean have the highest rates of overweight and obesity in the world, with their prevalence of adult obesity of 24.2 per cent, of adult overweight exceeding 50 per cent, and of childhood obesity and overweight surpassing 30 per cent of children aged 5 to 19 years old. The region’s high prevalence marks a rapid rise in overweight and obesity in the past thirty years. As countries in the region develop, urbanize and become more globalized, people are increasingly moving away from traditional diets based on plants, whole grains, legumes, meat and fish toward diets rich in processed sugar, fat and sodium. They are also shifting from lifestyles high in physical activity and labour, toward urbanized lifestyles low in physical activity while high in sedentarism. Furthermore, while this transition impacts people living in urban areas, it also adversely impacts those living in rural areas, who increasingly rely on commercial value chains as local natural resources become privatized. This conjunction of an unhealthy diet and physical inactivity are cornerstones of the region’s high rates of overweight and obesity and their corollary increase in nutrition-related non-communicable diseases.

To inform the implementation of the Nutrition Strategy 2020-2030, the UNICEF Latin America and the Caribbean Regional Office (LACRO) commissioned a qualitative
To gain social and behavioural insights around this problem, the study gathered data from a review of pertinent literature, from 36 focus group discussions (FGDs) with adolescents and parents, and from 30 interviews with key informants across the public, private and academic sectors. Study participants were drawn from a sample of people in each country who regularly experience financial scarcity. This was to gain insights into the experiences of people who are most likely to be adversely affected by the region’s nutrition transition. The three primary research questions and the thematic areas are outlined in Figure 2 below.

The study was conducted in Colombia, Guatemala, and Mexico. Figure 1 shows key statistics for each country and across the region.

Guatemala experiences growing rates of obesity, continued prevalence of stunting, and rapid increase in diabetes:
- 24% Adults live with obesity
- 50% Children, under 5 years of age, experience stunting
- 25% Adults from Indigenous communities will be diagnosed with diabetes
- 40% of children and adolescents, between 11 and 15 years old, live overweight or obesity

Mexico ranks first in the world for adult overweight and obesity and has one of the highest rates of childhood overweight and obesity:
- 75% Adults live with overweight or obesity
- 36% Children, between 5 and 11 years of age, live with overweight or obesity

Colombia has experienced over 10% increase in obesity since 2012:
- 1 in 5 Adults live with obesity
- 17% adolescents, between 14 to 17 years of age, live with overweight or obesity

By 2030:
- 80% of deaths will be attributed to non-communicable diseases across Latin America.

Note: The maps are stylized, and they are not to scale. They do not reflect a position by UNICEF on the legal status of any country or territory or the delimitation of any frontiers.
### Key Findings

#### Psychological Insights
- Affect bias encourages emotion-based food decision making
- Salience bias focuses on prominent items of health information
- Low self-efficacy demotivates individuals to take charge of their health
- Ambivalent health interest and attitudes contributes to low motivation to make health changes

#### Environmental Insights
- Limited policy continuity between governing entities incentivizes short-term food policies
- Limited road infrastructure in rural areas hinders organizations transporting of perishable foods in and out of the areas
- Limited pedestrian infrastructure in rural and urban areas hinders people’s ability to walk and exercise regularly
- Limited regulation of ultra-processed foods increases their availability, affordability, and variety

#### Sociological Insights
- Social influence of adults informs children's food and health interests and attitudes
- Community dynamics encourage eating out for recreation and celebration
- Community dynamics encourage discussing health topics at home
- Gender norms assign meal preparation and serving to women and girls
- Meta norms consider thinner bodies to be healthier than larger bodies
Across all three countries, the study found that environmental factors such as narratives about access to food and health, and sociological factors such as family, friends, community members and society, impacted the ways that people ate and the attitudes they held about health. Figure 3 and annex 1 summarize these findings and highlight key insights of the study by behavioural drivers: psychology, sociology and environment. Importantly, the study found that these drivers are interactive rather than linear: this is to say that each of these drivers influences individual and group behaviours to a greater or lesser extent, depending on individual and group characteristics and the level of exposure and access people have to alternative options.

**Research Question 1: How are the environmental context and structural elements influencing social norms on dietary habits and body image?**

Structural factors like free trade agreements, public policies and the regulation of food and beverage marketing impact the accessibility and affordability of food in people’s environments. In particular, the industrialization of food and agriculture as a form of economic development contributes to increased reliance on commercial value chains for food purchases, often resulting in increased exposure and access to ultra-processed foods and beverages. This has contributed to the development of neighbourhood food swamps, which are areas where there are few options for nutritionally rich foods, but plenty for nutritionally poor products. Food swamps are more prevalent in less affluent neighbourhoods because ultra-processed foods are typically less expensive than perishable foods. This finding is important because previous research has shown that the saturation of ultra-processed foods in people’s environments correlates positively with overweight prevalence in their communities.

Infrastructural factors like limited transportation, particularly in rural areas, impact the functionality of local economies and people’s ability to exercise easily. Limited road infrastructure hinders the ability of businesses to transport perishable foods to and from rural areas. The urban design of cities also influences whether and how people exercise: in contrast to North America and Europe, Latin American and particularly Mexican urbanicity is correlated with less physical exercise due to limited pedestrian infrastructure. Moreover, the industrialization of food and agriculture impacts communities’ ability to access natural resources like water and land: in Guatemala, the study found that the privatization of land can be hostile to traditional practices of communal land ownership and limit access to natural resources. These findings show that infrastructural factors play a large role in shaping the food and exercise environments in which people live.

The findings of the study show that the policies and regulatory actions of governing entities play a role in shaping the communication environment through public conversations about nutrition and physical activity, in addition to the accessibility of foods and beverages. Particularly in Guatemala and Mexico, national public health policies are dependent on presidential support. These findings indicate that such presidential reliance as well as cyclical governing structures based on 4- to 6-year administration terms in Guatemala and Mexico hinder policy continuity between administrations, incentivize short-term health regulations. These findings are important because slowing and reversing current trends in population health across the region requires long-term, evidence-based policy initiatives with clear and consistent messaging to the public.

**Research Question 2: How are social determinants influencing social norms around dietary habits and body image?**

Social factors at the household and community levels influence people’s behaviour about what they consider normal and desirable to eat. The study found that, for example, parents’ social influence plays an outsized role in informing what children consider desirable to eat: in Colombia and Mexico, many 2-3-year-old children tried carbonated sugar-sweetened beverages when they saw their parents drinking these beverages and by being offered by them. Similarly, in Guatemala, 2-3-year-old children started drinking coffee and consumed it regularly with breakfast, a practice that many parents considered normal. This underscores the fact that, whether intentional or not, the social influence of trusted individuals such as parents informs behaviour.
The dynamics of people’s communities also influence how people ate and purchase food. In Colombia and Mexico, participants regularly ate out for celebration and recreation. They bought food at food stands or international fast-food restaurants after receiving their salary and, for this reason, many associated eating out with financial wellbeing and family recreation. Adolescents mirrored this practice by purchasing food items at convenience stores, from food vendors near their schools and, occasionally, at food stands and cafes when they had spare change or went out with friends. These findings show that community dynamics influence and contribute to the beliefs and practices shared by many members of a given community.

At home, collectively held beliefs about gender influence what people consider appropriate food-related work and behaviour roles. Across all three countries, women, female adolescents and girls were considered responsible for food decision-making: meal preparation, cooking and serving. Boys, male adolescents and men occasionally helped women. However, men were more likely to initiate economic decisions. According to the perceptions and experiences of the participants in this study, in Colombia and Mexico, they were the ones to decide whether to eat out with their families. In Guatemala, many men described their role as that of the primary earner. These findings show that there are unequal work division and expectation norms regarding meal preparation labour, norms that impact women and adolescent girls.

Regarding perceptions about healthy and normal body sizes, the study found that in all three countries, the body sizes that people consider “healthy” are smaller than the “normal” body sizes that people observe in their communities. To generate insights into people’s views around body image, the study used the Stunkard Figure Rating Scale (see Figure 5) to learn about men’s and women’s perceptions regarding healthy and normal male and female body sizes. The scale in the figure shows a range of body sizes and enables researchers to ask study participants questions about their attitudes and perceptions about both individual body sizes and the range of sizes shown. While perceptions in general about healthy body sizes were smaller than the sizes considered normal, this finding was particularly evident in the comparison of female body sizes: across all three countries, participants considered sizes 3 to 5 to be “healthy” for women but tended to rank sizes 5 to 7 as “normal” for women. This finding indicates that most women may have larger bodies than what people consider “healthy,” and suggests that women may experience more social pressure to have smaller or thinner bodies than what is considered normal in their communities.

![Figure 5 Stunkard figure rating scale](image)
Research Question 3: How are personal characteristics, including cognitive and emotional drivers, influencing dietary practices and body image?

Individuals’ personal characteristics also impact what and how people eat, how they perceive health and what they consider healthy. Cognitive biases like salience bias played a role in how people differentiate between “healthy” and “unhealthy” foods: in Colombia, they distinguished between “natural” (healthy) and “artificial” (unhealthy), and in Mexico between “homemade” (healthy) and store-bought (unhealthy). While this rule of thumb was often an accurate measure, it could sometimes distort people’s perceptions of the healthfulness of foods and beverages. This was evident for beverages like panela water, a drink made from boiled unrefined whole cane sugar, and homemade fruit-infused water, both of which many participants drank daily: by focusing on the “natural” or “homemade” qualities of these beverages, these drinks can appear more healthy than they are. Moreover, in Colombia, many adolescents favoured “local” carbonated and uncarbonated sugar-sweetened beverages produced by Colombian brands, which they considered to be more nutritious in comparison with other brands.

Current emotions influence participants’ decisions about food consumption. Affect bias plays a role in influencing people’s rapid decisions, such as when people decided what to eat for snacks. In all three countries, people often ate snacks to fill cravings for something sweet or as a reward for hard work, such as when men drank carbonated sugar-sweetened beverages after performing physical labour. People bought such snacks and drinks at convenience stores or sometimes made them at home. Likewise, people’s economic aspirations also drive perceptions about what they consider desirable to buy: many participants across the three studied countries considered carbonated sugar-sweetened beverages to be a sign of economic wellbeing, i.e., status.

Participants’ sense of health self-efficacy significantly influences their beliefs in their capability to take charge of and maintain their health. In Colombia, participating adults and adolescents in urban areas often felt less capable of changing their habits of drinking carbonated sugar-sweetened beverages. In Mexico participating adults in urban areas described feeling incapable of changing the socio-economic circumstances impacting their ability to buy nutritionally rich foods. In Guatemala, adults expressed strong feelings of ambivalence about their ability to prevent diabetes in themselves and their families, diabetes having become an epidemic across the country. Moreover, only a few participants described regularly doing physical exercise, such as playing sports, and most participants who described doing physical exercise were men, male adolescents and boys. While there is limited data from this study about participants’ practices regarding physical exercise, the data obtained suggests that cardio-protective exercise (i.e., strenuous activities like running, vigorous walking, riding a bicycle, etc.) may not be a common practice among most participants and that there may be individual and gendered barriers to regular exercise.

While many people feel ambivalent about their capability to maintain their health, all participants value buying fresh, nutritionally rich foods that are affordable, of high quality and sold close to where they live. For example, many people valued the reciprocal relationships that they built with local food purveyors at green grocers and butcher shops. These relationships were drivers of customer loyalty. In Mexico, for instance, participants shared that they often expressed their gratitude for affordable foods by giving tips and spare change to shopkeepers. Likewise, in Colombia and Guatemala, affordability and quality particularly drove purchasing decisions, where participants sought the highest quality product for the lowest price. This finding shows that participants value access to nutritionally rich foods and the individual relationships that they build with shopkeepers; and that, for many people, affordability is one of the key barriers to optimal nutrition.
Conclusions

The study findings show that environmental and sociological factors create contexts that hinder health-forward decisions to eat nutrient-rich products and to exercise regularly. In particular, the environments in which participants live facilitate decisions to eat ultra-processed products and to not exercise regularly. The built infrastructure, from roads to sidewalks, and structural factors regarding food policies and regulatory frameworks, created challenges to accessing nutritious foods and exercising. At the sociological level, conversations and social influences at home and in people’s communities are strong indicators of people’s dietary practices and their attitudes about body size, as well as of their beliefs about health. Socio-economic factors like affordability of food are also among the primary barriers to eating nutrient-rich foods, and participants regularly felt the need to prioritize affordability over quality. Moreover, while participants valued eating nutritious foods, as evidenced by their cognitive biases such as using cognitive heuristics like “homemade” and “natural” to identify nutritious foods, it was often easier to make the decision to eat processed foods. This is because the environments and social contexts in which they live make eating processed foods easy, accessible, social, and timely. These findings underscore the importance of creating environments and social contexts that enable people to easily make decisions that prioritize and preserve their health.

Recommendations

It is recommended social and behaviour change interventions that address the environmental and sociological drivers of dietary habits contributing to overweight and negative perceptions about body size, in line with diets and practices to support optimal nutrition, growth, and development. Such interventions address the root causes contributing to overweight, obesity, and nutrition-related non-communicable diseases by creating environments and social contexts that make health-forward decisions easy, accessible, social, and timely. The recommendations are organized by environmental, sociological, and psychological drivers to facilitate cross-reference to its findings.

Environmental Level

- Develop instruments to regulate exposure and access to ultra-processed foods and beverages and expand food and nutrition policy initiatives.

- Create or reinforce the necessary legal instruments (laws, rules, regulations and policies) to guarantee the rights of the population, especially of children, to continuous and sufficient drinking water and healthy eating, especially among the most vulnerable groups of the population.

- Generate pertinent regulatory instruments free of conflicts of interest, to guarantee and monitor the sale and distribution of healthy and sustainable food in schools and childcare centres.

- Ensure financing for actions or interventions that promote healthy and sustainable nutrition and physical activity.

- Promote coordination between institutions to address the problem of malnutrition in all its forms, through a common agenda between government agencies, health organizations, the media, the food industry and civil society organizations.

- Reduce the availability of sugar-sweetened beverages in nurseries and schools and consider the prohibition of this type of products in schools using labelling as a regulatory tool.

- Frame healthy food options to be attractive to food decision-makers: Reframe school menus to promote nutritious decisions.
Create and promote infrastructure that facilitates health-forward decisions.

- Ensure the availability of drinking water for consumption in communities, health facilities, schools, nurseries and homes.
- Implement intersectoral strategies to transform educational centres into institutions with adequate infrastructure for the promotion of a healthy and sustainable nutrition, hydration and physical activity for children and adolescents.

Promote gender equality and increase men, male adolescents and boys’ engagement in meal preparation and in creating healthy habits early and often at home.

- Highlight the importance of the father as role model in the formation of healthy habits in children and develop capability-building programming for men, adolescent males and boys to create gender-neutral associations with health, nutrition, food preparation, and household labour.

Psychological Level

Promote interest, positive associations, interest, positive associations, and cultural identification with nutritious foods

- Develop a social marketing campaign that evokes emotions, feelings and traditions related to healthy eating and emphasizes preparing and sharing meals together as an expression of affection. Also, it is important to link recreation and love not only to food but also to exercise.
- Create a social marketing campaign that shows how consuming fruits and vegetables is not necessarily more expensive; that highlights the “price” or harms of soft drinks in terms of health risks and environmental pollution; and that points out the benefits of consuming plain water.

Fostering individuals’ self-efficacy to support their health through initiatives aimed at building their capability and motivation to practice health-forward habits

- Develop educational programmes, such as culinary workshops or a food-centred mobile application, that increase adults and adolescents’ capability to include healthy foods and beverages as a part of their daily habits, and to identify satisfying alternatives to unhealthy foods and beverages.
- Develop social programming that makes physical exercise accessible, social, and timely; dismantles barriers to regular exercising through social exercise groups—e.g., hiking, running, yoga and sports—in local parks and community centres; and offers programmes aimed toward gender inclusion.

Sociological Level

Foster conversations that promote healthy eating, adequate nutrition and body neutrality.

- Carry out communication campaigns, to promote public discourses among the population about what a healthy and sustainable diet is, emphasizing the most relevant messages for each country.
- Carry out communication campaigns focused on self-empowerment and body neutrality, which means to exist within our bodies without judgement or holding strong opinions about how we look, to promote public discourses among the population about what a healthy body is and how thinness and perceptions about thinness are not equivalent to health.
- Implement communication and behavioural change strategies in indigenous languages through mass media to promote healthy and sustainable eating, favouring the consumption of locally produced food.
- Build capability programmes among teachers and health personnel dedicated to promoting healthy and sustainable eating, so that they become channels of information for students and patients.

Fostering individuals’ self-efficacy to support their health through initiatives aimed at building their capability and motivation to practice health-forward habits
References


### Annex 1

<table>
<thead>
<tr>
<th>FACTOR</th>
<th>DEFINITION OF FACTOR</th>
<th>FINDING</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ENVIRONMENT INSIGHTS</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Governing entities</td>
<td>Administrative and regulatory organizations recognized by a community</td>
<td>National public health policies in the three countries are dependent on presidential support. The structure of 4 or 6-years government administrations creates a lack of continuity between administrations and incentivizes short-term rather than long-term health policies.</td>
</tr>
<tr>
<td>Infrastructural factors</td>
<td>The set of facilities and systems that impact the functionality of an economy and people's participation in it</td>
<td>Limited transportation and pedestrian walking infrastructure create barriers to business’ ability to transport perishable foods to and from rural areas and to individuals’ ability to exercise outside and to actively commute. The privatization of land opposes traditional models of communal land ownership and limits access to natural resources, particularly for Indigenous communities. Political insecurity hinders the government’s ability to conduct health and nutrition programs in areas with volatile security.</td>
</tr>
<tr>
<td>Structural factors</td>
<td>Obstacles (policies, practices, norms) that impact a group disproportionately and contribute to social disparity</td>
<td>The industrialization of agriculture and the promotion and limited regulation of ultra-processed foods has increased the availability, affordability and variety of ultra-processed foods and beverages in local communities. Indigenous people face significant obstacles to accessing and participating in public services, as these services have language barriers and are not differentially adapted to the needs of the population from an intercultural perspective.</td>
</tr>
<tr>
<td><strong>SOCIOLOGICAL INSIGHTS</strong></td>
<td></td>
<td></td>
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<tr>
<td>Social influence</td>
<td>Intentional and unintentional efforts to change a person’s behavior</td>
<td>The beverage habits of adults drinking carbonated sugar sweetened or caffeinated beverages spurs children’s interest and development of the same habit.</td>
</tr>
<tr>
<td>Community dynamic</td>
<td>Social and environmental characteristics of a group of people</td>
<td>Eating out is reserved for recreation and occasional celebration, based on financial resources, and it is associated with economic wellbeing. Parents and family are the most important people from whom children learn about health and wellbeing, while teachers also have a large influence.</td>
</tr>
<tr>
<td>Gender norms</td>
<td>Principles governing the behavior of adults and children to do behaviors considered appropriate for their gender</td>
<td>Women and girls are considered responsible for food decision making, ingredient procurement, and meal cooking and serving, while men and boys are expected to help occasionally.</td>
</tr>
<tr>
<td>Meta norms</td>
<td>Collectively held beliefs and values that facilitate group cohesion and social order</td>
<td>Thin bodies are considered healthier than larger bodies, despite the fact that thin bodies are not the norm for adults in many communities.</td>
</tr>
<tr>
<td><strong>ÁMBITO PSICOLÓGICO</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Salience bias</td>
<td>Focusing on items of information that are more prominent and ignoring items that are not</td>
<td>Many people use heuristics like &quot;store-bought&quot; and &quot;artificial&quot; as rules of thumb to determine whether foods are healthy, which can make some foods appear healthier than they are.</td>
</tr>
<tr>
<td>Affect bias</td>
<td>Current emotions Influencing rapid decisions</td>
<td>Many adults and adolescents eat snacks as a reward or to fill cravings for something sweet.</td>
</tr>
<tr>
<td>Interest and attitudes</td>
<td>The significance of a characteristic and the perspective around it</td>
<td>Affordability and proximity were the two most important factors in people’s food purchasing decisions.</td>
</tr>
<tr>
<td>Self-efficacy</td>
<td>Belief in one’s own capability to the behaviors to reach a specific goal</td>
<td>Many adults and adolescents were ambivalent about their ability to change their dietary and exercise habits or to prevent non-communicable diseases</td>
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</tbody>
</table>
Authors: Orla O’Sullivan, Angel Santamaria (MAGENTA)

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Technical contribution: Jo Jewel (UNICEF NY HQ), Cassia Ayres (UNICEF LACRO), Paula Veliz (UNICEF LACRO), Romain Sibille (UNICEF LACRO), Lina Zapata (UNICEF Colombia), Salua Osorio (UNICEF Colombia), Eduardo Gularte (UNICEF Guatemala), Maria Claudia Santizo (UNICEF Guatemala), Delhi Trejo (UNICEF Mexico), Graciela Raya (UNICEF Mexico), Juan Antonio Bazan (UNICEF Mexico), Marina Martinez (UNICEF México), Mauro Brero (UNICEF Mexico), Anabelle Bonvecchio (INSP), Amal Haouet (MAGENTA), Sarah-Jean Cunningham (MAGENTA)

Supervision: Maaike Arts (UNICEF LACRO)

Technical coordination: Paula Veliz (UNICEF LACRO) and Ana María Narváez (UNICEF LACRO)

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May 2023

Latin America and the Caribbean Regional Office
Bldg. 102, Alberto Tejada St., City of Knowledge
Panama, Republic of Panama
PO. Box 0843-03045
Phone: +507 301 7400
www.unicef.org/lac

@uniceflac
/uniceflac