

Tackling Malnutrition through Food Systems Approaches in Colombia

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Three sisters from Isla Fuerte Cordoba, in the north

Current patterns of development in Latin America and the parallel processes of urbanization and globalization around the world have accelerated the pace of the nutrition transition (changes in diet and physical activity and their effect on body composition).^{1,2} As a result, the prevalence of diet-related chronic diseases such as obesity, diabetes, and cardiovascular disease has dramatically increased.³ Countries like Colombia have experienced a rapid rate of change in behavioral health patterns, demographic distribution, and profile of disease.⁴ Health care,

policy and food systems have not had sufficient time to respond to these rapid changes. In addition, unequal distribution of resources within the region has increased population health disparities, placing a higher burden of disease on the most disadvantaged and vulnerable groups.

Colombia is still battling the prevalence of infectious diseases, while also experiencing an increasing rate of morbidity and mortality due to non-communicable diseases (NCDs). In the midst of this dual burden of disease and in the transition from underweight to overweight, children and women are more vulnerable and are being disproportionately affected. According to UNICEF, one in 10 children in Colombia suffers from chronic malnutrition, which is an average figure for Latin America and significantly lower than in Africa and Asia.

“One in 10 children in Colombia suffers from chronic malnutrition”

Colombia's success in fighting malnutrition

In recent years, the population of Colombia has shown a significant improvement in its nutritional indicators. According to the latest Global Nutrition Report 2015, Colombia is the only country that is on track to achieve four of the nutritional indicators given by the World Health Assembly: **1)** reduction of stunting in children under 5 years of age, **2)** reduction of wasting or low weight for height (pathological thinness), **3)** reduction in the number of children under 5 years who are overweight, and **4)** reduction of anemia in women of reproductive age.⁵

Colombia has various policies and interventions to reduce malnutrition that have holistic approaches and are focused on prevention, which are established in the National Policy of Food and Nutrition Security of 2008.⁶ Although overweight and obesity are growing concerns for the population, most of the policies and programs are centered on tackling undernutrition



Girl from the outskirts of Bogota living in poverty. Most of the children only receive a meal given at the school.

with interventions such as food fortification, micronutrient supplementation, conditional cash transfer with nutritional education, promotion of breastfeeding as well as individual and group counseling, and food assistance programs such as the school feeding programs.⁶ Unfortunately the food assistance programs of the country, and in particular the school feeding programs, have been highly criticized and are currently under investigation due to serious corruption allegations and budgetary concerns, preposterously in the states of the country with the highest need for nutritional assistance such as Guajira, Cesar, Atlántico, and Choco.⁷ Conversely, the only existing effort to prevent overweight and obesity in Colombia is the Law 1355 of 2009, which has yet to be implemented. The law outlines regulations, policies, and practices for the prevention and control of obesity and takes an inter-sectorial approach.

Despite improvement in overall nutritional indicators, major problems remain, such as unequal access to water, sanitation and education, which highly influence nutritional outcomes. Among the most affected populations are the rural and indigenous populations, who are more likely to have some form of malnutrition, either underweight, overweight or double burden (chronic malnutrition in children under 5 years, and mothers more likely to be overweight or obese).⁸ An integrated food systems approach is lacking in the majority of the official programs and policy level interventions, which usually take an individual-focused approach.

“Rural and indigenous populations are more likely to have some form of malnutrition”

The country's economic growth, reduction of poverty levels and satisfactory response to existing nutrition policies have contributed to Colombia's improved performance in nutritional indicators. Still, the challenge for the design and implementation of new protection strategies and interventions will be to direct them to face new challenges such as the increase in overweight and obesity in the adult population, the dual burden of malnutrition in states such as Guajira, and the precarious situation of segregated areas and populations of the country such as Choco, Atlántico, Cesar, and Guajira where corruption related to nutrition assistance programs is rampant. Strategies should be aimed at strengthening community-based programs and directing them mainly at the early days of childhood in order to counter malnutrition problems in adulthood. They should also ensure that the impact produced is measured by monitoring systems and periodic nutritional assessments.

Deaths from malnutrition

Colombia's economy depends heavily on exports of coal and oil. The prices commanded by these commodities have the potential to improve the economic and social status of the rural population while reducing problems related to malnutrition. However, this growth should in fairness ensure that revenues benefit all the population, beginning with minority populations such as Afro-Colombians and indigenous people, who in many cases lack coverage of their basic needs such as safe drinking water or sewage disposal. For instance, the states of Meta and Vichada, which are among the largest agricultural and fishing regions of the country, have already documented the deaths of seven indigenous children in 2016 due to malnutrition and food insecurity.⁹ It is not uncommon for Colombian newspapers to report news about children dying from malnutrition, particularly in the northern states of Colombia (Guajira and Cesar) and among indigenous communities. In fact, more than 2,000 children have died from malnutrition in Colombia during the past decade, many of them in states that have a rich and successful agriculture system and enjoy large revenues from oil and coal production.¹⁰

Focusing on diet quality is imperative to reduce problems of under- and overnutrition in the country. Micronutrient malnutrition and overweight/obesity are linked to poor-quality diets, and both promote the development of NCDs. Programs and policies that promote sustainable food systems and strategies

to enhance diet quality with a life-cycle approach should be implemented.¹¹ The implementation of selective and tailored nutrition programs can be part of the solution, but can also be part of the problem. It is important for policy-makers to recognize the importance of screening strategies, based on the selection of adequate anthropometric indicators, when implementing nutrition programs. Using universal strategies that are not linked to healthy and sustainable food systems is likely to increase disparities in malnutrition and to promote obesity.¹²

FIGURE 1: Boy from the Island of San Andrés in the Caribbean coast of Colombia, enjoying a fried plantain local dish. San Andres is the Colombian state with the highest childhood and adult obesity rate in the country. Poor dietary habits and extremely high levels of physical inactivity and sedentary lifestyle are the major drivers behind this situation. According to the last national nutrition survey of Colombia (2010), the Caribbean region of San Andres has some of the lowest consumption of fruits and vegetables and the highest consumption of highly processed food products including sugar-sweetened beverages and fast food. In addition, the average daily time spent watching TV among children between the ages of five and 12 is one of the highest in the country, at 2.8 hours, with 27.4% of the population spending more than four hours a day watching TV.¹³



“Focusing on diet quality is imperative to reduce problems of under- and overnutrition”

Using a food systems approach

Concentrating on the social determinants and using a food systems approach through policy and economic regulations is imperative in order to begin tackling the root causes of malnutrition. Promoting fair trade and agriculture policies that support and ensure diet quality is a must for Colombia. Sustainable agriculture can alleviate poverty in rural areas and can also improve food security by increasing food availability.¹⁴ Agricultural policies and programs that subsidize and promote the harvesting and production of healthier local fresh foods with high levels of micronutrients should be encouraged.¹⁵ Likewise, increasing the involvement and role of women in agricultural productivity,¹⁶ diversification of diets encouraging consumption of fruits, vegetables and legume-based protein,¹⁷ and bringing the agriculture and health sectors together, should be encouraged.¹⁸ In recent years, Colombia has implemented a series of activities and programs in rural areas to increase productivity and diversification within the agricultural sector, including the initiative *Colombia Siembra* (Sowing Colombia).¹⁹ This program, which is implemented by the Ministry of Agriculture and supported by the World Bank, aims to increase the amount of agricultural land in Colombia by a million hectares in 2018.²⁰

The negative and unintentional effects of market liberalization policies, the levels of political corruption, the increased presence of highly processed products from transnational food corporations in local markets as well as other local or native food industry products or preparations, and the negative effect of food advertising should be considered in the design of comprehensive food system interventions aimed at controlling malnutrition in the country.^{14,21–23} Recognizing that the economic growth of a country does not necessarily translate into better nutritional outcomes is crucial to help Colombia stay on track in tackling all forms of malnutrition.

“We must recognize that economic growth does not necessarily translate into better nutritional outcomes”

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Child on the north coast of Colombia eating a highly processed snack

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