## **A Call to Action for Government to Invest in Nutrition**

June 2017

Guatemala ranks sixth for chronic malnutrition in the world and has the highest prevalence in the Western Hemisphere. Malnutrition is compromising the health of women and children and is undermining the country's human capital and development efforts.

- Malnutrition in Guatemala includes chronic malnutrition (stunting, or short-for-age), underweight (low weight-for-age), acute malnutrition (wasting, or low weight-for-height), anemia, iodine deficiency, and low birth weight (< 2.5 kg) (see Figure 1).<sup>1</sup>
- Nearly half of the children under 5 in Guatemala are chronically malnourished, 46.5%, a higher percentage than in Africa, Asia, and Latin America and the Caribbean. The percentage rises to 53% in rural areas and to 58% among indigenous populations.
- Anemia prevalence is alarming, affecting 32% of children under 5, over 70% of children 6–11 months, and 24% of pregnant women.
- At the same time, Guatemala is experiencing a sudden increase in overweight and obesity among adults, which is an important contributor to diseases such as diabetes and heart disease.

## Impact on Health

- Malnutrition is the underlying cause of as many as 45% of child deaths in Guatemala.<sup>2</sup>
- By 2026, with no change in nutrition, more than 38,000 children will die related to stunting alone.<sup>3</sup>
- Malnourished children are more likely to suffer and die from common childhood illnesses such as diarrhea and pneumonia and may be more likely to develop chronic diseases such as heart disease in adulthood.<sup>2</sup>
- By 2026, with no change in nutrition, more than 70,000 children will die related to poor breastfeeding practices alone.<sup>3</sup>
- Anemia in young children increases the risk of infectious diseases. Anemia during pregnancy is associated with maternal and neonatal deaths and is a major cause of low birth weight.<sup>2</sup> Babies with low birth weight are five times more likely to die within the first month of life than normal birth weight babies.<sup>4</sup>

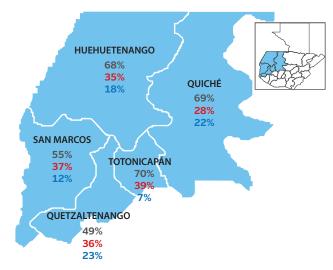
## Impact on Education

- Children who are stunted learn to sit, stand, and walk later; have poorer cognitive function; perform worse in school; are more likely to repeat grades; miss more days of school due to illness; and are more likely to drop out of school than well-nourished children.<sup>24</sup>
- In young children, anemia can impair cognitive performance, behavioral and motor development, coordination, language development, and achievement in school.<sup>2,4</sup>
- By 2026, if there is no change in stunting, children will lose 33 million equivalent school years of learning from stunting alone.<sup>3</sup>

## Impact on Economic Development

- Malnutrition weakens Guatemala's economic productivity. Iron deficiency anemia and stunting reduce labor productivity, which impedes agricultural and industrial production and slows national development. Childhood stunting in Guatemala is also associated with future lower wages in adulthood.<sup>6</sup>
- By 2026, Guatemala will lose Q146,207 million (US\$19,437 million) related to stunting alone.<sup>3</sup>

**Figure 1.** Prevalence of Chronic Malnutrition and Anemia in Five Departments of the Western Highlands<sup>1</sup>



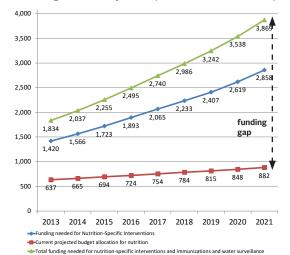
Chronic malnutrition, children 0–59 months

Anemia, children 6–59 months

Anemia, pregnant women

Source: Encuesta Nacional de Salud Materno Infantil, 2014-2015

Figure 2. Funding Gap at the National Level for Nutrition Interventions: Projected Budget versus Funding Needed by Year (Millions of Quetzales)<sup>7</sup>



# Malnutrition is preventable and treatable. But we must act now.

## Nutrition Services as an Investment in the Future

- Guatemala is committed to reducing chronic malnutrition among children under 2 by 10 percentage points by 2020. If the government is to fulfill this promise, additional investment must be made with a specific budget for nutrition to make more nutrition services available for mothers and children, particularly in rural and remote areas.
- The benefits of investing in nutrition far outweigh the costs. Every US\$1 spent on nutrition yields a return of US\$16.8
- Investing in proven, effective nutrition interventions, implemented at scale, will save and improve lives. Improved nutrition would:<sup>2,3,5,6</sup>
  - Reduce child deaths by reducing stunting and wasting.
  - Prevent permanent brain damage in children and increase the average child's IQ by up to 13.5 points by preventing iodine deficiency.
  - Improve cognitive development in children by preventing stunting and by preventing and treating iron deficiency anemia.
  - Help children stay in school longer and perform better in school, resulting in higher wages in the future. On average, a child who is 2 years of age in 2026 will gain 1.7 equivalent school years of learning just related to a reduction in stunting.
  - Increase physical capacity and reduce sick days in adulthood, leading to greater economic productivity. By 2026, gains for Guatemala would total Q25,229 million (US\$3,354 million) related to a reduction in stunting alone.
  - Reduce the risk of overweight and obesity in adults.
- In Guatemala, the government spends only 2.4% of its gross domestic product (GDP) on health. This is the <u>lowest</u> in Latin America.<sup>9</sup>
- In 2013, the Government of Guatemala invested Q637.2 million in nutrition—only <u>one-third</u> of what was required for national nutrition services.
- In 2016, only an estimated 0.15% of GDP was to be allocated for nutrition, which is <u>not sufficient</u>. About 0.50%, or Q2,495 million, would be needed for improvement in nutrition.
- As a result, women and children, especially in rural and remote areas where malnutrition is highest, are not being provided the nutrition services they are entitled to under Guatemalan law.

#### What Can You Do for Nutrition in Guatemala?

- Ensure that Q2,740 million is allocated for nutrition in 2017 and increase that amount by 10% each subsequent year up to 2021 to expand coverage of nutrition services across the country (see Figure 2).
- Ensure that 77% of the total budget allocated to nutrition in the Ministry of Health each year is allocated for nutrition-specific services and 23% is allocated to immunization and safe water.
- Incorporate nutrition into national and local plans and budgets as part of the health budget.
- Strengthen the health infrastructure—particularly at the first and second levels of care—and prioritize to focus on preventing chronic malnutrition through programs to promote dietary diversity and optimal nutrition (which will also help address the growing problem of obesity).
- Ensure greater tax revenues, which is not possible under the current tax structure, with greater transparency to provide adequate budgets for nutrition services.
- Conduct periodic costing of nutrition services to both allocate adequate funds for nutrition and manage the use of these funds, including updating the cost formulas in the Ministry of Finance catalog for nutrition activities under the Results-Based Budget Management Agreement.
- Develop and strengthen the capacities and competencies of staff in charge of nutrition activities at the Ministry of Health, clearly defining their roles and duties.
- Strengthen the supervision, monitoring, and evaluation of nutrition activities to ensure their compliance with service and quality standards and protocols.

## **Nutrition-Specific Interventions Needed Include:**

- Promoting maternal nutrition during prenatal care
- Promoting exclusive and continued breastfeeding
- Promoting complementary feeding for infants and young children and providing fortified complementary food
- Promoting dietary diversity
- Supplying micronutrients for mothers and children

- Conducting growth monitoring
- Promoting nutritional management of sick children
- Managing acute malnutrition at the community level

## **Other Health Interventions:**

- Monitoring water quality
- Providing vaccinations

Main data sources include: \(^1\) National Maternal and Child Health Survey 2014-2015 (MSPAS et al 2017), \(^2\) "Maternal and child undernutrition and overweight in low-income and middle-income countries" (Black et al. 2013), \(^3\) "Reducing Malnutrition in Guatemala: Estimates to Support Nutrition Advocacy—Guatemala PROFILES" (FANTA 2017), \(^4\)"Mortality risk in preterm and small-for-gestational-age infants in low-income and middle-income countries: a pooled country analysis" (Katz et al. 2013), \(^5\)"Effects of Health and Nutrition on Cognitive and Behavioural Development in Children in the First Three Years of Life" (Grantham-McGregor et al. 1999) and "Developmental Potential in the First 5 Years for Children in Developing Countries" (Grantham-McGregor et al. 2007), \(^6\)"Effect of a Nutrition Intervention during Early Childhood on Economic Productivity in Guatemala Adults" (Hoddinott et al. 2008), \(^7\) Costing of Essential Nutrition Interventions for the Reduction of Child Chronic Malnutrition in Guatemala (FANTA 2015), \(^8\)\*International Food Policy Research Institute 2015, \(^9\)World Health Organization Global Health Expenditure Database 2010–2014.





