Nutrition at a GLANCE

The Costs of Malnutrition

- Underweight in Guatemala (at 18%) cost the country $3.1 million, or 11.4% of GDP, in lost productivity in 2004. This is over half the combined cost of undernutrition for all of Central America.3
- Over one-third of child deaths are due to undernutrition, mostly from increased severity of disease.2
- Children who are undernourished between conception and age two are at high risk for impaired cognitive development, which adversely affects the country’s productivity and growth.
- Childhood anemia alone is associated with a 2.5% drop in adult wages.5
- The Latin America and Caribbean region is anticipated to lose a cumulative US$8 billion to chronic disease by 2015.5

Where Does Guatemala Stand?

- Guatemala has the third highest rate of chronic malnutrition (stunting) in the world (54.5%).2
- Indigenous children suffer disproportionately, with rates of stunting and underweight almost twice that of non-indigenous children.11
- 67% of Guatemalans aged 15 and above are overweight, of which 29% are obese.6
- 1 in 8 infants are born with a low birth weight.2

As seen in Figure 1, Guatemala has higher rates of stunting than other countries in its region and income group, and has the third highest rate of stunting in the world. Countries with similar per capita incomes in other regions, such as Iraq and Swaziland, also exhibit lower rates of child stunting.

Guatemala has Higher Rates of Stunting than its Neighbors and Income Peers

Source: Stunting rates were obtained from the WHO Global Database on Child Growth and Malnutrition. GNI data were obtained from the World Bank’s World Development Indicators.

Ethnicity and nutrition

Indigenous groups have disproportionately high rates of malnutrition. Nearly 8 out of 10 indigenous children are stunted compared to 4 of 10 non-indigenous children. Large differentials in chronic malnutrition by ethnicity may reflect social exclusion or other forms of differential access to services.7 Indeed, supply side barriers have been shown to be particularly important for the indigenous population.8

As seen in Figure 2, indigenous groups within the country have disproportionately high rates of stunting compared to other ethnic groups.

The Double Burden of Undernutrition and Overweight

Not only does Guatemala show one of the worst chronic malnutrition rates in the world, it has also experienced a recent and rapid increase in adult obesity, particularly among those living in urban areas.7 Low-birth weight infants and stunted children may be at greater risk of obesity and chronic diseases such as diabetes and heart disease than children who start out well-nourished.12

This “double burden” is the result of various factors. Progress in improving community infrastructure and development of sound public health systems has been slow, thwarting efforts to reduce undernutrition; while the adoption of diets high in refined carbohydrates, saturated fats and sugars, as well as a more sedentary lifestyle are commonly cited as the...
Poor Infant Feeding Practices

- Just over one-half (60%) of all newborns receive breast milk within one hour of birth.2
- One-half (51%) of infants under six months are exclusively breastfed.2
- During the important transition from breastfeeding to a mix of breast milk and solid foods between 6 and 9 months of age, one-third of infants are not fed appropriately with both breast milk and other foods.2

**Solution:** Support women and their families to exclusively breastfeed up to six months, and to introduce adequate complementary foods when children are six months of age, while still breastfeeding.

High Disease Burden

- Malnutrition increases the likelihood of falling sick and the severity of disease.
- Undernourished children who fall sick are much more likely to die from illness than well-nourished children.
- Parasitic infestation diverts nutrients from the body and can cause blood loss and anemia.

**Solution:** Prevent and treat childhood infection and disease through hand-washing, deworming, zinc supplements during and after diarrhea, and continued feeding during illness.

Limited Access to Nutritious Food

- For most households in Guatemala, access to calories is not a problem.
- Dietary diversity is essential for food security.
- Achieving a diverse and nutritious diet seems to be a problem reflected in high rates of anemia, overweight and obesity.

**Solution:** Involve multiple sectors including education, health, agriculture, gender, the food industry, and other sectors, to ensure that diverse, nutritious diets are available and accessible to all household members. Examine food policies and the country regulatory system as they relate to overweight and obesity.

### References


### World Bank Nutrition-Related Activities in Guatemala

**Projects:** The World Bank is currently supporting a US$49 million Maternal-Infant Health and Nutrition project which includes components geared towards reducing child malnutrition, and will be supporting a US$120 million Expanding Opportunities for Vulnerable Groups project which aims to increase access to essential health and nutrition services, especially in poor and indigenous areas. This project is pending government approval.

**Analytic Work:** A new protocol for local evaluation of the child growth monitoring program is being piloted and will be evaluated soon. This will be financed by the Japan Trust Fund for Scaling-Up Nutrition. The World Bank, in collaboration with the Ministry of Health, has also produced and disseminated a video to make chronic malnutrition more visible and promoted the use of basic health and nutrition services. Finally, the World Bank recently published a review of all the community based growth promotion programs in Central America, highlighting promises and challenges in their attempt to extend coverage of preventive nutrition services to the most vulnerable populations.

World Bank nutrition activities in Latin America: www.worldbank.org/lacnutrition

### Vitamin and Mineral Deficiencies Cause Hidden Hunger

Although they may not be visible to the naked eye, vitamin and mineral deficiencies impact well-being and are prevalent in Guatemala.

- **Iron:** 38% of children under-five and 22% of pregnant women suffer from anemia.14 Iron deficiency increases the risk of maternal mortality and in children leads to impaired cognitive development, poor school performance, and reduced work productivity.
- **Vitamin A:** 16% of preschool aged children are deficient in vitamin A.15 An estimated 1,500 deaths in Guatemala are precipitated by vitamin A deficiency annually.9
- **Iodine:** Just under half of all households use iodized salt in Guatemala, and an estimated 67,000 children annually are born mentally impaired due to iodine deficiency.16

### Figure 2

**Indigenous Groups in Guatemala Suffer from High Rates of Stunting**

![Figure 2](image-url)