



Country Context

HDI ranking: 152nd out of 182 countries¹

Life expectancy: 57 years²

Lifetime risk of maternal death: 1 in 45²

Under-five mortality rate: 76 per 1,000 live births²

Global ranking of stunting prevalence: 64th-highest out of 136 countries²

Technical Notes

Stunting is low height for age.

Underweight is low weight for age.

Wasting is low weight for height.

Current stunting, underweight, and wasting estimates are based on comparison of the most recent survey data with the WHO Child Growth Standards, released in 2006. They are not directly comparable to the wealth quintile data shown in Figure 2, which are calculated according to the previously-used NCHS/WHO reference population.

Low birth weight is a birth weight less than 2500g.

The methodology for calculating nationwide costs of vitamin and mineral deficiencies, and interventions included in the cost of scaling up, can be found at: www.worldbank.org/nutrition/profiles

The Costs of Undernutrition

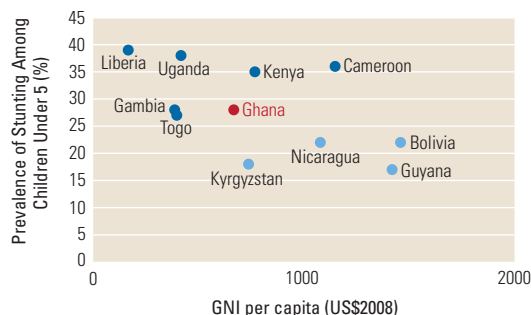
- Over one-third of child deaths are due to undernutrition, mostly from increased severity of disease.²
- Children who are undernourished between conception and age two are at high risk for impaired cognitive development, which adversely affects the country's productivity and growth.
- The economic costs of undernutrition include direct costs such as the increased burden on the health care system, and indirect costs of lost productivity.
- Childhood anemia alone is associated with a 2.5% drop in adult wages.⁵

Where Does Ghana Stand?

- 28% of children under the age of five are stunted, 14% are underweight, and 9% are wasted.²
- Ghana is on track to meet MDG 1c (halving child underweight by 2015).⁶ Prevalence of underweight, which in 1993 was 27%, has dropped by half.⁷ The stunting rate has also decreased by eight percentage points over the same time period. Though they have dropped, stunting rates are still high, and wasting rates remain virtually unchanged: it is important that progress continues.
- 1 in 10 infants are born with a low birth weight.²

As seen in **Figure 1**, Ghana's stunting rate is similar to some countries with lower per capita income (e.g. The Gambia and Togo), yet it has a higher level of stunting than countries in other regions with similar income (such as Kyrgyzstan and Nicaragua). With Ghana's aim to achieve middle income status,

FIGURE 1 Ghana has Lower Rates of Stunting than its Neighbors and Some Income Peers



Source: Stunting rates were obtained from the WHO Global Database on Child Growth and Malnutrition (figures based on WHO child growth standards). GNI data were obtained from the World Bank's World Development Indicators.

Annually, Ghana loses over US\$177 million in GDP to vitamin and mineral deficiencies.^{3,4} Scaling up core micronutrient interventions would cost about US\$10 million per year.

(See *Technical Notes* for more information)

Key Actions to Address Malnutrition:

Increase nutrition capacity within the Ministries of Health and Agriculture.

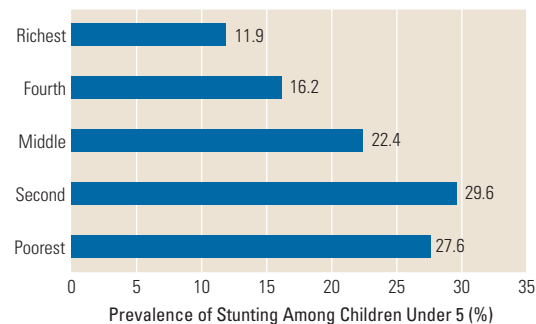
Improve infant and young child feeding through effective education and counseling services.

Increase coverage of vitamin A supplementation for young children and iron supplementation for pregnant women.

Achieve universal salt iodization.

Improve dietary diversity through promoting home production of a diversity of foods and market and infrastructure development.

FIGURE 2 Undernutrition Affects All Wealth Quintiles – Poor Infant Feeding Practices and Disease are Major Causes



Source: DHS 2008 (figures based on NCHS/WHO reference population).

countries such as Bolivia and Nicaragua provide examples of how it can expand its efforts to lower rates of undernutrition.

Undernutrition is not just a problem of poverty. As **Figure 2** shows, children are undernourished in nearly 12% of even the richest households. This is not an issue of food access, but of caring practices and disease.

Most of the irreversible damage due to malnutrition happens during gestation and in the first 24 months of life.⁶

Poor Infant Feeding Practices

- Two-thirds of all newborns do not receive breast milk within one hour of birth.²
- Less than two-thirds (63%) of infants under six months are exclusively breastfed.²
- During the important transition period to a mix of breast milk and solid foods between six and nine months of age, one-quarter of infants are not fed appropriately with *both* breast milk and other foods.²

Solution: Support women and their families to practice optimal breastfeeding and ensure timely and adequate complementary feeding. Breast milk fulfills all nutritional needs of infants up to six months of age. After that time, complementary foods should be introduced and infants age 6–24 months fed with at least 3 different food groups several times a day. In high HIV settings, follow WHO 2009 HIV and infant feeding revised principles and recommendations.¹²

High Disease Burden

- Undernutrition increases the likelihood of falling sick and 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 other disease. Hand-washing, deworming, zinc supplements during and after diarrhea, and continued feeding during illness are important.

Limited Access to Nutritious Food

- Fewer than 10% of households are food insecure as defined by available calories per capita.⁸ Achieving food security, however, means ensuring quality and continuity of food access, in addition to quantity, for all household members.
- Dietary diversity is essential for food security.
- High rates of micronutrient deficiencies in Ghana indicate that dietary diversity may be poor.

Solution: Involve multiple sectors including agriculture, education, transport, gender, the food industry, health and other sectors, to ensure that diverse, nutritious diets are available and accessible to all household members.

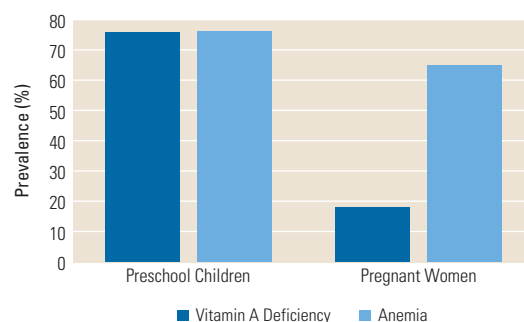
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Vitamin and Mineral Deficiencies Cause Hidden Hunger

Although they may not be visible to the naked eye, vitamin and mineral deficiencies impact well-being and are pervasive in Ghana, as indicated in **Figure 3**.

FIGURE 3 High Rates of Vitamin A and Iron Deficiency Contribute to Lost Lives and Diminished Productivity



Source: 1995–2005 vitamin A and 2003 anemia data from the WHO Global Database on Child Growth and Malnutrition

- Adequate intake of micronutrients, particularly iron, vitamin A, iodine and zinc, from conception to age 24 months is critical for child growth and mental development.
- **Vitamin A:** About three-fourths of preschool aged children, and one-fifth of pregnant women are deficient in vitamin A.⁹ Supplementation of young children and dietary diversification can eliminate this deficiency.
- **Iron:** About three-fourths of preschool aged children, and two-thirds of pregnant women suffer from anemia.¹⁰ Iron-folic acid supplementation

of pregnant women, deworming, provision of multiple micronutrient supplements to infants and young children, and fortification of staple foods are effective strategies to improve the iron status of these vulnerable subgroups.

- **Iodine:** Only a third (32%) of households consume iodized salt.⁶ Without this intervention there is a risk of iodine deficiency, which can cause lost IQ in infants and young children.

World Bank Nutrition Related Activities in Ghana

Projects: The World Bank is supporting the US\$25 million Nutrition and Malaria Control for Child Survival Project which aims to improve use of community-based health and nutrition services for children under age two and pregnant women. This focus on community-level services has led to successes in reduction of underweight in Latin American countries with similar income levels to Ghana. There is also a US\$15 million Ghana Health Insurance Project which is aimed at supporting Ghana's National Health Insurance System and a related Results-Based Financing Grant with supply and demand-side incentives to improve maternal and child health.

Addressing undernutrition is cost effective: Costs of core micronutrient interventions are as low as US\$0.05–3.60 per person annually. Returns on investment are as high as 8–30 times the costs.¹¹



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