The Costs of Malnutrition
- Egypt is anticipated to lose a cumulative US$1.3 billion to chronic disease by 2015.5
- 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 and overweight 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.6

Where Does Egypt Stand?
- 29% of children under the age of five are stunted, 6% are underweight, and 7% are wasted.2
- National averages, however, obscure vast regional differences in undernutrition prevalence. The stunting rate for children in urban Upper Egypt is 22.7% while that for children in urban Lower Egypt is nearly twice as high at 39.3%.15
- 70% of those aged 15 and above are overweight or obese.7
- More than 1 in 8 infants are born with a low birth weight.2

As shown in Figure 1, the overall prevalence of stunting and underweight has not changed significantly from 1990 levels. Egypt will not meet MDG 1c (halving 1990 rates of child underweight by 2015) with business as usual.8

FIGURE 1 Egypt’s Progress Toward MDG 1 is Insufficient

Source: WHO Global Database on Child Growth and Malnutrition (figures based on the NCHS/WHO reference population)

As seen in Figure 2, while Egypt performs better than some of its low-income neighbors in the region, some countries with similar per capita incomes, such as Sri Lanka and Mongolia exhibit lower rates of child stunting.

FIGURE 2 Egypt has Higher Rates of Stunting than its 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.

Most of the irreversible damage due to malnutrition in Egypt happens during gestation and in the first 24 months of life.9
Solutions to Primary Causes of Undernutrition

**Poor Infant Feeding Practices**
- Just over one-half (56%) of all newborns receive breast milk within one hour of birth.²
- Just over one-half (53%) 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-third 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, boosts their immunity, and reduces exposure to infections.

**High Disease Burden**
- 28% of child deaths are due to either diarrhea or pneumonia.⁸
- Undernourished children have an increased risk of falling sick and greater 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**
- Achieving food security means ensuring quality and continuity of food access, in addition to quantity, for all household members.
- Dietary diversity is essential for food security.

**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.

**References**

**Undernutrition is not just a problem of poverty.** As Figure 3 shows, stunting rates are similar (27–31%) across all wealth quintiles. Children are undernourished in over one-quarter of even the richest households. This is not an issue of food access, but of caring practices and disease.

**FIGURE 3 Undernutrition Affects All Wealth Quintiles – Poor Infant Feeding Practices and Disease are Major Causes**

<table>
<thead>
<tr>
<th>Wealth Quintile</th>
<th>Prevalence of Stunting Among Children Under 5 (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Richest</td>
<td>27</td>
</tr>
<tr>
<td>Fourth</td>
<td>27</td>
</tr>
<tr>
<td>Middle</td>
<td>27</td>
</tr>
<tr>
<td>Second</td>
<td>31</td>
</tr>
<tr>
<td>Poorest</td>
<td>30</td>
</tr>
</tbody>
</table>

*Source: DHS 2008 (figures based on the WHO Child Growth Standards)*

**The Double Burden of Undernutrition and Overweight**

Egypt has also seen a recent increase in adult obesity. Low-birth weight infants and stunted children may be at greater risk of chronic diseases such as diabetes and heart disease than children who start out well-nourished.¹⁶

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 Western diets high in refined carbohydrates, saturated fats and sugars, as well as a more sedentary lifestyle are commonly cited as the major contributors to the increase in overweight and chronic diseases.⁹

**Vitamin and Mineral Deficiencies Cause Hidden Hunger**

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

- **Vitamin A:** 12% of preschool aged children and 22% of pregnant women are deficient in vitamin A.¹⁰
- **Iron:** Current rates of anemia among preschool aged children and pregnant women are 30% and 45%, respectively.¹¹ 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:** While 79% of households consume iodized salt, over 429,000 infants remain unprotected from iodine deficiency disorders.⁸
- **Zinc:** 9% of the population is at risk for insufficient zinc intake.¹³ Zinc supplementation during diarrheal episodes can reduce morbidity by more than 40%.¹⁴

**World Bank Nutrition-Related Activities in Egypt**

The World Bank is currently engaging heavily with Egypt through its analytical and advisory work. A Governorate Health Plan examining areas of child and maternal health was completed, as was a more recent how-to-guidance on overall health system performance.