The Costs of Malnutrition

- 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.
- As overweight and obesity increase, the Latin America and Caribbean region is anticipated to lose a cumulative US$8 billion to chronic disease by 2015.⁵
- Childhood anemia alone is associated with a 2.5% drop in adult wages.⁶

Where Does Peru Stand?

- 30% of children under the age of five are stunted and 18% are underweight.²
- 64% of those aged 15 and above are overweight, of which 28% are obese.⁷
- 50% of children younger than 5 suffer from anemia.¹³
- Just under one-half (48%) of all newborns receive breast milk within one hour of birth.²
- 69% of infants under six months are exclusively breastfed.²
- There are stark urban-rural differences in rates of child stunting, where 44% of children in rural areas are stunted compared to 16% in urban areas.¹⁶

Most of the irreversible damage due to malnutrition in Peru happens between 6 and 18 months of life.⁸

Key Actions to Address Malnutrition:

- Improve infant and young child feeding through effective education and counseling services based on regular growth monitoring of children.
- Achieve effective iron supplementation to the poorest and most vulnerable populations (pregnant women and young children).
- Improve effective coverage and quality of basic health and nutrition services.

Annual costs of undernutrition and overweight to vitamin and mineral deficiencies.³,⁴ Scaling up core micronutrient nutrition interventions would cost less than US$16 million per year. (See Technical Notes for more information)

The Double Burden of Undernutrition and Overweight

Peru, like many other countries in Latin America, has seen a recent increase in adult overweight, particularly among those living in urban areas.¹⁰ This “double burden” is the result of various factors. 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.⁷ Progress in development of sound public health systems has been slow, thwarting efforts to reduce under-nutrition; while the adoption of Western diets high in refined carbohydrates, saturated fats and sugars, as well as a more sedentary lifestyle...
Solutions to Primary Causes of Undernutrition

**Poor Infant Feeding Practices**
- Just under one-half (48%) of all newborns receive breast milk within one hour of birth.2
- 69% of infants under six months are exclusively breastfed.2 Efforts to further increase this relatively high rate should continue.
- During the important transition period to a mix of breast milk and solid foods between six and nine months of age, it is critical that infants are fed appropriately with both breast milk and other foods.2

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

**High Disease Burden**
- 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 disease through hand-washing, deworming, zinc supplements during and after diarrhea, and continued feeding during illness. Promote adequate coverage of basic health and nutrition services, and improve community outreach.

**Access to Healthy Diets**
- For most households in Peru, 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.
- Maintenance of healthy traditional foods may help slow the nutrition transition.

**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**
8. Ministry of Health data, Peru.

World Bank Nutrition-Related Activities in Peru

**Projects:** The World Bank is currently preparing the third in a series programmatic operation to improve the Government of Peru’s results in health, nutrition, and education. Reforms under the US$330 million Results and Accountability Development Policy Loan aim to increase access to institutional birth services and coverage of growth promotion programs. A US$25 million Result Based project (Peru Juntos for Nutrition SWAP) is also in preparation, to strengthen demand, supply and governance related to health and nutrition services. In addition, the US$15 million Second Phase Adaptable Program Loan of the Health Reform Program for Peru intends to improve the capacity and quality of women’s and child health care in rural areas. A US$1.9 million Japan Social Development Fund has recently been approved to support community based activities related to communication and governance in nutrition, to be implemented in three of the poorest regions of the country.

**Analytic and Advisory Work:** The World Bank is also providing technical assistance to the conditional cash transfer program *Juntos* to improve its results on nutrition, partly with support of the Japan Trust Fund for Scaling-Up Nutrition. Analytical work is also ongoing to study the role of parents’ knowledge of child growth and nutritional status. The World Bank has also supported the production and successful dissemination of a video to make the problem of chronic malnutrition more visible and promote the use of basic health and nutrition services. Finally, the World Bank developed an innovative collaboration with high-profile local chefs to demonstrate nutritional child feeding practices using traditional Peruvian cuisine.

**Addressing undernutrition is cost effective:** Costs of core micronutrient interventions are as low as US$0.05–8.46 per person annually. Returns on investment are as high as 6–30 times the costs.14