The Costs of Malnutrition

- Over one-third of child deaths are due to undernutrition, mostly from increased severity of disease.1
- 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 Africa region is anticipated to lose at least a cumulative US$4.0 billion to chronic disease by 2015.5
- 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 Lesotho Stand?

- 42% of children under the age of five are stunted, 14% of are underweight, and 2% are wasted.2
- 50% of those aged 15 and above are overweight or obese.7
- 13% of infants are born with a low birth weight.2
- Lesotho will not meet MDG 1c (halving 1990 rates of child underweight by 2015) with business as usual.8

Most of the irreversible damage due to malnutrition happens during gestation and in the first 24 months of life.1

As seen in Figure 1, Lesotho has higher or similar rates of stunting than many countries in its region with lower per capita income. That lower-income countries have lower rates of stunting shows that undernutrition is not a function of income alone. Undernutrition is not just a problem of poverty at the household level, either. As Figure 2 shows, children are undernourished in 1 in 4 of even the richest households. This is not typically an issue of food access, but of caring practices and disease.

The Double Burden of Undernutrition and Overweight

While rates of undernutrition remain high in Lesotho, the country has also seen a recent increase in adult obesity. The coexistence of undernutrition and overnutrition may lead to particular risks: 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.10

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 urbanization and the adoption of diets high in refined carbohydrates, saturated fats and sugars, combined with a more sedentary lifestyle are

Technical Notes

Stunting is low height for age (too short). Underweight is low weight for age (too small).

Wasting is low weight for height (too thin). 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.

Overweight is a body mass index (kg/m²) of ≥ 25; obesity is a BMI of ≥ 30.

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

Key Actions to Address Malnutrition:

- Increase health promotion and education, particularly related to infant and young child feeding.
- Increase nutrition capacity within the Ministries of Health and Agriculture.
- Increase coverage of vitamin A supplementation and deworming for young children and iron supplementation for pregnant women.
- Reduce diarrheal disease severity through provision of zinc and oral rehydration salts, and education on correct preparation.
- Improve dietary diversity through promoting home production of a diversity of foods and market and infrastructure development.

FIGURE 1 Lesotho has Higher Rates of Stunting than its Lower Income Peers

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

Richest

Middle

Fourth

Second

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

Source: DHS 2004 (figures based on NCHS/WHO reference population).

Prevalence of Stunting Among Children Under 5 (%) 0 10 20 30 40 50

3. Popkin BM. et al. 1996. Stunting is Associated with Feeding revised principles and recommendations.17
4. A. 12 Supplemental of young children and diarrhea.15
11. Popkin BM. et al. 1996. Stunting is Associated with Feeding revised principles and recommendations.17

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

• 15% of households are food insecure, according to a measure of per capita access to calories. Many more households likely lack access to diverse diets year round.
• Achieving food security means ensuring quality and continuity of food access, in addition to quantity, for all household members.
• High levels of micronutrient deficiencies coexisting with obesity indicate that diet quality is not optimal.
Solution: Involve multiple sectors including agriculture, education, social protection, transport, gender, the food industry, health and other sectors, to ensure that diverse, nutritious diets are available and accessible to all household members.

Vitamin and Mineral Deficiencies Cause Hidden Hunger

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

• Vitamin A: 33% of preschool aged children and 15% of pregnant women are deficient in vitamin A.14 Сupplementation of young children and dietary diversification can eliminate this deficiency.
• Iron: Current rates of anemia among preschool aged children and pregnant women are 49% and 25%, respectively.15 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.
• Zinc: One-third of the population is at risk for insufficient zinc intake.14 Zinc supplementation during diarrheal episodes can reduce morbidity from diarrhea by more than 40%.
• Iodine: Currently 91% of households in Lesotho consume iodized salt. Efforts to maintain universal salt iodization will ensure that children continue to be protected from iodine deficiency disorder.
• 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.

World Bank Nutrition-Related Activities in Lesotho

The World Bank is not currently supporting any nutrition-related activities in Lesotho.

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.16