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 South Asia region is anticipated to lose a cumulative US$20 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 Bhutan Stand?

- 37% of children under the age of five are stunted, 11% are underweight, and 5% are wasted.15
- 40% of those aged 15 and above are overweight or obese.7
- 9% of infants are born with a low birth weight.15
- Bhutan is currently on track to meet MDG 1c (halving 1990 rates of child underweight by 2015).8

As seen in Figure 1, Bhutan has similar high rates of stunting relative to its South Asian neighbors. Countries with comparable per capita incomes, however, exhibit lower rates of child stunting, which demonstrates the ability to achieve better nutrition outcomes despite low income. Bhutan also has higher maternal and infant mortality rates relative to income and health spending than all of its South Asian neighbors.14 This indicates that available funds can be used more effectively to benefit women and children’s health and nutrition.

Most of the irreversible damage due to malnutrition happens during gestation and in the first 24 months of life.4

The Double Burden of Undernutrition and Overweight

While more than a third of all children in Bhutan are undernourished, the country has also seen a recent increase in adult obesity. The coexistence of under- and overnutrition can cause 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.9

This “double burden” is the result of various factors. Progress in improving community infrastructure and development of sound public health
Solutions to Primary Causes of Undernutrition

Poor Infant Feeding Practices

• 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 nutrient-dense complementary foods.

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

• 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 infections and other diseases. 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.

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 Bhutan, as indicated in Figure 2.

Figure 2: High Rates of Vitamin A and Iron Deficiency Contribute to Lost Lives and Diminished Productivity


- Vitamin A: More than 1 in 5 preschool aged children (22%) and 17% of pregnant women in Bhutan are deficient in vitamin A.

World Bank Nutrition-Related Activities in Bhutan

In 2005, a policy note was produced that examined human development outcomes in Bhutan, with particular attention to areas of nutrition, food security, 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.

References

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