The Costs of Undernutrition

- Over one-third of child deaths are due to undernutrition, mostly from increased severity of disease.
- Those who survive are at high risk for impaired cognitive development, which adversely affects the country’s productivity and development.
- 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.
- Childhood anemia alone is associated with a 2.5% drop in adult wages.

Where Does Côte d’Ivoire Stand?

- 40% of children under the age of five are stunted, 16% are underweight, and 8% are wasted.
- 17% of infants are born with a low birth weight.
- The Ministry of Health established the National Nutrition Program in the early 2000s, which reports directly to the Directorate General of Health, visibly making it a priority program of the Health Ministry. There is strong interest to move nutrition to a higher level, the main problem being the lack of resources.

As shown in Figure 1, Côte d’Ivoire displays equal or lower prevalence of child stunting than several African nations with similar per capita incomes, including Sudan and Lesotho. However, many nations in the region with lower or similar per capita income than Côte d’Ivoire also display lower prevalence of stunting, including Ghana, Mauritania, Kenya, and Sao Tome and Principe.

Vitamin and Mineral Deficiencies Cause Hidden Hunger

Although they may not be visible to the naked eye, micronutrient deficiencies are widespread in Côte d’Ivoire, as shown in Figure 2.

- **Vitamin A:** Over half (57%) of preschool aged children, and 19% of pregnant women are deficient in vitamin A.
- **Iron:** Current rates of anemia among preschool aged children and pregnant women are 69% and 55% respectively. 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.

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

CÔTE D’IVOIRE

Poor Infant Feeding Practices
• In Côte d’Ivoire, three-quarters of infants do not initiate breastfeeding within one hour of birth.2
• Only 4% of infants under six months of age are exclusively breastfed.2
• 54% of infants 6–9 months of age are breastfed with complementary food.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. In high HIV settings, follow WHO 2009 HIV and infant feeding revised principles and recommendations.8

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
• 14% of households are food insecure, using a measure of per capita caloric access.5 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.
• 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.

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 Côte d’Ivoire
The World Bank is not currently supporting any nutrition projects in Côte d’Ivoire, but provides discrete support to policy development activities, such as a nutrition landscape study in FY10.

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.8

References