

## Nutrition



© UNICEF/Zambia

### Background

Zambia is one of 22 African countries with the highest burden of under nutrition in children under five. Thousands of children and women suffer from one or more forms of malnutrition, including low birth weight, wasting, stunting, underweight, and multiple micronutrient deficiencies such as vitamin A, iron, zinc, and iodine deficiencies. Deficiencies of a single nutrient are uncommon and multiple nutrient deficiencies usually predominate in the same individuals.

Under nutrition is determined by a number of factors which operate at different levels. An individual's nutritional status is influenced by three broad categories of factors -- food, care, and health -- and adequate nutrition requires the presence of all three. Poor infant and young child feeding practices due to lack of resources or knowledge of care takers, along with illnesses such as diarrhoea, pneumonia, malaria, and HIV and AIDS, often exacerbated by intestinal parasites, are immediate causes of malnutrition. Underlying and more basic causes include poverty, household food insecurity, unsanitary health environment, illiteracy, social norms, and emergencies.

### Issue

Growth faltering is an early life phenomenon occurring in a period of 1,000 days that starts at conception, continues through fetal life, birth, and infancy up to the second year of life. This period of rapid physical growth also coincides with significant brain formation and development. Under-nutrition during the fetal and early childhood period leads to a negative impact on brain structure and cognitive function. Under-nutrition is associated with poor school performance leading to reduced productivity and income-earning capacity in adult life.

Malnourished children have substantially lower chances of survival than children who are well nourished. They are much more likely to suffer from a serious infection and die from common childhood diseases such as diarrhoea, pneumonia, measles, and malaria. Maternal and child under-nutrition is estimated to contribute to one-third of child mortality. Every level of under-nutrition increases the risk of a child's dying. However the vast majority of malnutrition-related deaths occur in children with mild and moderate malnutrition, though the risk is lower than from severe forms. The high level of stunting (45 percent) and of anaemia in children in Zambia has persisted over the past 2 decades.

### Action

Under-nutrition can be greatly reduced through the delivery of simple interventions at key stages of the life cycle - for the mother: before she becomes pregnant, during pregnancy, and while breastfeeding; for the child, in infancy and early childhood. Maternal under-nutrition leads to intra-uterine growth retardation and low birth weight. Further, the 1,000 day period from the beginning of pregnancy to the child's second

birthday provides a critical window of opportunity in which interventions can have a positive impact on a child's prospect for survival, growth, and development especially in countries with high burden of under-nutrition such as Zambia.

A package of effective nutrition interventions to reduce the levels of chronic malnutrition (stunting) has been globally agreed upon by experts in the field. It includes: adequate maternal nutrition during pregnancy and lactation, early initiation of breastfeeding, exclusive breast feeding for the first 6 months, continued breastfeeding and adequate complementary feeding from 6 to 24 months, and increased micronutrient intakes during the critical 1,000 days. Effective interventions for treatment of acute malnutrition (wasting) include the use of specific therapeutic foods, treatment of medical complications for severe cases, and the use of various supplementary foods for moderate cases. Given the close link between under-nutrition and infections, the implementation at scale of interventions aimed at preventing and treating infections such as immunization, diarrhea, and malaria control will further contribute to malnutrition reduction.

UNICEF supports the delivery of priority interventions at different stages of the life cycle: policy development, system strengthening, service delivery, advocacy, capability building, partnerships, resource mobilization, innovations, and knowledge management

- *Policy Development*

UNICEF supports the Government in developing nutrition policies and strategies and mainstreaming nutrition in national development plans, as well as policies and strategies from other sectors such as agriculture, education, and social protection.

- *System Strengthening*

UNICEF addresses human resources capacity gaps at national and sub-national levels by building technical capacity of nutritionists and health workers, reviewing the nutrition training curriculum, and seconding nutrition experts to the Ministry of Health. Further, UNICEF supports generation of nutrition data through the implementation of nationwide and sub-national surveys.

- *Service Delivery*

UNICEF supports the scaling-up and delivery of various high impact interventions at facility and community level addressing both the supply and demand side. UNICEF provides technical and financial support to the Ministry of Health under the following programs:

- Bi-annual Child Health Weeks for vitamin A supplementation and de-worming. Children under 5 receive vitamin A capsules and de-worming tablets. UNICEF also supports planning, supervision, and implementation.
- Promotion of adequate infant and young child feeding practices through the development of appropriate guidelines and training materials, and capacity building of health workers at facility and community level.
- Management of severe acute malnutrition through the provision of therapeutic nutrition foods, medicines, anthropometric equipment, as well as training of health care workers.

## **Impact**

In some areas progress has been recorded:

- Underweight has decreased from 23 percent in 2002 to 15 percent in 2007;
- Iodine deficiency decreased from 72 percent in 1992 to 4 percent in 2003;
- Exclusive breastfeeding rate increased steadily from 10 percent in 1992 to 19 percent in 1997 to 40 percent in 2002 to 61 percent in 2007;
- Vitamin A supplementation and de-worming delivered twice a year through the Child Health Week has consistently achieved over 90 percent national coverage.

## **UNICEF's Country Programme 2011-15**

UNICEF's new country programme will continue to support the Government of Zambia's commitment to reduce the overall under nutrition in the country. This will include strengthening institutional capacities in the nutrition sector, improve implementation and coordination of strategic interventions, especially those targeting the period from conception to two years and aimed at reducing the burden of stunting and micronutrient deficiencies

Further public/private partnerships will play a central role in combating micronutrient deficiencies namely for fortification of staple food and condiments, while innovative approaches such as home fortification with micro-nutrient powder will be tested for the poor who cannot afford commercially fortified complementary food.

Nutrition is under the programme result, "Children, mothers, and pregnant women benefit from high impact interventions contributing to the attainment of Millennium Development Goal targets for child and maternal survival and development." Under the United Nations Development Assistance Framework, nutrition contributes to achieving, "Outcome 1: New HIV infections are reduced by 50 percent by 2015, while scaling up treatment, care and support" and "Outcome 3: Vulnerable people living in Zambia have improved quality of life and well being by 2015." Under the new country programme, UNICEF is expected to contribute towards the national targets of reducing stunting from 45 percent to 30 percent and underweight from 15 percent to 10 percent by 2015.

Source: [UNICEF](#)