

# MICRONUTRIENT MALNUTRITION: Reducing Nutritional Deficiencies Globally

## BY THE NUMBERS

**50%**

At least 50% of children worldwide ages 6 months to 5 years suffer from one or more vitamin or mineral deficiency

**>2 billion**

Globally more than 2 billion people are affected by vitamin or mineral deficiency

**30 million**

30 million low birthweight babies born annually (23.8% of all births) face severe short-term and long-term health consequences

## The Issue

Vitamins and minerals are vital to human development, disease prevention, and well-being. Some vitamins and minerals, such as iron, iodine, vitamin A, zinc, and folate, are not produced in the body and must be provided by diet. Lack of necessary vitamins and minerals — known as malnutrition — can lead to birth defects, blindness, anemia, diarrhea, infections, and death.

Malnutrition can occur in all age groups, but infants and young children are at greater risk because of their high nutritional requirements for growth and development. Good nutrition is especially important before and during pregnancy because a malnourished mother is at higher risk of giving birth to a low birthweight baby.

*Mothers wait in line at a community health clinic to weigh their babies.*



- **Anemia:** Caused by lack of iron and leads to higher perinatal mortality and lower birth weight, affects 43% of children and 38% of pregnant women worldwide.
- **Iodine:** 18 million babies are born mentally impaired because of maternal iodine deficiency and 38 million are born at risk of iodine deficiency. Globally, an estimated 2 billion people have insufficient iodine intake.
- **Vitamin A:** Globally, 1 in 3 pre-school aged children and 1 in 6 pregnant women are vitamin A deficient due to inadequate dietary intake.
- **Zinc:** 17.3% of the global population is at risk for zinc deficiency due to dietary inadequacy, and up to 30% of people are at risk in some regions of the world.
- **Folate:** Ensuring sufficient levels of folate in women aged 15-49 can reduce neural tube defects — a specific type of birth defect — by up to 50%.

IMMPaCt's goal is to work collaboratively to achieve optimal health among vulnerable populations by improving micronutrient nutrition globally, with a particular focus on iron, vitamin A, iodine, folate, and zinc.



## CDC's Response

Established by the Centers for Disease Control and Prevention (CDC) in 2000, the International Micronutrient Malnutrition Prevention and Control (IMMPaCt) Program works with global partners to contribute CDC expertise and resources to eliminate vitamin and mineral deficiency among vulnerable populations throughout the world. CDC and its global partners support monitoring to eliminate vitamin and mineral deficiencies and enable national governments, food industries, and civic organizations

to implement successful interventions (mass food fortification, supplementation and home fortification). The CDC IMMPaCt Program has provided technical assistance, training, and funding to over 75 countries. CDC recommends the use of micronutrient powders — sachets of vitamins and minerals that can be mixed into any ready to eat semi-solid food (home fortification) to reduce micronutrient deficiencies among children six months of age and older.

## Our Partners

- CDC Foundation
- Global Alliance for Improved Nutrition
- National Institutes of Health, Micronutrient Initiative
- Rollins School of Public Health at Emory University
- United Nations Children's Fund
- U.S. Agency for International Development
- World Food Programme
- World Health Organization

\* de Onis, Blössner & Villar, 1998.

For further information, please visit: [www.cdc.gov/impact](http://www.cdc.gov/impact)

*Child receives vitamin A micronutrient fortification.*

