

## INVESTING IN NUTRITION TO UNLOCK BETTER HEALTH FOR LIFE

Tackling child undernutrition before conception, through pregnancy and in early infancy, has a huge impact on future health, as well as improving access to future opportunities. Well-nourished children have better life chances: they live longer, have healthier lives and do better in school. They are more likely to grow into productive and fulfilled adults who are better able to boost a country's economic development, pass good practices on to future generations and break the intergenerational cycle of poverty and poor nutrition.

### THE POWER OF NUTRITION

The Power of Nutrition is an innovative foundation committed to helping children grow to their full potential, enabling countries to build strong and healthy communities. We believe that a strong health system that supports mothers and children during their first 1,000 days from pregnancy, builds the healthy foundations for all the days that follow. The right nutrition builds immunities, prevents infection and ill-health during childhood, and improves long-term health and life expectancy.



Source: World Bank

We therefore build co-investment partnerships aligned behind government strategies to reduce under nutrition in Sub-Saharan Africa and Asia. Our funding model makes money go further, multiplying each contribution a minimum of four times to accelerate investment to help tackle undernutrition.

### THE LONG-TERM HEALTH CONSEQUENCES OF UNDERNUTRITION

Undernutrition is the underlying cause of 45% of deaths in children under five; 149 million children under five years of age suffer with stunting; yet nutrition remains dangerously underfunded.<sup>1</sup>

Without access to the right nutrition, particularly in the first 1,000 days from conception until a child's second birthday, children are at risk of suffering from various health complications including stunting. This is a chronic condition that limits a child's physical and cognitive development, and places them at greater risk of diseases such as diabetes and heart disease in adulthood. Undernutrition is strongly connected to:

#### INFECTIOUS DISEASES



Undernutrition can weaken children's immune systems, placing them at a higher risk of contracting or not recovering from infectious diseases such as diarrhea, pneumonia, malaria and measles. A child suffering from stunting is 1.6 times more likely to die from these diseases compared to a well-nourished child, and this likelihood is 9 times higher for a severely wasted child (indicated by a low weight for height).<sup>2</sup> In turn, infections can reduce a child's appetite and nutrients uptake, which puts them at risk of becoming trapped in a dangerous cycle of undernutrition and infection.

#### NON-COMMUNICABLE DISEASES



Non-communicable diseases (NCDs), including cardiovascular diseases, cancers, diabetes and chronic respiratory diseases, are responsible for over 70% deaths a year globally.<sup>3</sup> The burden of these diseases is rising disproportionately in lower income populations, and around 85% of premature deaths due to NCDs now occur in low- and middle-income countries.<sup>4</sup> Childhood undernutrition and stunting are recognised as significant risk factors for developing certain NCDs later in life. In particular, evidence shows that children who do not grow properly in the first 1,000 days, but gain weight rapidly after this critical period, are at a heightened risk of adult obesity.<sup>5</sup> Low birthweight and undernutrition in infancy are linked to an increased risk of insulin resistance, type 2 diabetes, high blood pressure and cardiovascular disease.<sup>6</sup>

<sup>1</sup> World Health Organisation (WHO), Child Malnutrition, <https://www.who.int/gbo/child-malnutrition/en/>

<sup>2</sup> Robert Black et al, 'Maternal and Child Undernutrition and Overweight in Low Income and Middle-Income Countries,' *The Lancet*, vol. 382, No. 9891, pp. 427-451, 3 August 2013.

<sup>3</sup> WHO, Noncommunicable diseases, 2018: <https://www.who.int/news-room/fact-sheets/detail/noncommunicable-diseases>

<sup>4</sup> United Nations System Standing Committee on Nutrition. Non-communicable Diseases, Diets and Nutrition. Rome: UNSCN; 2018

<sup>5</sup> Black RE, Victora CG, Walker SP, Bhutta ZA, Christian P, de Onis M, et al.; the Maternal and Child Nutrition Study Group. Maternal and child undernutrition and overweight in low-income and middle-income countries. *Lancet* 2013; 371:243-60. doi:10.1016/S0140-6736(13)60937-X

<sup>6</sup> Victora CG, Adair L, Fall C et al. for the Maternal Undernutrition Group. Maternal and child undernutrition: consequences for adult health and human capital (*Lancet* 2008, 371)



## HIV/AIDS

Globally, there are nearly 38 million people living with HIV and, in 2018, 770,000 people died from HIV-related illnesses.<sup>7</sup> Children and adults living with HIV/AIDS are at an increased risk of suffering from undernutrition, including stunting and wasting, as chronic infection makes it more difficult to absorb adequate nutrients. Evidence also shows that undernutrition may reduce the effectiveness of anti-retroviral therapy (ART), and increase the progression of HIV infection to AIDS by weakening the immune function of the body.<sup>8</sup> Having access to the right nutrition is therefore particularly crucial to ensure good health and effective treatment for those living with HIV/AIDS.

## OUR WORK

We work in partnership with national governments and experienced implementing partners in countries with the greatest burden of stunting, focusing on those with a stunting prevalence equal to or more than 30% and at least 250,000 children stunted.

Our programmes focus on supporting national governments in the delivery and scale up nutrition interventions that have been proven to have the biggest impact improving nutrition for mothers, babies and young children and reducing the risk of stunting and wasting.<sup>9</sup> Since we were founded in 2015, over 44 million people have benefited from our supported nutrition interventions. These include:

### Breastfeeding

Our programmes support women to breastfeed. Early exclusive breastfeeding provides babies with essential nutrition in the first six months, helping to ensure healthy growth, boosting immunity and preventing gastrointestinal infections. Evidence also shows that exclusive breastfeeding helps to protect children from obesity and developing NCDs later in life, whilst also benefiting the mother.<sup>10</sup> Breastfeeding an infant for over 12 months is linked to a 32% lower risk of type 2 diabetes in the mother, as well as reducing her risk of cancer.<sup>11</sup>

### Complementary Feeding & Nutrition Education

Children are at the highest risk of undernutrition from six to 24 months, when breastmilk no longer provides them with all the nutrients they need to develop.<sup>12</sup> Our programmes therefore help to educate and support caregivers to provide children with a healthy and diverse diet during this critical period of development. This helps to set the foundations for healthy dietary habits throughout life.

### Multiple Micronutrient Supplementation

The serious complications associated with nutrient deficiencies, including those of iron, vitamin A and iodine, are preventable through supplementation. For example, we support daily iron supplementation for pregnant women to help tackle anaemia. This reduces the risk of illness, maternal and neonatal mortality, and increases the likelihood that a child will be born at a healthy weight. We also support the delivery and uptake of vitamin A and multiple micronutrient supplementation for children from the age of six months to five years.

### Handwashing with Soap

Handwashing with soap is an important component of water, sanitation and hygiene (WASH) programmes that helps to prevent the spread of infectious diseases, such as diarrhoea. We promote handwashing with soap, particularly for caregivers and their children, to help protect against common infections so that children can absorb nutritious food and develop strong immune systems.



**Thank you for taking the time to learn more about our work. We look forward to developing a partnership with you so that more children can grow up healthy, free from stunting and able to reach their potential.**

<sup>7</sup> WHO, HIV/AIDS <https://www.who.int/news-room/fact-sheets/detail/hiv-aids>

<sup>8</sup> Alebel, Anmut et al. 'Effects of undernutrition on survival of human immunodeficiency virus positive children on antiretroviral therapy.' *Italian journal of pediatrics* vol. 44,1 29. 27 Feb. 2018, doi:10.1186/s13052-018-0472-2

<sup>9</sup> These 11 interventions were highlighted in the 2008 Lancet Series on Maternal and Child Undernutrition and the 2013 Lancet Series on Maternal and Child Nutrition as having the greatest impact on child stunting.

<sup>10</sup> WHO, Exclusive breastfeeding for optimal growth, development and health of infants: [https://www.who.int/elena/titles/exclusive\\_breastfeeding/en/](https://www.who.int/elena/titles/exclusive_breastfeeding/en/)

<sup>11</sup> Chowdhury R, Sinha B, Sankar MJ, Taneja S, Bhandari N, Rollins N, Bahl R, Martines J. Breastfeeding and maternal health outcomes: a systematic review and meta-analysis. *Acta Paediatr.* 2015 Dec;104(467):96-113.

<sup>12</sup> Kathryn G Dewey and Adu-Afarwua, Seth, 'Systematic Review of the Efficacy and Effectiveness of Complementary Feeding Interventions in Developing Countries', *Maternal and Child Nutrition*, vol. 4, pp. 24-85, 2008