#5for5 brief: Nutrition

By the time a child reaches five years old, 90% of their brain has already developed – which means the progression from birth to school is the most important time of a child's life.¹

But around the world children from poorer and marginalised households are unable to access support and are put at a disadvantage. For example, those who start school at five without early years support have a limited vocabulary and ability to learn, impacting their opportunities in later life.

Theirworld's 5 for 5 campaign focuses on the 5 elements of quality nurturing care needed by every child under five: health, nutrition, play, learning and protection. Even though the importance of these interventions has been thoroughly proven, investment in the 0 to 5 age group is still far too small.

This briefing explores the issue of nutrition and is part of a series of briefings examining the 5 key elements of quality nurturing care, available at theirworld. org.

What is nutrition and why is it essential for healthy development?

Good nutrition is more than just having enough to eat — it also means having the right balance of foods and sufficient nutrients. Malnutrition can result from not having enough food or nutrients or as a side effect of repeated infections or poor water and sanitation. Having enough of the right foods is especially important for infants and toddlers, whose bodies and brains need good nutrition for healthy growth. For example, during infancy, brain development uses 50 to 75 per cent of the energy a baby consumes². Inadequate nutrition also increases the risk for serious illness; an estimated half of all deaths of children ages 0 to 5 can be attributed to poor nutrition³.

There are several different kinds of malnutrition including:

Chronic malnutrition. Children who suffer from chronic malnutrition fail to grow as they should, either physically or mentally. As a result of chronic malnutrition, children suffer from stunted growth, reduced brain development, weakened immune systems, and increased risk of serious health problems later in life, such as diabetes and heart disease. Chronic malnutrition in the womb and during the first 1000 days of life can permanently and irreversibly harm the growth of a child's body and brain, but chronic malnutrition is completely preventable.

Acute malnutrition. Acute malnutrition or 'wasting' occurs when a child loses weight quickly and becomes too thin for their height due to food shortages or as a side effect of disease or poor water and sanitation. Wasting puts children at risk of illness and death, and also increases the risk of chronic malnutrition.

Acute malnutrition often occurs in emergency situations.

Low birth weight. Low birth weight is a major predictor of infant illness and death and puts babies at greater risk for long-term health problems⁴. While low birth weight is seen predominantly in low and middle-income countries, it remains an issue worldwide, including in the UK and US.

Obesity. 41 million children under the age of five are overweight, which can result from families being unable to afford a balanced, nutritious diet⁵. The lower price and accessibility of foods high in sugar, fat, and salt mean that both poor and rich countries have seen a rapid rise in obesity⁶. Under-nutrition and obesity can exist side by side, creating a "double burden" of malnutrition. For example, a child can be both overweight and deficient in nutrients⁷.

Are kids around the world receiving adequate nutritional support?

Although malnutrition is 100% preventable, and significant progress has been made in reducing child mortality and malnutrition rates, millions of children still suffer as a result of inadequate nutrition.

- An estimated half of all deaths of children ages 0 to 5 can be attributed to poor nutrition⁸.
- 159 million children 1 in 4 are chronically malnourished worldwide, and 1 in 3 are chronically malnourished in low and middle income countries⁹.
- 50 million children under age 5 1 in 13 -are acutely malnourished and 2 million children die from acute malnutrition each year.¹⁰
- 20 million babies each year are born with low birth weight, representing 15 - 20 per cent of all births¹¹.

How can we provide nutritional support through quality early childhood care?

Malnutrition is 100% preventable. The solutions to tackling the many forms of malnutrition are complex, as nutrition is affected by many development issues including poverty, inadequate health care, and lack of education, but support for mothers and babies is critical. However, there are a number of key interventions that can reduce the risk of malnutrition in all its forms, these include:

Scaling up breastfeeding. The World Health Organisation (WHO) recommends exclusive breastfeeding for the first six months of life (no other food or water). Breast milk is the best source of nutrition and health in these early months, supplying not only the right balance of protein, fat, and nutrients, but also providing children antibodies to fight off illness¹². Children who are breastfed exclusively for 6 months are 14 times more likely to survive than non-breastfed children¹³.Globally, only 43% of infants are exclusively breastfed for 6 months¹⁴; UNICEF estimates more than 800,000 children's lives could be saved each year if 6 months of exclusive breastfeeding was universal¹⁵. Mothers need support to breastfeed or express milk in the workplace, and societal acceptance of the practice.

Promoting adequate complementary feeding. At 6 months, the WHO recommends adding solid foods to a child's diet in addition to breast milk. During this period, children's nutritional needs are "greater per kilogram of body weight

than at any other time in life,"¹⁶ so they require frequent meals from a diverse range of food groups. However, only 1 in 6 children around the world have a "minimum acceptable diet."¹⁷ Parents and caregivers need support in understanding what type of complementary foods to add and when, how to safely store and prepare food, and in accessing enough and sufficiently diverse food.

Providing supplements. Vitamin and mineral supplements for adolescent girls, pregnant women, mothers, and children can ensure access to essential nutrients if they are not available through diet alone.

Improving water and sanitation. Poor water and sanitation contributes to the preventable deaths of 860,000 children ages 0 to 5 each year¹⁸. Exposure to unclean water, to food prepared in unsanitary conditions, or to poor hygiene practises can result in diarrhoea and other water-borne diseases and lead to dehydration and malnutrition. During the first six months, exclusive breastfeed-ing protects children from these dangers; communities also need support to improve water and sanitation systems.

Support for adolescent girls and pregnant women. As many 20 per cent of cases of children's chronic malnutrition is caused by the mother's malnutrition before or during pregnancy or by pregnancy among adolescent girls, which can lead to low birth weight¹⁹. Tackling malnutrition for the youngest children therefore requires supporting good nutrition, health, and education for girls and women. This includes improving access to quality education for girls and women as children are less likely to be chronically malnourished if their mother has a secondary education²⁰.

Fortifying food. Staple foods like wheat, rice, and salt can be fortified with vitamins and minerals such as iron and iodine to provide increased nutrients without requiring consumers to buy different foods.

What are the economic benefits of investing in early childhood nutrition?

In addition to the harm to individual children and families, malnutrition can impact the economic progress of a country. The 2016 Global Nutrition Report explains that inadequate nutrition costs Asia and Africa an average of 11% of GDP every year — "greater than the loss experienced during the 2008–2010 financial crisis." ²¹ Further, the global costs of not breastfeeding are roughly \$230 billion each year in high-income countries and \$70 billion in low and middle-income countries.²² Conversely, investments in nutrition bring huge economic benefits: every \$1 spent combatting chronic malnutrition can reap up to \$18 in returns²³.

Action needed:

Every country must invest in quality care for all under fives, including nutrition and health, protection, safe places to play, early learning opportunities, with special emphasis on the poorest, most marginalised, and vulnerable children, including those living in the midst of conflict and other humanitarian crisis.

#5for5 - the 5 crucial things every child under 5 needs for the best start in life. Join the movement and stand up for kids who haven't mastered standing. www.theirworld.org

Endnotes

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