Nutrition in South Asia

The smart start for child growth and development

States shall take measures to ensure that parents are supported in the use of basic knowledge on child nutrition

Convention on the Rights of the Child, Article 24

Nutrition

The smart start for child growth and development

Nutrition is key to children's survival and development. Well-nourished children are healthier and cleverer than their undernourished peers, they grow and develop to their full potential, and they perform better in school and as adults. In South Asia, an estimated 38 percent of children under the age of five are stunted due to chronic nutrition deprivation.[1] Research shows that there is a critical 1,000-day window of opportunity – from conception to the age of two – to prevent child stunting and break the intergenerational cycle of undernutrition: once this window closes, for most children it closes for life.

In South Asia, stunting in children under the age of five is declining, but the estimated prevalence – 38 percent – is still too high, and comparable to that in sub-Saharan Africa.[2] Undernutrition in children can be seen in stunted growth – a stunted child is significantly less tall than would be expected for his or her age.[3] We use data on the prevalence of child stunting, between approximately 1990 and 2010, to assess progress and document trends in reducing child undernutrition in South Asia.

Recent global data indicate that 26 percent of children under five years of age (about 165 million) have stunted growth. The same sources indicate that stunting leads to about one million child deaths every year.[4] For the children who survive, stunting in early childhood causes lasting damage, including poor performance at school, reduced lean body mass, short adult stature, lower productivity, reduced earnings and – when accompanied by excessive weight gain later in childhood – a higher risk of chronic diseases.[5]

There is clear evidence that all children have similar growth and development potential in the first years of life. Global evidence also shows that a set of proven interventions from conception to the age of two – the 1,000-day window of opportunity mentioned above – can offer children the best start in life. Policies, programmes, research and advocacy therefore need to ensure that:

- Children are breastfed within the first hour of life and are fed only breast milk in the first six months of life to grow healthy and strong.
- Children are fed the right food – in quantity and quality – and

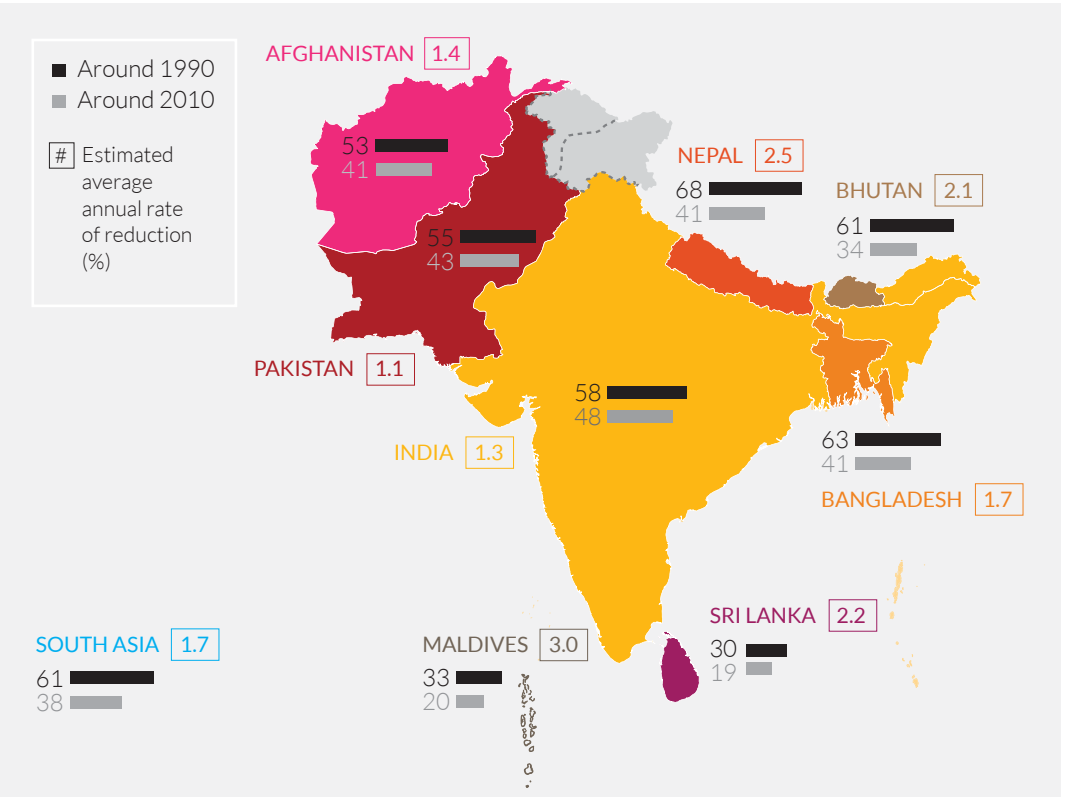
mother's milk after six months of age with safe and hygienic feeding practices to ensure optimal growth and development.

- Children are given essential vitamins and micronutrients, and full immunization, to strengthen their immune systems and protect them from nutritional deficiencies and disease.
- Children are given nutritious, life-protecting foods and care when they are sick or severely undernourished to ensure their survival and lasting recovery.
- Women benefit from good foods and care, including during adolescence, pregnancy and lactation, to secure their nutrition today and the nutrition of their children tomorrow.

The good news is that we know what works and, increasingly, we know how to make it work. Yet an estimated 38 percent of South

Despite improvements, progress in reducing child stunting is insufficient and unequal

PREVALENCE OF STUNTING AMONG CHILDREN UNDER FIVE (%), South Asia, 1990-2010



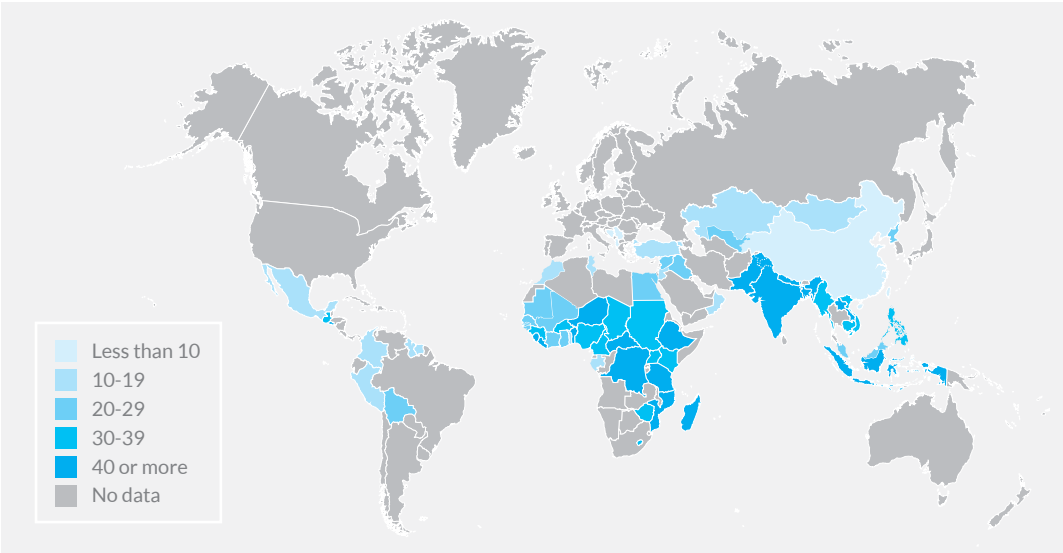
Source: UNICEF global database on child malnutrition; UNICEF/WHO/ World Bank. n.d. Global Health Observatory Data Repository: Nutrition: Joint child malnutrition estimates. apps.who.int/gho/data/view.wrapper.nutrition-1-1 [accessed 4 July 2014]

Note: The prevalence of child stunting in Afghanistan (41 percent, Afghanistan National Nutrition Survey 2013) was made public at the time of releasing this publication, but has not yet been incorporated into the global database.

The dotted line between Jammu and Kashmir represents approximately the Line of Control agreed upon by India and Pakistan. The final status of Jammu and Kashmir has not yet been agreed upon by the Parties.

South Asia is home to the largest number of stunted children worldwide

PREVALENCE OF STUNTING AMONG CHILDREN UNDER FIVE (%), different regions, 2012



Source: UNICEF global nutrition database, based on Multiple Indicator Cluster Surveys, Demographic and Health Surveys, and other nationally representative surveys [accessed 4 July 2014]

Note: The dotted line between Jammu and Kashmir represents approximately the Line of Control agreed upon by India and Pakistan. The final status of Jammu and Kashmir has not yet been agreed upon by the Parties.

Asia's underfives are stunted.[6] This high prevalence of stunting, combined with the region's large child population, explains why South Asia bears about 40 percent of the global burden of child stunting. Therefore, accelerating the reduction of stunting in South Asia is key to achieve the global target of reducing the number of stunted underfives by 40 percent by 2025.

The prevalence of stunting among underfives in South Asia has declined from about 61 percent in 1990 to about 38 percent in 2012, which represents a 38 percent decline over the last two decades. Every country has seen a reduction in the prevalence of stunting over the past twenty years. In Bangladesh, Bhutan, the Maldives, Nepal and Sri Lanka the prevalence of stunting declined by more than one third. The average annual rate of reduction in the prevalence of child stunting was 1.7 percent, ranging from about 1.1 percent in Pakistan to about three percent in the Maldives.

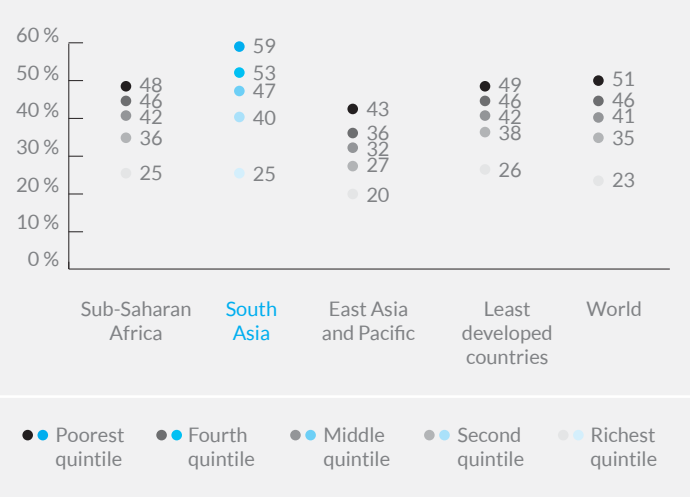
However, regional and national averages hide important disparities. Children from the poorest households, children who live in rural areas, children from families with a specific social identity (caste or ethnicity), and/or children born to particularly vulnerable women are more often stunted than those born in better circumstances.

Throughout the world, child stunting is significantly more common in the poorest parts of society. This difference is particularly marked in South Asia: the prevalence of stunting in the poorest households (59 percent) is 2.4 times higher than the prevalence in the richest (25 percent). This compares unfavourably with sub-Saharan Africa, for instance, where the prevalence of stunting in the poorest households (48 percent) is 1.9 times higher than in the richest (25 percent).

Declines in the prevalence of child stunting have often been more pronounced in richer than in poorer households. For example between 1993 and 2006 in India – home to over 70 percent of the stunted children in South Asia – the prevalence of stunting declined by 42 percent in the richest group; the reduction in the poorest was only 14 percent.[7]

The prevalence of child stunting is significantly higher in the poorest wealth quintile in every region, but inequities are more pronounced in South Asia

PREVALENCE OF STUNTING AMONG CHILDREN UNDER FIVE (%) BY WEALTH QUINTILE, different regions, 2006-2012

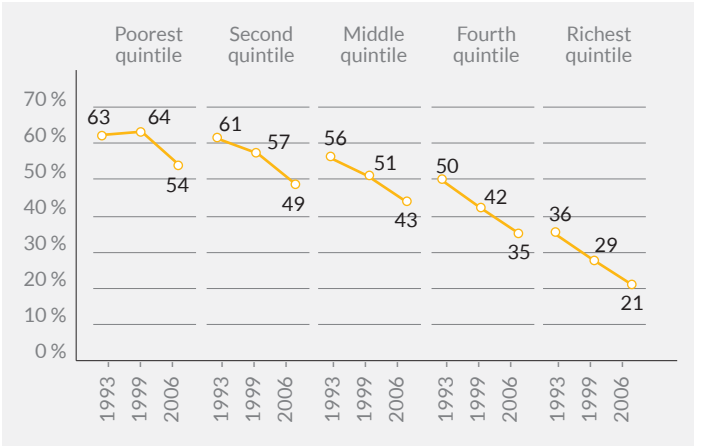


Source: Adapted from UNICEF. 2013. "Improving Child Malnutrition: The achievable imperative for global progress". www.unicef.org/publications/files/Nutrition_Report_final_lo_res_8_April.pdf

Note: Excludes China.

India: greater reduction in child stunting in richer households

PREVALENCE OF STUNTING AMONG CHILDREN UNDER FIVE (%) BY WEALTH QUINTILE, India, 1993-2006

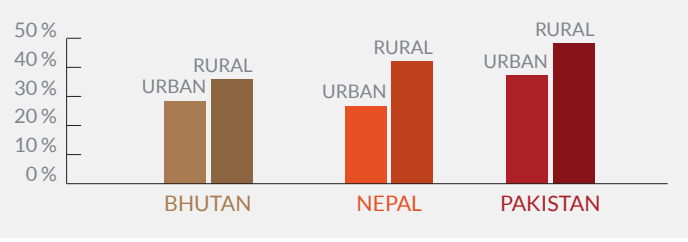


Source: UNICEF. 2010. "Progress for Children: Achieving the MDGs with Equity (No. 9)". www.unicef.org/publications/files/Progress_for_Children-No.9_EN_081710.pdf

Note: Prevalence estimates are calculated according to the National Centre for Health Statistics reference population, as there were insufficient data to calculate trend estimates by household wealth according to the World Health Organization (WHO) child growth standards.[8] Estimates are age-adjusted to represent children 0–59 months in each National Family Health Survey used.

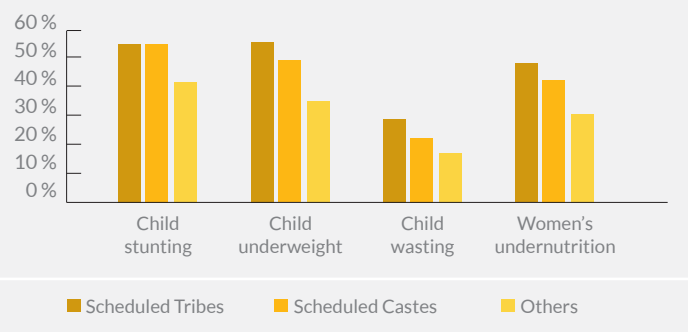
Children who live in rural areas are more often stunted. The prevalence of child stunting is higher among children living in rural areas than among those living in urban settings. For example, the prevalence of stunting among rural underfives in Nepal is 57 percent higher than among urban underfives. The corresponding values for Bhutan and Pakistan are 28 percent and 30 percent, respectively.

PREVALENCE OF STUNTING AMONG CHILDREN UNDER FIVE (%) IN URBAN AND RURAL AREAS, Bhutan, Nepal and Pakistan, 2010-2012



Source: Bhutan Multiple Indicator Survey 2010; Nepal Demographic and Health Survey 2011; Pakistan Demographic and Health Survey 2012

PREVALENCE OF STUNTING, UNDERWEIGHT, AND WASTING AMONG CHILDREN UNDER FIVE (%), AND PREVALENCE OF UNDERNUTRITION AMONG WOMEN AGED 15-49 (%), BY POPULATION GROUP, India, 2005-2006

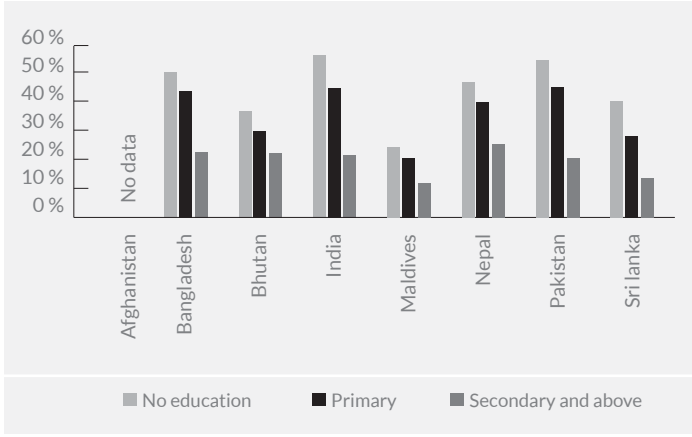


Source: India National Family Health Survey 2005-2006

Note: Child stunting, underweight, and wasting prevalence estimates are calculated according to the World Health Organization (WHO) child growth standards.[9] Women's undernutrition is defined as the percentage of women 15-49 years old with a body mass index (BMI) < 18.5 kg/m2.

Children born to women without formal education are those more often stunted

PREVALENCE OF STUNTING AMONG CHILDREN UNDER FIVE (%) BY MOTHER'S LEVEL OF FORMAL EDUCATION, South Asian countries, 2006-2012



Source: Bangladesh Demographic and Health Survey 2011; Bhutan Multiple Indicator Survey 2010; India National Family Health Survey 2006; Maldives Demographic and Health Survey 2009; Nepal Demographic and Health Survey 2011; Pakistan Demographic and Health Survey 2012; Sri Lanka Demographic and Health Survey 2011

Children from specific castes and ethnic groups are more often stunted. Caste and ethnicity underlie many of the disparities seen in the nutrition of children and women in South Asia. In India, for example, child stunting is more prevalent in Scheduled Castes (Dalit) and Scheduled Tribes (Adivasi) than in the rest of the population. Child underweight (low weight-for-age), child wasting (low weight-for-height), or women's undernutrition are also more prevalent in Scheduled Castes and Scheduled Tribes.

Children born to women without access to education are more often stunted. Lack of access to formal education for girls and women is closely linked to poor child nutrition in South Asia. In Bangladesh, India, Nepal and Sri Lanka the prevalence of stunting among children born to women without formal education is two and a half times higher (ranging from 41 to 57 percent) than among children born to women who have completed secondary education (14-26 percent).

Innovations and impact

INDIA

Improved governance for nutrition

Over 60 million Indian underfives - 48 percent of this age group - have stunted growth. Even in Maharashtra, India's second largest state, 46 percent of underfives were stunted in 2006. Maharashtra responded by launching the State Nutrition Mission, which began by improving the flagship programmes for child health, nutrition and development (the Integrated Child Development Services and the National Rural Health Mission), particularly in the most deprived tribal districts. Key vacancies, particularly community-based workers and their supervisors, were filled, and the motivation and skills of these frontline workers were boosted. In its second phase (2011 onwards), the Mission is focusing on the nutrition of children under two and their mothers, in line with global evidence indicating the need to optimise the 1,000-day window of opportunity to prevent stunting in children.

In 2012, the Government of Maharashtra commissioned the first-ever state-wide nutrition survey. It revealed that the prevalence of stunting among children under two had declined from 39 percent in 2006 to 23 percent in 2012, a decrease of 16 percentage points over six years. The decline was significantly higher among Adivasi children than among non-Adivasi children. Three factors seem key to the Maharashtra Nutrition Mission's success: (1) improving service delivery, by focusing on proven interventions for children under two and their mothers, and on the nutrition of adolescent girls; (2) delivering at scale with equity, by bringing services closer to the most vulnerable children, households and districts; and (3) coordinating and measuring nutrition results across sectors.

The Nutrition Mission has been a key policy instrument in the reduction of child stunting in Maharashtra. The main lesson learned is that a concerted effort to improve governance for nutrition has led to a measurable reduction in child stunting, particularly among the most vulnerable children: the youngest, the poorest and the socially-excluded.

NEPAL

Female Community Health Volunteers

In Nepal, the prevalence of stunting in underfives dropped from 57 percent in 2001 to 41 percent in 2011, largely as a result of the interventions delivered by Female Community Health Volunteers (FCHVs).

Nepal created the FCHV programme to increase the outreach of health and nutrition services. Currently, there are about 53,000 Female Community Health Volunteers delivering a range of essential services to children and women. The Volunteers promote and support mothers to use the best combination of breastfeeding and complementary feeding for children under two, a service that is integrated with the twice-yearly delivery of micronutrient powders to children aged 6-23 months. They supply deworming tablets to children aged 12-59 months, and provide care and referral services for children under five suffering from diarrhoea, acute respiratory infections, measles or severe acute malnutrition. Finally, they offer counselling and support to pregnant and breastfeeding women on nutrition, health and family planning.

Vitamin A deficiency is now believed to be largely under control; 80 percent of households use salt with adequate levels of iodine; the proportion of children under five with symptoms of pneumonia who are taken to a health facility for treatment has increased from 18 percent in 1996 to 50 percent in 2011; and the proportion of children with diarrhoea who are taken to a health provider for treatment has increased from 14 percent in 1996 to 38 percent in 2011.

In addition, in 2012, Nepal launched the Multi-Sectoral National Nutrition Plan under the leadership of the Prime Minister. The Plan aims to address the immediate, underlying and basic causes of maternal and child under-nutrition by focusing on the nutrition-specific and nutrition-sensitive interventions that prioritize a mother's pregnancy and her child's first two years of life.

SRI LANKA

Improved legislation, counselling and outreach

Sri Lanka has seen a significant improvement in the rate of exclusive breastfeeding in infants younger than six months, which increased from 53 percent in 2000 to 76 percent in 2007 due to policy and programme improvements.

One of the first countries to translate the International Code of Marketing of Breastmilk Substitutes into a national law, Sri Lanka has also achieved significant progress in maternity protection. In 1992, paid maternity leave in government jobs was extended from six weeks to 84 working days. Private sector employees covered under the Shop and Office Act are granted 84 days (including weekends and public holidays) of fully paid maternity leave for the first two children and 42 days for subsequent births.

Expanding the coverage and quality of the support provided to pregnant women and breastfeeding mothers has been central to Sri Lanka's progress on breastfeeding. Practically the entire health workforce in the country – paediatricians, obstetricians, primary care physicians and nurses – has benefitted from a 40-hour training course on lactation management. Mother-baby and lactation

management centres have been set up in all major hospitals to support breastfeeding mothers.

Finally, the contribution of over 7,000 government-trained public-health midwives cannot be overstated - they are an integral part of the team that delivers comprehensive maternal and child health care. During the first six weeks after delivery, each mother receives four home visits by her skilled birth attendant, who provides post-partum care and supports the mother to establish and maintain exclusive breastfeeding.

Sri Lanka's achievements in breastfeeding are the result of strong political commitment, a well-developed health system with professionals trained to support breastfeeding, a well-equipped and dedicated workforce of public-health midwives, and multiple strategies to raise awareness of the benefits of breastfeeding among mothers, families and communities.

Ideas for moving ahead

Four areas in nutrition need priority policy, programme and budgetary attention if South Asia is to meet the global target of reducing the number of stunted under-fives by 40 percent between 2010 and 2025:

- Improving the quality of food and feeding practices – including breastfeeding – for children in the first two years of life.
- Addressing the causes of prenatal stunting by improving women's nutrition and education, and eliminating adolescent pregnancy.
- Eliminating open defecation (see chapter on open defecation) and promoting hand-washing after defecation and before feeding children.
- Prioritizing the most vulnerable children and women – the youngest, the poorest, and the socially excluded – in policy-making, resource allocation, programme design, and in advocacy and research.

Further reading

UNICEF: **State of the World's Children Reports**: www.unicef.org/sowc/

UNICEF on nutrition: www.unicef.org/nutrition/index_4050.html

UNICEF: "**Improving Child Nutrition: The achievable imperative for global progress**": www.unicef.org/publications/files/Nutrition_Report_final_lo_res_8_April.pdf

World Health Organization (WHO) on nutrition: www.who.int/topics/nutrition/en/

United Nations World Food Programme (WFP): www.wfp.org

United Nations Food and Agriculture Organization (FAO): www.fao.org

Scaling Up Nutrition (SUN): scalingupnutrition.org

Renewed Efforts Against Child Hunger and Under-nutrition (REACH): www.reachpartnership.org

International Food Policy Research Institute: www.ifpri.org

Alive and Thrive: www.aliveandthrive.org

Helen Keller International (HKI): www.hki.org

Endnotes

[1] UNICEF/WHO/World Bank. n.d. Global Health Observatory Data Repository: Nutrition: Joint child malnutrition estimates. http://apps.who.int/gho/data/view.wrapper.nutrition-1-1

[2] UNICEF/WHO/World Bank. n.d. Global Health Observatory Data Repository: Nutrition: Joint child malnutrition estimates. http://apps.who.int/gho/data/view.wrapper.nutrition-1-1

[3] WHO. n.d. "Child growth standards". www.who.int/childgrowth/en/ [accessed 4 July 2014]. Undernutrition prevalence is defined as the percentage of children under five years of age (0-59 months old) falling below minus two standard deviations from the median height-for-age of the World Health Organization (WHO) child growth standards.

[4] Black, Robert E. et al. for the Maternal and Child Nutrition Study Group. 2013. "Maternal and child under-nutrition and overweight in low-income and middle-income countries". The Lancet, Volume 382, Issue 9890. www.thelancet.com/journals/lancet/article/PIIS0140-6736(13)60937-X/fulltext

[5] Victora, Cesar G. et al. for the Maternal and Child Under-nutrition Study Group. 2008. "Maternal and child under-nutrition: consequences for adult health and human capital". The Lancet, Volume 371, Issue 9609. www.thelancet.com/journals/lancet/article/PIIS0140-6736(07)61692-4/fulltext

[6] UNICEF. 2014. "The State of the World's Children 2014 in Numbers. Every Child Counts: Revealing disparities, advancing children's rights". www.unicef.org/sowc2014/numbers/

[7] UNICEF. 2010. "Progress for Children: Achieving the MDGs with Equity (No. 9)". www.unicef.org/publications/files/Progress_for_Children-No.9_EN_081710.pdf

[8] WHO. n.d. "Child growth standards". www.who.int/childgrowth/en/ [accessed 4 July 2014]

[9] WHO. n.d. "Child growth standards". www.who.int/childgrowth/en/ [accessed 4 July 2014]

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