

# NUTRITION STRATEGIES FOR THE WORLD'S POOREST

**Stunting, where a child's growth and development are compromised, affects some 161 million children worldwide and can have lasting effects on their physical health, learning capacity, and work productivity as adults. Undernutrition underlies 45% of deaths in children under 5 – about 3 million each year.**

**A**s part of a series in *The Lancet*, researchers looked at what can be done, and at what cost. The work updates the journal's 2008 landmark series on the importance of maternal and child nutrition for survival.

"We underscore the value of investing in nutrition-specific interventions that are not only important for survival but also have

developmental benefits," explains Zulfiqar Bhutta, Co-Director and Chair in Global Child Health and Policy at the Centre for Global Child Health at the Hospital for Sick Children in Toronto. He and fellow researchers reviewed a number of evidence-based interventions aimed at women of reproductive age, pregnant women, infants and children. And they looked at delivery platforms: how to best promote behaviour change, access and uptake of these interventions.

Their analysis suggests that 15% of these children – one million lives – can be saved if populations in the 34 focus countries can access 10 interventions at 90% coverage. They showed that investments in the health and nutrition of mothers could have significant benefits for the growing fetus and young infants. Management of severe and acute malnutrition, preventive zinc supplementation in young children, and promotion of breastfeeding showed particular potential.

## INTERVENING EARLY

Early intervention is key – even before pregnancy. "We know that one fifth of all stunting is attributable to fetal malnutrition and being small at birth," says Bhutta. "Some of that is related to nutrition in pregnancy, but some is related to nutrition pre-pregnancy. So you need to go back and have a strategy for interventions that can have intergenerational benefits."

Roughly 10 million girls under 18 are married each year; interventions among adolescents, therefore, to improve nutrition and family planning, to delay the age of the first pregnancy or increase the spacing between pregnancies, might help reduce small-for-gestational-age births in some populations.

The study also notes the importance of nutrition-sensitive interventions – things that are not necessarily in the health sector but that influence nutrition in a tangible way. This includes investments in education, girls' empowerment, agriculture, and water sanitation and hygiene.

## IMPLEMENTATION STRATEGIES

Promising delivery strategies include the use of community events or child health days to scale up coverage in the short term. Such community-based platforms might serve to connect with populations not currently being reached and provide commodities as needed.

Stanley Zlotkin, Chief of the Centre for Global Child Health, says finding the best implementation strategies is precisely the next challenge. He's currently working with four of Canada's largest NGOs to provide a combined evaluation of their projects. "They're doing all the right things in terms of evidence-based interventions," he says. "But we really haven't figured out all of the secrets to implementation." For example, what's the best way to get more women to breastfeed? Instead of seeing efforts invested in 20 different directions, he'd love to have evidence allowing them to concentrate on the few most effective strategies. "We know what to do; the next step is to figure out how to do it efficiently and well." 🦋

BY EVE KRAKOW



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Ref.: Bhutta ZA, Das JK, Rizvi A, Gaffey MF, Walker N, Horton S, Webb P, Lartey A, Black RE, The Lancet Nutrition Interventions Review Group, Maternal Child Nutrition Study Group. Evidence-based interventions for improvement of maternal and child nutrition: What can be done and at what cost? *The Lancet* 2013;382(9890):452-477. doi:10.1016/s0140-6736(13)60996-4.