



Nutrition and Health: Strengthening the Connection

by Michele Learner

Constantia and her family farm a small plot of cassava and maize near their hometown of Cobue, Mozambique. The family is among many in Mozambique who are subsistence farmers, eating what they grow themselves. Most rural farmers in this southern African country have neither fertilizer nor formal training in agriculture. A hoe and a machete—not oxen pulling a plow—are what they use to survive.

Malnutrition among Mozambican children is all too common. It nearly cost Constantia's firstborn child, Gustavo, his life. A few months after his first birthday, Gustavo had a severe case of malaria that weakened his immune system. Constantia and her family worried that breastfeeding was hampering his recovery. But replacing breast milk with a maize porridge worsened the toddler's condition—he developed other infections and continued to lose weight. Gustavo's condition became life-threatening when his body began to retain water, a condition known as edema. At 18 months, he weighed less than 17 pounds—including the water weight.

Fortunately, Constantia was able to bring her son to a health clinic where staff members were experienced in treating malnutrition. Once she learned how to give Gustavo a fortified milk formula with a syringe, she fed him every two to three hours around the clock. The formula was specially designed to maximize his absorption of energy, protein, and micronutrients.

When he was a little stronger, Gustavo was given Plumpy'nut, a high-protein therapeutic food that resembles peanut butter. His appetite began to return, helped along by his enjoyment of Plumpy'nut's taste. Now, a year later, Gustavo runs and plays with other children in the village.

The health clinic could not help Constantia and her husband with their longer-term struggle to feed their family. Gustavo and his family still live on the edge of hunger. But his life was spared because he received medical treatment and special nutritional care in time.



Gustavo, shown here with his mother, Constantia, is now a healthy 2-year-old, thanks to fortified milk and therapeutic food.

Rebecca Vander Meulen

Progress on Malnutrition: Picking Up Speed

In the last few years, there has been an unprecedented global effort to improve maternal and child nutrition. The effort is driven by the growing recognition that malnutrition during the period from pregnancy to a child's second birthday causes devastating and largely irreversible damage. Gustavo and other young children are simply much more vulnerable to malnutrition than older kids or adults. But the flip side is that pregnancy to age 2 is truly a "window of opportunity." Ensuring that young children are well-

nourished has a dramatic impact on their whole lives—better health, greater achievement in school, and higher lifetime earnings.

The global consensus on the need for much greater effort to improve maternal and child nutrition was kicked into high gear in 2008. First, the 2008 global food price crisis—in which prices of staple foods such as rice doubled or even tripled in a matter of months—was a wake-up call to many governments, refocusing political attention on hunger and food insecurity. Another round of food price spikes in 2010–2011 kept the pressure on governments to take action on hunger and malnutrition—sooner rather than later.



Todd Post

In Alta Verapaz, Guatemala, a child receives fortified ready-to-use supplemental food to combat undernutrition.

Second, an influential series of reports on early childhood appeared in the leading medical journal *The Lancet* in 2008. The series not only emphasized the importance of good nutrition from pregnancy to age 2, but showed how practical, inexpensive interventions during this 1,000-day period can bring lifelong benefits. Researchers urged immediate action in 36 “high-burden” countries that are home to 90 percent of the world’s stunted children. (When a child is stunted—significantly shorter than an average child of the same age—it indicates that he or she has suffered long-term malnutrition.)

Nutrition, both during and after the 1,000-day “window,” has been neglected in international health and development programs for far too long. The recent attention to improving nutrition among pregnant women and young children also opens the door to improving nutrition more generally.

Scaling up effective nutrition programs and making meaningful, measurable progress against malnutrition will require both additional resources and new ways of working. It will mean supporting national nutrition strategies that are country-owned and country-driven, coordinating efforts among all agencies and programs that can make a difference, and strengthening the human resources and institutions needed to implement nutrition plans. The benefits of investing resources in nutrition can be multiplied by ensuring that plans capitalize on the linkages among the nutrition, health, and agriculture sectors.

U.S. Leadership on Nutrition

Over the past three years, the United States has been a leader in the intensified global effort to improve maternal and child nutrition, providing high-level political support and pledging additional resources. In particular, progress on maternal and child nutrition is a primary objective of two key U.S. development programs. The Global Health Initiative (GHI) views nutrition through a health “lens,” while Feed the Future is more focused on agriculture’s contribution to better nutrition.

GHI supports partner countries in strengthening their health systems so they can better fight disease, improve maternal and child nutrition and health, and increase access to safe water. GHI complements more specialized health efforts such as the President’s Emergency Plan for AIDS Relief (PEPFAR) and the President’s Malaria Initiative. One of GHI’s goals is to reduce child malnutrition by 30 percent in its 17 focus countries. This will require a combination of effective nutrition programs now, and stronger national health systems for the long term.

The Scaling Up Nutrition (SUN) Movement, composed of developing countries committed to improving maternal and child nutrition, supports an action plan based on the recommendations in the *Lancet* series. The SUN Framework for Action, released in 2010, delineates how best to make significant and sustained progress on nutrition among these vulnerable groups.

In September 2010, Secretary of State Hillary Rodham Clinton and her Irish counterpart launched the “1,000 Days: Change a Life, Change the Future Partnership” to support SUN and its action framework in individual countries. The 1,000 Days Partnership seeks to achieve results during its own “1,000 Days,” the period from Sept. 2010 to June 2013.

By March 2012, 26 countries—including a majority of the 36 nations with the highest rates of childhood stunting—had identified themselves as SUN countries and begun to develop a national nutrition strategy. National governments have appointed a high-level representative to coordinate

the implementation of the strategy across ministries such as health and agriculture. In addition, each SUN country plans to establish a working group to coordinate the actions of all who are working on scaling up nutrition, including representatives of government, donors, development banks, international organizations, civil society, and business.

Well-Nourished Babies and Toddlers

As the *Lancet* series made clear, many of the actions needed to provide pregnant women and young children with the nutrients they need are straightforward and affordable. For example, babies younger than 6 months need to breastfeed exclusively—meaning they should not be given any other food or water. For babies, breastfeeding is a critical component of nutrition. Breastfeeding is one of the “13 highly cost-effective nutrition interventions” identified in the *Lancet* series. The World Health Organization recommends exclusive breastfeeding until the age of 6 months and supplementing food with breastfeeding thereafter, up to age 2 or later.

Exclusive breastfeeding is critically important, particularly in poor countries: Babies who receive partial or no breastfeeding are more than twice as likely to die in their first few months of life. However, just 37 percent of infants around the world are exclusively breastfed. In a video message to participants in an international meeting to strengthen support for SUN/1,000 Days—organized by Bread for the World Institute and Concern Worldwide in June 2011—Melinda French Gates of the Bill & Melinda Gates Foundation emphasized the need to prioritize exclusive breastfeeding as a practice that should be scaled up.

Beyond an understanding of why it is important, mothers and communities need strategies to overcome barriers to exclusive breastfeeding. For example, the goal of the UNICEF/World Health Organization Baby Friendly Community Initiative is to ensure that all maternity wards become centers of support for breastfeeding. The essentials for successful breastfeeding have been broken down into 10 simple steps that can be incorporated into health services for new mothers.

One of the most common reasons for abandoning exclusive breastfeeding—in both industrialized and developing countries—is women’s need to return to work. Nursing mothers and their babies are interdependent; the vast majority of women have no choice but to end exclusive breastfeeding when they resume work in fields, factories, offices, and markets and are separated from their babies for hours at a stretch.

The knowledge that exclusive breastfeeding is essential, however, provides motivation for families and communities to find ways around the problem. For example, when



A H'mong woman and her baby in Sin Chai hill tribe village in Vietnam. Since 1960, the number of children who die before age 5 has fallen by more than half. (UNICEF)

UN Photo/Kibae Park

mothers in Sierra Leone go to work in the fields, their babies are often left with grandmothers, who give them porridge and warm water when they are hungry. A Catholic Relief Services (CRS) breastfeeding support program brought women together to discuss possible solutions.

As a result, 18 communities decided to establish “baby-friendly farms”—plots of land that pregnant and nursing mothers cultivate. Many are near villages; the others offer a nursery nearby. The farms are open to pregnant women and mothers with children younger than 3. With training and basic tools from CRS, the women are growing nutritious foods such as beans, groundnuts, and cassava leaves—good for both mothers and toddlers.

The most important needs for older babies, ages 6 to 12 months, include family access to a safe water supply and diverse nutritious foods. These children need food to complement breastfeeding, which can provide only about half their essential nutrients. Around the world, the complementary foods offered are often porridges with little nutritional value. Families may also be unable to ensure that food for babies and toddlers is cooked with clean water. As a result, between 6 and 12 months is often the age when babies stop growing properly.

Nutrition, Health, and Agriculture: Making the Connections

Nutrition, health, and agriculture are linked in important ways. But in the past, the three sectors rarely worked in coordinated ways toward their common goal of well-nourished, healthy people and communities. Now, however, it's becoming increasingly clear that building true global food security requires the combined efforts of effective programs in all areas that affect nutrition.

GHI and the SUN Framework emphasize the importance of these connections. GHI can make more progress toward its child nutrition goals, for example, with support from Feed the Future and other agriculture programs in making nutritious food more available and accessible. Similarly, some efforts are important in their own right—for example, providing young children and other vulnerable people with micronutrient supplements, promoting healthy and diverse diets in families and communities, and improving agricultural productivity—but will have limited impact in isolation. Many actions in the SUN Framework are designed specifically to improve people's nutritional status, of course, but the framework also calls for “nutrition-sensitive” efforts. These work to improve nutrition as well but are carried out from within other relevant programs, including agriculture, food security, health, education, rural development, and emergency response.



Laura Elizabeth Pohl

Jane Sabbi farms 12 acres of land in Kamuli, Uganda. She grows corn, bananas, coffee, amaranth, potatoes, soy beans, common beans and sweet potatoes.

Adding a nutrition perspective can make health programs more effective. For example, child survival programs have traditionally focused on fighting infectious diseases, yet the largest single cause of child mortality is malnutrition.

Disease and malnutrition reinforce each other, both weakening a child's immune system, so they can't be effectively treated in isolation. Gustavo's near-fatal malnutrition was set in motion when he contracted malaria, for example. Thus, treatment for illnesses such as pneumonia or diarrhea should include not only the right antibiotics, but also nutritional assessment, education, and support that will help the child recover quickly and avoid new infections.

Conversely, health care settings offer excellent opportunities to detect and treat malnutrition as early as possible. Doing so is critical, since although a severely malnourished child is more likely to die than a moderately malnourished child, moderate malnutrition actually kills more children. Waiting until malnutrition is so severe that it's obvious to any observer is courting tragedy. Instead, scaling up training and education efforts to treat both forms of malnutrition must be a top priority of the child survival agenda. Any one of a wide range of health services should be able to detect malnutrition; just a few of the possibilities are prenatal care, maternity wards, community health programs for vulnerable households, well child care, and programs seeking to prevent mother-to-child transmission of HIV.

Top Priorities: Nutrition and Health

Here are some critical steps toward strengthening the connections between better nutrition and better health:

- Prioritize the most vulnerable populations, including pregnant and postpartum women and children under 2.
- Coordinate the U.S. government's approach to scaling up effective nutrition interventions, and integrate nutrition into health programs.
- Support country-owned, country-led nutrition strategies developed through a consultative process.

For detailed recommendations, please see more complete coverage of this topic in Bread for the World Institute's March 2012 briefing paper, “Linking Nutrition and Health: Progress and Opportunities.”

This paper is based on Bread for the World Institute's March 2012 briefing paper, “Linking Nutrition and Health: Progress and Opportunities,” by Rebecca Vander Meulen and Noreen Mucha.