

CHANGING BEHAVIOUR THROUGH BUILDING AND SHARING KNOWLEDGE



Denise is a voluntary community health worker in Akabacuzi Village, Gatsibo District, where the legendary 1,000 hills of Rwanda begin to slide into drier, flatter savannahs near the border with Tanzania. Twenty-two children in her village used to suffer from malnutrition, but today, not a single child is considered either severely or moderately malnourished. Much of this improvement is because of Denise's efforts to ensure that parents in her community know what and how to feed their youngest children, and then put that knowledge into practice.

Through cooking sessions in her home, Denise demonstrates a variety of new techniques to prepare nutritious food. Recently, Denise showed other mothers how to make beet juice, rich in vitamins and minerals. She cleaned her hands carefully before selecting a set of well-scrubbed pots and utensils. Brilliant purple slices slid off the knife in her slender hands, landing in a mortar where she pounded them into a thin pulp before straining them through a cloth. Mothers with children in their arms gathered round to share the juice, poured into plastic drinking cups. In other

sessions, Denise has covered how to combine a diverse array of foods in a delicious and nutritious stew, so that children eat a variety of foods with the highest nutritional benefits.

"At first, people did not think about eating vegetables and other healthy foods," Denise said. "Now we know what a balanced diet is. As long as we keep informing and encouraging people, no more children here will be malnourished."

Previously, parents in this community would have thought it natural to feed young children a diet heavy in carbohydrates like potatoes. Now, because of health workers like Denise, they know that this is not enough; diverse fruits, legumes, grains, vegetables, and proteins like eggs, fish, or meat need to be a regular part of their diet. They understand the importance of practicing exclusive breastfeeding for a minimum of six months, and the importance of continued

breastfeeding up to age two and introducing complementary foods at six months.

Just as importantly, with this new knowledge have come the tools with which to use it. Small kitchen gardens ensure a steady vegetable supply. Livestock such as goats and chickens provide fertilizer for more abundant crops and foods such as eggs. Savings and loan groups help poor families earn extra income, including through micro-businesses, to purchase foods they cannot find at home.

This poster from the First 1,000 Days campaign carries messages in Kinyarwanda, the local language spoken throughout Rwanda. The 1,000 Days campaign is working to change caregivers' behaviour for improved nutrition. The messages centre around five key practices linked to good nutrition: exclusive and continued breastfeeding, full immunisation, complementary feeding providing a diversified diet, maternal nutrition, and good hygiene practices.



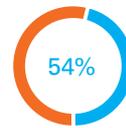
A BRIEF OVERVIEW OF THE NUTRITION SITUATION IN RWANDA



18% of children 6-23 months receive a minimum acceptable diet (up from 1% since 2010)



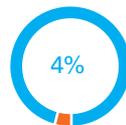
80% of households are food secure



54% have improved sanitation facilities (58% in 2010)



38% of children younger than five are stunted (down from 44% since 2010)



4% of households have access to handwashing facilities with soap and water (2% in 2010)



37% of children younger than five are suffering from anemia (down from 38% in 2010)



87% of children 0-6 months are exclusively breastfed



73% of households have access to an improved water source (75% in 2010)



2% of children younger than five are wasted (down from 3% since 2010)

Data sources: The RDHS 2014/15 and the CFSVA 2015.

WHAT IS UNICEF DOING TO HELP

With support from the Government of the Netherlands, the Swiss Development Corporation (SDC), IKEA Foundation, and the U.S. Agency for International Development (USAID), UNICEF is implementing a multi-sectoral package of nutrition-specific and nutrition-sensitive interventions focusing on 19 of 30 districts in Rwanda. These interventions include:

Support to monthly community growth monitoring and promotion sessions, including cooking demonstrations, to teach caregivers

on how to prepare a diversified diet from locally available ingredients.

Distribution of micronutrient powders, Vitamin A and deworming to improve the micronutrient status of children and reduce anemia

Support to the management of severe acute malnutrition in children, including screening, referral and treatment

Training of caregivers of young children in establishing kitchen gardens and small livestock rearing to supplement the family's diet

Establishment of community

saving and lending groups for caregivers of young children to increase access to financing and income-generating activities.

Support to coordination, monitoring and evaluation, learning and knowledge management at the district and national levels through training in DevInfo to track district plans to eliminate malnutrition, support to learning visits between districts, and training in operational research to capture best practices to identify drivers and barriers for effective nutrition interventions.

BACKGROUND AND CONTEXT

Denise and community health workers across Rwanda are on the vanguard of the fight against malnutrition. Despite improvements, stunting rates remained stubbornly high in Gatsibo, as in many other districts. UNICEF and the Adventist Development and Relief Agency (ADRA) have supported the district's efforts to reduce malnutrition, under the guidance of the Government of Rwanda's national nutrition programme, and with funding from the Government of the Netherlands, USAID, SDC, and IKEA Foundation.

One of the main strategies is behaviour change communication. Many people in Rwanda have enough food, but do not always know how to best prepare, store, and consume it, particularly to ensure that young children are well nourished. A steady diet of potatoes and beans is normal in many areas, even as people grow fields of other vegetables to sell in the market. Products from livestock such as milk and eggs are common sources of income, not children's nutrition. Many families feed young children along with adults two or fewer times a day without realising that children need more frequent meals. All of this contributes to high stunting rates even in areas with lower rates of poverty. One out of five children (21 per cent) in the wealthiest quintile of the population is stunted, compared to 38% of the total population, according to the 2014-2015 Rwanda Demographic and Health Survey.

To encourage better use of common, locally available resources, the Government of Rwanda nationally rolled out the 1,000 Days for a 1,000 Hills campaign. Led by the Rwanda Health Communication Centre under the Ministry of Health, the campaign emphasizes an integrated set of messages around a healthy diet, building on recommendations from UNICEF and the World Health Organization about exclusive breastfeeding until six months, followed by the introduction of a variety of complementary foods introduced in multiple meals throughout the day. The campaign also stresses elements that support nutrition, such as handwashing and immunisation to prevent diseases.

Messages on these key behaviours to improve nutrition flow through a variety of channels, including community radio stations, as these are a primary channel for information across Rwanda. Community health workers have been trained to encourage people to ensure good nutrition practices from pregnancy through the critical first two years of life, including in monthly growth monitoring sessions and cooking demonstrations. Messages are shared by agricultural technicians when teaching communities to create kitchen gardens, and among the members of village savings and loans groups. Parliamentarians, religious leaders and journalists have also been engaged in disseminating campaign messages.



During a nutrition session, Denise Nyirabiakunze, the Community Health Worker demonstrates how to prepare beet juice to a group of women in Akabacuzi Village in Gatsibo District, Rwanda. © UNICEF/Noorani

METHODOLOGY

To capture lessons learnt in Rwanda, UNICEF commissioned five briefs on themes central to the programme: behaviour change, multi-sectoral approaches to ending malnutrition, decentralisation, monitoring, and innovation.

The briefs are based on a review of documents outlining the scope of the programme and reporting on results, as well as over 75 semi-structured interviews with key informants, including national and local government counterparts, partners, men and women participating in the programme, and UNICEF staff in Kigali and New York. The interviews were designed to elicit both technical information and expertise on which interventions were most effective and which required improvement, as well as to capture and document the experiences of people who have benefited from project interventions.

The process was based on the pause, learn, and share methodology developed by the National Aeronautics and Space Administration (NASA), the US space agency. Aimed at eliciting knowledge based on real-world experiences, it stresses taking time to reflect on recent events, which helps people learn what happened and why.

LESSONS LEARNT AND RECOMMENDATIONS

Making knowledge useful

Within communities supported by the programme, new knowledge on improved nutrition practices was often identified as the most important project input. The knowledge gap is not just related to what people eat, but who eats, how often, and how food is prepared, consumed, and stored, all of which are needed to be factored into behaviour change communication. For example, a high number of Rwandan women breastfeed infants, but many do not know how often to feed young children, the importance of introducing complementary feeding at six months, or how to mix foods for nutritionally complete meals.

New knowledge needs to be tied to concrete, practical actions. Programme beneficiaries report that learning about good nutritional practices, practicing skills promoted through monthly community cooking demonstrations, and setting up kitchen gardens to supply vegetables and fruits generates a sense of empowerment. People participating in the programme feel they can act to change their own lives, rather than waiting for someone else to help. They express enthusiasm about an approach that is mainly about putting new knowledge into practices, not just talking.

Some spoke of feeling helpless earlier because they knew something was wrong with a child, but assumed it must be poison or possession by spirits that would prevent the child from growing well. Now they not only know what the problem is, but how to solve it, including through basic inputs such as seeds to establish kitchen gardens.

People are more willing to change—and even to demand services—when they understand ‘why’.

For example, parents previously reported attending growth monitoring sessions without understanding their importance. The sessions were seen as imposed by the healthcare system, and for some, this was a disincentive to attend, because they have many responsibilities and cannot ‘waste’ time. Once growth monitoring was clearly associated with identifying and addressing malnutrition, they could start to see the longer-term benefits. As a result, parents were more willing to attend the sessions and make other changes such as investing in kitchen gardens and changing cooking and feeding practices.

Nutrition messages should come from a wide range of sources and through different channels

There is value in messages coming from many different channels, including both opinion leaders and peers. Some people stress the importance of local leaders speaking out and even modelling new behaviours, as in the case of religious figures who have planted kitchen gardens, or local elected officials who regularly check the progress of children at risk of malnutrition.

Community groups and role models have also been powerful supporters, showing that people in the same community can solve common problems with the same resources. They reinforce knowledge, including through discussing information acquired from sources like radio programmes, and can move the community towards seeing a well-nourished child as the social norm. The use of many different channels of communication increase the chances that people will hear messages from at least one source they trust.

Who needs to change?

Behaviour change is relevant for all.

Some district officials and technical specialists acknowledged that they too have needed to change their behaviour in the fight against malnutrition. Partners confirmed, describing in some cases a learning curve that began with local authorities denying that malnutrition is a problem. Regular meetings on district plans to eliminate malnutrition, field visits, and in one case showing pictures of malnourished children in a nearby village have all encouraged learning and change at multiple levels. Agronomists and veterinarians have begun including nutrition messages even when they are engaging with agricultural cooperatives primarily around production issues, for instance. Nutritionists say that they are better able to perform their functions because health officials no longer treat them as flexible labour that can be pulled into other tasks, such as managing people in health centre waiting rooms.

Behaviour change is not just for mothers.

Many behaviour change messages are oriented towards mothers as the primary bearers of responsibility for feeding children. In the broader

context, however, fathers also make household decisions and provide food for consumption. The 1,000 Days campaign recognised that fathers are a primary support for sound nutrition and should be strongly involved in outreach.

Over time, one way forward might be to design behavior change campaigns to increase greater engagement of men in child care. While this concept was far from being readily accepted in many communities, some men who have become involved in the nutrition programme affirmed a new understanding of the value and benefits from shared family responsibilities. This may offer an entry point for future initiatives aimed at shifting gender norms related to care-giving.

Keeping up momentum

Monitoring and other systems need to support sustained behaviour change.

People involved in the programme understood new knowledge and behaviour change as contributions that would last after the programme ceases, but also expressed concern about how thoroughly these might be sustained. Community health workers, for example, have many responsibilities, and it was easy to imagine how they might focus for a while on nutrition, but eventually be pulled into other issues, such as a malaria. Further engagement of other community service providers on sustained behaviour change for good nutrition, such as agro-extension workers, could help in terms of maintaining healthy practices.

Rapid SMS may also be a good tool to ensure sustained behavior change. This system allows the direct transmission of data on standard indicators via mobile phone from community health workers to supervisors in health facilities, enabling them to provide direct feedback and support. It can also remind community health workers of key nutrition messages to relate to caregivers during counselling sessions. Other suggestions included regular refresher trainings for community health workers, given that many have only a basic level of education. Health centres could have a plan for supervision of behavior change communication and nutrition counselling in communities to ensure that these activities take place regularly and that the correct messages are transmitted. Finally, regular knowledge, attitudes, and practices surveys could be conducted to monitor changes.

CONCLUSION

Behaviour change is a core strategy in the fight against malnutrition in Rwanda, where nutrition deficits are linked with food preparation and feeding practices. People are eager to learn, but they also appreciate complementary supports that help them translate new knowledge into daily life, such as kitchen gardens. Uptake of information and sustained behaviour change may increase when nutrition messages come from multiple sources and through different modes of communication, in a continuous loop of reinforcement. Encouraging behaviour change needs to go beyond reaching mothers, recognising that fathers and a variety of local service providers play critical supporting roles.

“Much of the success of this programme relates to behaviour change. Our greatest task has been to change knowledge of nutrition and how parents feed their children.”

—ROBERT NTAGANDA, ADRA

KEY RECOMMENDATIONS

Build nutrition programme strategies around behaviour change communication, recognising that a lack of knowledge on care and feeding practices can be a major driver of malnutrition. At the same time, assess messages against the feasibility of local implementation, including to ensure that people, especially in more marginalised communities, have capacities to make use of new knowledge. Multisectoral programmes providing links to income and agricultural inputs can help fill some potential gaps.

Design campaigns to change behaviours among diverse actors to mobilize a community-wide response to malnutrition that relies on local knowledge and resources. This means using different channels and reaching not just mothers, but also fathers, service providers, district officials, and local leaders.

Enlist people who can model new behaviours and demonstrate their value. Local leaders have been effective as figures of authority, but so have individual mothers who show other mothers that it is possible, having the same resources, to have healthy children.

Establish monitoring systems that measure change in knowledge and practices in the short term, but also how changes are sustained over time, with one option being follow-up knowledge, attitudes and practices surveys.

SOME QUESTIONS TO CONSIDER FOR FUTURE WORK

1. Are there factors besides a lack of knowledge that limit behaviour change? At what point should new knowledge be balanced with complementary interventions, such as those to address inadequate resources or unhealthy dynamics within families?
2. Beyond parents, whose behaviour needs to change and how?
3. What are the best ways to reach different audiences with change messages? Who will hear messages through the media, for example? And who through community channels of interpersonal communication?
4. What assumptions need to be managed around the sustainability of new knowledge? What helps embed it? What stands in the way?
5. How should the impact of behaviour change interventions be measured?

ALSO IN THIS SERIES...

For more on nutrition work in Rwanda, see:

1. **Rwanda: National Goals Propel Local Advances in Child Nutrition**
2. **Bridging Many Sectors to Accelerate Nutrition Results**
3. **Decentralised Planning Mobilises Local Government to Act on Reducing Malnutrition**
4. **Monitoring Tracks Many Levels of Change**
5. **In Pursuit of Innovation**

ACKNOWLEDGEMENTS

This brief was written with the support of the Ministry of Health in Rwanda, UNICEF Rwanda staff: Kristine Dandanell Garn, Josephine Kayumba, Youssouf Koita, Beatrice Kampirwa, Oliver Petrovic and Denise Uwera; and Gretchen Luchsinger (Consultant).