

# Integrating Nutrition into Health Services in Vietnam

## A Report on FANTA Activities from 2008 to 2014



## Nutrition and HIV in Vietnam

In 2013, approximately 250,000 people in Vietnam were living with HIV. Nutrition is an important element in the comprehensive care and treatment of people living with HIV. HIV can cause or aggravate malnutrition through reduced food intake, increased energy needs, and poor nutrient absorption. Conversely, malnutrition can hasten the progression of HIV and worsen its impact by weakening the immune system, increasing susceptibility to opportunistic infections, and reducing the effectiveness of treatment. Nutrition assessment, counseling, and support (NACS) can identify nutrition problems early and provide counseling and resources to help ensure adequate food intake, improve nutritional status, boost immune response, and improve adherence to antiretroviral therapy.

Between 2008 and 2014, the Food and Nutrition Technical Assistance III Project (FANTA), funded by the U.S. Agency for International Development (USAID), worked with the Vietnamese government and U.S. President's Emergency Plan for AIDS Relief (PEPFAR) Partners in Vietnam to integrate NACS into health services for people living with HIV in 10 provinces and to strengthen management of malnutrition among children under 5 years of age in Dak Lak Province. During this time FANTA:

- Provided technical assistance to PEPFAR/Vietnam and Partners to improve the quality of HIV services by integrating nutrition into care and treatment of people living with HIV
- Supported the National Institute of Nutrition (NIN) in integrating nutrition into HIV services
- Strengthened the capacity of government health care providers to provide nutrition assessment, counseling, and sustainable nutrition support at HIV care and treatment sites
- Conducted multiple assessments to inform the integration of nutrition into HIV services
- Enhanced the capacity of district and commune health service providers in Dak Lak Province, including training village health care providers and nutrition collaborators to implement the Interim Guidelines on Integrated Management of Acute Malnutrition in Vietnam and to integrate NACS into HIV services

This report summarizes FANTA's achievements and results in Vietnam over the past 7 years.

“FANTA brought not only financial support but also rich expertise and program experience from other countries to assist NIN and VAAC in working together for better nutrition for people living with HIV...With FANTA support, we must say, nutrition has made an official footprint in the HIV sector. People working within the HIV sector have increased awareness of the importance of nutrition and know how to assess, counsel, and support their clients. We hope these good seeds can become fruitful trees and flourish.”

–Dr. Huynh Nam Phuong,  
Director of the NIN Food and Nutrition  
Training Center



# Integrating Nutrition into Health Services for People Living with HIV

From 2010 to 2014, FANTA supported Vietnam's National Institute of Nutrition in planning and coordinating the following nutrition and HIV activities in Vietnam:

## Organizing a National Sub-Committee

FANTA supported the establishment of a Nutrition and HIV Sub-Committee under the Nutrition Cluster and Partnership Group led by NIN and UNICEF. The sub-committee shared information, reviewed guidelines and technical documents, and discussed nutrition and HIV issues.

## Developing National Guidelines

National guidelines were needed to advocate for the importance of nutrition in HIV treatment and care, to guide programs and service providers, and to ensure harmonized messages and approaches among partners. During numerous stakeholder review meetings, FANTA provided technical assistance to NIN and the Vietnam Administration of HIV/AIDS Control (VAAC) to draft the guidelines, which were adapted from those FANTA had developed for other countries. The final National Guidelines for Nutrition Care and Support of People Living with HIV, which were approved by the Ministry of Health in December 2012, include information on nutrition and HIV, nutrition assessment and counseling, therapeutic and supplementary feeding of clinically malnourished clients, dietary management of HIV-related symptoms and drug side effects, food and water safety and hygiene, and monitoring and reporting on nutrition interventions.

## Guideline Dissemination

In 2013, FANTA supported a workshop to disseminate the guidelines to national and provincial health managers. Participants agreed on steps to operationalize the guidance and monitor its implementation, and discussed challenges in



FANTA assisted with the development of Vietnam's National Guidelines for Nutrition Care and Support of People Living with HIV, which was the first legal nutrition care document for people living with HIV.

collecting and reporting nutrition data within the HIV health management information system. NIN and VAAC distributed the guidelines to provincial AIDS committees, outpatient clinics that provide HIV services, and organizations supporting HIV care and treatment. The guidelines were the first legal nutrition care document for people living with HIV and the foundation for VAAC to direct health facilities to implement nutrition assessment and counseling as part of routine care and treatment.

## Technical Assistance Provided to PEPFAR/Vietnam and Its Partners

- Developed an action plan for USAID/Vietnam to support multi-year planning of nutrition and HIV initiatives and support coordination among PEPFAR Partners
- Estimated the costs and quantities of specialized food products needed to treat malnutrition among clients of PEPFAR-supported clinics providing HIV services
- Assessed PEPFAR-funded nutrition and food assistance programs to develop recommendations for their integration into government activities
- Reviewed Partner nutrition and HIV assessment and counseling tools, standard operating procedures, and training materials
- Provided global updates on guidance for nutrition support for people living with HIV
- Supported nutrition screening in community home-based care sites
- Assisted in pretesting a tool to evaluate the capacity of outpatient clinics to implement NACS in terms of human resources, anthropometric equipment, job aids, and storage and counseling space

## Developing Training Materials

To align with the new national guidelines, FANTA worked with NIN and VAAC to develop a nutrition and HIV training package that was finalized in 2014. The course was designed to build the capacity of health care providers in antiretroviral therapy clinics to:

- Explain the relationship between nutrition and HIV
- Explore evidence on the benefits of good nutrition for people living with HIV
- Develop nutrition assessment and counseling skills for the HIV context
- Manage acute malnutrition in people living with HIV

## Training

FANTA co-facilitated training of facility- and community-based health care providers. In 2014, NIN, FANTA, and VAAC trained 144 provincial trainers in the 10 provinces in five courses. In practical exercises, participants role-played counseling on prevention of malnutrition, diet, hygiene and sanitation, and dietary management of symptoms; calculated doses of specialized food products for malnourished clients; and visited local health facilities to apply the skills learned with real clients. The courses concluded with action planning sessions. The training of trainers course includes an additional 2 days for participants to practice training on selected sessions. These trainers are expected to roll out the training to health care providers in the provinces.

**“The training course makes me more confident in counseling and managing malnourished clients.”**

–Dr. Khong Minh Chau  
Tinh Bien Outpatient Clinic,  
An Giang Province

# Assessments to Inform Nutrition and HIV Programming

FANTA completed three assessments in Vietnam to inform programming and policy:

- Challenges for Safe Replacement Feeding among HIV-Positive Mothers in Vietnam: A Qualitative Study of Mothers, Fathers, Health Care Providers, and Other Experts
- Nutritional Status of Adults with HIV in Outpatient Clinics in Vietnam
- Acceptability of Two Ready-to-Use Therapeutic Foods among HIV-Positive Patients in Vietnam

## Assessment of Infant Feeding Practices among HIV-Positive Women

Infant and young child feeding practices are critical for HIV-positive mothers and their children because of the risk of HIV transmission through breast milk and the risk of diarrhea and malnutrition from unhygienic, inadequate, or inconsistent replacement feeding. To determine whether HIV-positive women in Vietnam could safely follow Ministry of Health recommendations to provide replacement feeding to their infants, FANTA supported a qualitative assessment by the Center for Global Health and Development at Boston University and the Institute of Social and Medical Studies in Vietnam of infant and young child feeding practices among HIV-positive women. The assessment was carried out in 2010 in Vinh Bao Hospital in Hai Phong Province and urban clinics in Ho Chi Minh City.

The assessment found suboptimal infant feeding practices that reflected challenges at the household, health facility, program, and policy levels. All of the mothers interviewed had practiced mixed feeding (feeding breast milk and other foods and liquids, including infant formula), which increases the risk of HIV infection through breast milk. Most had introduced complementary food before their infants were 6 months of age. The study report explores informants' reported practices in light of the conditions for

safe replacement feeding in the World Health Organization's 2010 guidelines on infant feeding and HIV. None of the households met all of these conditions.

The report recommended that the government of Vietnam either (1) gradually discontinue the provision of free infant formula to HIV-positive pregnant and postpartum women and inform health care providers and families of the policy change through a vigorous social and behavior change communication campaign to support exclusive breastfeeding or (2) invest in specific actions to improve affordability, feasibility, acceptability, sustainability, and safety of replacement feeding in order to promote HIV-free survival.

In 2011, FANTA disseminated findings from the assessment in a workshop with stakeholders to develop recommendations on how to improve the national infant and young child feeding program for HIV-exposed children. FANTA also presented the findings as a poster at the 2012 International AIDS Conference in Washington, DC. The results informed the infant feeding section of the Vietnam National Guidelines on Nutrition Care and Support of People Living with HIV and the nutrition and HIV training manual.

## Assessment of the Nutritional Status of HIV-Positive Adults in Outpatient Clinics

To assist the Ministry of Health and PEPFAR/Vietnam in planning and budgeting for specialized food products to treat clinically malnourished people with HIV, FANTA collaborated with NIN to conduct a study in 2011 of the prevalence of malnutrition among HIV-positive adults. The assessment was also meant to provide a baseline estimate of the national prevalence of acute malnutrition among adults living with HIV and to inform nutrition programming. The assessment was conducted in 29 outpatient clinics.

The assessment found that 27 percent of the adults were malnourished—18 percent mildly, 5 percent moderately, and 3 percent severely. This was higher than the percentage of malnutrition reported among Vietnamese adults in the General Nutrition Survey 2009–2010. In general, reported food consumption did not meet NIN's recommended dietary allowances for adults. An association was found between poor nutritional status and higher CD4 count, higher clinical stage, and HIV-related symptoms and opportunistic infections. Based on the study findings, NIN made the following recommendations to VAAC:

- Integrate NACS into routine HIV services and treatment to prevent and manage malnutrition in this vulnerable population group. Support should include specialized food products prescribed for a limited duration, with clear eligibility and exit criteria based on anthropometric measurement.
- Focus nutrition counseling for patients on antiretroviral therapy on eating a balanced diet with adequate energy and micronutrients.
- Prioritize antiretroviral therapy patients under 25 years of age and over 50 years of age for nutrition assessment, counseling, and support.
- Formulate and enforce a strategic government policy to ensure equitable access to food support for groups vulnerable to food insecurity, including people living with HIV.

The prevalence of severe and moderate malnutrition found among HIV-positive adults has been used to help estimate quantities of specialized food products needed for treating malnourished people living with HIV.

## Acceptability Study of Two Ready-to-Use Therapeutic Foods for Treatment of Malnutrition in HIV-Positive Patients

Ready-to-use therapeutic food (RUTF) has been found to be a highly effective intervention to treat severe acute malnutrition among people living with HIV. In 2009, NIN, the Institut de recherche pour le développement (IRD), and UNICEF collaborated to formulate a rice/soy/mung bean-based RUTF that could be produced in Vietnam. The result, called High-Energy Bar for Integrated Management of Acute Malnutrition (HEBI), was developed as an alternative to the imported peanut-based RUTF, Plumpy'Nut. In 2011 and 2012, with funding from PEPFAR/Vietnam and technical support from FANTA, IRD collaborated with NIN to study the comparative acceptability of Plumpy'Nut and HEBI among 80 HIV-positive children 3–7 years of age attending the National Pediatric Hospital in Hanoi and 80 HIV-positive adults attending the Hospital for Tropical Diseases in Ho Chi Minh City. The study focused on assessing the products' acceptability and properties such as taste and texture.

FANTA met regularly with VAAC and USAID's Supply Chain Management System to discuss the study design and implementation of the protocol. NIN and FANTA trained nurses in the two hospitals

in the assessment protocol, including how to measure height, weight, and mid-upper arm circumference; how to calculate body mass index and z-scores; and how to prescribe RUTF. Subjects were asked to return to the hospital every week for measurement. Subjects or caregivers closely monitored daily RUTF intake and any side effects of the RUTF using a standardized intake form. An intake of 50 percent or more of the total 2-week amount of RUTF distributed was defined as acceptable for both products.

Both HEBI and Plumpy'Nut were acceptable to the sample of children and adults living with HIV who were included in the study. Children tended to prefer HEBI over Plumpy'Nut, and adults indicated a strong preference for HEBI. Results also showed significantly higher weight gain over the 4-week study period in both the children and adults who received RUTF, compared with those randomly assigned to the control group who did not receive RUTF.

UNICEF conducted an inspection of NINFOOD, the manufacturer of HEBI, and approved the product for use in Vietnam. FANTA collaborated with USAID/Vietnam's SMART TA Project and NIN to estimate quantities of HEBI needed to treat severe acute malnutrition in people living with HIV in the country's nine PEPFAR-supported provinces. Finally, NIN advocated with the National Assembly and Ministry of Health to include HEBI in the list of medicines that are covered by health insurance and to integrate the product into programs to treat acute malnutrition.



FANTA assessed the acceptability of two ready-to-use therapeutic foods in Vietnam. Locally produced HEBI was approved for use in the country by UNICEF as an alternative to imported Plumpy'Nut.



## Pilot of Integrated Management of Acute Malnutrition in Dak Lak Province

Despite Vietnam's significant reduction in malnutrition among children under 5 years of age, there are strong disparities in nutritional status among regions and vulnerable groups such as ethnic minorities. According to UNICEF, in 2011, 17 percent of mothers in Dak Lak Province in the Central Highlands had chronic energy deficiency, and iron and vitamin A supplementation were lower than the national average. Among children under 5 years of age, the prevalence of stunting was 36 percent, well above the national average, and the prevalence of wasting was 8 percent. Among the priorities identified by UNICEF for improving child nutrition in the province were managing acute malnutrition in communes with a high prevalence of wasting and ensuring that children achieve minimum dietary diversity, meal frequency, and acceptable diets.

To strengthen services to improve nutritional status, in 2013, FANTA began working with NIN, VAAC, and Dak Lak health managers to develop an implementation plan to pilot integrated management of acute malnutrition (IMAM) in three communes in Krong Bong District. IMAM

activities include community screening for acute malnutrition, referral of malnourished children to health facilities for diagnosis and treatment, and monitoring of children under treatment. The following outlines the activities undertaken as part of the pilot and results:

### Site Assessments

As a first step, FANTA and NIN assessed the capacity of hospitals and commune health stations to integrate nutrition into health services. At provincial, district, and commune levels, the team found limited nutrition assessment and care, in part due to lack of anthropometric equipment, nutrition supplies, and training.

### Procurement of Nutrition Equipment and Supplies

Based on the results of the site assessments, FANTA and NIN worked with UNICEF to calculate quantities of specialized food products, anthropometric equipment, and other supplies needed for the pilot. FANTA worked with the Dak Lak Department of Health to plan procurement of the needed supplies and equipment through NIN.



Photo credit: Nguyen Thi Hue

FANTA, NIN, Dak Lak Reproductive Health Center, and Krong Bong Medical Center working with commune health staff in Cu Dram Commune, Krong Bong District.



## Planning

FANTA and NIN oriented provincial health authorities on IMAM and worked with provincial, district, and commune health managers to plan how to integrate nutrition care for children under 5 years of age into health care services.

## Training

FANTA and NIN then trained doctors, nurses, and village health workers in the 2010 UNICEF/NIN Interim Guidelines on Integrated Management of Acute Malnutrition in Viet Nam and in nutrition and HIV. FANTA and NIN provided supportive supervision of village health workers and nutrition collaborators in nutrition screening, classification of nutritional status, and referral for treatment. FANTA and NIN also met with the Krong Bong District Preventive Medicine Center and commune health managers to review the results of nutrition screening to help them plan the rollout of activities and order specialized food products from NIN.

## Advocacy

In April 2014, FANTA and NIN held a workshop with the Department of Health, district and commune people's committees, the Women's Union, the Farmer's Association, and health care providers to advocate with local authorities on the importance of nutrition for children under 5 years of age and people living with HIV.

## Treatment

Between March and September 2014, village health care providers in the three communes in Krong Bong District screened children for malnutrition, measuring weight, height, weight-for-height z-score, and mid-upper arm circumference. Children with severe acute malnutrition were treated with HEBI. Those with medical complications and no appetite were treated as inpatients, while the rest received HEBI to take home. Village health workers counseled caregivers



A woman practices measuring mid-upper arm circumference during training in Dak Lak Province.

of children with moderate acute malnutrition on how to improve their children's diet and on improved water, sanitation, and hygiene practices, which affect nutritional status. Village health workers also made home visits to check on the children's progress. Over 2,500 children were screened for malnutrition and 92 were treated for severe acute malnutrition.

The District Medical Center provided supportive supervision to help commune health stations manage difficult cases of severe acute malnutrition and follow up cases of treatment failure. The Dak Lak Reproductive Health Center provided technical support to the district and commune levels through quarterly visits. FANTA and NIN also provided technical support at the regional, district, and commune levels.

## Outcomes of the Pilot

### Screening and treatment:

**2,557** children under 5 years of age screened for malnutrition

**131** caregivers of moderately malnourished children counseled on how to improve their children's nutritional status

**92** children treated for severe acute malnutrition

### Training:

**37** health care providers trained in IMAM and nutrition and HIV

**31** village health care providers trained in nutrition screening, referral, counseling, and follow-up of malnourished children

### Equipment and supplies provided:

**18** height/length boards

**34** scales

**100** sachets of ReSoMal for dehydration

**540** sachets of F-100 therapeutic milk

**720** sachets of F-75 therapeutic milk

**2,000** counseling posters and brochures

**10,850** sachets of HEBI

### Next Steps

FANTA and NIN made several recommendations to maintain and replicate the program in the province including:

- Awareness raising so that mothers know how to prevent malnutrition and seek appropriate health services before their children become severely malnourished
- Enhancing the capacity of health staff in managing acute malnutrition, with routine assessment, classification, and consultation in health facilities
- Including HEBI in services covered by national health insurance
- Making the packaging and form of HEBI more child friendly

Moving forward, NIN hopes to work with the Department of Health to continue IMAM implementation in Dak Lak, including mobilizing funds to sustain IMAM in the three communes and scaling up to other districts in the province.



Photo credit: Nguyen Thi Hue

A health care provider makes a home visit to a child with severe acute malnutrition. After 6 weeks of treatment, his weight increased by 1.1 kg. His mother was impressed. “Since he was treated with HEBI, his health has been much better, and his weight has increased despite the fact that he also had to be treated for malaria during this time. He asks for food when waking up, which has never happened before.”

## Publications

- Challenges for Safe Replacement Feeding among HIV-Positive Mothers in Hai Phong and Ho Chi Minh City, Vietnam: A Qualitative Study (Available in English and Vietnamese)
- Challenges for Safe Replacement Feeding among HIV-Positive Mothers in Vietnam: A Qualitative Study of Mothers, Fathers, Health Care Providers, and Other Experts
- Acceptability of Two Ready-to-Use Therapeutic Foods among HIV-Positive Patients in Vietnam
- Impact Story: Investigating Sustainable Options for Treating Malnutrition among People Living with HIV in Vietnam
- National Guidelines for Nutrition Care and Support of People Living with HIV (Available in Vietnamese)
- Training Materials for Nutrition Care and Support of People Living with HIV (Available in Vietnamese)

For more information, visit  
**[www.fantaproject.org/countries/vietnam](http://www.fantaproject.org/countries/vietnam)**

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