

Policy Brief

January 2026

Integration of Locally Available Foods and Diet-Based Interventions in HIV Care



Executive Summary

Kenya's HIV response is at risk of slowed attainment of targets due to malnutrition, sub-optimal dietary diversity, and rising prevalence of non-communicable diseases among people living with HIV (PLHIV). Whereas ART coverage remains high, treatment outcomes are undermined by food and nutrition insecurity and the lack of incorporation of food and diet-based interventions into the clinical protocols and insurance covers. This policy brief underscores the urgent need for a national policy framework that institutionalizes the integration of locally available, nutrient-dense foods into HIV care. Evidence from a systematic review of thirty-four (34) randomised control trials revealed that locally available diets significantly improve immune recovery, ART adherence, and quality of life. In the absence of a formal policy to guide implementation, financing, and cross-sectoral coordination, nutrition will remain a neglected pillar in HIV programming. Strategic integration of locally available foods and diet-based interventions in clinical care is essential to achieve Universal Health Coverage, reduce AIDS-related mortality, and deliver equitable, sustainable health outcomes.

Introduction

Kenya has made remarkable progress in HIV care, with over 78% of people living with HIV (PLHIV) on antiretroviral therapy (ART) and viral suppression rates surpassing 71% nationally a testament to the Ministry of Health's leadership and sustained investment in treatment access (1). Nutrition has been increasingly integrated into HIV programming, with more than 460 health facilities offering services such as Food by Prescription, nutrition counselling, and targeted support for vulnerable groups (2). Yet, nutrition-related challenges continue to compromise treatment outcomes, particularly among rural and marginalized populations. Barriers such as limited access to nutrient-dense foods, low nutrition literacy, weak community-based follow-up, and the absence of insurance coverage for dietary interventions hinder clients from sustaining the nutritional support essential for immune recovery and ART adherence (3).

Additionally, in 2025, over 800,000 children and 120,000 pregnant/lactating women required treatment for acute malnutrition. This prevalence shows the deteriorating nutritional conditions in HIV-affected households. Malnutrition among PLHIV is associated with increased risk of opportunistic infections, poor ART adherence, and progression to advanced HIV disease (4). Without dedicated financing, county-level prioritization, and

stronger multisectoral linkages, nutrition risks remaining a peripheral component in HIV care despite its critical role in achieving and maintaining viral suppression (1,3, 4).

Simultaneously, Kenya faces a rising burden of non-communicable diseases (NCDs). Hypertension affects 33.2% of adults aged 30–79, and obesity affects 12.4%¹, with PLHIV disproportionately affected due to ART-related metabolic changes and poor dietary quality. This dual burden of HIV and NCDs is compounded by the resurgence of advanced HIV disease (AHD), where, in 2024, 20,480 AIDS-related deaths were recorded. Further, a total of 2,607 child deaths were recorded, most of these linked to maternal viral load and missed early diagnosis². Despite current evidence, including a 2025 systematic review of 34 randomised trials across 21 countries showing that locally sourced and food-based interventions improve CD4 count, Body Mass Index (BMI), mental health, and quality of life, these strategies are excluded from HIV treatment protocols and Social Health Insurance Fund- SHIF-financed benefits. This reflects a critical policy gap. To address this issue, Kenya needs a review of existing policies to incorporate locally available dietary interventions into HIV care and treatment. This approach would align nutrition with HIV and non-communicable disease (NCD) programs, institutionalise routine nutrition screening, and utilise community-based models to promote food security and dietary diversity. In the absence of such integration, Kenya risks undermining its progress in HIV management. However, with a strategic review of existing policies, nutrition can become a fundamental component of resilient, equitable, and sustainable HIV care. The table below shows the summary of the results;

i. Table 1: Integrated Summary Table: Locally Available Foods for PLHIV – Nutrients, Outcomes, and Implementation Insights

Food Group / Example	Key Nutrients	Health Benefits for PLHIV	Implementation Notes
Legumes (beans, lentils, cowpeas)	Protein, Iron, B Vitamins	Weight gain, improved BMI, anemia prevention	Widely available; requires awareness and preparation support
Animal Proteins (omega, liver, eggs)	Protein, Iron, Zinc, Selenium	CD4 recovery, immune support, reduced infections	Cost and access vary; culturally accepted in many regions
Leafy Greens (spinach, pumpkin leaves)	Iron, Calcium, Vitamin A	Micronutrient recovery, anemia prevention	Seasonal availability; needs preservation strategies
Fruits & Roots (mangoes, carrots, sweet potatoes)	Vitamin A, C, Fiber	Enhanced immunity, gut health	High acceptability; perishability may limit reach
Whole Grains (maize, millet, sorghum)	B Vitamins, Selenium, Fiber	Energy metabolism, antioxidant support	Staple foods; fortification opportunities exist
Moringa (leaves, powder)	Vitamin A, Iron, Calcium, Protein, Antioxidants	Immune boost, micronutrient recovery, reduced infections	High potential; requires scale-up and community education

¹National AIDS and STI Control Programme (NASCO). Kenya AIDS Strategic Framework II Mid-Term Review Report. Nairobi: Ministry of Health; 2023. Available from: <https://analytics.nsdcc.go.ke/estimates/KENYA%20AIDS%20STRATEGIC%20FRAMEWORK%20II%202023-MTR%20Report.pdf>

²Population Health Data Analysis and Reporting (PHDA). Kenya HIV Epidemic Appraisal: County Assessment Report. Nairobi: PHDA; 2025. Available from: https://www.phdaf.org/wp-content/uploads/2025/07/HIV-epidemic-appraisal_FINAL.pdf

³Mureithi C. Kenya's fight against HIV: Behind the progress, huge gaps remain. Daily Nation [Internet]. 2023 Dec 1 [cited 2025 Sep 24]. Available from: <https://nation.africa/kenya/health/kenya-s-fight-against-hiv-behind-the-progress-huge-gaps-remain--4839374>

⁴DNDi 2024 Report: <https://dndi.org/wp-content/uploads/2025/07/DNDi-AnnualReport-2024.pdf>

⁵Oakley, E., Reinking, J., Sandige, H., Trehan, I., Kennedy, G., Maleta, K., et al. (2010). A ready-to-use therapeutic food containing 10% milk is less effective than one with 25% milk in the treatment of severely malnourished children. *Journal of Nutrition*, 140(12), 2248–2252.

3. Themed Summary of Policy Issues from the Research Findings

i. Fragmented Policy Integration

National nutrition manuals for PLHIV (e.g. NASCOP and MoH directives) recommend dietary diversity and fortified foods but do not translate these into actionable clinical protocols or budgeting frameworks across counties and facilities.

ii. Limited Financial Access

Lipid-based spreads and micronutrient-enriched foods have demonstrated measurable improvements in CD4 counts and BMI, yet SHIF excludes these therapeutic foods from reimbursement schemes, limiting access among food-insecure households.

iii. Underuse of Indigenous Foods

Despite clinical evidence supporting moringa, pumpkin leaves, amaranth, millet, legumes, and fermented maize-based blends, these remain underrepresented in institutional meal plans, procurement protocols, and clinical counselling tools.

iv. Weak Infrastructure for Local Production

Most fortified supplements and RUTFs are imported, increasing programmatic costs and reducing continuity. Kenyan manufacturers face regulatory burdens, lack incentives, and struggle with scale-up in the absence of dedicated infrastructure support.

v. Research Gaps in Dietary-Based Interventions

Although plant-based therapies like *Moringa oleifera* and *Sutherlandia frutescens* offer immune and mental health benefits, dosing remains unstandardised and risks exclusion from evidence-based guidelines due to a lack of Kenyan clinical trials

4. Policy Recommendations



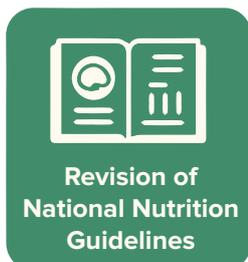
Include therapeutic feeds in the SHIF essential benefits. Introduce conditional subsidies for PLHIV in Kenya.



Mandate health facilities, schools, and feeding programs to source locally available therapeutic foods aligned with the Kenya Nutrition Action Plan (KNAP)



Co-lead campaigns with MoH and MoA, leveraging community health volunteers and mass media to promote production and consumption of moringa, legumes, leafy greens, and traditional cereals.



Update PLHIV nutrition protocols to reflect findings from the 2025 systematic review, integrating visual tools, stratified meal plans, and facility job aids.



Allocate national grants for food and diet-based dosing trials and systematic evaluation of bioavailability, contraindications, and ART interactions.

5. Supporting Evidence

Evidence strongly supports the integration of locally available, nutrient-dense foods into HIV care in Kenya. Micronutrient-rich yoghurt and fermented foods improve CD4 counts^{3, 4}, while lipid-based RUTF and peanut spreads enhance BMI and lean mass^{5, 6}. Tailored meals, probiotics, and livelihood-linked programs like *Shamba Maisha*¹¹ reduce gastrointestinal symptoms and depression^{8, 9}. Fortified food baskets also boost ART adherence in food-insecure settings^{10, 11}. These outcomes affirm food-based interventions as clinically effective, cost-efficient, and essential to a resilient, equity-driven HIV response.



6. Conclusion

Kenya's response to HIV is on the brink of a significant change that goes beyond clinical protocols to embrace a holistic strategy that promotes human resilience. At the core of this transformation is a seemingly simple yet profoundly strategic approach of using locally available and nutrient-dense foods.

Integration of healthy foods and diet enhances adherence to ARVs, optimization of immune function, and improves the quality of life of PLHIVs, all while reducing programmatic costs and strengthening community ownership. By aligning food-based support with treatment protocols, agrifood systems and boosting economic growth, in a locally and culturally-relevant fashion. This approach will further promote Kenya's prominence in multi-sectoral collaboration. County Governments will be stimulated to be engines of innovation, healthcare facilities will evolve into centres of holistic care, and communities will regain control over their health outcomes. The evidence supporting this approach is compelling, the necessary infrastructure is emerging, and the urgency for action is demonstrable. Institutionalising food-based interventions is no longer just an option for policymakers; it is a strategic imperative for achieving Universal Health Coverage, sustaining the success of ART, and delivering equity on a large scale.

⁶Manary, M., Ndekha, M., Van Oosterhout, J., et al. (2010). Supplementary feeding in the care of the wasted HIV infected patient. *Malawi Medical Journal*, 22(2), 63–68.

⁷Shamba Maisha: Randomized controlled trial of an agricultural and finance intervention to improve HIV health outcomes in Kenya: 10.1097/QAD.0000000000000781

⁸Anukam, K. C., Osazuwa, E. O., Osadolor, H. B., Bruce, A. W., & Reid, G. (2008). Yoghurt containing probiotic *Lactobacillus rhamnosus* GR-1 and *L. reuteri* RC-14 helps resolve moderate diarrhoea and increases CD4 count in HIV/AIDS patients. *Journal of Clinical Gastroenterology*, 42(3), 239–243

⁹Cohen, C. R., Weke, E., Frongillo, E. A., Sheira, L. A., Burger, R., & Mocello, A. R., et al. (2022). Effect of a multisectoral agricultural intervention on HIV health outcomes among adults in Kenya. *JAMA Network Open*, 5(12), e2246158.

¹⁰Martinez, H., Palar, K., Linnemayr, S., Smith, A., Derose, K. P., & Ramirez, B., et al. (2014). Tailored nutrition education and food assistance improve adherence to HIV antiretroviral therapy: Evidence from Honduras. *AIDS and Behavior*, 18(5), 566–577.

¹¹Mshanga, N., Martin, H., & Petrucka, P. (2019). Food-basket intervention to reduce micronutrient deficiencies among Maasai pregnant women in Tanzania: A quasi-experimental study. *Journal of Human Nutrition and Dietetics*, 32(5), 625–634.

Further information on the results presented in this policy brief can be found in:

Systematic Review Report: Locally Available Foods and Dietary-based Interventions to Improve Health Outcomes for People Living with HIV. Ministry of Health, Kenya, and Trust for Indigenous Culture and Health, Nairobi, Kenya.



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