



# WORLD HEALTH ORGANIZATION

**EXECUTIVE BOARD**  
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## **Nutrition and HIV/AIDS**

### **Report by the Secretariat**

1. In resolution WHA57.14, the Health Assembly called on Member States, as a matter of priority, to pursue policies and practices that promote, inter alia, integration of nutrition into a comprehensive response to HIV/AIDS. This report concentrates on nutrition for people living with HIV/AIDS; WHO is working with partner agencies and organizations in the United Nations system on the issue of food security for families whose livelihoods have been affected by HIV/AIDS.
2. WHO initiated a collaborative effort to develop approaches based on the latest available scientific evidence with respect to the macronutrient and micronutrient needs of HIV-infected people, the special nutritional needs of HIV-infected pregnant and lactating women and their children, and the nutritional needs of HIV-infected adults and children receiving antiretroviral treatment. The evidence was gathered with the assistance of the WHO Technical Advisory Group on Nutrition and HIV/AIDS<sup>1</sup> and the initial findings were presented and discussed at a technical consultation on nutrient requirements for people living with HIV/AIDS.<sup>2</sup> The main findings of a detailed review of the evidence were submitted to a technical consultation on nutrition and HIV/AIDS in Africa (Durban, South Africa, 10-13 April 2005).
3. Participation in the Durban consultation, a joint effort by WHO with FAO, WFP, UNAIDS, UNHCR, UNICEF, the World Bank, the United States National Institutes of Health and the South African Department of Health, included health officials, nutritionists, scientists, researchers, and representatives of partner nongovernmental organizations (including networks of people living with HIV/AIDS) from 20 Member States in eastern and southern Africa. The objectives were to present the latest findings on the relationship between HIV infection and nutrition and its consequences, to learn from the African community about successes and failures in providing adequate food, nutritional care and antiretroviral therapy, and to formulate practical guidance on how best to incorporate nutrition and food-based interventions into national HIV prevention, care and treatment programmes.
4. Recognizing the gravity of the situation, the participants unanimously adopted a statement (see Annex) that highlighted the main scientific conclusions and made recommendations on actions for immediate implementation at all levels.

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<sup>1</sup> The Technical Advisory Group acts as an international technical advisory body with responsibility for making recommendations to the Director-General on appropriate action in national and international settings.

<sup>2</sup> *Nutrient requirements for people living with HIV/AIDS: Report of a technical consultation (World Health Organization, Geneva, 13-15 May 2003)*. Geneva, World Health Organization, 2003.

5. Incorporation of the recommended actions into a coordinated and comprehensive response to HIV/AIDS would enhance Member States' capacity to improve the nutritional status of HIV-infected adults and children, particularly in sub-Saharan Africa, which is hardest hit by the pandemic. It would also enable governments, United Nations agencies, nongovernmental organizations, health workers and other concerned parties to strengthen and broaden the scope of their efforts to extend provision of antiretroviral therapy and to find innovative ways to ensure that food and nutritional considerations are fully integrated into responses to HIV/AIDS. Moreover, successful advocacy for the allocation of additional resources for integrating nutrition into the essential package of care, treatment and support of people living with HIV/AIDS would help to ensure the attainment of internationally agreed goals and immediate implementation of the recommendations made at the Durban consultation at all levels.

6. The recommended actions will form the basis for WHO's priorities and plan of work in this area. WHO will concentrate on formulating global recommendations; preparing, revising and disseminating operational guidelines and assessment tools; strengthening human resource capacity and skills; and maintaining the focus on the integration of nutrition in the response to the HIV/AIDS pandemic based on evidence and scientific findings. The expected result will be the enhanced capability of Member States' to improve the nutritional status of HIV-infected adults and children, not only in sub-Saharan Africa but also globally.

#### **ACTION BY THE EXECUTIVE BOARD**

7. The Executive Board is invited to note this report.

## ANNEX

**WHO CONSULTATION ON NUTRITION AND HIV/AIDS IN AFRICA****Durban, South Africa, 10-13 April 2005****PARTICIPANTS' STATEMENT**

1. HIV/AIDS is affecting more people in eastern and southern Africa than the fragile health systems of the countries afflicted can treat, demoralizing more children than our educational systems can inspire, creating more orphans than communities can care for, wasting families and threatening food systems. The HIV/AIDS epidemic is increasingly driven by and contributes to factors that also create malnutrition – in particular, poverty, emergencies and inequalities.
2. In urgent response to this situation, we call for the integration of nutrition into the essential package of care, treatment and support for people living with HIV/AIDS and efforts to prevent infection.
3. We, the representatives of 20 countries in eastern and southern Africa and other participants, from organizations in the United Nations system, bilateral agencies, regional groups, nongovernmental organizations, academe and other bodies, *recognize that*
  - (1) far-reaching steps need to be taken to reverse current trends in malnutrition, HIV infection and food insecurity in most countries in the region, in order to achieve the Millennium Development Goals;
  - (2) adequate nutrition cannot cure HIV infection but is essential to maintain a person's immune system, to sustain healthy levels of physical activity, and for optimal quality of life;
  - (3) adequate nutrition is also necessary to ensure optimal benefits from the use of antiretroviral treatment, which is essential to prolong the lives of HIV-infected people and prevent transmission of HIV from mother to child;
  - (4) there is a proliferation in the marketplace of unproven diets and dietary therapies, with exploitation of fears, raising of false hopes and further impoverishment of those infected and affected by HIV and AIDS;
  - (5) exceptional measures are needed to ensure the health and well-being of all children affected and made vulnerable by HIV/AIDS, with young girls especially at risk;
  - (6) knowledge of HIV status is important to inform choices for reproductive health and child feeding.

**Conclusions**

4. After reviewing the scientific evidence and having discussed the programmatic experience on nutrition and HIV/AIDS, we *come to the following conclusions*.

### **Macronutrients**

- HIV-infected adults and children have greater energy needs than uninfected adults and children. Energy needs increase by 10% in asymptomatic HIV-infected adults and children, and, in adults with more advanced disease, by 20% to 30%. For HIV-infected children experiencing weight loss, energy needs are increased by between 50% and 100%.
- There is no evidence to support a need for increased protein intake by people infected by HIV over and above that required in a balanced diet to satisfy energy needs (12% to 15% of total energy intake).
- Loss of appetite and poor dietary intake are important causes of weight loss associated with HIV infection. Effective ways of improving dietary intakes need to be developed and documented.

### **Micronutrients**

5. Micronutrient deficiencies are frequently present in HIV-infected adults and children.
  - Micronutrient intakes at daily recommended levels need to be assured in HIV-infected adults and children through consumption of diversified diets, fortified foods, and micronutrient supplements as needed.
  - WHO's recommendations on vitamin A, zinc, iron, folate and multiple micronutrient supplements remain the same.
  - Micronutrient supplements are not an alternative to comprehensive HIV treatment including therapy with antiretroviral agents.
  - More studies are needed to understand better the relationship between micronutrient supplementation and potential health benefits for people infected with HIV.

### **Pregnancy and lactation**

- Pregnancy and lactation do not hasten the progression of HIV infection to AIDS.
- Optimal nutrition of HIV-infected women during pregnancy and lactation increases weight gain, and improves pregnancy and birth outcomes.
- HIV-infected pregnant women gain less weight and experience more frequent micronutrient deficiencies than uninfected pregnant women.

### **Growth**

- HIV infection impairs the growth of children early in life. Growth faltering is often observed even before the onset of symptomatic HIV infection. Poor growth is associated with increased risk of mortality.
- Viral load, chronic diarrhoea and opportunistic infections impair growth in HIV-infected children. The growth and survival of HIV-infected children are improved by prophylactic use of

cotrimoxazole, antiretroviral therapy, and early prevention and treatment of opportunistic infections.

- Improved dietary intake is essential to enable children to regain lost weight after opportunistic infection.

### **Infant and young child feeding**

- For HIV-uninfected mothers and mothers who do not know their HIV status, exclusive breastfeeding for six months is the ideal practice because of its benefits for improved growth, development and reduced incidence of childhood infections. Safe and appropriate complementary feeding and continued breastfeeding for 24 months and beyond are recommended.
- The risk of transmission of HIV through breast milk is constant throughout the period of breastfeeding and is greatest among women newly infected or with advanced HIV disease.
- Exclusive breastfeeding is less associated with HIV transmission than mixed breastfeeding.
- WHO and UNICEF recommend that HIV-infected mothers should avoid breastfeeding when replacement feeding is acceptable, feasible, affordable, sustainable and safe. These conditions, however, are not easily met for most mothers in the region.
- The safety of infant feeding can be improved with adequate support, but health systems and communities are not providing this support.
- Early cessation of breastfeeding is recommended for HIV-infected mothers and their infants. The age at which to stop breastfeeding depends on the individual circumstances of mothers and their infants. The consequences of early cessation on transmission, mortality, growth and development need to be urgently studied. There is an immediate need to evaluate suitable ways of meeting nutritional needs of infants and young children who are no longer breastfed.

### **Interaction between nutrition and antiretroviral treatment**

- The life-saving benefits of antiretroviral therapy are clearly recognized. To achieve the full benefits of such treatment, adequate dietary intake is essential.
- Dietary and nutritional assessment is an essential part of comprehensive HIV care both before and during antiretroviral treatment.
- Long-term use of antiretroviral agents can be associated with metabolic complications (e.g., cardiovascular disease, diabetes and bone related problems). Although, the value of antiretroviral therapy far outweighs the risks, the metabolic complications need to be adequately managed. The challenge is how best to apply in Africa the extensive clinical experience in managing these types of metabolic disorders in HIV-infected adults and children.

- Interactions between nutritional status and antiretroviral treatment in chronically malnourished populations, severely malnourished children, and pregnant and lactating women need to be investigated.
- The effects of traditional remedies and dietary supplements on the safety and efficacy of antiretroviral agents need to be evaluated.

### **Recommendations for action**

6. Based on the foregoing scientific conclusions, we *urge* all concerned parties to make nutrition an integral part of their response to HIV/AIDS. *We make the following recommendations* for immediate implementation at all levels.

#### **(1) Strengthen political commitment and improve the positioning of nutrition in national policies and programmes**

- Use existing, and develop new, advocacy tools to sensitize decision-makers to the urgency of the problem, the consequences on development targets of neglecting the role of nutrition and not including it within the overall care and support package and the opportunity to improve care.
- Advocate increased resource allocation and support for improved nutrition, in general, and tackling the nutritional needs of HIV-affected and infected populations.
- Prioritize the needs of children affected and made vulnerable by HIV/AIDS.
- Clarify and improve multisectoral collaboration and coordination between the agricultural, health, social services, education and nutrition sectors.

#### **(2) Develop practical tools and guidelines for nutritional assessment for home, community, health facility-based and emergency programmes**

- Validate simple tools to assess diet and use of supplements, including traditional and alternative therapies, nutritional status, and food security so that nutrition support provided within HIV programmes is appropriate to individual needs.
- Develop standard and specific guidelines for nutritional care of individuals, and implementation of programmes at health-facility and community levels.
- Review and update existing guidelines to include considerations of nutrition and HIV (e.g., guidelines on integrated management of adolescent and adult illness, antiretroviral treatment, and nutrition in emergencies).

**(3) Expand existing interventions for improving nutrition in the context of HIV**

- Accelerate the implementation of the Global strategy for infant and young child feeding.
- Renew support for the Baby-friendly Hospital Initiative.
- Accelerate the fortification of staple foods with essential micronutrients.
- Implement WHO protocols for vitamin A, iron, folate, zinc and multiple micronutrient supplementation and management of severe malnutrition.
- Accelerate training on, and use of guidelines and tools for, infant feeding counselling and maternal nutrition in programmes to prevent mother-to-child transmission of HIV.
- Expand access to HIV counselling and testing so that individuals can make informed decisions and receive appropriate advice and support on nutrition, including in emergency settings.

**(4) Conduct systematic operational and clinical research to support evidence-based programming**

- Develop and implement operational and clinical research to identify effective interventions and strategies for improving nutrition of HIV-infected and affected adults and children.
- Document and publish results and ensure access to lessons learned at all levels.
- Encourage scientific journals to give greater opportunity for publication of operational research and records of good practice.

**(5) Strengthen, develop and protect human capacity and skills.**

- Include funding for nutrition capacity development in plans for expanded treatment and care of people living with HIV and those affected by HIV/AIDS.
- Incorporate nutrition into training, including pre-service training, of health, community and home-based care workers, with development of specific skills such as nutritional assessment and counselling, and programme monitoring and evaluation. Such training should not favour particular commercial interests.
- Strengthen the capacity of government and civil society to develop and monitor regulatory systems to prevent commercial marketing of untested diets, remedies, and therapies for HIV-infected adults and children.
- Improve the conditions of service and coverage of health workers, especially dietitians and nutritionists, to deliver nutritional services.
- Identify and use local expertise to improve response to emergency conditions.

**(6) Incorporate nutrition indicators into HIV/AIDS monitoring and evaluation plans**

- Include appropriate indicators for measuring progress towards integrating nutrition into HIV programmes and the impact of nutritional interventions in reporting the results of clinical and community-level surveillance and reporting of progress at national, regional and international levels.

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