Infant and young child nutrition: quadrennial report

Report by the Secretariat

1. Following a summary of the global burden of malnutrition, this document reports on progress in protecting, promoting and supporting appropriate feeding, including implementation of the International Code of Marketing of Breast-milk Substitutes. These activities contribute to achieving the health-related Millennium Development Goals, especially eradication of extreme poverty and hunger, reduction in child mortality and improvement of maternal health. The Global Strategy for Infant and Young Child Feeding provides a comprehensive framework for promoting appropriate feeding and reducing malnutrition, which is responsible, directly or indirectly, for over half of the 10.6 million deaths annually among children under five.1

PROTEIN-ENERGY MALNUTRITION

2. Despite some improvement globally, based on surveys in 139 countries, it is unlikely that the goal of reducing 1990 levels of underweight by 50% will be met by 2015. This stems partly from the deteriorating situation in Africa, where only one subregion (north Africa) is on track, and sub-Saharan and eastern Africa are experiencing increased prevalence of underweight. HIV/AIDS and political and social instability are contributing factors. Both HIV-infected children and orphans or children of parents affected by AIDS are at increased risk of malnutrition. Forecasts for underweight in 2015 might be underestimates if the HIV/AIDS epidemic worsens. Eastern (mainly China) and south-eastern Asia are forecasted to reach the goal, whereas south-central and western Asia are not. By 2015, the relative contribution to the global prevalence of childhood undernutrition is expected to decrease from 80% to 60% for Asia, and to increase from 16% to 38% for Africa.2

MICRONUTRIENT MALNUTRITION

3. Thousands of millions of people worldwide suffer from vitamin A, iron and iodine deficiency, the most susceptible groups being pregnant women and young children of poor socioeconomic status. Global estimates for iodine deficiency in 2004 show that nearly two thousand million people have insufficient iodine intake, although the number of affected countries decreased by half since 1993

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(more than 70% of the world population now consumes iodized salt). Updates of databases on vitamin A deficiency and iron-deficiency anaemia are expected in early 2006.

4. Expert consultations were convened to develop guidelines on indicators of iron and zinc status (respectively, April 2004 and December 2005); strategies for prevention and control of iodine deficiency in pregnant women and young children (January 2005); and for the control of folate and vitamin B12 deficiencies (November 2005). WHO and UNICEF published a joint statement on iron supplementation following a multicountry study to evaluate iron’s impact on childhood mortality. An expert consultation on the efficacy and safety of iron supplementation will be held in June 2006. WHO is coordinating a study in India to determine the impact of zinc supplementation on morbidity in low-birth-weight infants. With a view to improving micronutrient status among populations in emergencies, WHO, UNICEF and WFP issued a joint statement on multiple vitamin and mineral supplements for pregnant and lactating women, and children aged 6 to 59 months.

NUTRITION IN EMERGENCIES AND MANAGEMENT OF SEVERE MALNUTRITION

5. Much disability and death can be averted during emergencies with proper feeding and care; thus WHO has prepared guiding principles for organizing sustained field interventions for feeding and care of infants and young children at all stages of emergency response. The guiding principles complement training modules which prepare emergency-relief staff on appropriate infant feeding. WHO is also drawing up norms and standards for use in emergency nutrition response while contributing to joint assessment and planning activities.

Community-based management of severe malnutrition

6. Participants at a meeting on community-based management of severe malnutrition (Geneva, 2005), organized by WHO, UNICEF and the Standing Committee on Nutrition, concluded that it was possible to manage a large proportion of severely malnourished children at home using ready-to-use therapeutic foods. It may also be possible to treat such children by using a diet that combines home-based, nutrient-rich foods with vitamin and mineral supplements; further research was needed to assess large-scale clinical effectiveness and feasibility of this approach. Combined with facility-based action, community-based management can prevent many child deaths each year.

IMPLEMENTATION OF THE GLOBAL STRATEGY FOR INFANT AND YOUNG CHILD FEEDING

7. All regions have initiated activities to translate the Global Strategy for Infant and Young Child Feeding into action.

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Developing national strategies and action plans

8. In the African Region, the Regional Office organized workshops for French-speaking countries (Burkina Faso, Côte d’Ivoire, Mali, Senegal) in 2004 and Portuguese-speaking countries (Angola, Cape Verde, Guinea Bissau, Mozambique, Sao Tome and Principe) in 2005 in order to prepare national action plans. The workshops have been followed up specifically in 23 countries, including establishment of task forces in Ghana, Kenya, the United Republic of Tanzania and Zimbabwe.

9. In the Region of the Americas, the Organization provided support to the governments of Bolivia and Guyana in convening stakeholder meetings to discuss ways to strengthen inter-programme collaboration on nutrition, the integrated management of childhood illnesses and HIV, and to draw up plans for implementing the Global Strategy. Intercountry planning workshops were organized in Argentina (for Argentina, Paraguay and Uruguay), Guatemala (for Costa Rica, Dominican Republic, El Salvador, Guatemala, Honduras, Nicaragua, Panama) and Martinique (for 22 Caribbean countries). Follow-up visits were made to assess implementation in Honduras, Nicaragua and Panama.

10. In the South-East Asia Region, national strategies on infant and young child feeding have been adopted in Bangladesh, Maldives, Myanmar and Nepal; India completed guidelines, and Indonesia continued drafting its strategy.

11. In the Western Pacific Region, China, Philippines, American Samoa and Tonga completed their plans of action, and Mongolia, Papua New Guinea and Viet Nam started to draft theirs.

12. WHO and UNICEF produced a planning guide to assist national coordinators and working groups in translating the Global Strategy’s aim and objectives into practical policy, strategy and action plans. The Regional Office for the Americas also produced a manual to guide assessment, design, implementation, monitoring and evaluation of interventions to improve infant and young child feeding. WHO and its partners drew up an inventory of materials on infant and young child feeding to facilitate assessment, policy framing, planning, advocacy, capacity building, and monitoring and evaluation of interventions.

Building capacity for implementing the Global Strategy for Infant and Young Child Feeding

13. National capacity in counselling on infant and young child feeding has been built up in all regions. In the European Region, Kazakhstan developed and field-tested a training course for nurses conducting home visits. In the Eastern Mediterranean Region, a regional Arabic adaptation of the WHO/UNICEF infant and young child feeding course was finalized, and participants from a number of Member States were trained in its use.

14. By the end of 2005, over 250 national trainers and over 5000 health workers in Africa alone had been trained in counselling on breastfeeding and HIV and infant feeding.

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15. The course on HIV and infant feeding was introduced in Nicaragua and Peru,\(^1\) and a strategic framework on preventing HIV infections in infants was issued in the European Region. The South-East Asia and Western Pacific regional offices organized an intercountry training course in India on breastfeeding counselling, and HIV and infant-feeding counselling for participants from seven countries.

16. WHO, in collaboration with the Africa Centre for Population Studies and Reproductive Health, is preparing a course on breastfeeding, complementary feeding, and HIV and infant feeding counselling.\(^2\) Master trainers from countries in the African, South-East Asia and Western Pacific regions received specific training in this regard. In Viet Nam, breastfeeding information was integrated into pre-service education in medical schools.

**Improving breastfeeding**

17. To mark the fifteenth anniversary of the Innocenti Declaration on the Protection, Promotion and Support of Breastfeeding, national, regional and international representatives met (Florence, Italy, 21-22 November 2005) to assess progress made in achieving operational targets set in 1990, examine current challenges and move to strengthen the international agenda. Participants renewed a “call for action” in support of environments that enable mothers, families and other caregivers to make informed decisions about optimal feeding.\(^3\)

18. By end 2005, nearly 20,000 maternity facilities in some 150 countries had been awarded baby-friendly status as part of the Baby-friendly Hospital Initiative. Information materials have been revised to reflect up-to-date scientific findings, including HIV.

19. Globally, the exclusive breastfeeding rate among infants less than six months old increased from 34% to 39% between 1990 and 2001. National legislation, consistent messages and strong commitment are associated with increases, as seen in certain African countries.

**Improving complementary feeding**

20. In addition to breast milk, energy-dense complementary foods are needed from six months onwards to meet infants’ changing nutritional requirements. This period is marked by a sharp increase in the incidence of malnutrition in many countries. WHO is developing a tool to help identify balanced complementary diets at lowest cost using locally available food and micronutrient supplements or fortified foods. Field tests were completed in Mozambique and Tajikistan, and the tool will be integrated into existing protocols for developing locally appropriate recommendations. Panama is fortifying with iron a commercially available food that research sponsored by PAHO shows that many infants and young children consume.

21. Preliminary findings of an evaluation in 2004 of the WHO three-day course on complementary feeding counselling conducted in Egypt, showed significant improvements in health workers’ counselling performance, mothers’ recall, and reported feeding practices in the weeks following consultation.

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2 Infant and Young Child Feeding Counselling: An integrated course (in preparation).
22. WHO is providing support for research to determine indicators for assessing complementary feeding practices. Food-intake data from children 6 to 24 months of age from 10 country studies were re-analysed to assess correlations between dietary diversity and nutrient adequacy, and between feeding frequency and energy intakes. Findings will be discussed in a meeting of experts in 2006.

Feeding children in exceptionally difficult circumstances

23. In light of the 60% to 80% of newborn deaths occurring annually among low-birth-weight babies, WHO is reviewing evidence on feeding this group and preparing guidelines for use in first-level facilities.

24. Between 45% and 20% of infants born to HIV-infected women are infected through breastfeeding, in the absence of specific interventions to reduce the risk of transmission. To provide practical guidance on HIV and infant feeding, WHO has prepared a comprehensive set of policy documents, training materials and job aids for national planning and implementation.\(^1\) Twenty countries in the African Region have drawn up action plans to implement the framework for priority actions;\(^2\) five others have revised and disseminated their policies on HIV and infant feeding.

25. WHO continues to promote research into infant-feeding counselling for HIV-infected mothers. Studies in Brazil, Nigeria and South Africa show the importance of health-worker training and supervision for effective counselling of HIV-infected mothers, and identification of appropriate messages, feeding recommendations, and an environment conducive to helping mothers overcome difficulties in adhering to their feeding choice.

26. Further to earlier guidance on complementary feeding, WHO published guidelines on feeding children who are not breastfed.\(^3\)

27. Responding to recommendations of WHO’s technical consultation on nutrition and HIV/AIDS (Durban, South Africa, April 2005), participants issued an urgent call for the full implementation of the Global Strategy and renewed support for the Baby-friendly Hospital Initiative, which was taken into consideration by the Executive Board at its 117th session.\(^4\)

International Code of Marketing of Breast-milk Substitutes


29. In the Region of the Americas, Honduras made substantial progress in implementation, including adoption of a national Code of Marketing of Breast-milk Substitutes.

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1 HIV and infant feeding counselling: a training course.


4 See resolution EB 117.R2.
30. The Western Pacific Region saw an increase in national efforts to ensure effective implementation of the Code, particularly through capacity building and adoption of regulatory measures. The Regional Office, together with UNICEF and the International Code Documentation Centre provided support for training on national implementation of the Code, with participants from several countries in the Region. In 2005 Cambodia adopted its Sub-decree on Marketing of Products for Infant and Young Child Feeding and the Mongolian Parliament adopted a Law on the National Code. The Philippines recently initiated a review and reform of the Implementing Rules and Regulations of its national Code law.

31. To mark the twenty-fifth anniversary of the International Code, Member States have been requested to provide up-to-date information on the status of Code implementation. Findings will be disseminated.

INTERNATIONAL GROWTH STANDARDS FOR INFANTS AND YOUNG CHILDREN

32. WHO is to launch shortly the first set of new child-growth standards on the basis of primary data collected among children in Brazil, Ghana, India, Norway, Oman and the United States of America who were raised in environments that minimized constraints to growth and whose mothers followed healthy practices. The standards apply to children under five years of age and include indicators for weight-for-age, length/height-for-age, weight-for-length/height, and body mass index-for-age.

33. The new standards make breastfeeding the biological norm and establish the breastfed infant as the normative model for growth and development; they replace the current international growth reference used in 100 countries, depict normal human growth under optimal environmental conditions, and are recommended for assessing children everywhere regardless of ethnicity, socioeconomic status and type of feeding. Other standards will follow.

CHILDHOOD OBESITY

34. Worldwide, at least 20 million children under five years of age are overweight. The main determinants of childhood obesity are changing patterns of diet and physical activity, which are influenced by rapid societal and environmental changes. Fetal and infant undernutrition contributes to the increasing risk of obesity and other nutrition-related chronic diseases later in life. Because of the lack of an agreed growth reference for school-age children and adolescents, the extent and magnitude of the problem of overweight and obesity in these age groups is not yet known. WHO, in close collaboration with partner agencies, is initiating development of an international reference for school-age children and adolescents using relevant historical data as part of the follow-up to the WHO Expert Meeting on Childhood Obesity (Kobe, Japan, June 2005).

THE INTERGENERATIONAL CYCLE OF MALNUTRITION

35. Low birth weight, which remains a significant public health problem, has long been accepted as a marker of perinatal risk and precursor of early childhood malnutrition. The Secretariat is summarizing evidence of effective interventions to improve fetal development that encompass action across the lifecycle. Global and regional consultations have been held since 2004 systematically to
review programmatic implications of this evidence. A consolidated report is in preparation, including recommendations, practical guidelines and a research agenda.

**ACTION BY THE HEALTH ASSEMBLY**

36. The Health Assembly is invited to take note of this report.