## D. REGIONAL STRATEGY AND PLAN OF ACTION ON NUTRITION IN HEALTH AND DEVELOPMENT, 2006–2015: MID-TERM REVIEW

### Introduction

1. There is no good health without good nutrition. Many of the most effective policies and programs for promoting good nutrition fall outside the health sector. Yet the burden of poor nutrition, with an array of health outcomes related to both undernutrition and overweight, has a direct impact on the health sector. The dual burden of malnutrition is increasing, including undernutrition (primarily chronic malnutrition among young children and micronutrient deficiencies among children and other age groups), and in contrast, overweight and obesity. These two forms of malnutrition can coexist within the same country or community, and even within a single household. Food and nutrition insecurity, inadequate water and sanitation, poverty, and gaps in access to health services and education are all determinants of malnutrition, which puts at risk the achievement of the Millennium Development Goals and other global and regional health goals.

2. In the Americas in 2007, 77% of total deaths (3.9 million) were due to noncommunicable chronic diseases (NCDs) *(1)*. Of these deaths, 76% (2.95 million) resulted from four diseases: cardiovascular diseases (1.5 million), cancer (1 million), diabetes (232,000), and chronic obstructive pulmonary disease (219,000). Three of these (all but cancer) have poor nutrition as a risk factor. Approximately 44% of deaths from all causes occurred before 70 years of age; these premature deaths are associated with significant social, health, and economic costs to families and countries, and to the health sector in particular.

3. NCDs are a problem in all countries. Like undernutrition, however, the burden of NCDs affects the poor far more than the wealthy, in both relative and absolute terms, globally and in the Region of the Americas. The extent of child malnutrition varies among countries in the Region, depending on their poverty levels, relative income equity, and safety nets. It also varies within countries because of inequities. Micronutrient deficiencies are widespread.

4. Addressing underlying determinants and improving the quality of diet and physical activity throughout the life course is critical to reducing both undernutrition and nutrition-related chronic diseases. This requires specific policies to increase agricultural production of and broad access to quality foods; improved initiatives to promote consumer information, school nutrition, general nutrition, and physical education; and implementation and monitoring of the International Code of Marketing of Breast-milk Substitutes and guidelines on the marketing of foods and beverages to children.

**Background**

5. At the 47th Directing Council in September 2006, Member States approved the Strategy and Plan of Action on Nutrition in Health and Development, 2006–2015 (Document CD47/18) by Resolution CD47.R8. This includes five interdependent strategies: Development and Dissemination of Macropolicies Targeting the Most Critical Nutrition-related Issues; Strengthening Resource Capacity through the Health and Nonhealth Sectors Based on Standards; Information, Knowledge Management and Evaluation Systems; Development and Dissemination of Guidelines, Tools, and Effective Models; and Mobilizing Partnerships, Networks, and a Regional Forum in Food and Nutrition. It also includes one line of action and two sublines: Food and Nutrition in Health and Development; Suboptimal Nutrition and Nutritional Deficiencies; and Nutrition and Physical Activity in Obesity and Nutrition-related Chronic Diseases.

6. The Strategy and Plan of Action contributes to the Health Agenda for the Americas and to PAHO's Strategic Plan 2008–2012. To carry out the five strategies, Member States, with the support of the Pan American Sanitary Bureau, have made progress in developing multisectoral strategies and integrating interventions throughout the life course. This approach has contributed to the prevention of malnutrition in all its forms.

**Progress and Early Results**

7. With respect to "Development and Dissemination of Macropolicies Targeting the Most Critical Nutrition-related Issues," in 2006 few countries had policies related to food and nutrition security and reduction of chronic malnutrition and obesity. As of 2012, nearly every country has a national policy addressing one or more of these issues. Many have also established high-level intersectoral and/or interministerial committees at the national, subregional, and municipal levels. Some are also acting to ensure national food production sufficient to meet population requirements. A key achievement in Central America was the recently approved Regional Agenda for Food and Nutrition Security. In South America, Mercosur is working on a similar agenda. At the 50th Directing Council in September 2010, Member States approved the Strategy and Plan of Action for the Reduction of Chronic Malnutrition (Document CD50/13) by Resolution CD50.R11. This Strategy and Plan of Action recognizes that underlying factors cause malnutrition and proposes interventions to address its determinants, using an intersectoral approach and involving different levels of government. It also promotes national alliances and monitoring and evaluation.

8. With respect to "Strengthening Resource Capacity through the Health and Nonhealth Sectors Based on Standards," PAHO has held regional and national trainings in coordination with partners on the World Health Organization (WHO) Child Growth

Standards and Baby-Friendly Hospital Initiative, as well as on design of food fortification programs and quality assurance involving both the public sector and food producers.

9. In the area of "Information, Knowledge Management and Evaluation Systems," PAHO has promoted the use of nutrition indicators in national health surveillance systems. This has proved challenging and requires additional work. A number of countries have implemented nationally representative nutrition surveys that provide updated information on nutrition indicators. Some countries still lack such surveys, particularly those in the Caribbean. PAHO has used these surveys to develop reports on anemia, iodine deficiency, child growth, and breastfeeding, describing national and regional trends and numbers of persons affected. A cross-organizational technical team in nutrition for health and development has been formed at PAHO to promote coordination of activities across different technical areas.

10. On the "Development and Dissemination of Guidelines, Tools, and Effective Models," PAHO, in coordination with other stakeholders, has developed regional guidelines, translated guidelines from WHO, and supported adaptation of guidelines to national contexts. Examples include updated materials and reactivation of the Baby-Friendly Hospital Initiative, indicators for assessing infant and young child feeding practices, guidelines for vitamin A supplementation, and guidelines for implementing quality control, quality assurance, and regulatory monitoring of staple food fortification. These actions have resulted in updated national policies and norms in Member States, measurement of indicators using global and/or regional standards, and improved nutrition training for health professionals. A key challenge is to ensure broad coverage and high-quality implementation of these norms and guidelines.

11. Regarding "Mobilizing Partnerships, Networks, and a Regional Forum in Food and Nutrition," in July 2008 the Regional Directors of the United Nations (UN) established the Pan American Alliance for Nutrition and Development *(2)*. This interagency initiative, made up of 15 UN agencies, facilitates the coordination of international cooperation efforts and resources to promote effective, evidence-based multisectoral and inter-programmatic interventions to respond to the multiple causes of malnutrition. The agency directors established a Regional Technical Team to develop a conceptual framework and plan of action. The Alliance's conceptual framework has been disseminated throughout the Region through workshops with UN Country Teams in Argentina, Bolivia, El Salvador, Guatemala, Paraguay, and Peru, as well as through a number of political, technical, and academic seminars. A next step is the development of national alliances along the same lines.

12. With respect to the subline of action on "Suboptimal Nutrition and Nutritional Deficiencies," data show that among children in the Region, chronic malnutrition is the most prevalent form of growth failure. However, overweight and obesity is also a growing problem: 7% to 12% of children under 5 years of age are obese, six times the

percentage of children who are currently underweight *(3)*. Although the prevalence of chronic malnutrition is declining, about one-third of children are stunted in Bolivia and Ecuador, and about half in Guatemala. National data mask increasingly wide disparities within countries based on income, rural or urban residence, and ethnicity. Because stunting starts during the prenatal period and is transmitted intergenerationally, its eradication requires health-service and intersectoral approaches, using a life-course framework. In the health sector, PAHO promotes policies and programs to support optimal breastfeeding and complementary feeding, growth assessment, treatment of severe acute malnutrition, micronutrient supplementation, and food fortification, as well as measures to increase access to health services. PAHO also advocates approaches across a range of other sectors, including housing and environment, water and sanitation, education, food security, employment and family income, and social protection, targeted to areas where nutritional deficiencies are most prevalent. Moreover, PAHO has learned from successful experiences in reducing chronic malnutrition in Brazil, Mexico, and Peru and has shared these with other countries. Other examples include Chile's *Crece Contigo* program and conditional cash transfers in several countries.

13. Globally, suboptimal breastfeeding is the third-greatest risk factor for global morbidity and mortality, according to the most recent estimates from the Global Burden of Disease Project.[1] Both breastfeeding and complementary feeding practices, essential for healthy growth and development, are far from universal. In the Region, only 58% of newborns are put to the breast within the first hour of birth, and only 44% of infants less than six months of age benefit from exclusive breastfeeding, dropping to only 25% among those four to five months old *(4)*. About 30% of children do not receive minimum dietary diversity, and only 43% receive a minimum meal frequency. Although most countries have implemented the International Code of Marketing of Breast-milk Substitutes, only five countries have regulations in place for its effective enforcement *(5)*. Certification of hospitals for the Baby-Friendly Hospital Initiative has lagged.

14. Micronutrient deficiencies have a significant impact on human development and economic productivity. In the Region, the prevalence of anemia is 44.5% in young children (22.5 million), 30.9% in pregnant women (3.5 million), and 22.5% in women of reproductive age (31.7 million) *(6)*. Over the past 10 years, only the prevalence of anemia among pregnant women has declined, illustrating the failure of most micronutrient supplementation programs as well as the need to better integrate actions against anemia with Integrated Management of Childhood Illness (IMCI), maternity care, and other programs that deliver health services. Most countries have implemented folic acid supplementation or fortification programs to prevent neural tube defects. Argentina, Brazil, Canada, Chile, Costa Rica, and the United States have nationally representative information showing reduction in neural tube defects as evidence of the effectiveness of

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[1] Presented at PAHO in January 2012 by Christopher Murray, Institute for Health Metrics and Evaluation; publication pending.

these programs. Efforts are being made in Central American countries to implement a neural tube defects surveillance system. Universal salt iodization to prevent iodine deficiency disorders has been adopted, and 90% of the population in the Region has adequate iodine intake. Challenges persist in countries with low quality salt production and in communities with no access to fortified food. It is estimated that vitamin A deficiency is mild to moderate in the Region, although for some countries available information is more than 10 years old. Vitamin A supplementation has been the main strategy for preventing this deficiency; however, only countries with national demographic and health surveys have information on program coverage. Sugar fortification with vitamin A has been successful in Central America. Deficiencies of zinc, vitamin B12, and more recently vitamin D have been reported by nonrepresentative small surveys in Central America. Although most countries of the Region have national policies and plans of actions for micronutrient supplementation or staple food fortification, surveillance systems to guide these policies are weak.

15. With respect to the subline of action on "Nutrition and Physical Activity," overweight and obese children are likely to remain obese into adulthood and to develop NCDs at a younger age than average. For most NCD conditions associated with obesity, the risks depend partly on the age of onset and the duration of obesity. Policies and programs are needed to provide environments conducive to healthy eating and an active life, so that the healthy choice becomes the easy choice. Because children are especially vulnerable to the influence of advertising, they must be protected through effective public health action. To this end, PAHO convened an Expert Consultation on the Marketing of Food and Non-Alcoholic Beverages to Children in the Americas to make recommendations on the subject *(7)*. Coordinated and focused actions with Member States are needed to implement these recommendations and evaluate their impact. Progress has also been made in developing bicycle paths and limiting traffic on main roads on weekends to facilitate recreation. Regional meetings on obesity have been held in Aruba and Mexico and among the presidents of Central America. The Chilean Senate also organized a conference in Valparaíso, supported by PAHO, to discuss improved food supply.

16. During the Sixty-third World Health Assembly in 2010, Resolution WHA63.23 was approved. It mandates WHO to support Member States in expanding their nutritional interventions related to the dual burden of malnutrition, in monitoring and evaluation of these interventions, in strengthening or establishing effective nutrition surveillance systems, and in implementing the WHO Child Growth Standards and Baby-Friendly Hospital Initiative. The resolution also charged WHO with developing an implementation plan for these measures to be presented at the WHA in 2012. To receive input from Member States on the draft implementation strategy, PAHO and the Food and Agriculture Organization convened a regional meeting in 2011, which involved teams from 17 countries.

## Conclusion

17. At the midpoint of the Nutrition Strategy and Plan of Action, Member States have made important advances in addressing the determinants of malnutrition and its effects on health, with the participation of many sectors and stakeholders. In addition, there is an increased awareness and integration of nutrition interventions in primary health care, using a life-course approach. Notable reductions in chronic malnutrition have occurred in Brazil, Mexico, and Peru, and many other countries show some extent of reduction.

18. This mid-term review highlights the many challenges in the Region related to the dual burden of undernutrition and overweight/obesity. While much of the burden of poor nutrition in terms of its myriad health outcomes affects the health sector, many of the solutions to its underlying determinants lie outside the sector. Ministries of health therefore must play a catalyzing role in promoting a multisector and comprehensive approach, ideally led at the highest levels of government. A well-established set of effective interventions, if implemented, could prevent 35% of the mortality from maternal and child undernutrition *(8)*. Ministries of health must take the lead in improving the coverage and quality of these interventions.

19. A key requirement for PAHO's technical cooperation is to identify those actions that are likely to have the greatest impact in reducing morbidity and mortality caused by malnutrition. In addition, knowledge dissemination throughout PAHO's technical areas must be strengthened so that those interventions known to be effective in reducing malnutrition are implemented in the context of primary health care.

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