COMPREHENSIVE IMPLEMENTATION PLAN ON MATERNAL, INFANT AND YOUNG CHILD NUTRITION

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PREFACE

Since the approval of the Comprehensive Implementation Plan on Maternal, Infant and Young Child Nutrition in 2012 food and nutrition policies have received increased political attention.

The global nutrition targets endorsed by the Health Assembly in resolution WHA65.6 have been widely adopted by global initiatives, including the Scaling Up Nutrition (SUN) movement, the Global Nutrition for Growth Compact and several donors' strategies. The targets are also referred to in several documents leading to the post-2015 development agenda.

Through the SUN movement, 50 countries have committed themselves to improving the political environment, aligning multiple actors, advancing policies and legislation and rapidly scaling up effective nutrition actions. In June 2013, government leaders from 19 countries as well as development partners, the private sector, the scientific community and civil society groups undertook to prevent at least 20 million children from being stunted by 2020, in line with the comprehensive implementation plan's global targets for 2025. Fourteen of these 19 governments committed themselves to increasing domestic resources invested in expanding national nutrition plans, namely up to US$ 4 150 million for specific nutrition interventions and an estimated US$ 19 000 million for improved nutrition outcomes from nutrition-sensitive investments between 2013 and 2020.

There is greater understanding on how combined actions in the health, food, water and sanitation, education and social support sectors are contributing to improved nutrition and countries are increasingly focusing on the development of multisectoral plans to improve nutrition. WHO has prepared and updated guidance in several areas, including provision of vitamins and minerals in different age groups, fortification of staple foods, management of acute malnutrition, and dietary goals for preventing obesity and diet-related noncommunicable diseases. United Nations specialized agencies, together with the World Bank and academics indicated that agricultural policies and

programmes can be made nutrition-sensitive if they are designed to increase the availability, affordability, and consumption of diverse, safe, nutritious foods; align with dietary recommendations and ensure environmental sustainability; empower women; and include nutrition promotion messages.

Progress has therefore been documented in all five action areas of this plan:

1. **to create a supportive environment for the implementation of comprehensive food and nutrition policies;**
2. **to include all required effective health interventions with an impact on nutrition in national nutrition plans;**
3. **to stimulate development policies and programmes outside the health sector that recognize and include nutrition;**
4. **to provide sufficient human and financial resources for the implementation of nutrition interventions; and**
5. **to monitor and evaluate the implementation of policies and programmes.**

However, the achievement of the global nutrition targets by the year 2025 is proving a challenge for many countries in all world regions. WHO is increasingly committed to work with governments, UN Agencies and other partners to accelerate progress towards this fundamental health and development goal.

Oleg Chestnov

Assistant Director-General

Noncommunicable Diseases and Mental Health

COMPREHENSIVE IMPLEMENTATION PLAN ON MATERNAL, INFANT AND YOUNG CHILD NUTRITION[1]

RATIONALE

Global nutrition challenges are multifaceted

Adequate provision of nutrients, beginning in early stages of life, is crucial to ensure good physical and mental development and long-term health. Poor availability or access to food of adequate nutritional quality or the exposure to conditions that impair absorption and use of nutrients has led to large sections of the world's population being undernourished, having poor vitamin and mineral status or being overweight and obese, with large differences among population groups. These conditions are often present simultaneously and are interconnected.

In women, both low body mass index and short stature are highly prevalent in low-income countries, leading to poor fetal development, increased risk of complications in pregnancy, and the need for assisted delivery.[2] In some countries in south-central Asia, more than 10% of women aged 15–49 years are shorter than 145 cm. In sub-Saharan Africa, south-central and south-eastern Asia, more than 20% of women have a body mass index less than 18.5 kg/m^2 and this figure is as high as 40% in Bangladesh, Eritrea and India. Conversely, an increased proportion of women start pregnancy with a body mass index greater than 30 kg/m^2, leading to increased risk of complications in pregnancy and delivery as well as heavier birth weight and increased risk of obesity in children.

Iron-deficiency anaemia affects 30% women of reproductive age (468 million), and 42% of pregnant women (56 million). Maternal anaemia is associated with reduced birth weight and increased risk of maternal mortality. Anaemia rates have not improved appreciably over the past two decades.[3]

Every year an estimated 13 million children are born with intrauterine growth restriction[4] and about 20 million with low birth weight.[5] A child born with low birth weight has a greater risk of morbidity and mortality and is also more likely to develop noncommunicable diseases, such as diabetes and hypertension, later in life.

[1] Endorsed by the Sixty-fifth World Health Assembly in resolution WHA65.6.

[2] Black RE et al. Maternal and Child Undernutrition Study Group. Maternal and child undernutrition: global and regional exposures and health consequences. *Lancet*, 2008; 371:243-260. Data are also taken from the Monitoring and Evaluation to Assess and Use Results Demographic and Health Surveys (MEASURE DHS) project (http://www.measuredhs.com/Data/, accessed 27 March 2012).

[3] United Nations System Standing Committee on Nutrition. *Progress in nutrition: Sixth report on the world nutrition situation.* Geneva, United Nations System Standing Committee on Nutrition Secretariat, 2010.

[4] de Onis M, Blössner M, Villar J. Levels and patterns of intrauterine growth retardation in developing countries. *European Journal of Clinical Nutrition*, 1998; 52(Suppl.1):S5-S15.

[5] United Nations Children's Fund and World Health Organization, *Low birthweight: country, regional and global estimates*. New York, United Nations Children's Fund, 2004.

In 2010 about 115 million children worldwide were underweight, 55 million had low weight for their height and 171 million under the age of five years had stunted growth.[6] The proportion of children under the age of five years in developing countries who were underweight is estimated to have declined from 29% to 18% between 1990 and 2010, a rate that is still inadequate to meet the Millennium Development Goal 1, Target 1.C of halving levels of underweight between 1990 and 2015. Sufficient decline took place in Asia and Latin America, but considerable efforts are still needed in Africa. In addition, in 2010, 43 million preschool children in developing and developed countries were overweight or obese.[7] The prevalence of childhood obesity in low- and middle-income countries has been accelerating in the past 10 years; WHO estimates that in 2015 the rate will reach 11%, close to the prevalence in upper-middle-income countries (12%). Obese children are likely to grow into obese adults; have an increased risk of type 2 diabetes, liver disease and sleep-associated breathing disorders; and have diminished chances of social and economic performance in adult life.

Anaemia affects 47.4% (293 million children) of the preschool-age population,[8] and 33.3% (190 million) of the preschool-age population globally is deficient in vitamin A. [9]

Nutritional status is also influenced by several environmental factors. In countries where the prevalence of HIV infection is high, HIV infection has both a direct impact on the nutritional status of women and children who are infected and an indirect effect through alterations in household food security and inappropriate choices of infant-feeding practices in order to prevent mother-to-child transmission of HIV. Poor food security also increases risk-taking behaviour by women that places them at increased risk of becoming infected with HIV. Tobacco use (both smoking and smokeless tobacco) during pregnancy adversely affects fetal health. Direct maternal smoking as well as exposure to second-hand

[6] Underweight and stunting, in: *World health statistics 2010*, Geneva, World Health Organization, 2010.

[7] de Onis M, Bloessner M, Borghi E. Global prevalence and trends of overweight and obesity among preschool children. The American Journal of Clinical Nutrition 2010;92:1257–64.

[8] De Benoist B, McLean E, Egli I, Cogswell M (Eds). *Worldwide prevalence of anaemia 1993–2005: WHO global database on anaemia*. Geneva, World Health Organization, 2008, pp.1–40.

[9] *Global prevalence of vitamin A deficiency in populations at risk 1995–2005: WHO global database on vitamin A deficiency*. Geneva, World Health Organization, 2009.

smoke during pregnancy increases the risk of complications in pregnancy, including low birth weight and preterm birth. More people are smoking in many low- to middle-income countries, in particular young girls and women of reproductive age. Although the proportion of women smoking is low in many countries, women and their offspring still face substantial risks of adverse pregnancy outcomes because of their exposure to second-hand smoke. Use of tobacco transmits tobacco contaminants to the fetus through the placenta and to neonates through breast milk. Expenditure on tobacco also limits the capacity of families to provide better nutrition for pregnant women and children.

Childhood malnutrition is the underlying cause of death in an estimated 35% of all deaths among children under the age of five years. More than two million children die each year as a result of undernutrition before the age of five years and iron-deficiency anaemia is estimated to contribute to a significant number of maternal deaths every year in low- and middle-income countries. Maternal and child undernutrition account for 11% of the global burden of disease.[10]

Malnutrition has a negative impact on cognitive development, school performance and productivity. Stunting and iodine and iron deficiencies, combined with inadequate cognitive stimulation, are leading risk factors contributing to the failure of an estimated 200 million children to attain their full development potential. Each 1% increase in adult height is associated with a 4% increase in agricultural wages[11] and eliminating anaemia would lead to an increase of 5% to 17% in adult productivity. Malnutrition is an impediment to the progress towards achieving Millennium Development Goals:

1 Eradicate extreme poverty and hunger

2 Achieve universal primary education

3 Promote gender equality and empower women

4 Reduce child mortality

5 Improve maternal health

6 Combat HIV/AIDS, malaria and other diseases

[10] Black RE et al. Maternal and Child Undernutrition Study Group. Maternal and child undernutrition: global and regional exposures and health consequences. *Lancet*. 2008; 371:243-260.

[11] Haddad L, Bouis HE. *The impact of nutritional status on agricultural productivity: wage evidence from the Philippines*. Warwick (United Kingdom of Great Britain and Northern Ireland), Development Economics Research Centre. Papers, No. 97, 1989.

Effective nutrition actions exist but are not implemented on a sufficiently large scale

A review and policy analysis of Member States in 2009–2010[12] indicated that most countries have a range of policies and programmes on nutrition. However, such policies are often inadequate in face of the complexity of the challenges of maternal, infant and young child nutrition and do not produce the expected impact.

Even when nutrition policies exist, they have not always been officially adopted, often do not articulate operational plans and programmes of work with clear goals and targets, timelines and deliverables; they do not specify roles and responsibilities for those involved, or identify workforce and capacity needs; and they do not include process and outcome evaluation.

The policy review indicated that correcting maternal undernutrition was not a priority in countries with a high burden of maternal mortality. Few of the 36 countries with the greatest burden of undernutrition implement on a national scale the full set of effective interventions to prevent child underweight and maternal undernutrition and to foster early child development.

Interventions that can be managed directly by the health sector lack detailed implementation guidance and are only partially implemented where health systems are weak. Many countries have adopted integrated strategies for maternal, newborn and child health that incorporate nutrition interventions, but the actual delivery of nutrition support in health services is often inadequate and few indicators are available to measure the coverage.

National development strategies do not give due consideration to nutrition. National food and nutrition policies often focus on information and informed-choice models and give little attention to structural, fiscal and regulatory actions aimed at changing unfavourable food environments.

Programme implementation is not well coordinated among different actors. In all regions most coordination and administration of policies occurred within health ministries, with variable input from ministries of education, agriculture, food and welfare. Policy and programme implementation often depends on external funding and is not sustainable. Monitoring of activities is either not regularly done or is poorly done.

The implementation of the International Code of Marketing of Breast-milk Substitutes and subsequent related Health Assembly resolutions is not consistent among countries. Statutory regulations have been put in place in 103 Member States and have been drafted in 9; 37 Member States rely on voluntary compliance by infant formula manufacturers, and 25 Member States have not taken action to enforce the Code; information is missing for 20 Member States.[13]

[12] A review of food and nutrition policies. Geneva, World Health Organization, 2012.

[13] Information from UNICEF; these countries also include all Member States that reported on implementation of the Code, as required its Articles 11.6 and 11.7. Questionnaires were sent to Member States in 2007 and 2009 and the results were summarized in documents A61/17 Add.1, section F, and A63/9.

In most of those 103 Member States, the legislation makes provisions for the prohibition of promotion of designated products to the general public and health workers and in health-care facilities, and sets labelling requirements. Fewer Member States have provisions on contamination warnings, and bans on nutrition and health claims.

Less than 50% of countries with legal measures also have legal provisions on monitoring implementation of the Code. Only 37 of those countries have established functioning monitoring and/or enforcement mechanisms, and limited information on the composition, mandate and functions of such mechanisms is available.

Regional offices continue to update the information on implementation of the Code. A recent PAHO review on implementation over the period 1981–2011[14] indicated that 16 countries have legal measures and six of them regulate the implementation of the relevant law. In a review in 2007, UNICEF found that, of 24 West and Central African countries,[15] half had comprehensive legal measures in place.

OBJECTIVE, TARGETS AND TIME FRAME

The plan aims to alleviate the double burden of malnutrition in children, starting from the earliest stages of development. Substantial benefits can be obtained by concentrating efforts from conception through the first two years of life, but at the same time a life-course approach needs to be considered so that good nutritional status can be maintained.

Progress can be made in the short term, and most nutrition challenges can be resolved within the current generation. For example, currently available nutrition interventions should be able to avert at least one third of the cases of stunting in the short term.[16] However, full elimination of some conditions may require a longer time frame. Commitment to a decade of investment to expand nutrition interventions should be made, with the aim of averting one million child deaths per year. Taking into account the need to align the implementation of the plan to other development frameworks that also consider nutrition, it is proposed that this plan has a 13-year time frame (2012–2025). Reporting will be done biennially until 2022 and the last report will be done in 2025.

Global targets are important to identify priority areas and to catalyse global change. Global targets may inspire choices of priorities and ambitions established at country level. They are not meant to dictate the choices of individual countries and regions. Global targets may be used to measure achievements and to develop accountability frameworks. Targets are needed for nutrition conditions that are responsible for a large burden of nutrition-related morbidity and mortality from conception through the first two years of life: stunting, maternal anaemia

[14] Sokol E, Aguayo V, Clark D. *Protecting breastfeeding in West and Central Africa: 25 years implementing the International Code of Marketing of Breast-milk Substitutes*. Dakar, UNICEF Regional Office for West and Central Africa, 2007.

[15] 30 años del Código en América Latina: Un recorrido sobre diversas experiencias de aplicación del Código Internacional de Comercialización de Sucedáneos de la Leche Materna en la Región entre 1981 y 2011. Washington DC, PAHO, 2011.

[16] Bhutta ZA et al. for the Maternal and Child Undernutrition Study Group. What works? Interventions for maternal and child undernutrition and survival. Lancet, 2008, 371:417-440.

and low birth weight.[17] Child underweight – of which stunting represents the largest fraction – is the largest cause of deaths and disability-adjusted life years in children under the age of five years, and iron deficiency contributes to maternal mortality in low- and middle-income countries. Such targets would complement and underpin Target 1.C of Millennium Development Goal 1 in relation to reducing the prevalence of underweight children. Under that Goal, a fourth target on childhood overweight is warranted, given the rapid increase observed globally in the prevalence of that condition. The proposed targets are based on country experiences and the existence of effective interventions.

GLOBAL TARGET 1: STUNTING

By 2025, a 40% reduction of the global number of children under five who are stunted. This target implies a relative reduction of 40% of the number of children stunted by the year 2025, compared to the baseline of 2010. This would translate into a 3.9% relative reduction per year between 2012 and 2025[18] and implies reducing the number of stunted children from the 171 million in 2010 to approximately 100 million, i.e. approximately 25 million less than what this number would be if current trends are not changed.[19] An analysis of 110 countries for which stunting prevalence is available on at least two occasions in the 1995–2010 period[20] reveals that global stunting is dropping at the rate of 1.8% per year (2.6% in countries with prevalence higher than 30%). In this period 20% of the countries have reduced stunting at a rate of 3.9 % or higher.

GLOBAL TARGET 2: ANAEMIA

By 2025, a 50% reduction of anaemia in women of reproductive age. This target implies a relative reduction of 50% of the number of non-pregnant women of reproductive age (15–49 years) affected by anaemia by the year 2025, compared to a baseline set in the period 1993–2005 and used as a reference starting point. This would translate into a 5.3% relative reduction per year between 2012 and 2025 and implies reducing the number of anaemic non-pregnant women to approximately 230 million. Several countries have demonstrated a reduction in anaemia prevalence in non-pregnant women, as indicated by repeated national surveys reported in the Sixth report on the world nutrition situation of the United Nations Standing Committee on Nutrition:[21] China from 50% to 19.9% in 21 years (1981–2002); Nepal from 65% to 34% in 8 years (1998–2006); Sri Lanka from 59.8% to 31.9% in 13 years (1988–2001); Cambodia from 56.2% to 44.4% in 6 years (2000–2006); Viet Nam from 40% to 24.3% in 14 years (1987–2001); and Guatemala from 35% to 20.2% in 7 years (1995–2002). These estimates point to a 4% to 8% relative reduction per year.

[17] The development of global targets has been requested by Member States during regional consultation. Draft targets have been discussed at the regional consultations in the Region of the Americas and the Eastern Mediterranean Region but broader discussion with Member States is required at the Executive Board and through electronic consultation.

[18] $r = \ln(P1/P2)/t$.

[19] de Onis M, Bloessner M, Borghi E. Prevalence and trends of stunting among pre-school children, 1990–2020. *Public Health Nutrition*, 2012, 15:142–148.

[20] Obtained from 430 data points.

[21] United Nations Standing Committee on Nutrition. Sixth report on the world nutrition situation. Geneva, 2010.

GLOBAL TARGET 3: LOW BIRTH WEIGHT

By 2025, a 30% reduction of low birth weight. The target implies a relative reduction of 30% of the number of infants born with a weight lower than 2500 grams by the year 2025, compared to a baseline set in 2006–2010 and used as a reference starting point. This would translate into a 3.9% relative reduction per year between 2012 and 2025. In Bangladesh and India, where around half the world's children with low birth weight are born, the prevalence of low birth weight decreased, respectively from 30.0% to 21.6% (between 1998 and 2006) and from 30.4% to 28.0% (between 1999 and 2005). Reduction in the prevalence of low birth weight has been observed in El Salvador (from 13% to 7% between 1998 and 2003), South Africa (15.1% to 9.9% from 1998 to 2003), and the United Republic of Tanzania (from 13.0% to 9.5% between 1999 and 2005). In these examples, the recorded reductions are in the order of 1% to 12% per year. The higher reduction rates have been observed in countries where a large proportion of the low birth weight is accounted for by intrauterine growth restriction, which is more amenable to reduction than pre-term birth.

GLOBAL TARGET 4: OVERWEIGHT

By 2025, no increase in childhood overweight. The target implies that the global prevalence of 6.7% (95% confidence interval (CI) 5.6–7.7) estimated for 2010 should not rise to 10.8% (in 2025) as per current trends[22] and that the number of overweight children under five years should not increase from 43 million to approximately 70 million as it could be forecast. The rates of increase are variable in different parts of the world, with more rapid increases in countries that are rapidly expanding their food systems, such as in North Africa. In higher income countries national and regional level information indicate that higher socioeconomic groups have a lower increase in childhood obesity. Lifestyle and environmental interventions used in such circumstances can be used as an example of good practice. In low- and middle-income countries little programmatic experience exists. Programmes aimed at curbing childhood obesity have mainly targeted school age children.[23] It would also be important to prevent an increase in childhood overweight in countries that are addressing the reduction of stunting.

[22] de Onis M, Bloessner M, Borghi E. Global prevalence and trends of overweight and obesity among preschool children. *American Journal of Clinical Nutrition*, 2010, 92:1257–1264.

[23] Population-based prevention strategies for childhood obesity: report of a WHO forum and technical meeting, Geneva, 15–17 December 2009.

GLOBAL TARGET 5: BREASTFEEDING

By 2025, increase the rate of exclusive breastfeeding in the first six months up to at least 50%. This target implies that the current global average, estimated to be 37% for the period 2006–2010, should increase to 50% by 2025. This would involve a 2.3% relative increase per year and would lead to approximately 10 million more children being exclusively breastfed until six months of age. Globally, exclusive breastfeeding rates increased from 14% in 1985 to 38% in 1995, but decreased subsequently in most regions. However, rapid and substantial increases in exclusive breastfeeding rates, often exceeding the proposed global target, have been achieved in individual countries in all regions, such as Cambodia (from 12% to 60% between 2000 and 2005), Mali (from 8% to 38% between 1996 and 2006) and Peru (from 33% to 64% between 1992 and 2007).

GLOBAL TARGET 6: WASTING

By 2025, reduce and maintain childhood wasting to less than 5%. This target implies that the global prevalence of childhood wasting of 8.6% estimated for 2010 should be reduced to less than 5% by 2025 and maintained below such levels.[24] In the period 2005–2010, 53 countries reported childhood wasting rates above 5% at least once. Wasting reduction requires the implementation of preventive interventions such as improved access to high-quality foods and to health care; improved nutrition and health knowledge and practices; promotion of exclusive breastfeeding for the first six months and promotion of improved complementary feeding practices for all children aged 6–24 months; and improved water and sanitation systems and hygiene practices to protect children against communicable diseases. Large numbers of children with severe wasting can be treated in their communities without being admitted to a health facility or a therapeutic feeding centre.[25] For moderate acute malnutrition, treatment should be based on optimal use of locally available food, complemented when necessary by specially formulated supplementary foods.

[24] WHO global and regional trend estimates for child malnutrition.

[25] Community-based management of severe acute malnutrition. A Joint Statement by the World Health Organization, the World Food Programme, the United Nations System Standing Committee on Nutrition and the United Nations Children's Fund. WHO, Geneva, 2007.

ACTIONS

This action plan illustrates a series of priority actions that should be jointly implemented by Member States and international partners. Specific regional and country adaptation will be needed, led by the relevant national and regional institutions.

ACTION 1

To create a supportive environment for the implementation of comprehensive food and nutrition policies

Progress towards nutrition goals requires high-level policy commitment and broad societal support. Existing food and nutrition policies need to be reviewed so that they comprehensively meet all main nutrition challenges and deal with the distribution of those problems within society. A further aim of such review is to ensure that nutrition is placed centrally in other sectoral policies and in overall development policy. Crucial factors for the successful implementation of these policies are: (a) official adoption by relevant governmental bodies; (b) the establishment of an intersectoral governance mechanism; (c) the engagement of development partners; and (d) the involvement of local communities. The private sector may also contribute to a better food supply and to increased employment and therefore income. Adequate safeguards to prevent potential conflicts of interest should be put in place.

Proposed activities for Member States

(a) revise nutrition policies so that they comprehensively address the double burden of malnutrition with a human rights-based approach and an official endorsement of parliament or government;

(b) include nutrition in the country's overall development policy, Poverty Reduction Strategy Papers and relevant sectoral strategies;

(c) establish effective intersectoral governance mechanisms for implementation of nutrition policies at national and local levels that contribute towards policy integration across sectors;

(d) engage local governments and communities in the design of plans to expand nutrition actions and ensure their integration in existing community programmes;

(e) establish a dialogue with relevant national and international parties and form alliances and partnerships to expand nutrition actions with the establishment of adequate mechanisms to safeguard against potential conflicts of interest.

Proposed activities for the Secretariat

(a) provide support to Member States, on request, in strengthening national nutrition policies and strategies, and nutrition components of other sectoral policies including national development policies and Poverty Reduction Strategy Papers;

(b) improve access to normative and policy guidelines, knowledge products, tools and expert networks.

Proposed activities for international partners

(a) implement global advocacy initiatives that increase public awareness of the need to expand actions on nutrition;

(b) strengthen international cooperation on nutrition in order to harmonize standards, policies and actions through adequate mechanisms and intergovernmental bodies, such as the World Health Assembly, the Committee on World Food Security and the United Nations Economic and Social Council;

(c) engage in international coordination mechanisms or partnerships, including the Scaling Up Nutrition movement and the United Nations System Standing Committee on Nutrition.

ACTION 2

To include all required effective health interventions with an impact on nutrition in national nutrition plans

Many diverse interventions aimed at changing behaviours, providing nutritional support and reducing the exposure to several environmental risk factors have been shown to be effective and should be considered for implementation at national scale. Effective direct nutrition interventions and health interventions that have an impact on nutrition and that can be delivered by the health system are summarized in a background paper to this plan[26] and reported in the WHO e-Library of Evidence for Nutrition Actions. The lists include interventions that need to be considered either for selected population groups or in special circumstances, including emergencies. WHO's guideline process ensures that evidence is continuously updated and that gaps in research are identified. Such interventions are intended as options that could be implemented on the basis of country needs.

[26] *Essential nutrition actions. Improving maternal-newborn-infant and young child health and nutrition.* Geneva, World Health Organization, 2012.

The greatest benefits result from improving nutrition in the early stages of life. However, a life-course approach to improving nutrition is also needed, with activities targeting older children and adolescents besides infants and young children, in order to ensure the best possible environment for mothers before conception so as to reduce the incidence of low birth weight and to break the intergenerational cycle of malnutrition. Management of childhood overweight would also require action throughout the school years.[27]

Interventions should be integrated into existing health-care systems to the extent possible. They should be linked to existing programmes and delivered as packages, in order to improve cost efficiency. Implementation of WHO's approaches and interventions – Integrated Management of Childhood Illness, Integrated Management of Adolescent and Adult Illness and Integrated Management of Pregnancy and Childbirth – will be essential. Furthermore, strengthening health systems forms a central element of a successful nutrition strategy.

The design of packages of intervention can be based on country needs and the level of investment. Community-based programmes that integrate different direct nutrition interventions in primary care, with systems to ensure universal access, should be prioritized as being cost-effective. A group of organizations in the United Nations system has jointly produced the United Nations OneHealth Costing Tool – software that can easily be adapted to different country contexts.

Proposed activities for Member States

(a) include all proven nutrition interventions relevant for the country in maternal, child and adolescent health services and ensure universal access;

(b) reflect the global strategy on infant and young child nutrition, the global strategy on diet and physical activity and the WHO nutrition guidelines in national policies;

(c) strengthen health systems, promote universal coverage and principles of primary health care;

(d) develop or where necessary strengthen legislative, regulatory and/or other effective measures to control the marketing of breast-milk substitutes in order to ensure implementation of the International Code of Marketing of Breast-milk Substitutes and relevant resolutions adopted by the Health Assembly;

(e) engage in vigorous campaigns to promote breastfeeding at the local level.

[27] *Population-based prevention strategies for childhood obesity: report of a WHO forum and technical meeting, Geneva, 15–17 December 2009*. Geneva, World Health Organization, 2010.

Proposed activities for the Secretariat

(a) review, update and expand WHO's guidance on and tools for effective nutrition actions, highlight good practice of delivery mechanisms and disseminate the information;

(b) apply cost–effectiveness analysis to health interventions with an impact on nutrition;

(c) provide support to Member States, on request, in implementing policies and programmes aimed at improving nutritional outcomes;

(d) provide support to Member States, on request, in their efforts to develop or where necessary strengthen and monitor legislative, regulatory and other effective measures to control marketing of breast-milk substitutes;

(e) convene a meeting with academic partners to develop a prioritized research agenda.

Proposed activities for international partners

(a) align plans for development assistance to nutrition actions recognized as effective;

(b) support the nutrition components of health strategies for maternal and child health, such as the Integrated Maternal Newborn and Child Health Strategy.

ACTION 3

To stimulate development policies and programmes outside the health sector that recognize and include nutrition

Sectoral development strategies that are sensitive to issues of nutrition are needed in order to reduce the double burden of undernutrition and overweight; these should aim to promote the demand for and supply of healthier food and to eliminate constraints to its access and to use of healthier food. Many sectors should be engaged, but mainly agriculture, food processing, trade, social protection, education, labour and public information. Cross-cutting issues such as gender equality, quality of governance and institutions, and peace and security should also be considered. These matters could be considered in the development and implementation of a framework akin to the WHO Framework Convention on Tobacco Control, which has provided substantial impetus to the control of tobacco use.

The Committee on World Food Security is preparing a global strategic framework on food security and nutrition. In the meantime, a series of general principles can be derived from existing policy frameworks, country experience and analysis of the evidence. For example, chronic malnutrition has been successfully reduced in some countries in South-East Asia and Latin America thanks to the simultaneous implementation of policies and programmes aimed at improving food security, reducing poverty and social inequalities, and enhancing maternal education.

For food security, increased access to foods of good nutritional quality[28] should be ensured in all local markets at an affordable price all year round, particularly through support to smallholder agriculture and women's involvement but with consideration being given to the potential negative impact of labour-displacing mechanization and cash-crop production and of pressure on women's time. In food manufacture, the nutrient profile, including better micronutrient content and reduced content of salt, sugar and saturated and trans-fats, needs to be improved. In the area of education, better women's education and improvements in water and sanitation are associated with better child nutrition.

Employment policies are crucial to household food security, but labour policies should also ensure adequate maternity protection and that employees could work in a better environment, including protection from second-hand smoke, and access to healthy food. An adequate environment should be created in the workplace for breastfeeding mothers. Social protection is needed to redress inequalities and must reach the most vulnerable. Cash transfers to the poor are used to guarantee food needs. Conditional cash transfers, linking the receipt of cash to bringing children to health centres and school, can have a positive impact on children's nutritional status, including increase in height and birth weight.

Trade measures, taxes and subsidies are an important means of guaranteeing access and enabling healthy dietary choices. They can be powerful tools when associated with adequate information for consumers through nutrition labelling and responsible food marketing, and with social marketing and promotion of healthy diets and healthy lifestyles.

Examples of policy measures engaging different relevant sectors that may be considered include: investment in small-scale agriculture, the promotion of fruit and vegetable production and of micronutrient-rich crop varieties (agriculture); the promotion of micronutrient fortification of foods and of reduced content of salt, sugars, saturated and trans-fatty acids in foods (food production); improvements in water and sanitation (infrastructure); investments in women's

[28] Food with high nutrient density and low concentrations of nutrients associated with increased risk of noncommunicable diseases.

primary and secondary education and school nutrition policies (education); maternity protection in the workplace and healthy workplaces (labour); cash transfers and food aid (social protection); healthy built environments (urban planning); regulation of advertising food and beverages to children, food-labelling schemes, food-price regulatory measures, implementation of the International Code of Marketing of Breast-milk substitutes (trade); use of excise taxes on tobacco and alcohol to finance expansion of nutrition programmes (finance); mass media campaigns and social marketing for breastfeeding promotion, and healthy diet and physical activity (information and social mobilization).

Proposed activities for Member States

(a) review sectoral policies in agriculture, social protection, education, labour and trade to determine their impact on nutrition and include nutrition indicators in their evaluation frameworks;

(b) establish a dialogue between health and other government sectors in order to consider policy measures that could improve the nutritional status of the population and to address potential conflict between current sectoral policies and health policies aimed at improving nutrition;

(c) implement the recommendations on the marketing of food and non-alcoholic beverages to children (resolution WHA63.14).

Proposed activities for the Secretariat

(a) develop methodological guidelines on the analysis of the health and nutrition impact of sectoral policies, including that on different socioeconomic and other vulnerable groups (e.g. indigenous peoples);

(b) identify and disseminate examples of good practice of sectoral policy measures benefiting nutrition.

Proposed activities for international partners

(a) engage in consultations in order to analyse the health and nutrition implications of existing policies involving trade, agriculture, labour, education, and social protection, with the aim of identifying and describing policy options to improve nutritional outcomes;

(b) analyse evidence of effectiveness of interventions aimed at improving food security, social welfare and education in low-income countries.

ACTION 4

To provide sufficient human and financial resources for the implementation of nutrition interventions

Technical and managerial capabilities are needed for implementation of nutrition programmes at full scale and for the design and implementation of multisectoral policies. Capacity development should be an integral part of plans to extend nutrition interventions. The availability of human resources limits the expansion of nutrition actions, and the proportion of primary care workers to the population is a major determinant of programme effectiveness. Capacity building in nutrition is required in both the health sector at all levels and other sectors.

More financial resources are needed to increase the coverage of nutrition interventions. Currently, nutrition programmes receive less than 1% of overall development assistance. The World Bank has calculated that US$ 10 500 million would be needed each year to implement on a national scale top-priority nutrition interventions in the countries with the highest burden of maternal and child undernutrition.[29] Furthermore, predictable resources are essential to sustain an increased level of programme delivery.

Joint efforts are required of both governments and donors. Increased resources may come from innovative financing mechanisms, such as the ones discussed in the context of maternal and child health.

Governments need to establish a budget line for nutrition programmes and identify financing targets for nutrition programmes. Excise taxes (for example, on tobacco and alcohol) may be used to establish national funds to expand nutrition interventions.

At the international level, mechanisms considered for maternal and child health promotion include an international financing facility, advance market commitments to fund research and development, a "De-Tax" to earmark a share of value-added taxes on goods and services for development, and voluntary solidarity contributions through electronic airline ticket sales or mobile phone contracts. Results-based funding as an incentive to achieve targets has also been considered by donors.

From the expense side, greater efficiency needs to be sought in funding programmes, including better alignment of donors' investments with national priorities, and measures to reduce the cost of micronutrient supplements and ready-to-use therapeutic food, also by reducing patenting fees.

[29] Horton S, et al. Scaling up nutrition. *What will it cost?* Washington, DC, The World Bank, 2010.

Financial monitoring and transparency in the use of resources will be needed for better accountability and increased efficiency.

Proposed activities for Member States

(a) identify and map capacity needs, and include capacity-development in plans to expand nutrition actions;

(b) implement a comprehensive approach to capacity building, including workforce development as well as leadership development, academic institutional strengthening, organizational development and partnerships;

(c) cost the expansion plan and quantify the expected benefits, including the proportion needed for capacity development and strengthening the delivery of services;

(d) provide support to local communities for the implementation of community-level nutrition actions;

(e) establish a budget line and national financial targets for nutrition;

(f) channel funds obtained from excise taxes to nutrition interventions.

Proposed activities for the Secretariat

(a) support workforce development, leadership, technical and managerial capacities in nutrition in Member States through workshops, distance learning and communities of practice, and provision of training materials;

(b) make available refined tools for capacity building, and support the capacity-building efforts of Member States;

(c) provide costing tools for nutrition interventions.

Proposed activities for international partners

(a) follow the principles of the Paris Declaration on Aid Effectiveness and the Accra Agenda for Action, and align donor support at country level;

(b) set international competency standards, specific to the development of the public health nutrition workforce, that recognize different tiers in the workforce (frontline workers, managers and specialists) and different contexts for policy (i.e. capacities for intersectoral action and practice (i.e. the double burden of malnutrition), and support revisions of curricula for pre-service and in-service training of all levels of health workers;

(c) establish academic alliances aimed at providing institutional support to capacity development in Member States;

(d) explore innovative financing tools for funding the expansion of nutrition programmes.

ACTION 5

To monitor and evaluate the implementation of policies and programmes

A well-defined monitoring framework is needed to assess progress made towards the objectives of the comprehensive implementation plan. The framework has to provide accountability for the actions implemented, resources and results and include indicators for input (policy and legislative frameworks and human resources), output and outcome (nutrition programme implementation and food security) and impact (nutritional status and mortality).

A proposed set of indicators is provided in the background document developed by WHO in preparation of this plan.[30] Indicators need to be adapted to the country context and priorities, but will be retained for assessment purposes at the global level. Additional indicators should be considered for monitoring progress in intersectoral action.

Surveillance systems should be established to ensure regular flow of information to policy-makers. Reporting time should be in line with national priorities and the requirements of the governing bodies.[31]

Proposed activities for Member States

(a) develop or strengthen surveillance systems for the collection of information on selected input, output/outcome and impact indicators;

(b) implement the WHO child growth standards to monitor individual growth patterns and population levels of stunting, wasting and overweight;

(c) ensure that nutrition indicators are adequately reported in the annual review process recommended by the Commission on Information and Accountability for Women's and Children's Health in countries with lowest income and highest burden of maternal and child deaths and that social differentials are adequately highlighted.

[30] *Indicators to monitor the implementation and achievements of initiatives to scale up nutrition actions*. Geneva, World Health Organization, 2012.

[31] Reporting implementation of the plan could be combined with the biennial reporting to the Health Assembly called for in Article 11.7 of the International Code of Marketing of Breast-milk Substitutes, adopted by the Health Assembly in resolution WHA34.22.

Proposed activities for the Secretariat

(a) provide methodological support for the collection of selected input, output/outcome and impact indicators, including protocols and design of surveillance systems;

(b) establish a database of selected input, output/outcome and impact indicators;

(c) report on global progress in developing, strengthening and implementing national nutrition plans, policies and programmes;

(d) support Member States in implementing the WHO child growth standards.

Proposed activities for international partners

(a) adopt the proposed framework of indicators as a tool to monitor the implementation of development activities;

(b) support the collection and exchange of information between organizations, with the aim of ensuring global coverage of the databases of input, output/outcome and impact indicators.

RESOLUTION

WHA65.6 Comprehensive implementation plan on maternal, infant and young child nutrition

The Sixty-fifth World Health Assembly,

Having considered the report on maternal, infant and young child nutrition: draft comprehensive implementation plan,[32]

1 ENDORSES

the comprehensive implementation plan on maternal, infant and young child nutrition;

2 URGES

Member States,[33] to put into practice, as appropriate, the comprehensive implementation plan on maternal, infant and young child nutrition, including:

(1) developing or, where necessary, strengthening nutrition policies so that they comprehensively address the double burden of malnutrition and include nutrition actions in overall country health and development policy, and establishing effective intersectoral governance mechanisms in order to expand the implementation of nutrition actions with particular emphasis on the framework of the global strategy on infant and young child feeding;

(2) developing or, where necessary, strengthening legislative, regulatory and/or other effective measures to control the marketing of breast-milk substitutes;

(3) establishing a dialogue with relevant national and international parties and forming alliances and partnerships to expand nutrition actions with the establishment of adequate mechanisms to safeguard against potential conflicts of interest;

(4) implementing a comprehensive approach to capacity building, including workforce development;

[32] Document A65/11.

[33] And, where applicable, regional economic integration organizations.

3 REQUESTS the Director-General

(1) to provide clarification and guidance on the inappropriate promotion of foods for infants and young children cited in resolution WHA63.23, taking into consideration the ongoing work of the Codex Alimentarius Commission;

(2) to support Member States in the monitoring and evaluation of policies and programmes, including those of the global strategy for infant and young child feeding, with the latest evidence on nutrition;

(3) to develop risk assessment, disclosure and management tools to safeguard against possible conflicts of interest in policy development and implementation of nutrition programmes consistent with WHO's overall policy and practice;

(4) to report, through the Executive Board, to the Sixty-seventh World Health Assembly on progress in the implementation of the comprehensive implementation plan, together with the report on implementation of the International Code of Marketing of Breast-milk Substitutes and related Health Assembly resolutions.

Adequate nutrition, beginning in early stages of life, is crucial to ensure good physical and mental development and long-term health.

This action plan illustrates a series of priority actions that should be jointly implemented by Member States and international partners to achieve, by the year 2025, six global nutrition targets:

- 40% reduction of the global number of children under five who are stunted
- 50% reduction of anaemia in women of reproductive age
- 30% reduction of low birth weight
- no increase in childhood overweight
- increase the rate of exclusive breastfeeding in the first six months up to at least 50%
- reduce and maintain childhood wasting to less than 5%

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