Outline of a comprehensive implementation plan on infant and young child nutrition as a critical component of a global multisectoral nutrition framework

1. The comprehensive implementation plan comprises four main sections: challenges; implementation of policies and programmes to reduce the double burden of malnutrition; objectives, targets and time frame; and actions. The plan provides details about high-priority interventions, sectoral policies and indicators.

CHALLENGES

2. This section of the comprehensive implementation plan will indicate the scope of nutritional issues that governments and development partners will have to tackle. A potential list of topics includes the following:

- child undernutrition (about 115 million children worldwide are underweight and 186 million children under five years of age are stunted\(^1\))
- low birth weight (every year an estimated 13 million children are born with restricted intrauterine growth or prematurely\(^2\))

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micronutrient deficiencies (anaemia affects 47.4% of the preschool-age population\textsuperscript{1} and 33.3% of the preschool-age population globally is vitamin A deficient\textsuperscript{2})

- child overweight (globally the number of overweight and obese\textsuperscript{3} preschool children in 2010 is estimated at 43 million)

- maternal undernutrition (maternal low body mass index and maternal 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)

- maternal anaemia (globally, anaemia affects 42% of pregnant women)

- maternal overweight (an increased proportion of women enter pregnancy with a body mass index $>30$ kg/m\textsuperscript{2}, leading to increased risk of complications in pregnancy and delivery as well as heavier birth weight and increased risk of obesity in children)

- inequities (large differences exist among population groups in access to food of good nutritional quality, education and health care, among others).

3. A discussion will follow on the health and development implications of the double burden of malnutrition, including mortality (undernutrition contributes to nearly three million deaths of children under the age of five years and together maternal and child undernutrition and suboptimal breastfeeding account for 11% of the global burden of disease\textsuperscript{4}) and development (persistence of areas where malnutrition is not effectively


\textsuperscript{3} +2 standard deviations or more above the median of the WHO standards.

tackled contributes to the lack of satisfactory progress towards achieving Millennium Development Goal 1 but also Goals 2 (Achieve universal primary education), 3 (Promote gender equality and empower women), 4 (Reduce child mortality), 5 (Improve maternal health) and 6 (Combat HIV/AIDS, malaria and other diseases).

IMPLEMENTATION OF POLICIES AND PROGRAMMES TO REDUCE THE DOUBLE BURDEN OF MALNUTRITION

4. This section of the comprehensive implementation plan will summarize the policy challenges in the implementation of nutrition interventions at national scale, as set out in the first background paper (see paragraph 3(a) in the main text above). Although most Member States have nutrition policies and programmes, they have not always been officially adopted, do not comprehensively address all the nutrition challenges and do not articulate operational plans and programmes of work. Few of the 36 countries with the greatest burden of undernutrition fully implement the complete set of interventions against child underweight and maternal undernutrition or ensure the continuum of care.

OBJECTIVE, TARGETS AND TIME FRAME

5. This section will identify the overall objective and the specific targets of the comprehensive implementation plan. The proposed overall objective is to address the double burden of malnutrition in children, starting from the earliest stages of development. Proposed specific targets will refer to the challenges listed above (child and maternal undernutrition; low birth weight; maternal anaemia; micronutrient deficiencies in children under five years of age; maternal and childhood obesity; and inequities).
Specific and quantitative targets would be better defined at country level, although the comprehensive implementation plan might provide guidance on how to do it.

6. A time frame for the comprehensive implementation plan will have to be indicated (five or 10 years). Outcomes of actions on different nutritional conditions can be seen in the short term (five years), but a longer time frame (10 years) needs to be considered in order to ensure substantial and sustainable public health impacts of policies.

**ACTIONS**

7. The main section of the comprehensive implementation plan will illustrate the implementation of actions by Member States, the Secretariat and international partners in five areas, involving multiple sectors. The global strategic framework for food security and nutrition to be prepared by the Committee on World Food Security will provide the necessary perspective to complement WHO's work.

8. The following text outlines the rationale for including five actions in the comprehensive implementation plan and exemplifies some specific activities. Tables 1-3 (see Appendix) list possible high-priority interventions, sectoral policies and indicators.

**ACTION 1. To create a supportive environment for the implementation of comprehensive food and nutrition policies**
9. A revision of existing food and nutrition policies is required so that they include actions directly implemented through the health sector and a mechanism for ensuring that nutrition is placed centrally in other sectoral policies and in overall development policy. Policies on agriculture, social welfare, trade, environment, education and local development can and should contribute substantially to the improvement of nutrition. A description of potential steps in country level policy development will be presented in the third background paper (see paragraph 3(c) of the main text).

10. Collaboration between partners at national and international levels will be a crucial factor for success in the implementation of the comprehensive implementation plan. The leadership of country government officials in the development of national plans must be recognized, but the involvement of organizations in the United Nations system, donors, civil society and the private sector should be promoted. A successful example of regional partnership is the Pan American Alliance for Nutrition and Development for the Achievement of the Millennium Development Goals. At the international level, several collaborative mechanisms are in place. The United Nations Standing Committee on Nutrition, established by the Economic and Social Council of the United Nations in order to harmonize standards, policies and action of the bodies in the United Nations system and other interested parties, is reforming its working processes and governance so that the core global functions can be exercised more efficiently, for instance through links with relevant initiatives, including the Renewed Efforts against Child Hunger and Undernutrition and the framework of action for scaling up nutrition.¹

¹ Scaling up nutrition: a framework for action. 
11. Member States may consider revising nutrition policies in order to establish comprehensive actions to reduce the double burden of malnutrition. To do so would need inclusion of nutrition in the country's overall development policy, establishing intersectoral governance mechanisms for implementing nutrition policies at national and local levels, and creating or strengthening alliances and partnerships to expand nutrition interventions.

12. The Secretariat may provide support to Member States in strengthening national nutrition policies and strategies and improving access to normative and policy guidelines, knowledge products, tools and networks of experts, on request.

13. International partners may consider implementing global initiatives to advocate public attention on the need to expand action on nutrition. Furthermore, consideration should be given to strengthening international structures for dealing with nutrition through adequate mechanisms and intergovernmental bodies.

**ACTION 2. To include all required effective health interventions with an impact on nutrition in national health and nutrition plans**

14. Scientific evidence of effective interventions and analysis of good practice in countries that have substantially reduced malnutrition indicate that a broad set of interventions aimed at changing behaviours, providing nutritional support and reducing the exposure to several environmental risk factors should be considered for implementation at national scale. A provisional list is provided in Table 1. The rationale
for inclusion in the comprehensive implementation plan will be discussed in the second background paper (see paragraph 3(b) in the main text).

15. 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 pre-conceptional environment and to break the intergenerational cycle of malnutrition.


17. Evidence should be continuously collected and gaps in research identified. The Director-General has established the WHO Nutrition Guidance Expert Advisory Group with experts in the fields of epidemiology, nutrition, public health, paediatric medicine, and programme implementation.

18. Member States may consider strengthening the capability of health systems to undertake nutrition interventions: by including recommended nutrition interventions in their maternal, child and adolescent health services and by supporting universal coverage and principles of primary health care. Member States may also consider drafting new
laws and/or strengthening existing legislative, regulatory and/or other effective measures to ensure that the marketing of breast-milk substitutes complies with the International Code of Marketing of Breast-milk Substitutes and subsequent relevant WHA resolutions.

19. The Secretariat may review, update and expand WHO's guidance and tools on effective nutrition actions; illustrate good practice of mechanisms to deliver nutrition interventions and broadly disseminate the information; implement cost-effectiveness analyses of health interventions with an impact on nutrition; provide support to Member States in designing and implementing policies and programmes aimed at improving nutritional outcomes; and create a dialogue with academic partners with the aim of drafting a prioritized research agenda, on request.

20. International partners may consider aligning plans for development assistance with nutrition actions that are recognized as effective.

**ACTION 3. To stimulate the implementation of non-health interventions with an impact on nutrition**

21. 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 improving maternal education.
22. Table 2 lists policy measures that engage different relevant sectors which may be considered. The rationale for their inclusion will be discussed in the second background paper (see paragraph 3(b) in the main text).

23. Member States may consider reviewing sectoral policies in agriculture, social welfare, education, and trade in order to consider their impact on nutrition, and establish a dialogue with the relevant government sectors.

24. The Secretariat may draw up methodological guidelines for the analysis of the impact of sectoral policies on health and nutrition, provide examples of good practice of sectoral policy measures, and provide support to Member States, on request, in the implementation of interventions.

25. International partners may consider engaging in a dialogue about 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.

**ACTION 4. To provide sufficient human and financial resources for the implementation of health interventions with an impact on nutrition**
26. Technical and managerial capabilities are required to implement nutrition programmes at full scale and to design and implement multisectoral policies. Capacity development should be an integral part of plans to extend nutrition interventions.

27. 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 required each year to implement at national scale top-priority nutrition interventions in the countries with the highest burden of maternal and child undernutrition. Increased resource mobilization will depend on advocacy and innovative financing mechanisms. Greater efficiency also needs to be sought in funding programmes, including better alignment of donors' investments with national priorities.

28. Member States may consider identifying their capability needs and including capacity building in plans to expand nutrition actions. Plans will need to be costed, including the financial resources needed for capacity development and strengthening the delivery of services, and the expected benefits quantified.

29. At the request of Member States, the Secretariat may support workforce development, foster leadership, contribute to strengthening technical and managerial capacities in nutrition in Member States through workshops, distance learning, creating communities of practice and providing training materials.
30. International partners may consider developing international competency standards specific to the public health nutrition workforce and establishing academic alliances aimed at providing institutional support for capacity development in Member States.

**ACTION 5. To monitor and evaluate the implementation of policies and programmes**

31. 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. Table 3 lists proposed indicators, which include biological outcomes, food security measures, process, and policy aspects. The fourth background paper (see paragraph 3(d) in the main text) will provide full definitions of the indicators, their metrics and the availability of global data.

32. Member States may consider developing or strengthening surveillance systems aimed at the collection of information on selected indicators of outcome, process and the policy environment.

33. At the request of Member States, the Secretariat may provide methodological support for the collection of information on selected indicators of outcome, process and policy environment, including protocols and design of surveillance systems. It may also similarly provide support for monitoring country progress in developing, strengthening
and implementing national nutrition plans, policies and programmes, and may establish a
database of selected indicators for these variables.

34. International partners may consider adopting the list of proposed indicators as a tool
for monitoring implementation of activities to expand nutrition interventions and
supporting the circulation and exchange of information between organizations, in order to
ensure global coverage of the database of outcome, process and policy indicators that the
Secretariat may be asked to establish.
Appendix

Tables listing priority interventions, sectoral policies and indicators

Table 1. Health interventions with an impact on nutrition

1. Targeting women

1.1. For all women

• Iron and folic acid supplementation for adolescent girls and women of reproductive age
• Calcium supplementation for women during pregnancy
• Nutrition counselling through food-based dietary guidelines
• Improving maternity protection and health through the workplace
• Breastfeeding counselling and support

1.2. In special circumstances

• Energy and protein supplementation in women with low body mass index
• Nutritional care and support for HIV-infected pregnant and lactating women
• Nutritional care and support in emergencies

2. Targeting children 0 to 24 months old

2.1. For all children

• Implementation of the International Code of Marketing of Breast-milk Substitutes and related resolutions of the World Health Assembly subsequent to resolution WHA34.22 adopting the Code
• Implementation of the Baby Friendly Hospital Initiative
• Counselling and support for optimal breastfeeding (early initiation, exclusive breastfeeding for the first six months and continued breastfeeding up to two years of age and beyond)
• Counselling of mothers and caregivers, and appropriate behavioural change communication on complementary feeding
• Provision of advice on safe and nutritionally-adequate home-made complementary foods
• Vitamin A supplementation for children under five years of age
• Iron supplementation for children under five years of age
• Zinc supplementation for diarrhoea management
• Home fortification of foods intended for young children¹

2.2. In special circumstances
• Nutrition counselling for the adequate care of sick children
• Nutrition counselling for the adequate care of malnourished children
• Integrated management of severe acute malnutrition through facility- and community-based interventions
• Treatment of moderate acute malnutrition
• Orientation and counselling on infant feeding in the context of HIV (prevention of mother-to-child transmission of HIV)
• Integrated approach to the nutritional care of HIV-positive children
• Nutritional care and support in emergencies¹

¹ Also delivered outside health-system channels.
3. Other health interventions

- Prevention of adolescent pregnancy
- Pregnancy spacing
- Intermittent preventive treatment of malaria in pregnancy
- Prevention and cessation of tobacco, alcohol and drug consumption in pregnancy
- Reduction of indoor air pollution
- Prevention and control of occupational risk in pregnancy
- Prevention and control of genitourinary infections in pregnancy
- Provision of insecticide-treated bednets
- Properly-timed cord clamping
- Deworming of children and adolescents
- Deworming of pregnant women
- Hand washing and other hygienic interventions

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1 Provision of adequate support according to the Operational Guidance for Emergency Relief Staff and Programme Managers on infant and young child feeding in emergencies, [Interagency Working Group on Infant and Young Child Feeding in Emergencies, 2007; http://www.ennonline.net/pool/files/ifc/ops-guidance-2-1-english-010307-with-addendum.pdf] which includes the protection, promotion and support for optimal breastfeeding, and the need to minimize the risks of artificial feeding
Table 2. Non-health interventions with an impact on nutrition

1. Agriculture and food production
   • Micronutrient fortification of staple foods
   • Micronutrient fortification of complementary foods
   • Salt iodization
   • Water fluoridation
   • Interventions to improve food security at household level
   • Interventions to improve the nutritional quality of foods (reduction of the content of salt, fats and sugars, and elimination of $\textit{trans}$-fatty acids)

2. Social protection
   • Conditional and unconditional cash transfers
   • Food aid

3. Trade
   • Public policies can influence prices through taxation, subsidies or direct pricing ways that encourage healthy eating and lifelong physical activity
   • Member States should consider different approaches, i.e. stepwise or comprehensive, to reduce the impact marketing of foods high in saturated fats, $\textit{trans}$-fatty acids, free sugars, or salt, to children
   • Provision of food in public institutions
   • Governments may require information to be provided on key nutritional aspects, as proposed in the Codex Guidelines on Nutritional Labelling
4. Education
   • Women's primary and secondary education
   • Improvement of diet and physical activity in schools

5. Labour
   • Support to lactating working women (through adopting and enforcing the ILO Maternity Protection Convention, 2000 (No. 183) and Recommendation (No. 191))

6. Information
   • Conducting social marketing campaigns
   • Labelling of food products
Table 3. Indicators for monitoring the realization of the comprehensive implementation plan

1. Biological outcomes
   - Incidence of low birth weight
   - Proportion of underweight children below five years of age
   - Proportion of stunted children below five years of age
   - Proportion of wasted children below five years of age
   - Proportion of overweight children below five years of age
   - Proportion of thin school-age children and adolescents (5-19 years of age)
   - Proportion of overweight school-age children and adolescents (5-19 years of age)
   - Proportion of thin women of reproductive age
   - Proportion of overweight and obese adults
   - Proportion of children below five years of age with haemoglobin concentration of <11 g/dl
   - Proportion of adolescent girls with haemoglobin concentration of <12 g/dl
   - Proportion of women of reproductive age with haemoglobin concentration of <12 g/dl
   - Proportion of women of reproductive age with clinical vitamin A deficiency
   - Proportion of children below five years of age with subclinical vitamin A deficiency
   - Median urinary iodine concentration (μg/l) in children aged 6-12 years
2. Implementation of nutrition programmes: process indicators

- Proportion of children under six months of age who are exclusively breastfed
- Proportion of children receiving a minimum acceptable diet at 6–23 months of age
- Proportion of hospitals providing maternity care designated as baby-friendly
- Proportion of infants born to HIV-positive women receiving appropriate feeding
- Proportion of children under five years of age receiving iron supplements
- Proportion of pregnant women receiving iron and folic acid supplements
- Proportion of children under five years of age who have received two doses of vitamin A supplements
- Proportion of children under five years of age who have received one dose of vitamin A supplements
- Proportion of households having access to iodized salt
- Proportion of children with severe acute malnutrition having access to appropriate treatment including therapeutic foods
- Proportion of population with sustainable access to an improved water source
- Proportion of population with sustainable access to sanitation

3. Food security indicators

- Proportion of population below minimum level of dietary energy consumption
- Per capita availability of major food items
- Mean dietary diversity score
• Proportion of average household expenditure on food of the bottom three deciles to the top three deciles of the population
• Proportion of population living below US$ 1 per day
• Global Hunger Index

4. Policy environment indicators
• Adoption and implementation of International Code of Marketing of Breast-milk Substitutes
• Strength of nutrition governance
• Number of staff with nutrition skills at each level of service delivery
• Ratio of number of community health workers to total population
• Proportion of hospitals and health-care centres with appropriate supplies for the management of severe acute malnutrition in paediatric wards.

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