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In reply please refer to: B13/445/14  
Prière de rappeler la référence:

Your reference:  
Votre référence:

Dr K.T. So  
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Department of Pediatrics  
Tuen Mun Hospital  
Tuen Mun, N.T.  
Hong Kong SAR

25 June 2001

Dear Dr So,

**Recommendation on the optimal duration of exclusive breastfeeding**

As you will recall, WHO initiated a survey in June 2000 to establish a global profile of existing recommendations on the duration of exclusive breastfeeding. The survey addressed both national governments and national paediatric associations worldwide with the purpose of ensuring that the Organization's recommendation is as scientifically sound and globally relevant as possible. The recommendations resulting from this global survey were brought forward to the WHO Executive Board in January 2001 in preparation for the 54<sup>th</sup> World Health Assembly in May 2001.

In addition, as an important part of the efforts to develop a comprehensive global strategy for infant and young child feeding, WHO conducted in 2000 a systematic review of the scientific literature on the optimal duration of exclusive breastfeeding. The outcome of this review was presented to an expert consultation (Geneva, 28 to 30 March 2001), whose objectives were to review the relevant scientific evidence, formulate recommendations and make proposals for research. The results of this consultation were communicated to the Health Assembly.

In this connection, I should like to draw your attention to the Assembly's resolution WHA54.2 on infant and young child nutrition, in particular paragraph 2(4) which, as indicated, should be read taking into account the findings of the expert consultation on the optimal duration of exclusive breastfeeding. The resolution calls on WHO Member States :

Encl. As stated

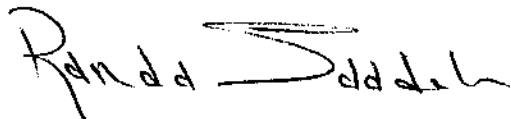
*to strengthen activities and develop new approaches to protect, promote and support exclusive breastfeeding for six months as a global public health recommendation, taking into account the findings of the WHO expert consultation on the optimal duration of exclusive breastfeeding, and to provide safe and appropriate complementary foods, with continued breastfeeding, for up to two years of age or beyond, emphasizing channels of social dissemination of these concepts in order to lead communities to adhere to these practices.*

The consultation's conclusions and recommendations are found in document A54/INF.DOC./4.

We hope that your Association will disseminate the above information widely among paediatricians and other health workers in your country.

With kind regards.

Yours sincerely,



Mrs Randa Saadeh  
Department of Nutrition for Health and  
Development



FIFTY-FOURTH WORLD HEALTH ASSEMBLY

WHA54.2

Agenda item 13.1

18 May 2001

## Infant and young child nutrition

The Fifty-fourth World Health Assembly,

Recalling resolutions WHA33.32, WHA34.22, WHA35.26, WHA37.30, WHA39.28, WHA41.11, WHA43.3, WHA45.34, WHA46.7, WHA47.5 and WHA49.15 on infant and young child nutrition, appropriate feeding practices and related questions;

Deeply concerned to improve infant and young child nutrition and to alleviate all forms of malnutrition in the world, because more than one-third of under-five children are still malnourished – whether stunted, wasted, or deficient in iodine, vitamin A, iron or other micronutrients – and because malnutrition still contributes to nearly half of the 10.5 million deaths each year among preschool children worldwide;

Deeply alarmed that malnutrition of infants and young children remains one of the most severe global public health problems, at once a major cause and consequence of poverty, deprivation, food insecurity and social inequality, and that malnutrition is a cause not only of increased vulnerability to infection and other diseases, including growth retardation, but also of intellectual, mental, social and developmental handicap, and of increased risk of disease throughout childhood, adolescence and adult life;

Recognizing the right of everyone to have access to safe and nutritious food, consistent with the right to adequate food and the fundamental right of everyone to be free from hunger, and that every effort should be made with a view to achieving progressively the full realization of this right;

Acknowledging the need for all sectors of society – including governments, civil society, health professional associations, nongovernmental organizations, commercial enterprises and international bodies – to contribute to improved nutrition for infants and young children by using every possible means at their disposal, especially by fostering optimal feeding practices, incorporating a comprehensive multisectoral, holistic and strategic approach;

Noting the guidance of the Convention on the Rights of the Child, in particular Article 24, which recognizes, *inter alia*, the need for access to and availability of both support and information concerning the use of basic knowledge of child health and nutrition, and the advantages of breastfeeding for all segments of society, in particular parents and children;

Conscious that despite the fact that the International Code of Marketing of Breast-milk Substitutes and relevant, subsequent Health Assembly resolutions state that there should be no advertising or other forms of promotion of products within its scope, new modern communication methods, including electronic means, are currently increasingly being used to promote such products;

and conscious of the need for the Codex Alimentarius Commission to take the International Code and subsequent relevant Health Assembly resolutions into consideration in dealing with health claims in the development of food standards and guidelines;

Mindful that 2001 marks the twentieth anniversary of the adoption of the International Code of Marketing of Breast-milk Substitutes, and that the adoption of the present resolution provides an opportunity to reinforce the International Code's fundamental role in protecting, promoting and supporting breastfeeding;

Recognizing that there is a sound scientific basis for policy decisions to reinforce activities of Member States and those of WHO; for proposing new and innovative approaches to monitoring growth and improving nutrition; for promoting improved breastfeeding and complementary feeding practices, and sound culture-specific counselling; for improving the nutritional status of women of reproductive age, especially during and after pregnancy; for alleviating all forms of malnutrition; and for providing guidance on feeding practices for infants of mothers who are HIV-positive;

Noting the need for effective systems for assessing the magnitude and geographical distribution of all forms of malnutrition, together with their consequences and contributing factors, and of foodborne diseases; and for monitoring food security;

Welcoming the efforts made by WHO, in close collaboration with UNICEF and other international partners, to develop a comprehensive global strategy for infant and young child feeding, and to use the ACC Sub-Committee on Nutrition as an interagency forum for coordination and exchange of information in this connection,

1. THANKS the Director-General for the progress report on the development of a new global strategy for infant and young child feeding;
2. URGES Member States:
  - (1) to recognize the right of everyone to have access to safe and nutritious food, consistent with the right to adequate food and the fundamental right of everyone to be free from hunger, and that every effort should be made with a view to achieving progressively the full realization of this right and to call on all sectors of society to cooperate in efforts to improve the nutrition of infants and young children;
  - (2) to take necessary measures as States Parties effectively to implement the Convention on the Rights of the Child, in order to ensure every child's right to the highest attainable standard of health and health care;
  - (3) to set up or strengthen interinstitutional and intersectoral discussion forums with all stakeholders in order to reach national consensus on strategies and policies including reinforcing, in collaboration with ILO, policies that support breastfeeding by working women, in order substantially to improve infant and young child feeding and to develop participatory mechanisms for establishing and implementing specific nutrition programmes and projects aimed at new initiatives and innovative approaches;
  - (4) to strengthen activities and develop new approaches to protect, promote and support exclusive breastfeeding for six months as a global public health recommendation, taking into account the findings of the WHO expert consultation on optimal duration of exclusive

breastfeeding,<sup>1</sup> and to provide safe and appropriate complementary foods, with continued breastfeeding for up to two years of age or beyond, emphasizing channels of social dissemination of these concepts in order to lead communities to adhere to these practices;

(5) to support the Baby-friendly Hospital Initiative and to create mechanisms, including regulations, legislation or other measures, designed, directly and indirectly, to support periodic reassessment of hospitals, and to ensure maintenance of standards and the Initiative's long-term sustainability and credibility;

(6) to improve complementary foods and feeding practices by ensuring sound and culture-specific nutrition counselling to mothers of young children, recommending the widest possible use of indigenous nutrient-rich foodstuffs; and to give priority to the development and dissemination of guidelines on nutrition of children under two years of age, to the training of health workers and community leaders on this subject, and to the integration of these messages into strategies for health and nutrition information, education and communication;

(7) to strengthen monitoring of growth and improvement of nutrition, focusing on community-based strategies, and to strive to ensure that all malnourished children, whether in a community or hospital setting, are correctly diagnosed and treated;

(8) to develop, implement or strengthen sustainable measures including, where appropriate, legislative measures, aimed at reducing all forms of malnutrition in young children and women of reproductive age, especially iron, vitamin A and iodine deficiencies, through a combination of strategies that include supplementation, food fortification and diet diversification, through recommended feeding practices that are culture-specific and based on local foods, as well as through other community-based approaches;

(9) to strengthen national mechanisms to ensure global compliance with the International Code of Marketing of Breast-milk Substitutes and subsequent relevant Health Assembly resolutions, with regard to labelling as well as all forms of advertising, and commercial promotion in all types of media, to encourage the Codex Alimentarius Commission to take the International Code and relevant subsequent Health Assembly resolutions into consideration in developing its standards and guidelines; and to inform the general public on progress in implementing the Code and subsequent relevant Health Assembly resolutions;

(10) to recognize and assess the available scientific evidence on the balance of risk of HIV transmission through breastfeeding compared with the risk of not breastfeeding, and the need for independent research in this connection; to strive to ensure adequate nutrition of infants of HIV-positive mothers; to increase accessibility to voluntary and confidential counselling and testing so as to facilitate the provision of information and informed decision-making; and to recognize that when replacement feeding is acceptable, feasible, affordable, sustainable and safe, avoidance of all breastfeeding by HIV-positive women is recommended; otherwise, exclusive breastfeeding is recommended during the first months of life; and that those who choose other options should be encouraged to use them free from commercial influences;

(11) to take all necessary measures to protect all women from the risk of HIV infection, especially during pregnancy and lactation;

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<sup>1</sup> As formulated in the conclusions and recommendations of the expert consultation (Geneva, 28 to 30 March 2001) that completed the systematic review of the optimal duration of exclusive breastfeeding (see document A54/INF.DOC./4).

(12) to strengthen their information systems, together with their epidemiological surveillance systems, in order to assess the magnitude and geographical distribution of malnutrition, in all its forms, and of foodborne disease;

3. REQUESTS the Director-General:

(1) to give, greater emphasis to infant and young child nutrition, in view of WHO's leadership in public health, consistent with and guided by the Convention on the Rights of the Child and other relevant human rights instruments, in partnership with ILO, FAO, UNICEF, UNFPA and other competent organizations both within and outside the United Nations system;

(2) to foster, with all relevant sectors of society, a constructive and transparent dialogue in order to monitor progress towards implementation of the International Code of Marketing of Breast-milk Substitutes and subsequent relevant Health Assembly resolutions, in an independent manner and free from commercial influence, and to provide support to Member States in their efforts to monitor implementation of the Code;

(3) to provide support to Member States in the identification, implementation and evaluation of innovative approaches to improving infant and young child feeding, emphasizing exclusive breastfeeding for six months as a global public health recommendation, taking into account the findings of the WHO expert consultation on optimal duration of exclusive breastfeeding,<sup>1</sup> the provision of safe and appropriate complementary foods, with continued breastfeeding up to two years of age or beyond, and community-based and cross-sector activities;

(4) to continue the step-by-step country- and region-based approach to developing the new global strategy on infant and young child feeding, and to involve the international health and development community, in particular UNICEF, and other stakeholders as appropriate;

(5) to encourage and support further independent research on HIV transmission through breastfeeding and on other measures to improve the nutritional status of mothers and children already affected by HIV/AIDS;

(6) to submit the global strategy for consideration to the Executive Board at its 109th session in January 2002 and to the Fifty-fifth World Health Assembly (May 2002).

Seventh plenary meeting, 18 May 2001  
A54/VR/7

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<sup>1</sup> As formulated in the conclusions and recommendations of the expert consultation (Geneva, 28 to 30 March 2001) that completed the systematic review of the optimal duration of exclusive breastfeeding (see document A54/INF.DOC/J4).

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# WORLD HEALTH ORGANIZATION

FIFTY-FOURTH WORLD HEALTH ASSEMBLY  
Provisional agenda item 13.1

A54/INF.DOC./4  
1 May 2001

## Global strategy for infant and young child feeding

### The optimal duration of exclusive breastfeeding

1. Appropriate feeding practices are of fundamental importance for the survival, growth, development, health and nutrition of infants and children everywhere. In this light, the optimal duration of exclusive breastfeeding is one of the crucial public health issues that WHO keeps under continual review. There has long been consensus on the need for exclusive breastfeeding; however, there has been considerable debate on its optimal duration.

2. In view of the continuing debate, early in 2000, WHO commissioned a systematic review of the published scientific literature on the optimal duration of exclusive breastfeeding; more than 3000 references were identified for independent review and evaluation. The outcome of this process was subjected to global peer review, after which all findings were submitted for technical scrutiny during an expert consultation (Geneva, 28 to 30 March 2001). The expert consultation's conclusions and recommendations for both practice and research is annexed.

3. The duration of exclusive breastfeeding, and the timely introduction of adequate, safe and appropriate complementary foods in conjunction with continued breastfeeding, are of direct relevance for much of WHO's work concerning infants and young children. This work includes two current major global initiatives.

- a multicountry study, involving more than 10 000 children, with the aim of establishing a new **international growth reference** that reflects growth patterns of healthy breastfed infants and children, thereby setting the norm against which all alternative-feeding methods must be measured in terms of growth, health and development;<sup>1</sup>
- the formulation of a **global strategy on infant and young child feeding**, whose aim is to ensure adequate, safe and appropriate feeding for all infants and young children.<sup>2</sup>

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<sup>1</sup> See document EB105/INF.DOC./1.

<sup>2</sup> See document A54/7.

ANNEX

**EXPERT CONSULTATION ON THE OPTIMAL  
DURATION OF EXCLUSIVE BREASTFEEDING**

**Conclusions and recommendations  
(Geneva, 28 to 30 March 2001)**

1. A systematic review of current scientific evidence on the optimal duration of exclusive breastfeeding<sup>1</sup> identified and summarized studies that compared exclusive breastfeeding for four to six months with exclusive breastfeeding for six months in terms of growth, infant iron status, morbidity, atopic disease, motor development, postpartum weight loss, and amenorrhoea. It should be noted that the review was based on two small controlled trials and 17 observational studies that varied in both quality and geographical provenance.
2. The evidence does not suggest an adverse effect of exclusive breastfeeding for six months on infant growth on an overall population basis, that is on average. The sample sizes were insufficient, however, to rule out an increased risk of growth faltering in some infants who are exclusively breastfed for six months, particularly in populations with severe maternal malnutrition and a high prevalence of intrauterine growth retardation.
3. The evidence from one trial in Honduras demonstrates poorer iron status in infants exclusively breastfed for six months than in infants exclusively breastfed for four months followed by partial breastfeeding to six months. This finding is likely to apply to populations in which maternal iron status and infant endogenous stores of iron are not optimal. The available evidence is grossly inadequate to assess risks of deficiency of other micronutrients.
4. The available data suggest that exclusive breastfeeding for six months has protective effects against gastrointestinal infection. These data were derived from a setting (Belarus) where hygienically prepared complementary foods were used.
5. The evidence does not demonstrate a protective effect against respiratory tract infection (including otitis media) or atopic disease, in infants exclusively breastfed for six months compared to those exclusively breastfed for four to six months.
6. Because the data from the Honduran trials that reported more rapid motor development are inconsistent and susceptible to observer bias, they are insufficient to allow any inferences to be drawn about neuromotor development.
7. The results of two controlled trials in Honduras indicate that exclusive breastfeeding for six months (compared with four months) confers an advantage in prolonging the duration of lactational amenorrhoea in mothers who breastfeed frequently (mean 10-14 feedings/day).

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<sup>1</sup> Because the definition of "exclusive breastfeeding" in studies in the systematic review often included infants who were predominantly breastfed, the term is used here to include both true exclusive breastfeeding and predominant breastfeeding, as defined by WHO.

8. The same Honduran trials demonstrated greater postpartum weight loss in mothers who exclusively breastfed for six months compared with mothers who exclusively breastfed for four months.

9. In developing-country settings, the most important potential advantage of exclusive breastfeeding for six months over exclusive breastfeeding for four months followed by partial breastfeeding to six months relates to infectious disease morbidity and mortality, especially those due to gastrointestinal infection (diarrhoeal disease). Because the evidence bearing directly on this issue was inadequate, however, the expert consultation also considered other published studies that did not meet the selection criteria for the systematic review. In particular, no mortality data were available that directly compared exclusive breastfeeding for four to six with that for six months. Moreover, the morbidity data from developing countries were limited to the two Honduran trials, which had insufficient statistical power to detect any advantage of exclusive breastfeeding to six months, and which used hygienically prepared complementary foods. However, the strong protective effect against gastrointestinal infection observed in Belarus, coupled with the high incidence of and mortality from gastrointestinal infection in many developing country settings, led the experts at the consultation to infer that exclusive breastfeeding for six months would protect against diarrhoeal morbidity and mortality in such settings. This inference is further strengthened by morbidity data relating to reduced risks of gastrointestinal infection and of all-cause mortality for exclusively breastfed children compared with partially breastfed infants from four to six months, regardless of when the latter stopped exclusive breastfeeding.

10. In summary, the expert consultation concludes that exclusive breastfeeding to six months confers several benefits on the infant and the mother. However, exclusive breastfeeding to six months can lead to iron deficiency in susceptible infants. In addition, the available data are insufficient to exclude several other potential risks associated with exclusive breastfeeding for six months, including growth faltering and other micronutrient deficiencies, in some infants. In all circumstances, these risks must be weighed against the benefits provided by exclusive breastfeeding, especially the potential reduction in morbidity and mortality.

## RECOMMENDATIONS FOR PRACTICE

11. The expert consultation recommends exclusive breastfeeding for six months, with introduction of complementary foods and continued breastfeeding thereafter. This recommendation applies to populations. The expert consultation recognizes that some mothers will be unable to, or choose not to, follow this recommendation; they should be supported to optimize their infants' nutrition.

12. The proportion of infants exclusively breastfed at six months can be maximized if potential problems with regard to the following are overcome:

- the nutritional status of pregnant and lactating mothers;
- micronutrient status of infants living in areas with high prevalence of deficiencies such as iron, zinc, and vitamin A;
- the routine primary health care of individual infants, including assessment of growth and of clinical signs of micronutrient deficiencies.

13. The expert consultation recognizes the need for complementary feeding at six months of age and recommends the introduction of nutritionally adequate, safe and appropriate complementary foods, in conjunction with continued breastfeeding.

14. The expert consultation also recognizes that exclusive breastfeeding to six months is still infrequent. However, it also notes that there have been substantial increases over time in several countries, particularly where lactation support is available. A prerequisite to the implementation of these recommendations is the provision of adequate social and nutritional support to lactating women.

## RECOMMENDATIONS FOR RESEARCH

15. There are several unanswered questions that are important for policy-making with regard to defining the optimal duration of exclusive breastfeeding and maximizing its benefits. Therefore, the expert consultation recommends that priority be given to the following research areas:

- a comparison of exclusive breastfeeding/predominant breastfeeding and partial breastfeeding for four to six months based on the following outcomes, to improve precision of estimates and their general applicability:
  - proportion of infants with growth faltering and malnutrition at six and 12 months,
  - micronutrient status,
  - diarrhoeal morbidity,
  - neuromotor development,

and for the mothers:

- changes in weight,
- lactational amenorrhoea.

Priority must be given to investigating these outcomes in infants born small-for-gestational-age or, alternatively, in those with low weight-for-age at four months;

- assessment of breast-milk production and composition from mothers with a body mass index <18.5 and the adequacy of breast milk for meeting infant requirements to six months;
- identification of biological and social constraints to exclusive breastfeeding to six months in different geographical and cultural settings, and design of appropriate and effective interventions to deal with these barriers and their consequences, as it is recognized that rates of exclusive breastfeeding decline substantially after four months;
- use of available opportunities to gain greater insight into the impact on mortality of exclusive breastfeeding to six months – for example, incorporation of additional variables into the demographic and health surveys;

- formulation and evaluation of interventions for micronutrient supplementation and for complementary foods in different areas of the world – including formative studies to identify processing and preparation methods, and local ingredients required to prepare nutritionally adequate, safe and appropriate complementary foods; and
- assessment of the role of care during pregnancy in relation to the adequacy of lactation in the first six months.

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