



International Symposium on Understanding Moderate Malnutrition in Children for Effective Interventions

IAEA Headquarters
Vienna, Austria

26–29 May 2014

Announcement and Call for Papers

A. Background

Undernutrition, already one of the world's most serious health problems, is at risk of worsening as the global economy deteriorates. In poor countries, undernutrition is the largest single contributor of more than one third of all deaths of children under five years of age, many of which are preventable through effective nutrition interventions (Lancet, 2008).¹ Thus, reducing undernutrition is vital for children's survival, particularly in poor countries, and consequently for socio-economic development. Moderate malnutrition is associated with more nutrition-related deaths than severe malnutrition because moderate malnutrition affects a greater number of children.

According to the World Health Organization (WHO), moderate malnutrition includes all children with moderate wasting, defined as a weight-for-height between -3 and -2 z-scores² with reference to the WHO Child Growth Standards, and those with moderate stunting, defined as a height-for-age between -3 and -2 z-scores with reference to the WHO Child Growth Standards. Most of these children will be moderately underweight (weight-for-age between -3 and -2 z-scores). This symposium will focus on

¹ See the special series of papers on maternal and child undernutrition published by *The Lancet* in 2008. More details can be found on the following WHO web page:

http://www.who.int/nutrition/publications/lancetseries_maternal_and_childundernutrition/en/.

² A z-score is the number of standard deviations below or above the reference median value.

the management (prevention and treatment) of moderate wasting or moderate acute malnutrition (MAM).

The importance of MAM should not be neglected. Although moderate wasting is not a condition of medical urgency, it can easily deteriorate. If some of these undernourished children with moderate wasting do not receive adequate support, they may progress towards severe acute malnutrition (SAM) — defined by the presence of severe wasting and/or bilateral pitting oedema — which is a life-threatening condition. The provision of complementary food to prevent and treat moderate malnutrition among children under two years of age is also less costly (US \$40–80 per child) than the treatment of SAM (US \$200 per episode and per child).³ Therefore, the management of MAM should be a public health priority. Preventing MAM could go hand-in-hand with preventing stunting, especially when the focus is on ensuring consumption of nutritious complementary food in addition to breastfeeding between the ages of 6 and 23 months.

In general, growth faltering takes place soon after birth and increases thereafter, reaching its lowest value close to two years of age; thus supporting the concept that the intrauterine period and the first two years of postnatal life are a critical window for preventing malnutrition. Therefore scaling up nutrition during the critical window of opportunity — the first 1000 days — can have a measurable impact on growth, development and incidence of chronic diseases.

Although there is no need to feed moderately wasted children with therapeutic foods that are used to treat SAM, they require higher intake of energy and essential nutrients than non-malnourished children. Ideally, their dietary management should be based on the use of locally available macro- and micronutrient-dense foods, including breast milk where applicable. In settings with food shortage, specially formulated supplementary foods are used to facilitate the recovery of moderately wasted children.

In 2008 and 2010, the WHO convened meetings on the dietary management of moderately malnourished children and on reviewing the evidence on strategies and programmatic approaches to manage moderate wasting. A technical note on the nutrient composition of supplementary foods for the management of MAM in infants and children aged 6–59 months was published by the WHO in 2012. Moreover, the Global Nutrition Cluster (GNC) of the Inter-Agency Standing Committee established a Task Force on Moderate Acute Malnutrition in 2011 to develop a decision-making tool which will support practitioners in the prevention and treatment of MAM in emergencies. This tool is currently being evaluated.

However, more evidence on effective programmatic approaches to manage moderate wasting is needed. In the evaluation of interventions, functional and structural outcomes such as body composition should be included in addition to the traditional methods used to assess healthy physical, cognitive and psychomotor development. Accurate assessment of body composition to determine the nature of the weight gained (lean body mass and fat body mass) over time can provide key information for evaluating the efficacy and effectiveness of interventions, as well as for gauging the risk of chronic diseases. The International Atomic Energy Agency (IAEA) has been a leader in developing and promoting the use of standardized protocols for body composition assessment using stable isotope techniques. Such techniques provide sensitive means of assessing the impact of interventions on the quality of growth, i.e., lean vs. fat body mass accumulation. This key information can complement and contribute to global efforts in improving infant and child nutrition.

³ See S. Horton, M. Shekar, C. McDonald, A. Mahal, J. K. Brooks, *Scaling Up Nutrition. What Will It Cost?* (World Bank, 2010), p. xxiii. This publication is available online at: <http://siteresources.worldbank.org/HEALTHNUTRITIONANDPOPULATION/Resources/Peer-Reviewed-Publications/ScalingUpNutrition.pdf>.

B. Objectives of the Symposium

The symposium will focus on developments in the area of management of MAM in infants and children.

The symposium will have the following objectives:

- To share experience related to the implementation and evaluation of programmes to prevent and treat MAM in infants and children, particularly during the first 1000 days;
- To support overall policy and specific evidence-based programmes dealing with the management of MAM;
- To identify knowledge gaps and define needs for future research to improve the management of MAM;
- To issue recommendations on how to improve the monitoring and evaluation of programmes dealing with the management of MAM; and
- To identify the role of the IAEA in addressing knowledge gaps and evaluating programmes to prevent and treat MAM.

C. List of Topics

1. Review of current knowledge, evidence gaps and further research needs in relation to the prevention and treatment of MAM
2. Experiences with the prevention of MAM during lean seasons and emergencies (using local foods, supplementary foods, cash), challenges faced and lessons learned
3. Experiences with the prevention of MAM during the first 1000 days, challenges faced and lessons learned
4. Experiences with community-based management of acute malnutrition (CMAM), challenges faced and lessons learned
5. Experiences with the decision-making tool for the prevention and treatment of MAM in emergencies being developed by the MAM Task Force of the GNC
6. Effects of prevention and treatment of MAM on growth, body composition and functional outcomes (including stunting) and methodological challenges in impact assessment
7. Capacity development in the management of MAM
8. Composition, acceptability and use of supplementary foods for the management of MAM
9. Lessons learned from SAM management: composition, intake and use of ready-to-use foods
10. Challenges in the management of MAM in infants aged up to 6 months
11. Hot topics in research related to MAM (gut inflammation and enteropathy in MAM; influence of microbiome on the development of malnutrition/Malawi twin study; the role of metabolomics in improving knowledge on the physiopathology of MAM and supporting new strategies for the prevention and treatment of MAM; long term effects of early rapid weight gain in moderately

wasted children with regard to the risk of becoming overweight or obese in later life and developing non-communicable diseases)

D. Target Audience

The symposium will provide an opportunity to review the latest developments in the field of management of MAM. The target audience comprises:

- Public health nutritionists
- Health professionals
- Policymakers in health and nutrition
- United Nations agencies such as the WHO, the World Food Programme and the United Nations Children's Fund
- National and international organizations involved in the management of moderate malnutrition
- The Scaling Up Nutrition (SUN) Movement, including SUN national representatives
- Private sector
- Institutes and universities that have research programmes on moderate malnutrition

E. Programme Structure

The opening plenary session will include welcome addresses by representatives of the IAEA, cooperating organizations and other relevant organizations. The main sessions will continue with a combination of keynote presentations, invited presentations, submitted papers and panel discussions addressing the main themes and topics of the symposium. The final plenary session on the last day will be dedicated to review and discussion of the conclusions and recommendations of the symposium.

There will also be poster sessions, and sufficient time will be dedicated to discussion and interaction with colleagues.

F. Abstracts and Papers

All papers submitted — other than invited keynote papers — must present original work and should not have been published elsewhere.

Persons who wish to present a paper at the symposium — either orally or in the form of a poster — must submit an abstract of 500 words maximum on one of the topics listed under Section C. The abstract should give enough information on the contents of the proposed paper to enable the Programme Committee to evaluate it. Including too many introductory and general matters should be

avoided. The accepted abstracts will be reproduced unedited in the electronic *Compilation of Abstracts* which will be distributed to all participants at the symposium.

F.1. Submission of abstracts

Persons who wish to present a paper or poster at the symposium must submit an abstract **in electronic format** (no paper copies) directly to the IAEA. Instructions on how to upload the abstract to the symposium's web browser-based file submission system (IAEA-INDICO) will be available on the symposium web page (see Section Q) as of June 2013. The abstracts **must** be submitted through this system by **1 November 2013**. No other form of submission will be accepted.

In addition, authors must submit the following two forms to their appropriate governmental authority (see section N) for transmission to the IAEA. These forms must be received by the IAEA no later than **1 November 2013**.

- Participation Form (Form A)
- Form for Submission of a Paper (Form B)

IMPORTANT: The electronically received abstracts will be considered by the Programme Committee only if these two forms have been received by the IAEA through the established official channels (see Section N).

F.2. Acceptance of abstracts for oral and poster presentation

Given the number of papers anticipated and the need to provide ample time for discussion, the number of papers that can be accepted for oral presentation is limited. Authors who would prefer to present their papers in a poster session are requested to indicate this preference on Form A.

Authors will be informed by **end of December 2013** whether their papers have been accepted for oral or poster presentation on the basis of the abstract.

F.3. Symposium proceedings

A limited number of the papers presented at the symposium will be selected for publication in a scientific journal.

G. Participation

All persons wishing to participate in the symposium are requested to register online in advance. In addition, they must send a completed Participation Form (Form A), the Form for Submission of a Paper (Form B) (if applicable), and the Grant Application Form (Form C) (if applicable) as soon as possible to the competent official authority (see Section N) for subsequent transmission to the IAEA.

Participants whose official designations have been received by the IAEA will be sent further information on the symposium at least three months before it begins. This information will also be made available on the symposium web page (see Section Q).

H. Expenditures

No registration fee is charged to participants.

The IAEA is generally not in a position to bear the travel and other costs of participants in the symposium. The IAEA has, however, limited funds at its disposal to help meet the cost of attendance of certain participants. Such assistance may be offered, upon specific request, to normally one participant per country provided that, in the IAEA's view, the participant on whose behalf assistance is requested will make an important contribution to the symposium. In general, not more than one grant will be awarded to any one country.

If governments wish to apply for a grant on behalf of one of their specialists, they should address specific requests to the IAEA to this effect. Governments should ensure that applications for grants are:

1. Submitted by **1 November 2013**;
2. Accompanied by a duly completed and signed Grant Application Form (Form C);
3. Accompanied by a completed Participation Form (Form A).

Applications that do not comply with the above conditions cannot be considered.

Approved grants will be issued in the form of a lump sum payment that usually covers **only part of the cost of attendance**.

I. Distribution of Documents

A preliminary programme will be posted on the IAEA symposium web page as soon as possible. The final programme and the electronic *Compilation of Abstracts* will be available free of charge upon registration at the symposium.

J. Exhibitions

A limited amount of space will be available for commercial vendors' displays/exhibits during the symposium. Interested parties should contact the Symposium Secretariat by email: N.Mokhtar@iaea.org before **12 September 2013**.

K. Working Language

The working language of the symposium will be English.

L. Accommodation

Participants must make their own travel and accommodation arrangements. Hotels which are offering a reduced rate for symposium participants will be listed on the symposium web page. Please note that the IAEA is not in a position to assist participants with hotel bookings, nor can the IAEA assume responsibility for paying cancellation fees or for re-bookings and no shows.

M. Visas

Designated participants who require a visa to enter Austria should submit the necessary application to the nearest diplomatic or consular representative of Austria at least four weeks before entry into Austria. Please note that Austria is a Schengen State and therefore persons who require a visa will have to apply for a Schengen visa. In States where Austria has no diplomatic mission, visas can be obtained from the consular authority of a Schengen Partner State representing Austria in the country in question.

N. Channels of Communication

The Participation Form (Form A) and, as applicable, the Form for Submission of a Paper (Form B), and the Grant Application Form (Form C), should be sent to the competent national authority (usually the Ministry of Foreign Affairs or National Atomic Energy Authority) for official transmission to the IAEA.

O. Key Deadlines

Submission of Form B and abstract:	1 November 2013
Submission of Form C:	1 November 2013
Notification of acceptance of paper:	end of December 2013

P. Symposium Secretariat

Scientific Secretaries of the Symposium:

Ms Najat Mokhtar and Ms Cornelia Loechl

Nutritional and Health-Related Environmental Studies Section
Division of Human Health
Department of Nuclear Sciences and Applications
International Atomic Energy Agency
Tel.: +43 1 2600 21657 and 21635
Email: N.Mokhtar@iaea.org and C.Loechl@iaea.org

Assistance to Scientific Secretaries:

Mr Tarik Becic

Nutritional and Health-Related Environmental Studies Section
Division of Human Health
Department of Nuclear Sciences and Applications
International Atomic Energy Agency
Tel.: +43 1 2600 26785
Email: T.Becic@iaea.org

Administration and Organization:

Ms Karen Morrison

Conference Services Section
Division of Conference and Document Services
Department of Management
International Atomic Energy Agency
Tel.: +43 1 2600 21317
Email: K.Morrison@iaea.org

IAEA Contact Information:

International Atomic Energy Agency
Vienna International Centre
PO Box 100
1400 VIENNA, AUSTRIA
Tel.: +43 1 2600 (0) or extension

Fax: +43 1 26007
Email: official.mail@iaea.org

Subsequent correspondence on scientific matters should be sent to the Scientific Secretaries and correspondence on administrative matters to the IAEA Conference Services Section.

Q. Symposium Web Page

Please visit the IAEA symposium web page regularly for new information regarding this symposium:

<http://www-pub.iaea.org/iaea meetings/46087/Understanding-Moderate-Malnutrition-in-Children>