

# SCN NEWS

A PERIODIC REVIEW OF DEVELOPMENTS IN INTERNATIONAL NUTRITION COMPILED FROM INFORMATION AVAILABLE TO THE ACC/SCN

UNITED NATIONS



ADMINISTRATIVE COMMITTEE ON COORDINATION  
**SUB-COMMITTEE ON NUTRITION**

Number 16, July 1998

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*Photo: School children from Ghana being measured and weighed,  
The Ghana Partnership for Child Development*

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UNITED NATIONS ADMINISTRATIVE COMMITTEE ON COORDINATION  
**SUB-COMMITTEE ON NUTRITION**  
(ACC/SCN)

The ACC/SCN is the focal point for harmonising the policies and activities in nutrition of the United Nations system. The role of the SCN is to serve as a coordinating mechanism, for exchange of information and technical guidance, and to act dynamically to help the UN respond to nutritional problems. The SCN is responsible for overseeing the direction, scale, coherence and impact of the UN response to the nutritional problems of the world.

The Administrative Committee on Coordination (ACC), which is comprised of the heads of the UN Agencies, recommended the establishment of the Sub-Committee on Nutrition in 1977, following the World Food Conference (with particular reference to Resolution V on food and nutrition). This was approved by the Economic and Social Council of the UN (ECOSOC). The SCN held its first Session in 1977 in Rome.

The UN members of the SCN are FAO, IAEA, IFAD, ILO, UN, UNDP, UNEP, UNESCO, UNFPA, UNHCHR, UNHCR, UNICEF, UNRISD, UNU, WFP, WHO and the World Bank. From the outset, representatives of bilateral donor agencies have participated actively in SCN activities. Non-governmental organisations are also involved. The SCN is assisted by the Advisory Group on Nutrition (AGN), comprised of six nutritional scientists and practitioners of world repute from different regions. The Secretariat is hosted by WHO in Geneva.

The SCN undertakes a range of activities to meet its mandate. Annual meetings have representation from the concerned UN Agencies, from 10 to 20 donor agencies, the AGN, as well as invitees on specific topics; these meetings begin with a symposium on subjects of current importance for policy. The SCN brings certain such matters to the attention of the ACC. The SCN sponsors up to nine working groups on specialised areas of nutrition.

The SCN compiles and disseminates information on nutrition, reflecting the shared views of the agencies concerned. Regular reports on the world nutrition situation are issued. Nutrition Policy papers are produced to summarize current knowledge on selected topics. SCN News is normally published twice yearly and reports on the nutritional status of refugees and displaced persons (RNIS) four times per year. As decided by the Sub-Committee, initiatives are taken to promote coordinated activities - inter-agency programmes, meetings, publications -- aimed at reducing malnutrition, primarily in developing countries.

*SCN NEWS No.16 was edited by Cathy Needham*

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*We are most grateful for contributions as shown in Sources after articles*

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Your contributions to future issues would be most welcome.

*SCN NEWS* aims to help the sharing of experience in nutrition.

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# MESSAGE FROM THE CHAIRMAN

## SCN's 21<sup>st</sup> Year and 25<sup>th</sup> Session: a worthy celebration in Oslo, Norway

The 21<sup>st</sup> anniversary of SCN's founding and its 25<sup>th</sup> Session was an important occasion. UN Agencies, Bilaterals and the Advisory Group on Nutrition (AGN) were present in force, with a new participant - the Asian Development Bank. With more NGO participants than ever before, the turnout for the opening of the Symposium - *Challenges for the 21<sup>st</sup> Century: A Gender Perspective on Nutrition Through the Life Cycle* - was probably a record, and the opening addresses by the Norwegian Minister of International Development and Human Rights Dr Hilde Frafjord Johnson, and Dr Gro Harlem Brundtland, Norway's former Prime Minister and Director-General of WHO, made the event very special. It was most fitting that this 25<sup>th</sup> Session of the SCN was hosted by a national government - Norway - a first in SCN history.

The Session itself was full and substantive. The various working groups spent the weekend discussing scientific, policy and programmatic developments and developed priorities and recommendations for action (for a summary of discussions see page 24). Highlights of the Session included:

- ◇ the presentation by Philip James on the preliminary findings of the *Commission on Nutrition in the 21<sup>st</sup> Century*, which provoked lively discussion and debate (see SCN 25<sup>th</sup> Session report, available from the SCN Secretariat in Geneva or on the SCN website - <http://www.unsystem.org/accscn/>);
- ◇ the 1998 *Abraham Horwitz Lecture* - a most lively and unforgettable presentation on breastfeeding by Isatou Semega-Janneh;
- ◇ the presentation of the *Third Report on the World Nutrition Situation*, with its encouraging news of the significant progress over the last two decades in reducing stunting in all regions of the world (except Sub-Saharan Africa);
- ◇ the splendid presentation by Mercedes de Onis and Cutberto Garza on the WHO research project to develop a new reference for child growth.

The 25<sup>th</sup> Session gave us an opportunity to look back at the vision and creativity of the SCN's founders. With the help of George Beaton (who had reviewed the SCN

records), my opening remarks underlined some of the SCN's pioneering achievements:

- ◇ its very creation by ECOSOC in 1977 as a 'triumvirate' (Dick Heyward's terminology) – the UN Agencies, Bilaterals and the AGN. It is probably the first interagency committee of the ACC to include civil society as an integral part of its structure;
- ◇ SCN's leadership in proposing and mobilising action in key areas of nutrition: iodine deficiency, vitamin A and iron;
- ◇ the establishment of interagency mechanisms for reporting on key areas of nutrition, the *Reports on the World Nutrition Situation*, the *Nutrition Policy Papers*, the regular reports of the *Refugee Nutrition Information System*;
- ◇ SCN's basic work in providing a forum for strengthening coordination – by sharing information on past and future activities, and by reviewing implementation of major international commitments made at the World Summit for Children, the International Conference on Nutrition and the World Food Summit.

I hope all of us left Oslo with a new sense of opportunity and challenge. For all the progress, high levels of undernutrition are still an outrage and violation of the human right to food and nutrition in a world where global consumption totals \$24 trillion and where we now have knowledge and practical examples of how undernutrition can be rapidly reduced.

Soon we will have a draft report setting out the elements of a strategic plan for enhanced interagency collaboration to accelerate action to achieve nutrition goals. Sonya Rabeneck, Lilian Marovatsanga and I have visited UN Agencies for discussions in the preparation of this report. Already one clear lesson has emerged – that there is as much need to strengthen nutrition priorities and coordination *within* agencies as there is to strengthen coordination *between* agencies. As SCN Chairman, I wish all SCN participants and SCN's wide group of supporters every success as we respond to the nutrition challenges ahead.

*Richard Tofts*

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# AGN PAGE

## The AGN and Current Members

The Advisory Group on Nutrition (AGN) provides assistance and advice on policy and the science of nutrition to the SCN. It is comprised of nutritional scientists and practitioners of world repute from different regions (see *SCN News No.15 p2* for details of current members).

After six years of service, Jak Jervell retired from the AGN in March 1998. Jak contributed enormously to the work of the AGN and we thank him greatly for his work. He can be contacted by email on [jak.jervell@klinmed.uio.no](mailto:jak.jervell@klinmed.uio.no)

## Update on AGN Activities and Discussions

The AGN met at the SCN's 25<sup>th</sup> Session, held in Oslo, Norway in March 1998. During the latter half of 1997, the AGN undertook assessment missions to two countries (Zimbabwe, Bangladesh) to look at coordination at country level. This work was highlighted as being important to the SCN in fulfilling its mission to harmonise and enhance the effectiveness of food and nutrition programmes.

The AGN members found that while there was good cooperation and information sharing between UN agencies, coordinated action tended to occur on an *ad hoc* basis and usually as a result of strong leadership by certain individuals, rather than because of a formal institutional policy. Coordinated actions between UN agencies were found to be most effective in response to acute emergency situations such as famine or civil strife.

The lack of intersectoral coordination of action, follow-up to plans of action, and programme implementation at the country level was reflected in the words of one national planner:

**“Nutrition is everybody’s business  
and nobody’s responsibility”**

On a positive note, the process of thematic planning, led by UNDP (see *SCN News No.15 p43*) was seen to offer

some promise for greater coordination and interaction at the country level. Furthermore, future visits by AGN members will focus on countries with successful experiences in country level coordination, and it is intended that during such visits, AGN members will help with strengthening interagency work and catalysing coordination.

### *Other activities and discussions:*

- ◇ The AGN recently addressed the question of using food balance sheets (FBS) to determine the micronutrient content of food supplies. They concluded that this is potentially very useful and should be explored further, however at present, using the FBS to calculate figures for micronutrient availability is premature.
- ◇ In considering what actions are necessary to reduce malnutrition globally, the AGN is examining the current activities of the UN lead agencies, and reviewing key agency documents to identify successful approaches.
- ◇ The AGN will provide advice to the SCN Secretariat in a project aimed at comparing different methods of anthropometric data analysis being used to estimate malnutrition in young children, with the purpose of defining the best approach to use in future analyses.
- ◇ In recent discussions of the role of multiple vitamin and mineral supplementation in maternal nutrition, the AGN concluded that early trials of supplementation in pregnancy should be closely monitored to evaluate any adverse effects. In addition, more research is needed on the effectiveness of generalised medicinal supplementation before this practice can be recommended for adoption at the community level. The need for controlled randomised clinical trials with large numbers of subjects is considered necessary before multinutrient supplementation is considered at the policy level.

A copy of the full AGN report, 'Report of the Meeting of the Advisory Group on Nutrition at the Twenty-Fifth Session of the Sub-Committee on Nutrition, Oslo, Norway, 26 March 1998', is available on request from the ACC/SCN Secretariat, c/o WHO, 20 Avenue Appia, CH-1211 Geneva 27, Switzerland. Fax: 41 22 798 8891 Email: [accscn@who.ch](mailto:accscn@who.ch)



# NUTRITION OF THE SCHOOL-AGED CHILD

*There are more children of school age, and more children going to school than ever before. Around 90% of the world's children now survive beyond their 5<sup>th</sup> birthday<sup>1</sup>. These successes raise new concerns. Ill health and nutrition compromise both the quality of life of school-age children and the potential to benefit fully from what might be the only education they receive.*

*In many developing countries there are more teachers than health workers and more schools than clinics. The infrastructure of the school system therefore provides an opportunity for health services to reach children in a cost-efficient way.*

*This feature brings together a variety of articles, and reports of two new publications on the health and nutrition of school-age children. The papers range in content from the assessment of nutritional status in school-age children, to examples of school-based nutrition and feeding programmes in different countries. The nutritional concerns of school children in industrialised countries – concerns that are also emerging in some areas of the developing world - are also presented.*

## OVERVIEW TO THE FEATURE

The first article in this feature presents new data from the Partnership for Child Development, showing that nutrition problems of school children may be greater and more widespread than previously thought (see page 4). Furthermore, anaemia data from the database on iron deficiency being developed by WHO indicate a higher prevalence of anaemia in school-age children than in pre-school children, although data are limited (see page 7 of this feature). It is likely, therefore, that the scale of nutritional problems in school-age children may have previously been underestimated. Indeed, one of the main conclusions from the meeting of the *SCN Working Group on Nutrition of School-age Children*<sup>2</sup> in Oslo this year is that more data on the health and nutrition of school-age children are needed to assess the scale of their problems.

A survey of donor and agency support for school health and nutrition programmes is presented on page 8 of this feature. This review reveals a surprisingly broad-based support for school nutrition and health programmes and calls for stronger collaboration between UN agencies, bilateral agencies, NGOs and the implementing countries.

The article on nutrition of school-aged children in Mongolia provides information about food and nutrient intakes of school children, and describes how the very low intake of fruit in school-age children is responsible for the intake of some essential vitamins and minerals falling below Mongolian normative values (see page 10). This description draws on information from an extensive dietary survey report, which is one of the few nutrition studies in Mongolia that has been translated into English.

There is concern that school-based systems fail to benefit children who are not enrolled in school, but who may be the most in need. Although this remains a problem, school feeding programmes can motivate children to attend school and can motivate parents to enroll their children. Food-for-school programmes, such as the national programme in India described on page 13, for example, provide 'take home' food to children with high attendance records, and are often implemented to increase enrolment and attendance, particularly for girls. Furthermore, 'school health days' could bring in non-enrolled children to receive treatments, and thus provide effective outreach to the community at large.

<sup>1</sup> UNICEF. *The State of the World's Children*, 1995.

<sup>2</sup> A copy of the report from the Working Group on Nutrition of School-age Children (summarised on page 25), is available on request from the SCN Secretariat, c/o WHO, 20 Avenue Appia, CH-1211 Geneva 27, Switzerland. Tel: 41 22 791 0456 Fax: 41 22 798 8891 Email: accscn@who.ch

Practical experience gained by the Partnership for Child Development indicates that school-based health and nutrition programmes are feasible and effective, with clear potential to improve the nutrition and growth of school-age children (see below). Examples of school feeding programmes presented in this feature show varied success. In India, the government-funded Nutritional Support to Primary Education Programme (NSPE) is working well in rural areas. By the end of 1998, it is expected that the whole country will be covered by this programme (see page 13). The new school feeding programme being implemented in designated 'poor' villages in Indonesia, is still in its early days. Funded entirely by the government, the recognition of its importance for the long-term future of Indonesia is signified by the fact that funding support has been maintained in spite of the recent economic crisis (see page 15). In South Africa, a case study has shown that vitamin and mineral fortification of biscuits results in a significant improvement of micronutrient status when given as a snack to school children. The biscuit is now commercially available and is actively marketed at the primary school level by the food industry (see page 16). School feeding programmes in Kenya however, have suffered from lack of funds. The Kenyan case highlights the need to monitor programme impact in order to develop more cost-effective approaches. Some other lessons that have emerged from Kenya include the key role of parents in sustaining school feeding programmes, the concerns of

safety and quality of food from vendors and hawkers, and the problems of money given to children for food being spent on drugs (see page 18).

The rising prevalence of obesity among school children, and the need for health education to focus on healthy eating is also presented in this feature. The article on page 22 provides an example of this focus on healthy eating, with the development of guidelines that promote healthy eating for school children in the USA. Nutrition concerns facing industrialised countries, and, increasingly, by some groups in developing countries include the problems of dietary excess and obesity, eating disorders and the future risk of chronic disease. The article on page 19 discusses these nutrition concerns. It also discusses the changing lifestyles and dietary patterns in industrialised countries, which are resulting in personal preferences driving the nutritional patterns of school children, rather than the availability of food itself. Finally, a study in Nepal has shown that in more affluent schools where convenience snacks are available, school children's food habits are changing towards a preference for modern convenience foods of poor nutritional quality (see page 21).

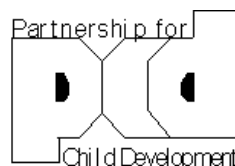
*We would like to thank Andrew Hall (PCD, Oxford University) for helpful comments during the preparation and editing of this feature.*

## **THE PARTNERSHIP FOR CHILD DEVELOPMENT: PROMOTING THE HEALTH, NUTRITION AND EDUCATION OF SCHOOL-AGE CHILDREN**

**by Andrew Hall and Don Bundy**

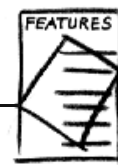
**T**he Partnership for Child Development (PCD) was established in 1992 to conduct and promote operations research on school health and nutrition programmes, and to undertake research on the health and health education of school-age children (1). The establishment of the PCD was a response to the growing number of children who were surviving to school-age - a group which typically comprises between 20% and 30% of the population.

The 1993 World Bank Development Report, '*Investing in Health*' identified school health and nutrition programmes as one of 5 priorities for public health initiatives. This, however, was based largely on theoretical analyses and there was little prior experience of large-scale



programmes. The first aim of the PCD therefore, was to gain practical experience of the processes, costs and issues involved in establishing school health programmes in a variety of settings.

The PCD was set up as a consortium of donors, countries and technical institutions to develop the inter-sectoral collaborations necessary to establish or strengthen school health programmes. The Scientific Coordinating Centre for the PCD is based at Oxford University in the U.K. This international initiative helps to provide technical assistance and support in order that low-income countries can monitor and evaluate the



costs, processes and impact of programmes. The programmes established so far have emphasised the development of national collaborations as a part of locally managed programmes, the core of which is the essential partnership between the health and education sectors. There are now PCD research programmes or activities in more than 14 countries around the world, supported by a broad range of international agencies (UNDP, WHO, UNICEF, World Bank), bilateral agencies (USAID, UK DFID), and charities (Rockefeller Foundation, Edna McConnell Clark Foundation, James S. McDonnell Foundation, Wellcome Trust and Save the Children Federation).

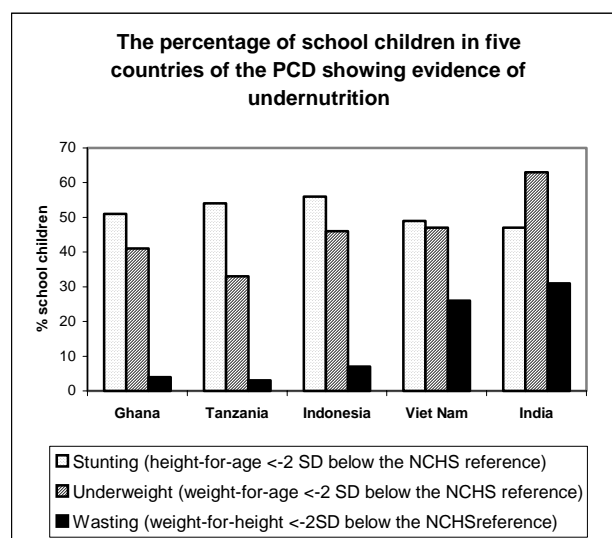
### **The practicality of the school-based approach**

A core activity of the PCD is to evaluate large-scale demonstration school health and nutrition programmes. These are typically implemented by governments through the existing school system rather than through the traditional health infrastructure. The support for national programmes provides an opportunity for the typical unit of decentralised administration - usually the district - to develop methods and skills on a scale that is operationally informative and representative. In practice, the school-based health services evaluated so far have ranged in size from to 45,000 children in Viet Nam to over 3 million children in India. In Tanzania, for example, the PCD programme, called *Ushirikiano wa Kumwendeleza Mtoto Tanzania*, is being implemented by a collaboration between four ministries working in three districts of Tanga Region, and currently involves about 350 schools and 120,000 pupils.

The experiences of implementing these programmes have confirmed the practical benefits of the school-based approach and have led to some important conclusions (see Box below).

### **The effectiveness of the school-based approach**

Although the impact of school health services on growth, nutritional status, parasitic infections and, in some countries, on cognitive functions, is being evaluated as a part of PCD programmes, this article will focus on nutrition. Evaluations are typically in the form of annual surveys of children both in districts where the programme is being implemented and in adjacent, comparison districts where programme implementation has not yet started.



The baseline surveys have shed new light on the extent of undernutrition and ill-health experienced by school-age children. A recent analysis of anthropometric measurements of about 14,000 schoolchildren in Ghana, Tanzania, Indonesia, Viet Nam and India (see graph above) found that a large proportion of children have stunted height and low weight when compared with NCHS reference values. Wasting is less common, although over

#### **Box: The practicality of the school-based approach - conclusions**

- ◇ Simple, safe and effective health services such as deworming and micronutrient provision (required periodically but infrequently) can be provided through the school system.
- ◇ With minimal training, teachers can feel positive about providing health care to children, as long as the task doesn't take up too much of their time. In addition, children and parents are willing to accept teachers in this role and may perceive schools in a more favourable light as a result of such programmes.
- ◇ A school-based system is not expensive, mainly because an existing infrastructure is used. For example, in the African programmes of the PCD it costs 3–4 US cents per child to deliver an annual standard-dose tablet to treat intestinal worms. While a more complicated treatment, such as praziquantel to treat the disease urinary schistosomiasis, is more expensive to deliver at between 21-67 US cents per child, it is still relatively inexpensive compared with many other health, nutritional or educational interventions. The experiences of the PCD in both Africa and Asia have illustrated that the education and health sectors can implement a school-based programme at very low cost (2).

20% of school children studied in Viet Nam and India have low weight-for-height (3). Data on the haemoglobin concentrations of 3,000 children in four of these same countries, reveal that anaemia is very common in Tanzania and Ghana (4), and is least common in school children studied in the Red River Delta of Viet Nam (see adjacent graph). This may be largely related to the occurrence of hookworm infection, urinary schistosomiasis and malaria in the African programmes. Urinary iodine and serum vitamin A data from Ghana, Tanzania and Indonesia have indicated that deficiencies of these micronutrients are more localised in nature.

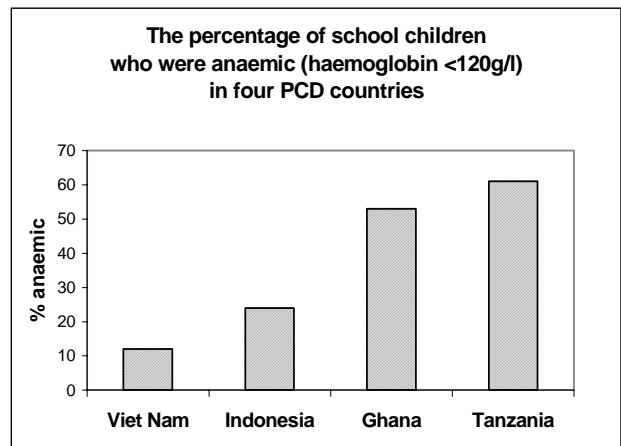
Surveys conducted after the programmes have been implemented are showing that school health services can have an impact on a broad range of health and educational outcomes. In Tanzania, for example, the children who had participated in the programme showed an average additional gain in height attributed to treatments with albendazole and praziquantel, of 1.5cms over 16 months, and an average increase in haemoglobin concentration of 4.8 g/l. There is, however, a large margin for further improvement. In Ghana, where evidence of better growth and improvements in educational achievements were also observed, the PCD programme is now investigating whether teachers can administer iron tablets to children once a week for a school term, and assessing what impact it would have on haemoglobin concentrations.

*“Baseline surveys have shed  
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experienced by school-age children”*

#### **Action-oriented research**

The PCD also provides a focus for a broad range of research activities in the field of school health with the aim of improving interventions and health education, and to develop better measures of outcome. For example,

- ◇ a large study of the impact of treating parasitic infections on children's cognitive functions and educational performance is being undertaken in Tanzania;
- ◇ studies are being done in Ghana and Tanzania to see how children perceive the pictorial messages used in health education materials with the aim of making them more easily understood;
- ◇ studies have been done in Ghana of children to investigate the health and social factors that are associated with not being enrolled in school because such children will miss out on both education and school



health services; and

- ◇ a randomised trial is being done in Viet Nam to see if health education prevents reinfection with intestinal worms.

#### **The future**

Efforts are now being made to scale up school health and nutrition programme activities and to help countries to develop and implement their own programmes by means of programme toolkits and guides. To this end, the PCD is working with WHO, UNICEF, the World Bank and with other international agencies working in the field of school health (see page 8).

The PCD is also beginning new research studies. To strengthen the body of scientific evidence on the impact of school-based nutritional interventions, large-scale randomised trials are planned for Ghana and Tanzania to look at the outcome of programmes providing iron with and without anthelmintics in terms of growth, haemoglobin concentrations and educational achievements, and in Viet Nam of anthelmintics alone. Research studies are also underway in Uganda and India to look at the benefits of nutritional interventions such as vitamin A and anthelmintics as a part of early childhood development programmes, with the aim of improving the readiness of pre-school children for education.

Although experience of school health programmes and knowledge of the health and nutritional problems of school-age children is growing, there is still a lot to be done and much to be learned. The authors would be delighted to learn from others about their experiences and research and can place summaries of programmes and activities on a forthcoming School Health and Nutrition site on the Internet and look forward to hearing from you.

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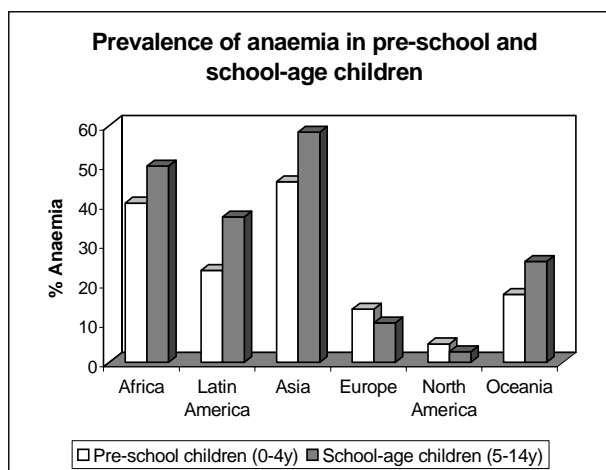
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## ANAEMIA IN SCHOOL-AGED CHILDREN

by Bruno de Benoist

Iron deficiency is the most widespread micronutrient deficiency in the world today. The anaemia it causes is a major problem among women and young children, but there is growing evidence that it is also a problem among school-aged children. Its importance as a public health problem in school-aged children deserves greater attention not only because of its deleterious effects, which include lower school achievement due to impaired cognitive development, fatigue and poor attention span, and increased morbidity because of reduced resistance to infection, but also because of the large numbers of school-age children affected. Indeed, recent estimates based on the WHO global database suggest that 7.8% of school-aged children in industrialised countries and 53% in developing countries are anaemic. Prevalences are highest in Asia (58.4%) and Africa (49.8%) where around half of school-aged children suffer from anaemia. Moreover, in developing countries, the proportion of school-aged children with anaemia is much higher than that of pre-school children (see graph).

These estimates should be interpreted cautiously since they are based mainly on subnational surveys from a limited number of countries for the regions mentioned. They nevertheless serve to draw attention to anaemia as a problem of public health importance in this age group and highlight the need for more information on its magnitude and causes so that appropriate control measures can be adopted. Countries in general, and developing countries in particular, can ill afford to allow their youth be damaged by so devastating a public health problem as anaemia.



Data come mostly from subnational surveys. For pre-school children, data are from 118 countries equally distributed between regions; for school-aged children, data are from 30 countries mainly from Africa (9 countries), Asia (10 countries) and America (9 countries). Anaemia is defined from haemoglobin concentration using 110g/l as cut-off for the 0-4y age group, and 120g/l as cut off for the 5-14y age group.

The WHO Micronutrient Deficiency Information System (MDIS) includes three databases on iodine, vitamin A and iron (see page 59). The database on iron deficiency (from which information has been taken for this article) is currently being developed, and WHO welcomes new contributions to this database. For further information about how to contribute to the database, please contact Bruno de Benoist, Programme of Nutrition, WHO, 20 Avenue Appia, CH-1211 Geneva 27, Switzerland. Tel: 41 22 791 3412 Fax: 41 22 791 4156 Email: [debenoistb@who.ch](mailto:debenoistb@who.ch)

## **SCHOOL-BASED HEALTH AND NUTRITION PROGRAMMES: A SURVEY OF DONOR AND AGENCY SUPPORT**

**by Don Bundy, Judy McGuire, Andrew Hall and Carmel Dolan**

There are more children of school age and more children attending school than at any time in human history. These children are one of the most accessible population groups from a public health perspective because they are gathered together on an almost daily basis and because they are supervised by a trained workforce of teachers. They are also a group which can benefit considerably from nutrition and health interventions: good health and adequate nutrition promote both physical growth and learning, while good health and nutrition education at school age can lay the foundation for life-long good health.

Given the apparent opportunities for school-based health and nutrition programmes, the *SCN Working Group on Nutrition of School-age Children* commissioned a survey of what donors and agencies are actually doing for school children. The survey method was to conduct key informant interviews over a two-month period in early 1998, and to present the results for further discussion at the Working Group meeting in Oslo, April 1998 (see page 25). A major conclusion of this review process was that there was much more happening in school nutrition and health than was commonly perceived, and also that the activity involved UN, financial, bilateral and NGOs in partnership with implementing countries.

Many UN agencies have strategies or policies on school-based health and nutrition. UNICEF has articulated a school health and nutrition strategy that encompasses sound school policies and the rights of school children, skills-based health education, a healthy school environment, and improved access to health services for school children. UNDP was a founding co-sponsor of the Partnership for Child Development in 1992 and has continued to support operations research into the contribution to sustainable human development of health and nutrition at school age. WHO launched a Global School Health Initiative in 1996 with a focus on health promoting schools and regional networks<sup>1</sup>. The Health Education and

Promotion Division is the focal point for the 8 Divisions which contribute to the steering group for school health and nutrition, but some 22 divisions at WHO are reported to be active in this area. UNFPA supports reproductive health programmes for adolescents in 98 countries, and school-based HIV/AIDS prevention activities in 95 countries. UNESCO supports the integration of HIV/AIDS education into the school curriculum and is a co-sponsor of UNAIDS, which has a specific working group on school based interventions. UNESCO also provides technical support for the WFP's school feeding activities which are underway in some 60 countries. FAO is currently field testing school-based nutrition education materials to promote dietary diversification and food security (see page 53).

Perhaps because school health and nutrition programmes are necessarily intersectoral, many of these activities are being implemented in partnership. This has been achieved formally, for example, by UNAIDS efforts to promote HIV/AIDS education in schools, co-sponsored by UNICEF, UNESCO, UNFPA, WHO and the World Bank. A looser partnership was created by the UNICEF School Based Initiative in 1994 which, through a series of technical support group meetings in Asia, Africa and the Americas, brought together WHO, UNFPA, UNESCO, the World Bank and NGOs to create a '*Situation Analysis Tool for School Health and Nutrition Programming*' (available on request from the PCD, see contact information on page 10). This partnership continues to grow: the tool has been evaluated by WHO in 5 African countries, with support from the Edna McConnell Clark Foundation, and is currently being evaluated for use in Spanish-speaking and Francophone countries by PAHO and USAID.

It appears that few bilateral agencies have specific policies which promote the health and nutrition of school children, but nevertheless most contribute significantly. Since 1992, CIDA has provided Can\$87 million for nutri-

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<sup>1</sup>Editor's note: A new WHO fact sheet (No.92; June 1998) on '*WHO's Global School Health Initiative: helping schools to become "Health-Promoting Schools"*' is available on the web at <http://www.who.ch/>. The goal of the WHO Global School Health Initiative is to increase the number of schools that can be called 'Health-Promoting Schools'. Such schools are characterised by their constant strengthening of capacity to provide a healthy setting for living, learning and working. Further information can be obtained from the recent WHO publication '*Promoting Health through Schools*', 1997, WHO Technical Report Series 870. pp.94 CHF 17 (CHF 11.90 in developing countries). Available from WHO distribution and sales, CH-1211 Geneva 27, Switzerland. Tel: 41 22 791 2477 Fax: 41 22 791 4857 Email: [publications@who.ch](mailto:publications@who.ch)



tion projects. These actions specifically help school children: e.g., the elimination of iodine deficiency disorders (IDD) and vitamin A deficiency in school girls in the Indian Sub Continent, and school-based IDD monitoring in South America. The CIDA/WFP Women's Health and Nutrition Facility targets 0.9 million women and 2.2 million children, including school children, in 15 low-income countries with food, micronutrients and deworming. DFID, UK, supports the integration of health and nutrition education into school curricula, funds the School Health Action and Training Project for teachers in 700 schools in Delhi and Bombay, provides US\$7 million worth of school-based health services in Andhra Pradesh, and has provided water and sanitation for 800 schools in Kenya; yet DFID has no specific policy for the health of the school-age child. DANIDA, NORAD and SIDA also have no specific policy for the health of the school child, but provide major support for information-education-communication (IEC) and life skills to promote health - particularly reproductive health - to be integrated into school curricula. For example, the Regional Adolescent Social and Reproductive Health Project implemented by AMREF in Kenya, Tanzania, Uganda and Ethiopia is co-funded by NORAD and SIDA. In 1997, GTZ identified adolescents as a neglected group, and recommended increased programming in life skills training for youth health, HIV/AIDS and nutrition - particularly in Africa. USAID has both a policy for promoting the health of school children - in Africa and the Americas - and active programmes providing school-based health services, including interventions (such as micronutrient provision and deworming) and skills-based health education.

Much of the practical implementation of school health and nutrition activities is undertaken by international or local NGOs, even if funded by bilateral and other agencies. A survey of 10 major INGOs revealed that all were active in IEC and skills-based health education in schools, and a majority were promoting a healthy school environment and the provision of school-based health and nutrition services. These programmes are often very substantial. World Vision (Canada), for example, has a CIDA-sponsored Can\$25 million programme in Ethiopia, Ghana, Malawi, Senegal and Tanzania that will, as one component, provide IEC, vitamin A and iron to school children and sanitation to schools. Catholic Relief Services is providing school-based IEC, feeding, specific micronutrients and first aid kits, in various combinations, in 10 countries, while Save the Children Federation (USA) is providing school-based IEC with or without micronutrient supplements and deworming in 15 countries. The coverage of IEC may be very extensive, for example, the

Children's Health and Environment magazine supported by CARE in Thailand is read by more than one million students in 31,000 schools.

The multilateral financial organisations also play an increasingly important role. The Inter American Development Bank and the Asian Development Bank both provide loans in support of school nutrition and health programmes. The World Bank was amongst the first to identify school-based health and nutrition programmes as remarkably equitable and cost-effective interventions that contribute to human capital and social capital development. The World Bank, mainly through the International



(Courtesy of UNHCR)

Development Association, currently supports programmes that seek to deliver a simple package of locally-relevant health and nutrition interventions through schools, delivered on a scale that is a benefit rather than a burden on the education services. Such activities are typically small components (2% to 9%) of universal basic education projects (with total budgets in the range of US\$35 to 60 million), but are also components of health and nutrition projects (with total budgets in a similar range), community funds for health, nutrition or education (with total budgets in the range of US\$50 to 110 million), and Sector Investment Projects (with total budgets in the US\$100s of millions). To enhance responsiveness to the needs of client countries, the World Bank has entered into productive partnerships with UN agencies (e.g., PAHO/WHO in Latin America and the Caribbean), INGOs (e.g. SCF (USA) in Africa) and technical groups (e.g. the PCD) as part of an International School Health Initiative (for further details of World Bank activity see page 22 'Class Action' by Joy del Rosso and Tania Marek).

Overall, this survey reveals surprisingly strong and broad-based support for school nutrition and health pro-

grammes. There may be a need to explore ways to build beyond the current levels of collaboration, and perhaps the *SCN Working Group on Nutrition of School-age Children* can contribute to this. Almost all UN agencies, funds and organisations with a mandate in health, nutrition or education have a specific policy to promote the health and nutrition of the school-age child, and most have active programmes in this area. The bilateral donors are active in the area, but curiously few have articulated specific health and nutrition policies for school children. This may reflect the ambiguities of the intersectoral status of some school "health" activities; school feeding, for example, is often seen as promoting school attendance and learning, and thus as contributing to educational rather than health outcomes. Or it may reflect a lack of recognition that programmes to promote adolescent health – a major area of current emphasis for prevention of HIV/AIDS, substance abuse, and violence – are frequently school-based in low income countries. The INGOs have clearly grasped this concept, and are expanding their definition of school health and nutrition to include school-based services, such as snacks, micronutrient provision and deworming. It seems to be this minimum package – health education and simple, well-tried health and nutrition services, both deliv-

ered through schools – that is emerging as a practical definition of a school-based health and nutrition programme.

This survey is a work in progress. If you would like a copy of the latest draft of the report, or if you would like to contribute to the survey, please contact Andrew Hall at the Scientific Coordinating Centre of the Partnership for Child Development, The Wellcome Trust Centre for the Epidemiology of Infectious Disease, University of Oxford, South Parks Road, Oxford OX1 3PS, UK. Tel: 44 1865 281231 Fax: 44 1865 281246 Email: child.development@zoology.ox.ac.uk

The survey was supported by a World Bank Special Grant and was conducted by Carmel Dolan with the Partnership for Child Development. The Partnership for Child Development programmes and activities are supported by the UNDP, the WHO, the British Department for International Development, UNICEF, the World Bank, the Edna McConnell Clark Foundation, The Rockefeller Foundation, the James S. McDonnell Foundation, and the Wellcome Trust.

Don Bundy is at the Human Development Network Education Department at the World Bank, Washington D.C. and at the Wellcome Trust Centre for the Epidemiology of Infectious Disease, University of Oxford; Judith McGuire is at the Latin American and Caribbean Human Development Network at the World Bank, Washington D.C.; Andrew Hall is in the Scientific Coordinating Centre of the Partnership for Child Development, University of Oxford; Carmel Dolan is a Freelance Consultant.

## **NUTRITION OF SCHOOL-AGED CHILDREN IN MONGOLIA**

*by Ruth English*

The population of Mongolia (2.3 million people) is relatively young, with 38% under the age of 15 years (1). Fifty-two percent of the Mongolian population live in urban areas and 48% live in rural areas, with approximately 20% of the population being nomadic. Since the break-up of the Soviet Union at the beginning of the decade, the economy of Mongolia has been in transition, changing from a communist-based to a capitalist-based economy. This has meant much hardship for the Mongolian people. As the support base for the agriculture system and the social welfare programme services has eroded, agricultural production has fallen drastically and unemployment and poverty are increasing. The cities have large numbers of people concentrated in *ger* (tent) settlements with 60,000 families in the capital city of Ulaanbaatar. There are associated problems relating to safe drinking water, adequate sanitation and waste disposal, and increased levels of soil pollution. These living conditions contribute to ill-health and an unsatisfactory quality of life.

### **Education situation**

Educational achievement has been high with a 95% literacy rate, 98% primary school coverage, 88% coverage for 8 years of schooling and 15% in higher levels. However this may be falling with increasing poverty and unemployment.

### **Nutrition situation of school children – nutrient intake**

From 1993 to 1996, the National Nutrition Research Centre conducted dietary surveys on some 21,000 persons, including school children. The data collection comprised a 24-hour recall of food eaten the previous day, using a questionnaire form for response. The report of the *Nutritional status of the Mongolian population* (2) details the nutrient intakes of pre-school and school-age children in four age groups: 4-7y, 6-10y, 11-14y, and 15-17y. For the two older age groups, the nutrient intakes of boys and girls were estimated separately.



### Nutrient intakes of school children in Mongolia

Nutrients	Age Groups					
	4-7y	8-10y	11-14y		15-17y	
			Boys	Girls	Boys	Girls
Protein (g)	75.6	69.0	64.7	56.2	73.0	57.4
Fat (g) – Plant	8.7	14.4	29.9	9.3	14.4	11.2
Fat (g) – Animal	22.4	25.4	40.6	28.9	34.0	29.0
Fat (g) – Total	31.1	39.8	70.5	38.2	48.4	40.2
Carbohydrate (g)	284.8	286.4	256.5	202.2	274.2	211.0
Energy (kcal)	1711	1780	1920	1378	1824	1435
Vitamin A (mg)	0.70	0.50	1.28	0.57	0.67	0.60
Vitamin B1 (mg)	0.88	0.90	0.94	0.75	0.98	0.82
Vitamin B2 (mg)	0.91	0.94	0.89	0.85	1.10	0.88
Niacin (mg)	8.54	8.87	20.3	7.70	10.5	8.00
Vitamin C (mg)	8.1	14.7	10.9	10.8	16.7	16.8
Calcium (mg)	180	202	720	186	217	227
Iron (mg)	11.0	15.0	---	12.1	16.0	12.4
% energy from protein:fat:carbohydrate	18:16:66	16:20:64	14:23:53	16:25:56	16:24:60	16:25:59

The figures for vegetable consumption were not included in the report. The very low intake of fruit and possibly also vegetables was responsible for the low intake of some vitamins (e.g., vitamin C) and minerals, which fell well below the normative values for nutrient intakes developed for Mongolia in 1981 (3). It was noted that eggs and rice were not consumed at all. The low intake of milk and milk products explains the overall low intake of calcium and vitamin B-2, while the low consumption of vegetable oil, butter, milk and milk products result in the generally low intake of fat.

The energy intakes of the younger age groups are high in comparison with those in the 11-14y and 15-17y age groups - particularly in girls (see table above).

With regard to micronutrients, intakes of some essential vitamins and minerals in all age and sex groups are below the recommended levels developed for the Mongolian population (3). In particular, intakes of vitamin C, vitamin B-2, and calcium are low, although the calcium intakes of boys aged 11-14 years appear to be adequate. Iron intake could be considered low for girls of puberty age (11-14y and 15-17y). However, this level of intake may actually be adequate as a major source of the iron would be in the form of the more absorbable haem iron from meat products.

#### Food intake among school children

The average daily intakes of foods for school children (aged 4-17y) are as follows:

Meat and meat products	158.6g
Milk and milk products	282.4g
Flour and flour products	205.3g
Butter	6.0g
Fat	0.4g
Rice	211.6g
Fruit	4.6g

#### Nutrition situation of school children – malnutrition

There is evidence of nutrient deficiency diseases among school children in Mongolia. Meat and dairy products have traditionally formed the main part of the adult diet with flour and flour products. Dietary patterns have been changing over the period of economic transition, particularly in relation to the consumption of milk and milk products. Especially in the cities and towns, the availability of milk has been decreasing, partly due to a breakdown in the milk marketing systems from rural to urban areas.

#### Underweight

The National Nutrition Research Centre has conducted a series of anthropometric surveys in children under 5 years of age to determine the prevalence of undernutrition in young children in this country. While the overall prevalence of underweight (low weight-for-age) has decreased from 1992 to 1996, there has been an increase from 29.4 to 42% amongst children aged 25-48 months and from 0 to 13% amongst children aged 49-60 months. These results are indicative of an increasing problem of malnutrition and growth failure in children as they enter the school system.

#### Micronutrient deficiencies

There are three priority micronutrition deficiency diseases in Mongolia that primarily affect women and children:

- ◇ *Vitamin D deficiency:* There is a major problem of vitamin D deficiency in Mongolia. Surveys have identified prevalence rates of rickets varying from 6% to 68% in different populations, with an average prevalence rate at 3 years of 26.5%. In the 1992 child survey, 44.7% of children under five had one or more signs of rickets with bowing of the tibia being the most common sign. The cause of vitamin D rickets in Mongolia is as yet ill-defined, but the data indicate that many children carry the handicap of bone malformation from rickets through their school years into adulthood.
- ◇ *Iron deficiency anaemia:* The prevalence of iron deficiency is now reported to be as high as 28.8% in pregnant women and 43.6% in children below five years of age. No data are available on the prevalence of iron deficiency anaemia in children of school-age.
- ◇ *Iodine deficiency diseases:* In 1992, 1490 children aged 7-12 years from eight schools, were examined to determine the prevalence of iodine deficiency disorders (IDD). Two of the eight schools were on remote state farms. The survey showed an overall prevalence of 41% (range 24-83%), with children in the Bulgan area or Aimag, most at risk. Clinical signs of dysfunction of the thyroid were identified in 1.5% of the children. Overall, it is estimated that 28% of the population has goitre. Iodine fortification of salt is the

major strategy being pursued to reduce and control IDD. Six plants produce salt in Mongolia. In 1996, it was estimated that 40% of households were using iodised salt. The small additional cost of fortified vs. unfortified is reported to be a deterrent to purchase of the iodised salt by poor families.

*Other micronutrient deficiencies:* In some country reports, reference is also made to the risk of vitamin A and vitamin C deficiencies in Mongolia. One survey indicated a prevalence of night blindness in 4.5% of a group of children, as reported by mothers. No evidence is available indicating that vitamin C deficiency has been clinically identified in school children or adults in Mongolia.

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1. State Statistical Office of Mongolia. Mongolian economy and society in 1996. Ulaanbaatar, 1997.
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3. Ministry of Agriculture and Industry. Physiological norms for nutrient intakes for the Mongolian population. Ulaanbaatar, 1981.

Ruth English is a Nutrition Consultant and Honorary Research Consultant at the Department of Social and Preventive Medicine, University of Queensland, Australia. Postal address: P.O. Box 1491 Noosa Heads, Qld, Australia. Tel/Fax: 61 7 5449 2015 Email: renglish@ozemail.com.au This article is based on information obtained during a consultancy in Mongolia in May/June 1997.

## SCHOOL FEEDING PROGRAMMES

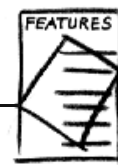
School feeding programmes are one of several interventions that can address some of the nutrition and health problems of school-age children. If properly designed and effectively implemented, school feeding programmes can achieve a number of goals:

- ◇ alleviate short-term hunger, thus increasing attention and concentration span;
- ◇ encourage (or be used specifically to encourage) enrolment by girls and improve retention;
- ◇ motivate children to attend school and motivate parents to enroll their children in school;
- ◇ contribute to better nutrition and address specific micronutrient deficiencies in school-age children (especially iron and iodine deficiencies which directly affect cognitive development);
- ◇ increase community involvement in schools.

A series of three documents entitled "School Feeding Programmes: Food for Education" have been prepared by Joy del Rosso under the auspices of the Partnership for Child Development (see page 4) to provide governments, agencies and organisations with up-to-date information:

- Part I: *Summary of Major Issues and Recommendations*
- Part II: *A Review and Annotated Bibliography*
- Part III: *Guidelines for School Feeding Programmes to Contribute to Improving the Effectiveness and Efficiency of Education*

Copies are available on request from the Partnership for Child Development, Wellcome Trust Centre for the Epidemiology of Infectious Disease, Oxford University, South Parks Road, Oxford OX1 3PS, UK. Tel: 44 1865 281231 Fax: 44 1865 281245 Email: child.development@zoo.ox.ac.uk Web: <http://www.ceid.ox.ac.uk/child/>



## INDIA'S NATIONAL PROGRAMME OF NUTRITIONAL SUPPORT TO PRIMARY EDUCATION PROGRAMME (NSPE)

by Tara Gopaldas

**O**n August 15<sup>th</sup> 1995 (India's 48<sup>th</sup> Independence Day), the Government of India launched the National Programme of Nutritional Support to Primary Education (NSPE). A number of converging and positive factors contributed towards the launch of NSPE. These were:

- ◇ a strong political commitment at both central and state levels to universalise primary education;
- ◇ the decision by the Government of India to redeem the national pledge of allocating 6% of the national income for primary education;
- ◇ successive bumper harvests, the success of the 'Green Revolution' and the development of a large-scale public distribution system;
- ◇ the excellent report of the Committee on Mid-Day-Meals (1) which is the Plan of Action instrument for the NSPE<sup>1</sup>;
- ◇ numerous research studies and publications in the 1980s and 1990s stressing the link between nutritional status and educational performance;
- ◇ a number of national and international surveys and studies to highlight the extremely poor nutritional and health status of the school child;
- ◇ some success stories of the cost-effectiveness of improving the micronutrient (iron, iodine, vitamin A) and health (intestinal parasites, impaired sight and hearing) status of the school child in the classroom itself;
- ◇ the strong recommendation of the Government of India that the NSPE should forge links with school health on the one hand, and with India's Integrated Child Development Services (ICDS – see *SCN News No.15 p27*) on the other.

### **Aims, coverage and budget of the NSPE**

The main aim of the NSPE is to give a boost to the universalisation of primary education in India by increasing enrolment and attendance at schools, and simultaneously improving the nutrition education of the school child (aged 6-15y). It is much more a *food for education* scheme than a food for nutrition and health scheme as it is based on supplying those students with a good school attendance record with grain (wheat or rice) over a period of time. A school child with 80% attendance is supplied with 3kg grain per month for 10 academic months per year. The child or parent is expected to collect

the grain from the designated ration (or public distribution) shop in the village.

The quantity of grain ration was guided by the findings of a 1990-1992 *Eight-States Diet and Nutrition Survey* conducted by the National Nutrition Monitoring Bureau (2). The survey found that the nutritional status of the rural school child was very poor, with only 6% classified as 'normal' when compared to the NCHS growth reference. The survey reported an average deficit of 620kcal and about 7g protein per day when compared to the Indian Recommended Daily Intake for this age group.



*School boys eating a hot cooked meal in the classroom.*  
(T. Gopaldas)

The NSPE has been operational for around three years. In 1995-6, 225,000 schools and 33.5 million school children were covered by the NSPE. This number rose to some 370,000 schools and 55.4 million school children in 1996-7. Attendance also increased from 21 million children in 1994 to 55 million in 1997. The NSPE has also helped to boost enrolment in primary schools.

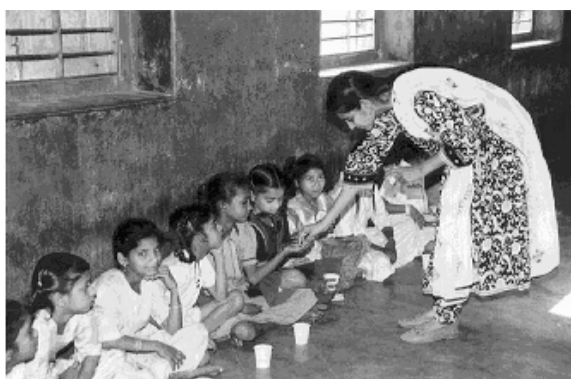
All 32 states and union territories (UTs) of India are implementing the NSPE. Seven of these 32 states and UTs, namely, Gujarat, Haryana, Jammu & Kashmir, Kerala, Madhya Pradesh, Orissa, Tamil Nadu and the UT of Pondicherry, are providing school children with a hot cooked mid-day meal. This is usually a cereal-pulse preparation with some condiments and seasonal vegetables. The remaining states and UTs either prefer not to give meals, or are not ready at present to make the necessary arrangements for provision of a hot cooked meal and have opted to provide school children with 3kg of grain per month for an 80% attendance record.

<sup>1</sup> The NSPE is the current Mid-Day-Meal Programme (see *SCN News No.14 p23*).

Once the 'hot cooked meal' becomes the norm in India, with the majority of states and UTs providing hot meals, 5kg per month of grain per school child for 10 academic months will be supplied within those states and UTs that are not able to run a 'hot cooked meal' programme. This is based on the argument that other members of the family in addition to the school child will consume the 'take-home' grain ration.

The NSPE is a 100% Central Government sponsored scheme. The cost of the food grains and transportation are borne by the Central Government. In the case of hot cooked meals, the States or UTs have to bear all other costs (kitchens, cooks, fuel etc.) Rs.8000 million was spent in 1996-7 (equivalent to approx. 190 million US\$), and Rs.9600 million has been allocated in 1997-8 (equivalent to approx. 225 million US\$).

Preliminary reports indicate that the NSPE is working well in the rural sector but not so well in the urban sector where the ration shops may be located far away.



School girls receiving iron, vitamin A and anthelmintics in the classroom. (T. Gopaldas)

### **Monitoring and evaluation**

The Government of India is developing a computerised Management Information System with the assistance of the National Informatics Centre in New Delhi in order to record data on enrolment, eligible beneficiaries for NSPE, and quantity of food grains allocated, collected and utilised. The system is not, as yet, fully operational as training at the state and UT level is required.

An all-India process and impact evaluation of the NSPE is urgently required. The reactions of the main actors, namely the school child, the teacher, and the local ration shop keeper are yet to be evaluated. Similarly, whether or not linkages have been formed with the primary health centres, the village *Panchyats* and the ICDS has to be ascertained. Furthermore, the advantages and disadvantages of the 'take home' grain ration versus the hot

cooked meal variant have to be assessed. Above all, if the NSPE has an important nutritional status improvement objective, then its impact in this crucial area has to be evaluated.

### **How can the present NSPE be made to have a more nutritional and health slant?**

- ◇ The NSPE must put nutrition and health objectives ahead of enrolment, retention and drop-out objectives.
- ◇ The NSPE must set a time-frame, say by the year 2000, where every primary and middle school child will receive a hot cooked meal.
- ◇ The NSPE must insist that a good brand of iodised salt be used in the hot cooked meal variant. India has the capability to produce the required quantity of iodised salt.
- ◇ In Indian communities, school-aged children are the age group most heavily infected with intestinal parasites. Hence, periodic deworming is a must. India has the capability to produce the required quantity of anthelmintics and dosing can and should be given by the teacher in the classroom.
- ◇ Weekly iron supplementation can and should be given by the teacher in the classroom. India also has the capability to produce the required quantity of iron supplements.
- ◇ India is one of the most vitamin-A deficient countries in the world. Legislation should make it mandatory that red palm oil, which is abundantly rich in  $\beta$ -carotene, be used in the hot cooked meals.

At present, India has a school-age population of approximately 200 million children. Policy-makers and implementers of the NSPE must realise that it would benefit the school child more to give him/her a health package of deworming, iron, vitamin A and iodine, rather than just grain. At Rs.10 (approx. 0.2 US\$) per child per year, such a health package, delivered in the classroom throughout India, would cost Rs.2000 million a year versus a yearly expenditure of some Rs.10 000 million for the grain. The best proposition would be to give the school child both the hot meal and the health package in the classroom.

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2. Diet and Nutrition Surveys in Eight States of India on Rural Children (6-11y). National Nutrition Monitoring (Rural) Surveys. National Institute of Nutrition, Hyderabad, 1990-2.

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## SCHOOL FEEDING IN INDONESIA: A COMMUNITY BASED PROGRAMME FOR CHILD, SCHOOL AND COMMUNITY DEVELOPMENT

by Lisa Studdert and Soekirman

In July 1996, Indonesia initiated a national school feeding programme. Initially implemented in all officially designated 'poor' villages except those on the islands of Java and Bali, the programme expanded in year-2 of implementation to include all 'poor' villages throughout Indonesia. The programme now provides a nutritious snack three times a week to 7.2 million primary school children. In developing this programme, the Government of Indonesia has adopted a unique approach to school feeding with community-based implementation involving several community groups, utilisation of local foods, and education and health components. This design is aimed at an overall programme goal of human resource development while addressing several objectives that target human, economic and social development at the community level. The sustainability of the programme will depend on the empowerment of all involved people - especially women. The objectives and the programme design recognise that improvement in children's health, nutritional status and educational achievements requires interventions that extend beyond the school child in the schoolyard or classroom.

### Human resource development in Indonesia

The Government of Indonesia has recognised human resource development as a key objective of its second (current) 25-year Development Plan. In the 1970s, the government launched a primary school development programme ensuring that every village in the country has a primary school. Building on this, the current 5-year Development Plan (1994/95-1998/99) has directed that all children should receive a minimum of nine years of schooling. There was concern, however, that these efforts have focused more on the infrastructure and policy than on the child and the child's capacity and ability to be in school and learn and progress effectively. Surveys in the early 1990s showed that up to 70% of children in 'poor' villages were consuming less than 70% of their daily energy requirements; up to 40% of children are anaemic and between 50-80% of children have worm infections. Moreover, it is estimated that each year around 1.2 million children - or 4.2% of the eligible population - drop out of school.

Thus, the *Programme Makan Tambahan Anak Sekolah* (supplemental food for the school child - PMT-AS) was pilot tested in several provinces in the early 1990s and

introduced as a national policy, with presidential endorsement, in 1996. Expenditure in 1997/98 was over US\$ 100 million.

### PMT-AS: the why and how

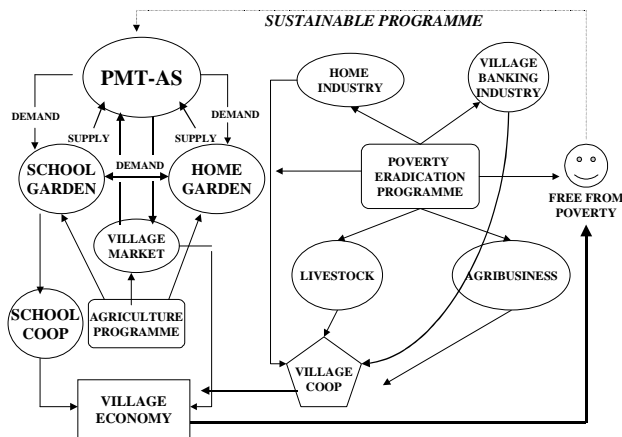
The objectives of the PMT-AS programme are divided into those for the school child, those for the school and those for the parents and community.

#### PMT-AS Objectives

<i>For the child:</i>	<ul style="list-style-type: none"> <li>-reducing absenteeism;</li> <li>-alleviating short-term hunger;</li> <li>-increasing total energy intake;</li> <li>-educating children on topics of health and nutrition;</li> <li>-reducing worm infection rates through the provision of deworming medication twice yearly.</li> </ul>
<i>For the school:</i>	<ul style="list-style-type: none"> <li>-improving teachers knowledge on teaching health and nutrition topics.</li> </ul>
<i>For the parents and community:</i>	<ul style="list-style-type: none"> <li>-knowledge and involvement of parents in children's health, nutrition and education;</li> <li>-increased demand and appreciation for local agricultural produce.</li> </ul>

Implementation of the programme revolves around the provision of a mid-morning 'snack' to primary school children three days per week through the school year (9 months). The term 'snack' is deliberately used so that there is no impression that the food is a meal that replaces food children would receive at home thus ensuring, as much as possible, that the snack received is additional and not substitutional. Children are also given deworming medication twice per year.

Funds, based on a per-snack, per-child, per-day amount are sent from the national level directly to the local level. Only the school principal may withdraw funds from the bank, and only with a snack menu plan co-signed by the heads of the local women's and parent's associations. The menu plans are prepared at the community level with technical advice from Ministry of Health personnel. It is stipulated that menus must use locally produced foods and that the snack must contain a minimum of 300 calories and 5g of protein. The compulsory use of locally produced foods is key to ensuring PMT-AS funding is



**Hypothetical relation between PMT-AS and village economy**

directed into, and kept within, the local economy. Hence, PMT-AS provides incentives for intensified local production as well as for home garden produce and school gardens. Through this mechanism, PMT-AS is expected to contribute to national poverty eradication programmes (see diagram above).

The process for food purchase and preparation is not strictly defined, but training and guidelines have been provided suggesting that the local women's association (PKK) and the school parents association (BP3) develop a system acceptable and appropriate to that community. Observations in the field have shown a wide range of practices involving between 1-15 women - some villages with a core group that does all the work, others with teams

that work on a rotating basis. Support and guidance are expected from the village leader, local Ministry of Health and Education officials and school officials.

**A programme for the future and in a crisis**

It is intended that the PMT-AS school feeding programme will be a long-term government initiative in Indonesia. Funded entirely by government resources, the recognition of its importance for the long-term future of Indonesia is signified by the fact that funding support has been maintained in spite of the economic crisis that has recently affected Indonesia.

In the life of such a programme it is still early days. The government plans to start comprehensive monitoring and evaluation activities in the coming year – year 3 – of implementation. The results of these activities will be used to modify and enhance implementation processes and related training activities and guidelines. Moreover, these results should start to assess programme impacts so that the value of this programme can be analysed, appreciated and shared with other nutrition, health and education policy makers and programme planners around the world.

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**ADDRESSING MICRONUTRIENT DEFICIENCIES IN PRIMARY SCHOOL CHILDREN WITH FORTIFIED BISCUITS**

**by Lize van Stuijvenberg and Spinnie Benadé**

Early in 1995, after having been approached by the community leaders of a rural village in KwaZulu-Natal, South Africa, the South African Medical Research Council undertook a cross-sectional nutritional survey in that community. The results showed deficiencies of iron, iodine and vitamin A; the prevalence of vitamin A and iodine deficiencies exceeded the level regarded by the WHO as a public health problem. These deficiencies were also present among the children attending the local primary school, despite the fact that a school feeding scheme, whereby the children received a cooked meal five days each week, had been in operation for a period of two years prior to the survey. 16% of the children were stunted and 2% were underweight.

An intervention study, in collaboration with the local community leaders and the food industry, was then undertaken to determine whether the micronutrient deficiencies present in the school children could be alleviated through food fortification. A shortbread type of biscuit was identified as a suitable vehicle for fortification. A similar biscuit is sold by the shops in the area and is very popular amongst the school children. The biscuit was fortified with  $\beta$ -carotene, iodine and iron (50% of the RDA), while a cold drink served as a carrier for vitamin C which was necessary to enhance the absorption of the iron. Two hundred and fifty-two 6-11-year-old children were randomly allocated to a group that received a fortified biscuit and cold drink, or to a group that received



an unfortified biscuit and cold drink. The biscuits and cold drinks were distributed daily during the school week, during the first two hours of the school day, for a period of 12 months. No intervention took place during school holidays or on public holidays. Distribution and consumption took place under close supervision and compliance was recorded daily. To exclude parasitic infestations as a confounding factor, the children of both groups were dewormed.

The 12-month intervention resulted in a significant improvement in blood levels of vitamin A, ferritin, iron, haemoglobin, haematocrit and in urinary iodine levels in the group who received the fortified biscuits compared to the unfortified group. The greatest improvement in vitamin A and ferritin status was seen in children with low values at the start of the study, while the intervention had little effect on those with adequate status: i.e., those that needed it most benefited the most from the intervention. The prevalence of low serum vitamin A levels ( $<20 \mu\text{g/dl}$ ) dropped from 39% to 12%, of low serum ferritin levels ( $<20 \mu\text{g/l}$ ) from 28% to 14%, and of anaemia ( $<120 \text{g/l}$ ) from 30% to 16%. There were no significant reductions in the group receiving the unfortified biscuit. The prevalence of low urinary iodine levels ( $<10 \mu\text{g/dl}$ ) in the fortified group decreased from 98% to 30% after 6 months, and to 5% after 12 months. In the unfortified group the prevalence decreased from 96% to 90% and 34% after 6 months and 12 months, respectively. The iodisation of salt became compulsory in South Africa during the second half of our study, thus contributing to the improvement in iodine status in both the fortified and unfortified groups. There was no reduction in the prevalence of goitre, which was 21% at the baseline assessment; a 12-month period may, however, have been too short to reverse an already enlarged thyroid. The biscuit was well accepted and 74% of the children indicated that they would prefer more than the three biscuits they were receiving. The price of three biscuits is US\$0.05 per child per day and provides 191kcal. The cost of fortification itself is US\$0.86 per child per year.

A danger of school feeding is that parents may reduce the food provided for children at home. Using a biscuit as a vehicle for fortification eliminates this problem, because it is seen as a snack rather than a meal and therefore unlikely to replace meals given to the child at home. In this study the biscuit intervention had no effect on the number of children who ate breakfast before coming to school, nor on the number of children bringing food to school. Additional advantages of using a biscuit are that it needs

no preparation, is easy to distribute and has a long shelf life. It is also easy to monitor and therefore less open to misuse or corruption.

Dealing with the hidden hunger of micronutrient deficiencies through food fortification is regarded as a short- to medium-term solution to address an immediate need. Longer-term solutions will include nutrition education in schools and communities with regard to the need for diverse diets. Should a fortified biscuit be implemented in school feeding, it is recommended that it be accompanied by a relevant nutritional message which would put the fortified biscuit in the diet into perspective.

Using a micronutrient fortified biscuit and cold drink in school feeding is feasible, effective and practical, and can seriously be considered for addressing micronutrient deficiencies in school children. The role of nutrition education as a long-term solution should, however, not be overlooked.

The biscuit is now commercially available and is actively marketed at the primary school level by the food industry, using the scientific results to promote its use in school feeding programmes throughout South Africa. Once in place, an effectiveness study will be carried out.

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## SCHOOL FEEDING PROGRAMMES: LESSONS FROM KENYA

by Ruth Oniang'o and Agnes Kimokoti

The National School Milk Programme launched by Presidential Decree in 1978, was a move to contribute to better health and nutritional status of school children. The costs of running this programme, however, have become unaffordable by the government, and as such, the operational targets of the programme can no longer be met. A second school feeding programme aimed at improving both nutritional and educational outcomes began in WFP-assisted areas where schools not only fed children, but also promoted nutrition education. This is now a nation-wide programme, although the phasing out of support by WFP means that its future is uncertain. In both of these cases, financial support seems to be the major constraint. There is a need to look into alternative mechanisms and more cost-effective strategies of supporting child nutrition.

### Issues for consideration

Some issues to be borne in mind when considering school feeding programme design and implementation in Kenya include the following:

- ◇ Kenya has had a tradition of providing school lunches, either through government or community mechanisms. Parents play a key role in school feeding. Where they can, parents support a scheme that provides a hot meal for their children. In such cases, vendors and hawkers are discouraged because of food safety and quality concerns. In arid and semi-arid areas, where families have few resources, parents make only a modest contribution. Government- and WFP-supported schemes have targeted such areas with the aim of encouraging school enrolment and attendance. It is these areas where the majority of the population is illiterate and the enrolment is fragile so that incentives are required to motivate school enrolment and retention.
- ◇ Some parents are able to afford to give their children a packed lunch or money to buy food. However, it has been observed that when children are given money, they buy snack foods of low nutritional quality, or spend their money on something else entirely. With a growing drug problem among Kenyan youth, parents are hesitant to give food money to their children for fear that this will be spent on drugs.
- ◇ The Nutrition and Health Unit has developed recommendations relating to school feeding. The Unit advo-

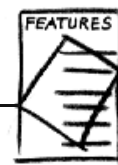
cates the carrying of packed lunch to school by every child and discourages parents as much as possible from giving their children money. This applies especially to children who commute daily to school. The Nutrition and Health Unit is also encouraging schools to establish their own school gardens. This would go a long way towards minimisation of expenses of buying food, for both schools and parents.

- ◇ Apart from giving the actual food, the Unit is also concerned with providing nutrition education and sensitising the public to proper nutrition and feeding habits, diet diversification and food quality and safety. This is done deliberately through the school curriculum, posters and during parent-teacher meetings. According to the head of the Unit, considerable success has been achieved in this area.
- ◇ In urban and peri-urban slum areas, NGOs are involved with provision of food for school children. However, there is a need for the government to coordinate all school feeding activities. Continuous monitoring is also necessary in order to formulate a programme that is beneficial to children, manageable by the schools and affordable by the parents.

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Courtesy of UNHCR (23092/10.1993/L.Taylor)



## MALNUTRITION AMONG SCHOOL CHILDREN IN INDUSTRIALISED COUNTRIES

by Andrew Tomkins

Poor nutrition in school children seriously compromises their health and learning capacity and sets up a disastrous trend towards damaging dietary patterns which affect the prevalence of disease in adults. There is disturbing evidence that the nutritional status among school children is deteriorating. In previous generations, anaemia, rickets and poor growth were associated with low socio-economic status. However, current radical changes in lifestyle among both poorer and better-off strata in industrialised countries, mean that personal preference about foods, fashion, physical activity levels and the media are now driving the nutritional patterns of school children more than the availability of food itself.

Traditional nutritional programmes focus on the provision of an adequate diet so that children can maintain a good level of health and benefit from the opportunities to learn at school. However, health and nutrition of school children are also of critical importance for determining the prevalence of adult diseases such as ischaemic heart disease, hypertension, certain types of cancer and diabetes. Failure to address the nutrition of school children probably explains why so many programmes aimed at preventing adult disease have had very limited impact.

This article concentrates on the nutritional problems facing industrialised countries, such as those in Europe and North America, but there are many communities in other continents where the nutritional status of children in better-off families is more akin to the industrialised nations, than to malnutrition syndromes of anaemia, hunger and stunting. Current epidemics of premature mortality among adults in less developed countries also have important origins in schoolchild nutrition.

### **Nutritional problems of school children**

**Obesity.** There is a steadily increasing epidemic of obesity among school-age children. Age-adjusted body mass index (BMI: weight divided by height squared) centiles are now available on the basis of which around 15% of UK children have a BMI of over 25. This figure has increased steadily over the last 2 decades. Using linked longitudinal data, up to 60% of obese children remain obese when they are restudied in their early 30s. Obesity in children is associated with a decreased willingness to become involved in physical activities and sports, leading to a much lower level of fitness. Obesity in children is also a major risk factor for adult disease.

**Hypertension.** Several longitudinal studies show an increase in levels of blood pressure among older children leading to hypertension in adulthood. While there are few immediately visible problems as a result of increasing blood pressure in adolescents, it is of concern that as such trends continue into adult life, they will increase the risk of heart attacks and strokes.

**Eating disorders.** While overweight is a major problem among school children, there is an increasing prevalence of anorexia nervosa and bulimia, especially among girls. The widespread, current social vogue, driven by the media and advertising agencies, which dictates that it is more beautiful to be thin, is a key factor driving the eating patterns of school children. This has devastating impacts on mental and physical health, school performance and family relationships.

**Dental disease.** Despite the enormous publicity and health promotion about the effect of confectionery on dental caries, dentists still find poor levels of dental health among many school-age children.

**Anaemia** is still a problem, especially in countries such as the UK where certain ethnic groups, such as Asians, may be disadvantaged and have dietary patterns which increase the risk of iron deficiency.

**Antioxidant deficiency.** Many adult diseases such as coronary heart disease and some forms of cancer are the result of the interaction between toxic agents, which generate free radical release, and lack of antioxidants which prevent disease by scavenging the free radicals. Toxic agents include excessive fat intake and cigarettes. There is a disturbing deficiency of certain antioxidants such as vitamin C because of rather low levels of fruit intake by many school children. Soft drinks and confectionery make up an increasing proportion of children's diets.

**Hunger.** Children who do not eat before coming to school do not perform so well at school. Increasingly, children 'fend for themselves' and many leave home without breakfast.

### **Changing lifestyles and dietary patterns**

**Major societal change** has occurred such that 'family meals', when parents and children sit down together to eat and talk, are much less common than in previous decades. Children are often given money to buy food

during the day and even when they do eat at home, there are increasing trends towards use of convenience pre-prepared foods rather than traditional meals. The 'eat and go' culture and decreasing levels of social interaction between parents and children mean that children 'choose' rather than 'are told' what to eat.

*Convenience foods* frequently have high levels of dietary fat; many surveys show that school children eat over one third of their energy as fat. Children tend to have high sodium intakes as a result of the spices and sauces which are an integral part of many fast foods and snacks.

*Physical exercise* and fitness among children is decreasing. As a result of increasing community violence, danger and parental fear, children are more frequently taken to school by car or bus rather than walking or cycling. Many schools have sold playing fields in recent years in order to provide income to pay teachers and have reduced staff salaries for supervision of physical activities such as team games and individual exercise. Provision for physical activity in inner cities is a special problem. Recent studies show that children take very little exercise which is vigorous enough to increase heart rate significantly.

*Increased consumption of toxic agents* such as cigarettes, alcohol and drugs all put a stress on the antioxidant capacity on the body to overcome their degenerative effect. Advertising aimed at school children is now a major focus of the food industry. While most governments prohibit cigarette advertising aimed at the young, no government has any policy aimed at reducing the consumption of certain foods by school children.

### **Action for nutritional improvement**



*There are several ways of improving nutrition* of school children. Children themselves should be the focus. Few people, other than the marketing units of the major confectionery and snack food industry, have really addressed their needs or wishes. Health promotion which starts with children's own perceptions and enables them to look at their wishes for health and feeling "good" both now and in the future are essential. Participatory approaches are likely to be more acceptable and effective rather than lectures which are considered "boring".

*Parents* need guidance. With the decreasing tendency of many parents/carers to provide cooked meals for children, and in certain circumstances, a low level of knowledge of how to prepare even a basic meal, there is a need to improve parenting as a focal point for improving the family dietary intake.

*Schools* have a great potential. Nutrition and health issues should be incorporated into the curriculum from an early stage, with boys learning just as much about food, its values and preparation, as girls. Self-learning activities, such as 'Child-to-Child' approaches are effective at stimulating 'learning by doing'. In disadvantaged areas, where many children come to school without breakfast, concerned school authorities can start 'breakfast clubs' where children can begin the day with a better nutritional state. Suitable foods include nutrient-dense porridges, suitably enriched or fortified biscuits or locally prepared nutrient rich-snacks.

*School governors or councils* have responsibility for monitoring academic standards in schools. They can also ensure adequate quality of nutrition within the curriculum and catering services. Only food of appropriate nutritional standards should be provided by school catering agencies. School governors also have the ability to limit the promotion and advertising of less nutritionally valuable foods obtainable by automatic vending machines which provide snacks for cash.

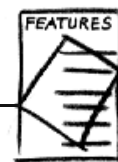
*Community councils* have statutory powers to licence fast food vendors who target their sales towards school children. They also have opportunities to provide local events which promote healthy diets and physical activity.

*The media and food industry* have enormous responsibility. The fashion industry has a responsibility for promoting beauty as something other than thinness. The food industry has a responsibility for promoting foods which can contribute to a better dietary intake.

*Social services* identify children from poor families who need particular income support and subsidise school meals for certain children. Despite their efforts, recent studies in the UK show that poor families still find it difficult to buy enough of certain foods such as fruit, even though energy intakes may be so great that their children are overweight.

*Transport policies* are crucial. Both city and rural councils need to develop a physical activity policy, especially within an overall transport policy such that children are able to cycle and walk to school safely and find safe places to take vigorous exercise.

*Government policies.* Improving nutrition of school children cannot be achieved by a government policy from one ministry alone. It needs concerted, focused work between ministries of health, agriculture, education, sports and social welfare. Governments need to liaise with local community voluntary groups such as in the



Health Cities Project of WHO and in the Health Action Zones now starting in the UK. If Governments recognised that such policies do not just address issues of childhood, but are crucial for longer term issues of adult health and national development they would take school child nutrition much more seriously.

*Nutrition Professionals.* It is the task and challenge for nutrition professionals to inform and stimulate action by government and community alike. With increasing

independence, it is increasingly children, rather than their parents, who decide what to eat. The challenge for any policy maker or programme manager is to understand their needs and wishes and promote dietary intakes that will provide better health for themselves, both now and in their adult years.

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## **TRENDS IN THE INTAKE OF READY-TO-EAT FOOD<sup>1</sup> AMONG URBAN SCHOOL CHILDREN IN NEPAL**

*by Indira Sharma*

In 1996, a cross-sectional study was conducted in an urban Nepalese school to assess the food behaviour of school-aged children in relation to ready-to-eat food (REF) intake, its impact on nutritional status and nutritional composition of meals eaten. 610 school children aged between 9-11 years from middle income families were included in the study. Consumption of seven widely available REFs - namely biscuits, bread, noodles, snack packets, potato chips, low cost doughnuts and dalmoth (a snack prepared from beans) - was assessed. Demographic and socio-economic data were collected and a questionnaire was developed to gather information on food choices and preferences.

The frequency and amount of REF intake was recorded for each child over a period of one week. Results showed that children consumed at least one or two items of REF every day. The average frequency of REF intake was 1.9 times per day, and the amount consumed was 125g per day. This provided 439 (+/-127 SD) calories on average per day - approximately 20% of the total energy requirement of children in Nepal. When classified according to the level of REF consumption, the majority of children (59.6%) had moderate consumption (300-500 calories), 27.7% had high consumption (>500 calories) and 12.7% had low consumption (<300 calories).

Compared with traditional foods, REFs were preferred by the majority of school children (68.7%). Taste preference, convenience and affordability were the foremost criteria in choosing REFs. In the majority of cases, parents were responsible for introducing REFs into their children's diets. The role of advertising in influencing children's choices

was also considered relevant by 80% of children. Among the many socio-economic factors, per capita income and mother's education level was found to be positively associated with REF consumption.

A subsequent, in-depth study conducted on a representative sub-sample of school children drawn from the low-, moderate- and high-consuming groups compared the nutritional status of the children in the three groups. There were no significant inter-group differences in height, weight, or in the energy and protein density of meals eaten by the children. The intake of pulses, green leafy vegetables, fruits and milk was, however, found to significantly decrease with increasing REF consumption.

Taste preferences for new food products are slowly changing children's food habits from eating conventional foods to preferring modern convenience foods. Presently, this change in eating behaviour is seen mainly in snacking patterns, however this may further extend to main meals. Thus, the results obtained from this study indicate changing food habits with an increase in REF intake by (middle-income) school children in Nepal. It is expected that this trend will further accelerate in the future because of ongoing technological developments in the food industry - encouraged by government policies - leading to an increased rate of REF production. Furthermore, per capita income and women's education level are also expected to increase.

Considering these points, it is advisable to take timely precautions for the prevention of the deleterious effects stemming from the intake of industrially processed ready-

<sup>1</sup> Ready-to-eat foods are defined in this article as 'industrially produced processed food characterised by food additives, low fibre, high salt and sugar containing foods that are expensive compared with home-made traditional foods'.

to-eat foods which are deficient in micronutrients such as calcium, iron, and vitamins A, B and C. The loss of various nutrients during processing suggests a possibility of their fortification with different nutrients. Caution must be taken however regarding the addition of harmful food additives, especially artificial colours and flavours. Labelling in all manufactured foods should be made mandatory. Nutrition education for mothers should include the adverse effects of food containing high levels of sodium, fat, sugar, food additives and low levels of fibre, and the improvement of children's diets by compensating the deficient components

with other rich sources. Finally, the importance of balanced diet with special emphasis on the formation of good food habits should form an integral part of nutrition education for school children in Nepal.

Indira Sharma, Tribhuvan University, Padma Kanya Campus, Bagbazar, Kathmandu, Nepal. Tel: 977 1 414482 Fax: 977 1 418907 Email: sushil@mos.com.np The full research article describing these studies was published in the journal of "Asian Regional Association for Home economics" 1996. Vol. 3 pp 22-27 (Editor Dr. Soojae Moon. Dept of Food and Nutrition, Yonsel University, Seoul, Korea).

## **CDC'S GUIDELINES FOR SCHOOL HEALTH PROGRAMS TO PROMOTE LIFELONG HEALTHY EATING**

**T**he key to promoting health in children of school-age is education, and the best opportunities for positively influencing the health of this age group are found in the school (*World Health Report, 1998, p85*). Most young people in the United States make poor eating choices that put them at risk for health problems. For example, over 84% of young people in the US eat too much fat; 51% eat less than one serving of fruit a day; and 8% of high school girls take laxatives or vomit to lose weight or prevent weight gain. The consequences of unhealthy eating include an increased risk of obesity (the percentage of young people who are overweight in the US has more than doubled in the past 30 years), lower intellectual performance, ill health and premature death in adulthood. On the other hand, the benefits of healthy eating patterns in childhood include promotion of optimal health, growth and intellectual development, the prevention of iron deficiency anaemia, obesity, eating disorders and dental carries, and the prevention of long-term problems such as coronary heart disease. Establishing healthy eating habits at a young age is therefore critical, and schools can help young people improve their eating habits by implementing effective policies and educational programmes.

The Division of Adolescent and School Health of the US Centers for Disease Control and Prevention, has developed a series of guidelines, one of which is the *Guidelines for School Health Programs to Promote Lifelong Healthy Eating*. These guidelines identify the most effective policies and programmes that schools can implement in order to promote healthy eating choices. Seven recommendations are included in the guidelines. These include the development of a school policy on nutrition, the implementation of nutrition education, the integration of school food services and nutrition education, suitable staff training, family and community involvement and programme evaluation.

These guidelines are available on the Internet at <http://www.cdc.gov/nccdphp/dash>. The document 'CDC's Guidelines for School Health Programs to promote lifelong healthy eating – at-a-glance' is available from CDC, National Center for Chronic Disease Prevention and Health Promotion, Division of Adolescent and School Health, ATTN, Resource room, 4770 Buford Highway, Mailstop K-32, Atlanta, GA 30341-3724. Tel: 1 770 488 3168.

Source: CDC. Guidelines for School Health Programs to promote lifelong healthy eating. MMWR 1996; 45 (No.RR-9), and brochure 'CDC's Guidelines for School Health Programs to promote lifelong healthy eating – at-a-glance'.

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### **Agir à l'école. Pour de meilleurs résultats scolaires par l'amélioration de la santé et de la nutrition dans les pays non industrialisés (Banque Mondiale, 1998)** **par Joy Miller del Rosso et Tonia Marek**

A partir d'exemples concrets, cette publication montre qu'une santé et une nutrition déficientes limitent l'acquisition du savoir par les élèves et réduisent les taux

d'inscription et de fréquentation scolaires.

Plusieurs interventions d'un coût modique et d'une haute efficacité, déjà réalisées ou à entreprendre par les Etats afin d'améliorer la santé et la nutrition des populations scolaires, y sont exposées.

L'ouvrage récapitule comment ces améliorations peuvent se traduire par un renforcement des capacités individuelles grâce à une incidence bénéfique sur les taux de

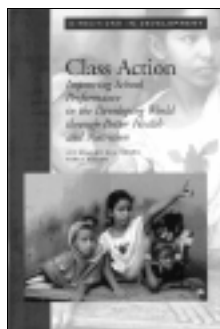




scolarisation, l'assiduité, les performances scolaires, la productivité économique et sur la santé des futures générations.

On distingue cinq chapitres: "Les enfants d'âge scolaire: une population à risque"; "Situation couteuse, remèdes peu couteux"; "Accroissement de la productivité et amélioration de la santé communautaire"; "Agir"; "Leçons à retenir". Deux annexes complètent l'ouvrage: "Informations nécessaires pour une analyse de la situation des enfants d'âge scolaire en nutrition et santé", et une liste par pays de projets financés par la Banque Mondiale et liés à la nutrition et à la santé de la population d'âge scolaire.

***Class Action. Improving School Performance in the Developing World through Better Health and Nutrition (World Bank, 1996)***  
by Joy Miller del Rosso and Tonia Marek



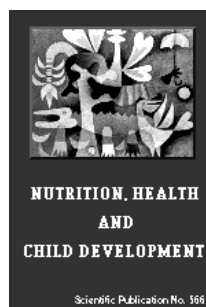
This publication shows concrete evidence that with poor nutrition and ill health, the learning capacity of children, and school enrolment and attendance rates are reduced.

A discussion on a variety of low-cost and highly efficient actions that governments have taken and can take to improve the health and nutrition of school age children is provided. The book summarises how improvements in these areas will lead to gains in human capital development through its beneficial effects on school enrolment, attendance, and performance, economic productivity, and the health of future generations.

60pp. US \$10. English and French versions are available from The World Bank, P.O. Box 960, Herndon, VA 20172-0960, U.S.A. Tel: 703 661 1580 Fax: 703 661 1501 Email: books@worldbank.org World Bank publications can also be ordered via the World Bank website at <http://www.worldbank.org/html/extpb/ordform/ordform2.htm>

***Nutrition, Health and Child Development (1998)***

In the countries of Latin America and the Caribbean infant mortality rates have been steadily decreasing over the past few decades, with more children surviving past infancy than ever before. As more and more children live to school age, the quality of life and concerns for achieving optimal physical and psychological potential and to benefit fully from education become paramount. A child



who has developed to the peak of his or her potential will be happier and learn better, and will ultimately grow up to become a more fully engaged, productive citizen.

This publication, arising from a workshop jointly organised by the Tropical Metabolism Research Unit (TMRU) of the University of the West Indies, and PAHO in 1995 in Jamaica, examines how and to what extent nutrition, health, and stimulation can affect children's cognitive and social development and their ability to learn in schools. By examining recent research, the authors explore such topics as undernutrition, iron and iodine deficiencies, neonatal feeding, short-term food deprivation, parasitic infections, and psychosocial deprivation. They also review results from early childhood interventions, including nutritional supplementation and psychological stimulation, as well as interventions in later childhood, including school feeding and deworming programmes.

Although no formal consensus statement of the workshop was issued, the technical editor, Sally Grantham-McGregor, summarises the main findings of the workshop in an appendix. With respect to school-age children, these include the following:

- ◇ There is now reasonably strong evidence to support a detrimental effect of undernutrition on school-age children's development.
- ◇ The effects of iodine deficiency on the cognitive development of school-aged children is equivocal and more data is needed.
- ◇ High risk school-aged children benefit from iron supplementation and school feeding programmes.
- ◇ New data are emerging on the interactions between different nutritional and health conditions, such as undernutrition and missing breakfast, or undernutrition and parasitic infections.
- ◇ Improving children's health and nutrition while they attend highly inadequate schools is unlikely to improve their achievement levels, thus, health and nutrition interventions for school-aged children should be integrated into educational improvement programmes.

268 pp. US \$36 (US\$26 in developing countries). A joint publication by the Pan American Health Organization, the Tropical Metabolism Research Unit of the University of the West Indies and the World Bank. Scientific Publication No.566. Copies of this book can be ordered from PAHO Sales and Distribution Center, P.O. Box 27, Annapolis Junction, MD 20701-0027, USA. Tel: 1 301 617 7806 Fax: 1 301 206 9789 Email: paho@pmds.com or via the PAHO website at <http://www.paho.org>

# A SUMMARY OF SCN WORKING GROUP DISCUSSIONS, OSLO 1998

On the occasion of the SCN's 25<sup>th</sup> Session in Oslo, Norway (26 March - 2 April, 1998), eight working groups met to discuss scientific, policy and programmatic developments, and to develop priorities and recommendations for action. Presented here are summaries of the discussions and decisions taken during these meetings. Full reports of each of the working group meetings are available on request from the SCN Secretariat, c/o World Health Organization, 20 Avenue Appia, CH-1211 Geneva 27, Switzerland. Tel: 41 22 791 0456 Fax: 41 22 798 8891 Email: accscn@who.ch

## **Nutrition, Ethics and Human Rights**

There is a growing interest in a human rights approach to food and nutrition among SCN members, attributed in part to the UN reform process to incorporate human rights approaches in all programme activities. This move away from a basic needs approach means that people can not only express their needs for, but also claim their rights to adequate food and nutrition.

The working group discussions were guided by a document prepared by WANAHR<sup>1</sup> entitled '*The Promotion and Protection of the Human Right to Food and Nutrition by ACC/SCN Members*', which identifies challenges and opportunities for the SCN in defining, adopting and monitoring a human rights approach to food and nutrition. Prominent among these is the need to develop an IEC (information-education-communication) strategy on the right to food and nutrition in close collaboration with the UN High Commissioner for Human Rights (UNHCHR).

One of the main recommendations of this working group was that the Symposium at the 26<sup>th</sup> Session of the ACC/SCN in 1999<sup>2</sup> have the theme '*The Substance and Politics of a Human Rights Approach to Food and Nutrition Policies and Programming*'. This recommendation was approved by the SCN.

## **Iodine Deficiency Disorders (IDD)**

The remarkable success by countries and the international community in eliminating IDD has been greatly helped by commitment and prioritisation at all levels. However, in some countries, interest is declining and sustainability is emerging as a major concern. In response, the working group drew up 10 key requirements for sustainability of programmes and urges the ACC to maintain its commitment to the elimination of IDD.

The working group also discussed the need to improve coordination of databases, the relative merits of different kits to measure iodine in salt and urine, and the issue of IDD elimination as a human right.

## **Household Food Security**

The working group heard a number of presentations on different agencies' approaches to household food security as an integrated part of a larger livelihood security approach. These included a presentation of CARE's Household Livelihood Security approach to assessment, action and monitoring, and a presentation by FAO of the document '*Household Food Security and Nutrition: Approaches and Experiences of FAO*'.

The working group proposed that a workshop on promoting household food security in Africa be organised during 1998, and that agencies prepare brief summaries of highlights in the household food security area, focusing on one or two countries with successful programmes as examples. The working group is currently addressing the problems of targeting household food security interventions, and the operational methods required to target such interventions.

## **Breastfeeding and Complementary Feeding**

Seven issues were discussed by the working group: maternity legislation, the care approach, complementary feeding, Code implementation, the Baby-Friendly Hospital Initiative, the economic value of breastfeeding, and HIV and infant feeding in the context of vertical transmission. For the latter, the urgent need for detailed practical guidance to manage the distribution of breast-milk substitutes for use by infants of HIV-positive mothers was stressed. This was subsequently addressed at a WHO-UNAIDS-UNICEF technical consultation on HIV and infant feeding (Geneva, 20-22 April 1998 – page 63).

The 1942 ILO Maternity Protection Convention No.103, which includes the right to maternity leave, cash benefits and medical benefits, is currently being revised and will be presented by the ILO in the year 2000 for consideration. The working group reaffirmed that UNICEF and WHO will work with ILO to ensure the protection of breastfeeding rights of working women. Further information is available through the new WABA webpage on

<sup>1</sup>World Alliance for Nutrition and Human Rights <sup>2</sup>The 26<sup>th</sup> Session of the SCN will be held at the office of the UNHCHR in Geneva, Switzerland, April 1999.



### **Chairs and Rapporteurs for SCN Working Groups, 1998**

<b>Working Group</b>	<b>Chair(s)</b>	<b>Rapporteur(s)</b>
Nutrition, Ethics and Human Rights	Urban Jonsson (UNICEF)	Wenche Barth Eide & Uwe Kracht (WANHR)
Iodine Deficiency Disorders	Graeme Clugston (WHO)	François Delange (ICCIDD)
Household Food Security	Bill Clay (FAO)	Lawrence Haddad (IFPRI)
Breastfeeding and Complementary Feeding	Lida Lhotska (UNICEF)	Felicity Savage (WHO)
Nutrition of School Age Children	Judith McGuire (World Bank)	Andrew Hall (PCD)
Nutrition of Refugees and Displaced People	Rita Bhatia (UNHCR) & Anne Callanan (WFP)	Judith Appleton (OXFAM-GB)
Iron Deficiency Control	Nevin Scrimshaw (UNU)	Gary Gleason (INF), Rainer Gross (GTZ), Fernando Viteri (UNU) & Ray Yip (UNICEF)
Vitamin A Deficiency	Joanne Csete (UNICEF)	Martin Bloem (HKI)

breastfeeding rights of women at <http://www.elogica.com.br/waba/working.htm>

### **Nutrition of School-Age Children** (see page 3)

Recent data suggest that nutritional problems in school age children may be greater and more widespread than previously thought. There are a number of activities aimed at improving the nutritional status of school-aged children, including school feeding programmes, school health and nutrition programmes (micronutrient provision, deworming, nutrition education and first aid), HIV prevention programmes, and water and sanitation projects.

The working group made three main recommendations. Firstly, more data on the nutritional status of schoolchildren are needed; secondly, the reference values on growth and anaemia need to be reviewed; and thirdly, there is a need to identify examples of good practices and success stories.

### **Nutrition of Refugees and Displaced People**

The Oxfam report '*Acceptability and Use of Cereal-Based Foods in Refugee Camps*' (see page 39) was presented. It was agreed that as a follow-up, plans to hold a meeting to discuss levels of micronutrient fortification in blended foods will be explored.

Panel discussions on 'How Food Aid Works' reflected perspectives and constraints for providing food aid by ICRC, WFP, USAID and CIDA. The working group agreed to continue discussions on appropriate indicators for

assessment of needs and impacts, and to better understand the processes of emergency food aid provision.

### **Iron Deficiency Control**

Iron deficiency and iron deficiency anaemia has consequences for cognition, resistance to infection, physical performance, metabolic impairments, morbidity and mortality. The working group recommended that governments, agencies and NGOs use an integrated strategy to reduce iron deficiency in combination with other micronutrient deficiencies (e.g., vitamin A deficiency), based on a life cycle approach and focusing mainly on preventive measures. An integrated strategy should include a combination of dietary approaches, fortification of appropriate foods and supplementation of the most vulnerable groups. It was stressed that the focus of supplementation during pregnancy should be expanded to include young children (because of its impact on cognitive development) and non-pregnant women (so that women enter pregnancy with sufficient iron stores).

It was also recommended that iron deficiency prevention programmes be linked with related health programmes such as breastfeeding promotion, prevention of other nutritional deficiencies, reproductive health and measures to control infectious diseases – especially malaria and intestinal helminth infections.

### **Vitamin A Deficiency**

The number of young children with sub-clinical vitamin A deficiency has been estimated by WHO/UNICEF and reported in the WHO/UNICEF MDIS report (1995). However, the working group expressed caution in citing the figure because of methodological difficulties, and recommended that WHO and UNICEF use a new method to update the prevalence and numbers.

The discussions of the working group covered a number of issues, including a presentation of the Bangladesh national vitamin A deficiency survey (in which access to home gardens was shown to play a role in addition to supplementation in reducing vitamin A deficiency), a presentation of the Nepal study on supplementation during pregnancy and maternal mortality (see *SCN News No.15 p27*) and a discussion of the near-crisis in Guatemala whereby the government considered revoking a law to fortify sugar with vitamin A.

A new initiative (the Global Vitamin A Initiative, supported by UNICEF, USAID, MI and CIDA) to accelerate progress towards the elimination of vitamin A deficiency as a public health problem was also presented to the working group.

# ABSTRACTS FROM THE SYMPOSIUM

## CHALLENGES FOR THE 21<sup>ST</sup> CENTURY: A GENDER PERSPECTIVE ON NUTRITION THROUGH THE LIFE CYCLE

*The Symposium on Challenges for the 21st Century: 'A Gender Perspective on Nutrition through the Life Cycle' took place on 30-31 March 1998 during the SCN's 25th Session in Oslo, Norway. Following the opening address by Richard Jolly, SCN Chairman, the Minister of International Development and Human Rights in Norway, Hilde Johnson, welcomed participants to Norway. We were delighted that Dr Gro Harlem Brundtland presented the keynote address on 'Food, Nutrition and Health in a Global Perspective'.*

*The Symposium was chaired by Kaare Norum, Director and Professor at the Institute for Nutrition Research, Oslo, Norway. Presented here are the abstracts of the presentations, including the abstract of the 1998 Abraham Horwitz Lecture, 'Breastfeeding: From Biology to Policy' by Isatou Semega-Janneh.*

*The report of the proceedings of the Symposium are expected to be published in October and will be available from the SCN Secretariat, c/o World Health Organization, 20 Avenue Appia, CH-1211 Geneva 27, Switzerland. Tel: 41 22 791 0456 Fax: 41 22 798 8891 Email: accscn@who.ch Details of all SCN publications are regularly updated on our website: <http://www.unsystem.org/accscn/>*

### THE GLOBAL NUTRITION CHALLENGE IN THE MILLENNIUM: PRESENTATION OF THE MAIN REPORT

**by Philip James**

*(Commission Chair and Panel of Commission Members)  
Rowett Research Institute, Scotland*

Following the ACC/SCN meeting in Kathmandu in 1997, a Commission was established to consider the need for new initiatives, particularly in relation to the persistent burden of childhood protein-energy malnutrition. The contributions of UN and other international agencies to this endeavour were seen as the crucial components of any new plan. A

reassessment of global trends in health has revealed that a range of issues needs to be tackled in a new coordinated way if the plea for the human right to health is to be converted into action. A preliminary perspective will be presented.

### NUTRITION CHALLENGES AND GENDER IN ASIA

**by Suttalak Smitasiri**

*Institute of Nutrition, Mahidol University, Thailand*

Though science has increased knowledge leading to the improvement of nutrition in the past fifty years, recent reports indicate that malnutrition is still a contributory factor to half of the deaths of our children today. In Asia, during this same period, there have been many successful nutrition interventions which have demonstrably changed nutrition situations. Prevalence and numbers of malnutrition in the populations in general, are going down but progress

among countries and different areas within countries are often uneven. South Asia, for example, still has the world's highest prevalence of childhood malnutrition and some countries in South East Asia still have widespread problems. Moreover, the recent Asian economic crisis will undoubtedly challenge all nutrition workers as to how to improve or maintain nutrition situations in the region.



Thailand is an Asian country which has made good progress nutritionally in the past twenty years. In this paper, the author attributes Thailand's success to good strategic thinking of leaders in the field of nutrition and development, a determined commitment of several sectors, good participatory action plans, systematic monitoring and most importantly, an effective social mobilisation process at all levels. Essential elements in the Thai holistic nutritional development process which led to rapid

progress are discussed. The issue of gender in the development process is critical to the success of empowering women, men, families and communities in taking positive actions towards nutritional change. A gender issue in the Thai context is discussed and synthesised. Lastly, some remedial suggestions are made which might be helpful to other countries, particularly those in South Asia.

## **ACHIEVING THE 2020 VISION, WITH SPECIAL REFERENCE TO GENDER ISSUES**

**by Per Pinstруп-Andersen**

*International Food Policy Research Institute*

Achieving good nutrition for all is within reach. However, while business as usual is likely to reduce the number of malnourished people, a different approach is required to achieve universal food security and good nutrition. The 2020 Vision for Food, Agriculture, and the Environment is a world where every person has access to sufficient food to sustain a healthy and productive life, where malnutrition is absent, and where food originates from efficient, effective, and low-cost food systems that are compatible with sustainable use of natural resources.

The action needed to achieve the 2020 Vision falls into six priority areas discussed in the paper. Such action will

require new or strengthened partnerships between individuals, households, farmers, local communities, the private sector, NGOs, national governments, and the international community. It will require a change in behaviour, priorities and policies. And it will require strengthened cooperation between industrial and developing countries, as well as among developing countries. Failure to take action will lead to persisting hunger and poverty, continuing degradation of natural resources, increasing conflicts over scarce resources, and widening gaps between the rich and poor.

## **GENDER AND NUTRITION IN THE GLOBAL BURDEN OF DISEASE, 1990 - 2020**

**by Alan Lopez**

*World Health Organization, Geneva, Switzerland*

Reliable information on the causes of disease and injury in populations, and how these patterns of ill-health are changing, is a critical input into the formulation and evaluation of health policies and programmes, and for the determination of priorities for health research and action. Such assessments must take into account not only causes of death, but also the impact of non-fatal outcomes and the comparative importance of major health hazards or risk factors.

The Global Burden of Disease Study, which commenced in 1992, is perhaps the first comprehensive assessment of global health conditions, providing quantitative estimates of premature death and disability from over 100 diseases

and injuries, and 10 major risk factors, for 8 geographical regions of the world, by age and sex. Contributions from death, disability and risk factors have been assessed using a time-based metric of future potential years of life lost or lived with a disability, namely Disability-Adjusted Life Years, or DALYs.

In 1990, about 1.3 billion DALYs were lost as a result of new cases of disease and injury in that year, almost 90% of which occurred in developing regions. Of the global total, about 52% of DALYs lost in 1990 arose from male mortality and morbidity, compared with 48% among females. The pattern of DALYs lost varied quite markedly between the sexes. For example, at ages 15-44 years, the leading causes of DALYs lost for women (worldwide)

were depression, tuberculosis, anaemia, suicide, bipolar disorder and obstructed labour whereas for men the leading causes were road traffic accidents, depression, alcohol use, homicide, tuberculosis and war.

Of the 10 major risk factors evaluated, malnutrition was by far the leading contributor to DALYs worldwide, causing an estimated 16% of the global burden of disease in 1990 (18% in developing regions), with the contributions to disease burden being particularly evident in Sub-Saharan Africa (33%) and India (22%).

Projections of the burden of disease were made based on scenarios according to the degree of optimism or pessimism about changes in the variables used to project health status. The baseline assumptions suggest that by 2020, ischaemic heart disease will be the leading cause of DALYs worldwide (rising from 5th place in 1990), followed by depression (4th), road traffic accidents (9th), stroke (6th), chronic obstructive pulmonary disease (12th) and lower respiratory infections (1st). On current trends, tobacco is expected to be the leading underlying cause of death and disability worldwide in 2020, causing more deaths (8-9 million) than AIDS, tuberculosis and complications of childbirth combined.

## ABRAHAM HORWITZ LECTURE

### BREASTFEEDING: FROM BIOLOGY TO POLICY

by Isatou Semega-Janneh

Department of State for Health, Social Welfare & Women's Affairs, The Gambia

The biological benefits of breastmilk and breastfeeding for mothers and infants in both developing and industrialised countries are well documented. Recent research findings have demonstrated physiological, immunological, psychological and economic factors in favour of exclusive breastfeeding for up to 6 months. Global trends, however, show that exclusive breastfeeding is practiced by a minority of mothers only. This may be attributed to a combination of cultural, social, economic and political factors.

This paper discusses the importance of providing local communities with adequate information about the advantages of breastmilk and exclusive breastfeeding and the equally important need for public support through government commitment and encouragement. The example given is that of the *Baby Friendly Community Initiative* (BFCI), implemented by the Ministry of Health in 12 communities in The Gambia. It shows how communities equipped with enough information can be motivated into action to promote breastfeeding. It also shows the critical role of government encouragement and support and how positive results from field trials can be subsequently translated into national policy.

In the BFCI, community members, both men and women, were trained and certified as *Village Support Groups on Infant Feeding*. Innovative ways of disseminating information were used by them to educate mothers and fathers on maternal and infant nutrition, environmental sanitation and personal hygiene. Evaluation of the intervention has

demonstrated that while exclusive breastfeeding was initially practiced by none, all mothers now do so and the term as translated into the local Mandinka language - *Susudiri Timarigo* - is a password in all the communities. The Ministry of Health has now launched exclusive breastfeeding as a policy objective and will gradually enable the project to go from pilot to national scale.

International commitment to breastfeeding is well recognised in the form of declarations, strategies and global initiatives. The paper, however, calls for more aggressive ways for SCN member agencies, through their specialised areas of work, to further stimulate national and local governments to view breastmilk as a critical natural food resource that must be optimally utilised in the best interest of the child, family and society.

Policy options would include public and community support to pregnant and lactating mothers and also adequate nutrition, care and advice. Legal protection in the form of regulated maternity leave for women in the formal sector should be strengthened while solutions must be sought for the majority of women working in the informal sectors.

Finally, the potential impact of HIV/AIDS on the safety of breastmilk and breastfeeding must be reviewed including solutions that do not jeopardise breastfeeding of infants everywhere.

# NEWS AND VIEWS

## Urban Malnutrition: a Rising Policy Problem

Over the period 2000-2025, the rural population of the developing world is projected to increase from 2.95 billion to 3.03 billion. Over the same period, the urban population of the developing world is projected to double - from 2.02 billion to 4.03 billion (United Nations Centre for Human Settlements, UNHCS, 1996).

While we can be sure that the number of people living in urban areas in the developing world will increase rapidly in the next 25 years, we do not know how many of them will be poor and undernourished. Furthermore, we do not know whether the absolute number of urban poor and undernourished will increase more quickly than the rural number. In other words,

- ◇ will there be a shift of poverty and undernutrition from rural to urban areas?
- ◇ are the opportunities for (and constraints to) income generation, food security and improved nutrition different for those living in urban areas compared with those living in rural areas?
- ◇ what do the answers to these questions imply for policy research and for policymaking in urban areas?

Research at the Food Consumption and Nutrition Division of the International Food Policy Research Institute (IFPRI) has begun to provide some answers to these questions. Newly assembled data suggest that the absolute number of poor and undernourished in urban areas is increasing and is accounting for a growing share of overall poverty and malnutrition.

Data to analyse trends in rural/urban comparisons of poverty and child malnutrition, are extremely scarce. IFPRI sought assistance from colleagues at the World Bank and WHO and gained

access to poverty and malnutrition data, disaggregated into rural and urban areas, for a number of countries over at least two points in time. The data show that for 9 out of 14 countries, the absolute number of underweight<sup>1</sup> children in urban areas is increasing. These 9 countries constitute a large percentage of the developing world given that they include China, Nigeria, Egypt, and the Philippines.

For the majority of the countries studied:

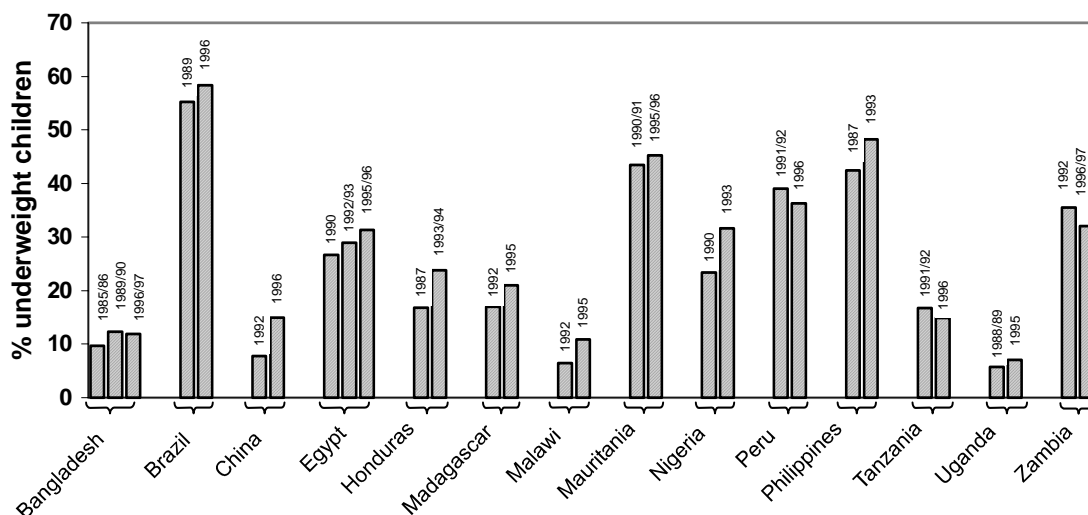
- ◇ the number of urban poor is increasing;
- ◇ the share of the urban poor in overall poverty is increasing;
- ◇ the share of urban preschoolers in overall numbers of underweight preschoolers is increasing; and
- ◇ the number of underweight preschoolers in urban areas is increasing (see graph below).

## The locus of poverty and undernutrition appears to be changing from rural to urban areas

### Why is more research needed on urban poverty and undernutrition?

Despite this upward trend in the numbers, there is surprisingly little research on urban poverty, food insecurity and malnutrition. The available research is often fragmented by issue or by discipline. Moreover, while many of the studies within cities utilise and generate rich case-study data, these studies are frequently limited in terms of the general conclusions that they can draw about other areas of the city or the city as a whole. The dynamics of urban poverty and the links to rural poverty also have been under-researched. Finally, community, NGO, and municipal and national government responses to urban

Percent of all Underweight Children that Reside in Urban Areas



<sup>1</sup>Underweight is defined as weight-for-age <-2SD below the NCHS reference median value

poverty and malnutrition have not been systematically documented and evaluated with a resulting set of best practices.

The authors argue that this closing of the rural-urban gap is a sufficient basis to call for more research on urban poverty, food and nutrition issues. The demand for urban food and nutrition policy research is rapidly outstripping the existing stock. Further research in this area is likely to have large payoffs in terms of assessment, analysis and action.

Based on a forthcoming IFPRI Discussion Paper (1998), 'Growing Urban Poverty and Undernutrition and the Urban Facts of Life: Implications for Research and Policy' by Lawrence Haddad, Marie Ruel and James Garrett. Copies of discussion papers can be obtained from FCND, IFPRI, 2033 K Street, N.W., Washington, D.C. 20006, USA. Tel: 1 202 862 5600 Fax: 1 202 467 4439 Email: ifpri@cgnnet.com This note was prepared by Bonnie McClafferty at the FCND, IFPRI. See also page 54 for further details about IFPRI's recent activities in nutrition.

Data Sources: WHO Global Database on Child Growth and Malnutrition, (WHO 1997, see page 68); UN Population Divisions Urban and Rural Areas by sex and age: The 1992 Revision, UN 1993, and World Urbanization Prospects: The 1994 Revision (1995).

### **Genetically-Modified Crops: the Social and Ethical Issues**

The Nuffield Council on Bioethics (UK) - an independent body established to consider major ethical issues arising from developments in medicine and biology - has recently started an inquiry into the ethical issues raised by genetically modified crops. A Working Party has been established to discuss this issue and a report will be published early in 1999.



#### **What are genetically modified crops?**

In contrast to traditionally bred varieties, genetically-modified plants have foreign or synthetic DNA inserted directly into their cells to confer desirable characteristics such as disease resistance or improvement of storage or processing characteristics. This method of genetic improvement has obvious benefits for agriculture. The private sector has invested heavily in this technology, and most scientists, who have spent years developing and perfecting the techniques involved, believe that such crops are safe to grow and eat.

Genetically modified soya, maize and cotton are increasingly grown in the United States, and genetically modified crops are already entering the human food supply in parts of Europe. In some areas of the world, however, these crops are being grown in the absence of a free press and with little public awareness of science.

## **In 1997 approximately 30 million acres worldwide were planted with genetically modified crops**

#### **Environmental and safety concerns**

There are major concerns about the environmental impact and safety of genetically modified crops. One of the main environmental concerns is the effect that the introduced genes will have once they are released into the environment. No one knows the long-term consequences of interbreeding between genetically modified crops and wild species.

Nutritionally, there are questions as to whether the introduction of a new gene could disturb metabolic pathways within the plant such that the proportions of fats, carbohydrates and other constituents are altered. Specifically, there is concern that the introduction of a new gene may increase the production of toxins in the plant, or indeed, be itself toxic.

There is also debate over the possible transfer of antibiotic-resistance genes to the gut of livestock fed with genetically modified maize, and the possibility of eventual transfer to humans.

Finally, there is the issue of consumer choice. Consumers have a right to know what they are eating and drinking. As US growers do not segregate genetically modified soya from traditionally-bred soya, countries importing US soya are unable to track which products are derived from genetically modified crops. Within the UK, a general aim of regulations has been that people should have a choice about whether to consume genetically modified foods. Given the difficulties of separating genetically modified foods, however, labelling has become a major issue in Europe.

#### **Implications for developing countries**

Genetically modified crops may potentially offer substantial benefits to developing countries, such as increasing yields and improving food consumption. However, it is likely that technology will continue to be directed towards the needs of rich countries, and it is unclear whether developing countries will have access to these new technologies. There is also the danger that new genetically modified products will undermine the market for commodities from developing countries. The United Nations Environmental Protection agency (UNEP) has adopted non-binding guidelines for the management of the release of genetically modified organisms<sup>1</sup>. However, many developing countries cannot afford to implement what some see as essential safeguards when genetically modified crops enter the environment or food chain. Some have argued that lower safety standards are justified.

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<sup>1</sup> Tzotzos, G.T. *Genetically Modified Organisms. A Guide to Biosafety*. Wallingford, UNIDO, UNEP, CAB International, 1995. Copies will soon be available to order from the UNEP website at <http://www.unep.org>



As part of the inquiry, the Nuffield Council on Bioethics is inviting comments on the development of genetically modified crops and the implications for consumers, the environment and the current regulatory framework. The Council would also like to hear views on the way in which ethical issues are being approached, now and in the future.

Please send your comments to: Dr Sandy Thomas, Secretary to the Working Party on the Genetic Modification of Crops, Nuffield Council on Bioethics, 28 Bedford Square, London WC1B 3EG, UK. Tel: 44 171 631 0566 Fax: 44 171 323 4877 Email: [ncob@cableinet.co.uk](mailto:ncob@cableinet.co.uk) by **August 31st 1998**. As the Council may publish some of the views expressed, please make it clear if you wish your response to be treated in confidence. Further information can be found in the consultation document '*Genetically Modified Crops: the Social and Ethical Issues*', available on the web at <http://www.shef.ac.uk/~doe/> or from the Nuffield Council on Bioethics.

Source: The Nuffield Council on Bioethics consultation document '*Genetically Modified Crops: the Social and Ethical Issues*', April 1998.

## **Human Rights and Nutrition in the SCN**

The 25<sup>th</sup> Session of the ACC-SCN saw a breakthrough in the recognition of linkages between nutrition as a development goal and nutrition as a human right. Over the last two SCN sessions - Ghana (1996) and Kathmandu (1997) - there has been increasing recognition of the international human rights system as a hitherto unexplored opportunity for strengthening nutrition analysis and advocacy, and for strengthening action towards sustainable access for all to adequate food and nutritional well-being.

A human rights approach can embrace broad nutrition policy issues and give added support to ongoing and future nutrition-relevant programmes. The advantages of using the human rights system of internationally agreed legally-based norms, institutions and procedures to strengthen the cause of ending hunger and malnutrition, is becoming better understood by the nutrition community.

There is also a growing recognition that the nutrition community itself can, through the SCN mechanism, play an important role in strengthening the work of the United Nations in promoting economic, social and cultural rights and in particular, the right to food and nutrition. The contributions by SCN participants include the provision of data, the documentation of experiences from efforts that do or do not work, and the dissemination of a comprehensive understanding of the linkages between nutrition goals and other development goals. This would improve the content of the obligatory periodic reports by member states (that have ratified the human rights conventions relevant to food and nutrition), and enhance the analysis by expert treaty bodies, notably the Committee on Economic, Social and Cultural Rights (CESCR) which has a Secretariat at the UNHCHR office in Geneva.

The momentum for a new global drive for nutrition has perhaps never been greater, underpinned as it is by the message from the UN Secretary-General Mr. Kofi Annan in his proposal for UN reform launched in 1997, that human rights shall resume a central place throughout the work of all United Nations agencies, programmes and funds. Also, the celebration of the 50th anniversary of the Universal Declaration on Human Rights this year has put into focus the human rights movement and its linkages to peace and economic and social development as the two other fundamentals of the UN Charter.

Specifically, the offer by the UN High Commissioner for Human Rights to host the 26<sup>th</sup> ACC-SCN Session in Geneva on April 12-15 1999, is a sign that nutrition may in the future figure much more centrally on the UN agenda at large. It is now up to the SCN and its participants to become better informed about the human rights system and the challenges it offers to the UN, to member countries, and to civil society in partnership for a move that *may* make a difference. The 26<sup>th</sup> SCN Session in 1999 will provide an opportunity for advancing understanding through its symposium "*The substance and politics of a human rights approach to food and nutrition policies and programming*", which will take place on April 12, 1999.

By Wenche Barth Eide (Institute for Nutrition Research / School of Nutrition, University of Oslo, P.O. Box 1046 Blindern, 0316 Oslo, Norway. Tel: 47 22 85 1375 Fax: 47 22 85 1376 Email: [w.b.eide@basalmed.uio.no](mailto:w.b.eide@basalmed.uio.no)) and Uwe Kracht (World Alliance for Nutrition and Human Rights (WANHR), Viale delle Medaglie d'Oro 415, 00136, Rome, Italy. Tel/Fax: 39 06 35 40 9595 Email: [kracht@flashnet.it](mailto:kracht@flashnet.it)), rapporteurs for the SCN Working Group on Nutrition, Ethics and Human Rights. See also page 24. The background document provided by this Working Group "*The Promotion and Protection of the Human Right to Food and Nutrition by ACC-SCN Member Agencies: Obligations and Opportunities*", is available by email from Wenche Barth Eide (address above).

## **A Multinutrient Package for Tea Plantation Workers for Better Health, Productivity and Profitability**

Results from a study to evaluate the effects of micronutrient supplementation on tea plantation workers and their families in India have demonstrated a significant, positive impact on the workers' health and productivity. Initiated in 1996, the study was conducted in the plantation district of Chikmagalur, Karnataka State, South India - a district with endemic iodine deficiency disorders (IDD), and high prevalences of iron deficiency anaemia and vitamin A deficiency (VAD). The overall objective of the project was to intervene for nine months with a multinutrient package of supplemental iron (240mg ferrous sulphate twice a week), vitamin A (1600 IU once a week) and iodised salt (30ppm for daily cooking in the household), and to evaluate the effects of this intervention on the health, productivity and profitability of the workforce and their families.



A tea plantation, India. (T. Gopaldas)

The workers were responsible for dosing themselves and their family members. A simple IEC (information – education – communication) sheet on the dosing regimen and benefits was developed in the local Kannada language and was distributed to the workforce at frequent intervals throughout the intervention period.

Significant improvements in the health of the workforce and their dependents were observed: haemoglobin levels increased (from 108g/l to 121g/l in females and from 116g/l to 140g/l in males); clinical signs of iron deficiency, VAD and IDD were significantly reduced (49%→11%, 19%→14% and 17% →7%, respectively); and common health problems and hospital referrals decreased. Above all, the intervention created a feeling of being cared for, and the majority of the workforce reported that they 'felt better', 'ate more' and 'felt less tired'. Marked improvements in worker productivity were also observed with an increase in the average amount of tea plucked (and hence increased income) over the intervention period. The total number of pluckers employed decreased over the intervention period. The analysis of profitability showed that the total cost of the micronutrient package (Rs 43,050, or Rs 61.5 (about US\$1.5) per worker + family per annum) was recovered in the cost of labour saved (Rs 111,800).

India is the largest producer of tea in the world, accounting for nearly 30% of the global production of tea. The tea industry in India is unique in that it employs 40-50% women workers. The workforce live on the plantations and their health and welfare are the general responsibility of the estate's management. This project, funded by OMNI-ILSI, was jointly planned and implemented by Tara Consultancy Services and the management of the tea estate, and used the plantation's own infrastructure and on-going management information systems. This approach, together with a simple intervention and the empowerment of the workers to take care of themselves and their families, has ensured the continuation (and funding) of the intervention by the management after the project ended in early 1998.

Based on the report 'A Multinutrient Package for Tea Plantation Workers for Better Health, Productivity and Profitability', by Tara Gopaldas and Sunder Gujral. Tara Consultancy Services, Bangalore, India, 1998. For further information and a copy of the report, please contact Professor Tara Gopaldas, Director, Tara Consultancy Services, "Saraswati", 124/B, Varthur road, Nagavarapalya, Bangalore – 560 093, India. Tel: 91 80 5242999 Fax: 91 80 5288098.

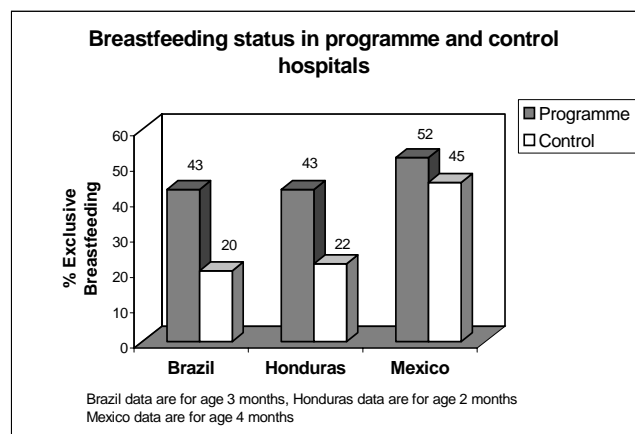
## Breastfeeding Promotion: A Cost Effective Intervention

Investing in breastfeeding promotion is among the most cost-effective interventions for child survival, equal to conventional practices such as immunisations and vitamin A supplementation, and surpassing oral rehydration therapy. This is the main conclusion from the Breastfeeding Cost-Effectiveness Study, conducted in Brazil, Honduras, and Mexico, initiated in 1992.

The aim of the study was to provide comparative data on the cost-effectiveness of breastfeeding promotion. To determine the impact of the breastfeeding promotion programmes, prevalences and rates of exclusive breastfeeding were compared for two groups of women:

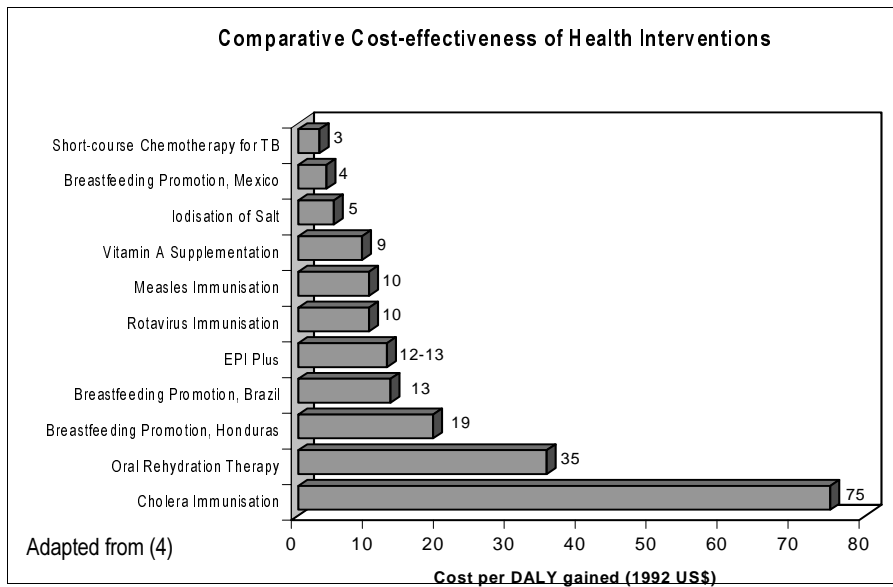
1. those who delivered at a hospital with a breastfeeding promotion programme;
2. those who delivered at a nearby hospital without such a programme.

The programme involved 17 specific breastfeeding promotion activities during hospitalisation for childbirth. Results showed a significant impact on breastfeeding (see graph below and references 1 and 2).



To determine costs, each hospital programme was described in terms of activities undertaken for breastfeeding promotion. The nature and level of resources (personnel, facilities and materials) associated with each activity were then determined and the direct institutional costs and savings of breastfeeding promotion for one year were determined. Programme maintenance costs of recurrent activities were itemised. All resources were identified and valued in terms of their economic or opportunity costs. A discount rate of 3% was used to calculate the annual value for capital goods. From the profile of costs developed, the difference in incremental costs between breastfeeding promotion at the programme and control hospitals, incremental savings per birth, and net incremental costs per birth was obtained.

Cost-effectiveness was calculated by determining the reduction in risk of diarrhoea and acute respiratory infection (ARI) from hospital differences in the prevalence of exclusive and partial breastfeeding. Mortality effects of differences in these breast-



feeding practices were derived by using relative risks for mortality for diarrhoea and ARI previously reported (3). Demographic and Health Survey data were used to make assumptions about baseline prevalences of diarrhoea and ARI in infants less than six months of age, and hence the number of diarrhoeal and ARI deaths averted.

Although the Mexico programme appears to be the most cost-effective (graph above), its cost-effectiveness stems largely from capitalising on the savings from less use of infant formula, which was not the case in Brazil and Honduras. Given the low rate of coverage and the extremely short duration of exclusive breastfeeding, Mexico is an example of a programme in which objectives of coverage and effects are not being met and for which additional investments are needed.

The range of cost-effectiveness estimates obtained in this analysis provides an indication of expected values in different programme and policy contexts (graph above). When compared to the interventions to control diarrhoea, breastfeeding promotion in all three countries compared favorably with rotavirus and measles immunisation. When breastfeeding promotion includes a shift from formula to almost no formula feeding, as in the case of Mexico, its cost-effectiveness is comparable to other health interventions, including iodisation of salt (\$5 per DALY gained), vitamin A supplementation (\$9), or short course chemotherapy for tuberculosis (\$3). However, even after savings that result from the elimination of formula have been fully exploited and no longer can be used to offset other costs, as in the case of Brazil and Honduras, breastfeeding promotion still remains a highly attractive intervention, similar to the Expanded Programme on Immunisation Plus and vitamin A supplementation.

Eliminating formula feeding and instituting 'rooming-in' have been appealing options for policy makers eager to realise their savings potential. However, limiting breastfeeding promotion activities to these changes without the next step of establishing

comprehensive support and educational activities for mothers is to miss out on an extremely cost-effective health investment. As the results from this study show, hospital-based breastfeeding promotion results in dramatic improvements in the duration of exclusive breastfeeding and is also one of the most cost-effective interventions available to improve infant and child health.

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By Chessa Lutter, Regional Advisor, Food and Nutrition Program, Pan American Health Organization, 525 Twenty-third Street, N.W., Washington, D.C. 20037-2895, USA. Tel: 1 202 974 3871 Fax: 1 202 974 3682 Email: lutterch@paho.org This study was supported by the US Agency for International Development under the Latin American and Caribbean/Health and Nutrition Sustainability Project contract to University Research Corporation (LAC-0657-C-00-0051) and subcontract to International Science and Technology Institute (90/01/3700). The study director was Dr. Tina Sanghvi.

### **Breastfeeding Promotion: The Haitian Experience**

As the 1991-94 political crisis wore on in Haiti, women were forced to spend more time away from home in an effort to provide for their family's survival. As a result, exclusive breastfeeding for three months plummeted from 13% in 1987 to 3% in 1995 (1, 2).

In response, the breastfeeding promotion programme started in 1994 with the introduction of the Baby Friendly Hospital Initiative. This was followed by a one-year national breastfeeding promotion campaign, launched in 1995 by the Minister of Health. A coordination committee oversaw the activities which included:

- ♦ wide partnership with churches, NGOs, the Haitian Medical Association, local cooperatives, and youth organisations;

- ◇ promotion by traditional birth attendants, priests, voodoo priests, youth, community workers, and health workers;
- ◇ testimonies on the values of breastfeeding by mothers who had successfully breastfed exclusively for six months;
- ◇ mass media support in the form of promotional materials, radio broadcasting, audiotapes with the programme jingle and breastfeeding messages played in local taxis, and promotional activities in local markets.

The campaign became a national event that drew the attention of the press and national authorities. Momentum peaked in 1996 when both the President and the Prime Minister participated in several events to celebrate the World Breastfeeding Week.

The breastfeeding promotion programme was one of the most successful and visible social development programmes implemented in Haiti during these difficult times. Key messages on breastfeeding had reached nearly every village. Moreover, various intervention areas throughout the country reported dramatic increases in the rate of exclusive breastfeeding for six months from 0% to more than 50%, while cases of severe diarrhoea and malnutrition declined. Factors responsible for the success of the programme are summarised in Box 1 below. There were problems however, and a number of lessons were learned (Box 2, above right).

**Box 1: Success factors**

- ◇ Adoption of a community-based strategy which fostered wide mobilisation and participation.
- ◇ Testimonies of healthy babies as a result of exclusive breastfeeding.
- ◇ Ease with which breastfeeding promotion integrates into cultural ceremonies because of its association with new life, health, happiness and love.
- ◇ Economic hardships, which facilitated the communication of messages on the economic value of breastfeeding.

The programme was engineered by a small number of highly motivated organisers (despite efforts to engage as many people in the process as possible), and most key players have now moved on. It has now lost momentum, although behavioural changes have been sustainable. In addition, many institutions and NGOs have integrated breastfeeding promotion into their regular activities. However, the goodwill among policy-makers and decision-makers is fading in the absence of a constant reminder. This is of particular concern because legislation on the marketing of breastmilk substitutes has not been adopted in Haiti, and the protection of breastfeeding in the work place (including markets) needs to be emphasised and promoted.

The biggest weakness in the programme is that it has not secured national support for promotion, protection and support of breastfeeding. Unfortunately, this is not unique to the

**Box 2: Lessons learned**

- ◇ Breastfeeding promotion can play an important role in crisis management. The political crisis in Haiti provoked large-scale migration within the country, disruption of many social mechanisms, breakdown of public health services, and a sharp deterioration of the health situation. Promotion of and support for exclusive breastfeeding for six months provided parents with better skills to avert the threat of disease and ensure survival of their young infants.
- ◇ The importance of community empowerment ensured that communication efforts led to sustainable behaviour change, which goes beyond the life of the programme.
- ◇ A chain reaction can be generated by mobilising successful mothers to share their experiences with others.
- ◇ Involving fathers and male leaders in the process of building a breastfeeding movement is important. Their proven enthusiasm and involvement in providing support for breastfeeding gave the impression that their indifference to child care is as much born out of ignorance and lack of capacity as it is a 'macho' behaviour.

breastfeeding programme as virtually all sectors in the country suffer from lack of national interest.

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The national breastfeeding promotion campaign year ended with a mural painting competition in the Port-au-Prince metropolitan area. The winning murals were compiled in a 1997 calendar that was developed to sensitise and inform the public on the Code on the Marketing of Breast Milk Substitutes. This picture shows one of the winning murals.

## News from the World Alliance for Breastfeeding Action

The World Alliance for Breastfeeding Action (WABA) arose out of the 1990 Innocenti Declaration. It is a conglomerate network, consisting of large and small networks, interested individual organizations and interested individuals. WABA has a very flat structure, but as a democratic entity, still has to organise responsibilities. WABA therefore has a Steering Committee; a small, hard-working Secretariat in Penang led by its most able Director; an International Advisory Council; Regional Focal Points; and eight Task Forces.

The Alliance makes maximum use of electronic media. Much of WABA's global interaction goes via cyberspace, although being electronically literate is no prerequisite for joining the Alliance. True to its grassroots responsibilities, WABA will always find a way of getting messages across, be it by hand or foot, mouth, pigeon or snail mail!

### ***Breastfeeding: the best investment***

This year, WABA has chosen '*Breastfeeding: the Best Investment*' as the theme for the World Breastfeeding Week (August 1-7, 1998). A number of economic studies reviewed in WABA's action folder for the 1998 World Breastfeeding Week, provide powerful arguments for advocacy efforts with governments, health care institutions, employers, funding agencies and others. For example, in Iran an increase in exclusive breastfeeding from 10% in 1991 to 53% in 1996, saved US\$50 million on the cost of importing of breastmilk substitutes.

This year's World Breastfeeding Week materials from WABA provide all the information needed to calculate some of the economic losses that artificial feeding implies. The information also emphasises that breastfeeding is worth more than its cost savings. Advocacy should begin on the basis that breastfeeding is a woman's right; advocacy messages can then go on to show that efforts to protect, support and promote breastfeeding will yield significantly reduced costs for health care and for infant foods. These savings may help to reduce foreign exchange spending.

### ***Breastfeeding, women and work: from human rights to creative solutions***

WABA has just concluded its annual Steering Committee (SC) meeting, which was held in Quezon City, the Philippines. Prior to the meeting, a workshop entitled 'Breastfeeding, women and work: from human rights to creative solutions' was held (sponsored by SIDA). Numerous ideas were presented and discussed for creative solutions to the difficult situation breastfeeding mothers find themselves in when they have to combine 'mother work and other work'.

ILO is updating its Conventions concerning maternity protection provisions – a subject that will be on their annual meeting



*World Breastfeeding Week, 1-7 August 1998, will have the theme 'Breastfeeding: the Best Investment'.*

agenda in June, 1999. There is a looming threat that the WTO's rules will override national legislation on worker's rights issues. This might be counteracted if maternity protection at work is recognised as 'core labour standards' of special importance, and which will continue to be under the protection and jurisdiction of ILO in the future.

The workshop finally adopted a "Quezon City Declaration" which summarises the concerns of the WABA partners and asks for continued vigilance as well as sharing of positive experience.

### ***HIV and breastfeeding***

At the June meeting in the Philippines, the WABA Steering Committee issued a position statement on HIV and breastfeeding. In brief, the WABA SC is concerned that the full economic and health consequences of the recent WHO/UNAIDS/UNICEF policy on HIV and infant feeding have not been adequately analysed (see page 63). Alternatives to infant formula such as expressed and heat-treated human milk are listed in the policy guides, but their use has not been adequately studied and is not explained in the same detail as is infant formula use.

WABA emphasises that the single most important condition that must apply if infant formula is used systematically in high HIV-prevalence areas is that only generic labelling of tins of formulae be permitted. Finally, WABA recommends that the health workers who live with the counselling problems on a day-to-day basis be heard and that they be given resources to study their own situation and propose appropriate remedies.

By Elisabet Helsing, co-chair, Steering Committee, WABA. The World Breastfeeding Week action folder, and other WABA information is available from the WABA Secretariat, P.O. Box 1200, 10850 Penang, Malaysia. Fax: 60 4 657 26 55 Email: [secr@waba.po.my](mailto:secr@waba.po.my) Further information about the 1998 World Breastfeeding Week, other WABA activities and more action ideas are available on the WABA website at <http://www.elogica.com.br/waba/> The coordinator of the World Breastfeeding Week, Denise Arcoverde from Brazil, is also responsible for bringing the Alliance into the electronic age, and can answer questions on this ([origem@elogica.com.br](mailto:origem@elogica.com.br)).

## **In Praise of Nevin** **A message from Richard Jolly, on behalf of the SCN**

*A symposium, followed by a gala banquet, was held on June 26th 1998 at MIT Laboratory of Human Nutrition, in honour of the enduring and broad ranging contributions made by Nevin Scrimshaw during his distinguished career. The event was held during Nevin's 80<sup>th</sup> year. Richard Jolly, Chairman of the SCN, relayed the following message to Nevin during this important event.*

We thank you Nevin, for your leadership and inspiration from the very beginnings of the ACC/SCN, throughout its life and to the SCN's latest meeting a few months ago in Oslo. Way back in 1955 you helped bring to birth the Protein Advisory Group, to provide the advice UNICEF needed for its child-focused programmes. Seven or eight years before that you had inspired Hans Singer to write the first UN publication on economic development and children, drawing on your early research on nutrition and cognitive development in infants and young children.

All this stretches to 50 years – yet you remain ever young in your vitality, enthusiasm and freshness of mind. So many of the good things of the SCN have grown from your own leadership and commitment: you organised in the UNU the first SCN meeting on nutrition and economic adjustment policy, you have been the force behind the working group on iron deficiency, endlessly pressing for practical actions to tackle the most widespread of all micronutrient deficiencies. You have been by far the most dedicated supporter of all the SCN's work and activities – at once forthright and practical, upright and professional and always wonderfully generous and creative. You have made these contributions both in your own name but always carrying with you the strong support of the UNU.

"Human progress is neither automatic nor inevitable. Even a superficial look at history reveals that no social advance rolls on the wheels of inevitability. Every step towards the goals of justice requires sacrifice, suffering and the tireless exertions and passionate concern of dedicated individuals." So said Martin Luther King, of the giants who give leadership and of the ordinary citizens who together become the force of social movements and human progress.

We thank you, Nevin, for being one of these individuals – one of the giants of nutrition as well as a committed citizen of humanity -- who has helped and succeeded to bring real and widespread advance in nutrition in so many countries over the last half century. We thank you for your wisdom and vision – and for your boundless energy and impact in carrying vision into practical action. We look forward to many further occasions of working with you and being inspired by your words, research, writings and ideas.



## *NUTRITION IN EMERGENCIES*



### **Health Intelligence Network for Advanced Contingency Planning (HINAP)**

"...The Goma refugee problem pointed out that epidemiological, nutritional, environmental, economic, and social information required to effectively mobilise resources was not available in a timely fashion..." (Professor Nancy Mock, Tulane University In: 'Public health crisis prevention, mitigation and recovery: Linking relief and development', March, 1996).

The Rwanda crisis of 1994, resulting in an estimated 50,000 deaths from cholera amongst refugees in Goma, and the subsequent repatriation of over one million refugees back to Rwanda in 1997, clearly demonstrated the need for advance health information and risk mapping for effective contingency planning. Deaths from preventable diseases would be avoided if vital health data were available in advance.

WHO intends to provide such vital health data proactively for decision making and planning purposes through development of the *Health Intelligence Network for Advanced Contingency Planning* or HINAP. An abundance of valuable information already exists but implementing agencies such as IOM, ICRC, UNHCR and NGOs such as MSF are obliged to contact various sources (e.g., different programmes and offices of WHO) for advance planning purposes. This is not only inconvenient, but may be impossible under emergency circumstances.

A core team at WHO in Geneva is working to develop an information management system for those involved in complex humanitarian emergencies with sudden population displacements. The project's major objective will be to consolidate, filter, organise and redistribute background information and existing data to the right people at the right time in an easy-to-

use format (e.g., World Wide Web, regular hard copy bulletins, CD-ROM, email, faxback, etc.).

HINAP will focus on country situations where latent or low-level tensions have not yet attracted significant attention but could escalate. It could assist decision-making in order to spur preventative measures where possible, and contingency planning where necessary. Examples of information that could be collected for countries of origin and countries of asylum include:

- ◇ health data such as epidemic risks, incidence and prevalence of communicable diseases and vaccination coverage, nutritional status and country health profiles;
- ◇ basic ethnographic data on populations at risk of displacement;
- ◇ capabilities of in-country NGOs and UN Agencies;
- ◇ description of the country's disaster plan, if any;
- ◇ level of health professional training in the country of origin which may help in recruiting and training of refugee health workers;
- ◇ logistics information such as warehouse capacity, price and availability of fuel, air and road access and telecommunications capacity;
- ◇ local and regional laboratory capabilities;
- ◇ in-country production capacity for and/or availability of drugs, jerry cans, cooking kits and other needed items.

Some initial HINAP data is expected to become available on the Web in late 1998. The address will be <http://www.who.ch/eha/>

This project is supported by the US State Department's Bureau for Population, Refugees and Migration (BPRM), the British Department for International Development (DFID) and the US Centers for Disease Control and Prevention (CDC). For further information, please contact: Eric K. Noji, M.D., M.P.H., Senior Medical Officer and HINAP Coordinator, Division of Emergency & Humanitarian Action, WHO, 20 Avenue Appia, CH-1211 Geneva 27, Switzerland. Tel: 41 22 791 2705/2754 Fax: 41 22 791 4844 Email: [nojie@who.ch](mailto:nojie@who.ch)

### **New UNICEF / WFP MOU**

A new memorandum of understanding (MOU) between UNICEF and WFP was signed in February 1998. The MOU details the working arrangements between the two organisations with respect to joint activities in emergency and rehabilitation operations. The MOU applies where WFP and UNICEF have agreed to work as partners in situations caused by natural or man-made disasters where people remain in their country of origin, and includes internally displaced people.

In these situations, WFP and UNICEF provide a comprehensive range of services to safeguard the health and nutrition of the affected population, with an emphasis on the most vulnerable groups. This joint approach is designed to make optimal use of each agency's strengths. The cooperation will maximise the efficiency of the agencies while avoiding duplication of efforts.

Some of the objectives of the WFP/UNICEF collaboration are to prevent famine-related deaths and malnutrition - including micronutrient malnutrition - and to restore or provide access to health services, water supplies, sanitation and other basic services for families, with particular attention to unaccompanied children. This collaboration is also intended to improve the condition of women, on the premise that strengthening opportunities for women is a major factor in overcoming hunger and poverty.

Specifically, WFP is responsible for assessing overall food needs and logistics and will mobilise and provide non-food items necessary for the transport, storage and distribution of food commodities. UNICEF will be responsible for mobilising and providing non-food items (e.g., food cooking equipment, emergency shelter material, soap). Food commodities will be appropriately fortified, and UNICEF will be responsible for covering any unmet micronutrient needs through supplement distribution or the provision of vitamin and mineral mixes.

UNICEF, in consultation with WFP will also identify requirements for strengthening caring capacity, access to safe water, sanitation, health services, and education. Both organisations will promote, protect and support breastfeeding practices in emergencies.

For copies of the WFP/UNICEF MOU please contact Diana Populin at WFP. Tel: 396 6513-2214 Fax: 396 6513-2817 Email: [populin@wfp.org](mailto:populin@wfp.org)

### ***IDPs and the Human Rights Commission***

At the 54<sup>th</sup> Session of the Commission on Human Rights (Geneva, 16 March - 24 April 1998), the report *'Further Promotion and Encouragement of Human Rights and Fundamental Freedoms, Including the Programme and Methods of Work of the Commission: Human Rights, Mass Exoduses and Displaced Persons'* was presented. The addendum to this report, *'Guiding Principles on Internal Displacement'*, addresses the specific needs of internally displaced people (IDPs)<sup>1</sup> worldwide by identifying rights and guarantees relevant to their protection. The Principles reflect and are consistent with human rights law, and are intended to be a persuasive statement that should provide not only practical guidance, but also an instrument for public policy education and consciousness-raising.

Specific reference to food and nutrition is made in principles 7, 10 and 18. Principle 7 sets out one of the guarantees to be met when authorities undertake displacement after having ensured

<sup>1</sup>Internally displaced people are defined, for the purposes of these Guiding Principles as 'persons or groups of persons who have been forced or obliged to flee or to leave their homes or places of habitual residence, in particular as a result of or in order to avoid the effects of armed conflict, situations of generalised violence, violations of human rights or natural disasters, and who have not crossed an internationally recognised State border.' (para 2, Guiding Principles E/CN.2/1998/53/Add.2).

that no alternative courses of action exist. This is to ensure "that such displacements are effected in satisfactory conditions of safety, nutrition, health and hygiene, and that members of the same family are not separated." (E/CN.4/1998/53/Add.2). Principle 10 discusses the elimination of starvation as a method of combat. Principle 18 specifies that all IDPs have the right to an adequate standard of living which, at a minimum, means safe access to:

- ◇ essential food and potable water;
- ◇ basic shelter and housing;
- ◇ appropriate clothing;
- ◇ essential medical services and sanitation.

Regarding humanitarian assistance, Principles 24-26 stipulate that all humanitarian assistance be carried out in accordance with the principles of impartiality and without discrimination. The primary responsibility for providing assistance rests with the national authorities - international organisations and others can offer their services in support of IDPs. Assistance will not be diverted, in particular for military or political reasons, and persons engaged in humanitarian assistance shall be respected and protected from attack or other acts of violence.

Source: 'Further Promotion and Encouragement of Human Rights and Fundamental Freedoms, Including the Programme and Methods of Work of the Commission: Human Rights, Mass Exoduses and Displaced Persons', Report of the Representative of the Secretary-General, Mr Francis Deng, submitted pursuant to Commission on Human Rights resolution 1997/39, and Addendum, 'Guiding Principles on Internal Displacement'. (E/CN.4/1998/53, E/CN.2/1998/53/Add.2, Resolution 1998/50). Both documents are available on the UNHCHR website at <http://www.unhchr.ch/html/menu4/chrrep/98chr53.htm> and <http://www.unhchr.ch/html/menu4/chrrep/98chr53a2.htm>, respectively, or from High Commissioner for Human Rights/Centre for Human Rights, Palais des Nations 8-14, Avenue de la Paix 1211, Geneva 10, Switzerland. Or, High Commissioner for Human Rights/Centre for Human Rights, United Nations New York, NY 10017, USA.

### **USAID's Results Review and Resource Request (R4) process**

As part of USAID's<sup>1</sup> management-for-results efforts, the Food For Peace/Emergency Division (FFP/ER) is monitoring progress in achieving its objective of meeting the critical food needs of targeted groups in emergencies. This is done through its Results Review and Resource Request (R4) process which assesses factors affecting programme performance and summarises progress made during the fiscal year. Thirty-five programmes implemented by the WFP, private voluntary organisations and government agencies in 24 countries, primarily in Africa, were included in the review process in 1997.

Most programmes assessed (76%) in the 1997 review were responding to complex emergencies, and undertook such activi-

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<sup>1</sup>USAID's Office of Food for Peace, Emergency Division (FFP/ER), administers the U.S. Government's P.L. 480 Title II emergency food aid. Title II development activities related to food security with a primary focus on household nutrition and agricultural productivity are undertaken by the Development Division.

ties as general free food distribution or targeted feeding of the most vulnerable groups, supplementary and therapeutic feeding, food-for-work/agriculture, rehabilitation and monitoring. It is estimated that emergency food aid reached more than 11.5 million beneficiaries during the reporting period (data was not available from four programmes). Efforts are underway to coordinate more closely with the ACC/SCN on monitoring nutritional status of beneficiaries through the Refugee Nutrition Information System.

The assessment found that significant progress was made through new programme approaches in 1997. FFP/ER introduced innovative measures to meet the challenge of timely food aid delivery within the context of an established system which normally take 120-150 days. These include the use of USDA procurements to ensure the arrival of food grains within two months of the start of the procurement process, and the prepositioning of \$5 million worth of commodities at US ports for immediate loading in case of a sudden-onset emergency. This has been used successfully to meet El-Niño emergency food aid needs in Sudan, Somalia and Central America. Other measures are a two-year planning for long-term or complex emergencies with funding requirements reviewed annually against needs. This will enable implementing partners to better address 'transition' and longer-term issues like rehabilitation, improving the programme planning and approval process by introducing a proposal guideline and checklist, and a new standardised grant document.

Accomplishments and lessons learned are illustrated by country case studies and data on various performance indicators. Expected "results" of the R4 process include:

- ◇ improved targeting of food aid to the most vulnerable populations;
- ◇ delivery of food aid target groups on schedule;
- ◇ improved planning and implementation from relief activities to development, including specific attention to avoid the negative impacts of food aid in programme design and implementation ('do no harm');
- ◇ strengthened capabilities of cooperating sponsors and host country entities to manage emergency food aid.

For further information on USAID's Food for Peace Emergency Programs, please contact: David Garms, Emergency Division, Office of Food for Peace, USAID, 1300 Pennsylvania Avenue, Washington DC 20523, USA. Tel: 1 202-712-5834 Fax: 1 202-216-3039 Email: [dgarms@usaid.gov](mailto:dgarms@usaid.gov)

### **Vitamin C Fortification of Food Aid Commodities: Final Report (1997)** **Institute of Medicine**

Over the last five years, there has been considerable interest in micronutrient fortification of rations provided in international food relief programmes. In 1995, a pilot programme was initiated by USAID to increase the vitamin C content of corn-soy



blend (CSB) and wheat-soy blend (WSB) from 40mg/100g to 90-100mg/100g (see also *SCN News No. 15 p36-7*).

This new report reviews and evaluates the pilot programme, determines the cost-effectiveness of scaling up vitamin C fortification, makes recommendations concerning the advisability of increasing vitamin C fortification and discusses alternative mechanisms for providing vitamin C to refugee populations at risk for vitamin C deficiency.

Scurvy outbreaks have been reported among refugee populations who are wholly dependent on emergency relief rations. With the exception of a mild recurring scurvy outbreak among Bhutanese refugees in Nepal, all other outbreaks in the past two decades have been among refugee camps in the Greater Horn of Africa (Ethiopia, Kenya, Somalia and Sudan). As only about 7% of all US-supplied fortified blended foods is designated for use in these countries, the Committee concluded that the costs of increasing vitamin C levels in all (100%) US-supplied fortified blended foods could not be justified, and suggested alternative approaches for the prevention of scurvy. These include providing vitamin C-containing foods (such as locally available fruits or vegetables, or tomato paste) as part of the emergency ration package, increasing access to local markets, and local fortification of commodities in the country or region where the emergency is occurring. Specifically, the report recommends that:

- ◇ the level of vitamin C fortification of US-supplied blended food aid commodities should not be increased;
- ◇ health surveillance systems in refugee camps should be strengthened to monitor populations at risk of scurvy;
- ◇ populations at risk should be targeted with appropriate vitamin C interventions;
- ◇ the uniformity of the vitamin and mineral fortificant throughout the blended foods should be improved.

100pp. US \$15 (in the US); US \$18 (international). Copies are available from the National Academy Press, 2101 Constitution Avenue, N.W., Box 285, Washington, DC 20055, USA. There is a 20% discount when placing orders through the National Academy Press Web online bookstore (<http://www.nap.edu>). The report is also available to download free of charge from the same website.

***Acceptability and use of Cereal-based Foods  
in Refugee Camps (1998)***  
***An Oxfam Working Paper by Catherine Mears  
with Helen Young***

Episodes of scurvy, pellagra, and beriberi among refugees during the 1980s were a startling reminder of the inadequacies and failures of the international humanitarian response. Fortification of the cereal staple and the provision of a fortified blended food are key strategies identified for prevention of micronutrient malnutrition in refugee settings. This report publishes the findings of a study, conducted by OXFAM-GB and funded by MI through CIDA, and UNHCR, to investigate the use and accept-

ability of fortified blended foods, and the feasibility of cereal fortification at the local level in three refugee situations (Nepal, Ethiopia and Tanzania).

The report was presented and discussed at the meeting of the SCN Working Group on the Nutrition of Refugees and Displaced People during the ACC/SCN's 25<sup>th</sup> Session in Oslo, 1998. The following is taken from the Working Group report<sup>1</sup>.

The nutritional situation and nutritional content of the rations for each of the three sites are included in the report to give background and context. Summaries of preferences at each site between items provided in the ration are described. In addition, preferences among ration and non-ration food items are included. Differences in preferences were found to be related to differences in age of the consumer, potential for sale, familiarity of food type, cooking time required, cooking methods and type of meal. The study also conducted a preliminary assessment of the opportunities for fortification of cereals at different levels (household, camp, regional, national).

The main findings of the report are as follows.

- ◇ Regional-level fortification of cereals would require adequate milling capacity close to the population, a medium-to long-term commitment to this by donors, and considerable technical and management expertise.
- ◇ Camp-level fortification of cereals would be most appropriate where the distributed staple grain is acceptable and consumed in milled form rather than as whole grain.
- ◇ Household-level fortification of cereals during pounding or grinding did not appear to be feasible. However, a fortification powder (premix) could be added to family meals during cooking.
- ◇ The evidence suggested that selecting a food vehicle for fortification should be context-specific. Factors that need to be assessed include: familiarity and food, resale and cultural value.
- ◇ No evidence emerged of rejection on cultural grounds of any of the blended foods investigated. In general, where blended foods were familiar, they were accepted, however unfamiliarity did not indicate low acceptability. The report highlights some technical and operational issues of quality control and timely supply of local products.

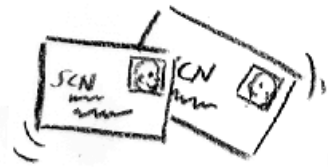
135pp. UK12.95; US \$18.95. Available from Oxfam, c/o BEBC, PO Box 1496, Parkstone, Dorset BH12 3YD, UK or in the USA, from Oxfam, c/o Humanities Press, 165 First Avenue, Atlantic Highlands, NJ 07716-1289.



<sup>1</sup> A full report of the Working Group meeting (see also page 25) is available from the SCN Secretariat, c/o WHO, 20 Avenue Appia, CH-1211 Geneva 27, Switzerland. Tel: 41 22 791 0456 Fax: 41 22 798 8891 Email: [accscn@who.ch](mailto:accscn@who.ch)



## LETTERS TO THE EDITOR



***This section aims to encourage positive discussion and debate about current issues in the field of international nutrition, including responses to articles published in SCN News. Your letters and comments would be most welcome.***



Dear Editor,

We have read with interest the edited version published in *SCN News No.15* of the Forman Memorial Lecture on 'How are we doing in international nutrition' which was delivered by F. James Levinson at the recent IVACG Meeting in Cairo. Mr. Levinson based his lecture on a questionnaire sent to persons he selected. None of these questionnaires were apparently sent to anyone at FAO or WHO, despite our work to provide member countries worldwide with authoritative normative information and policy guidance needed for better nutrition, food, agriculture and health programmes and our daily work with involved government agencies, the international community, academia, NGOs and others involved in nutrition improvement activities.

Although his lecture is concerned with international nutrition, Mr. Levinson does not mention the FAO/WHO sponsored December 1992 International Conference on Nutrition (ICN). The ICN was attended by over 2,000 persons interested in nutrition with delegations from 159 countries and was the first and only international and inter-governmental conference on nutrition. The ICN took a broad approach to nutritional improvement and its recommendations call for action in a coordinated and cooperative manner by all concerned. In addition, the ICN recommendations were fully endorsed and incorporated into the 1996 World Food Summit Declaration and Plan of Action.

FAO and WHO have worked closely together, and with other interested international organisations at the global, regional and national level to prepare and implement ICN mandated national plans of action for nutrition. These ICN follow-up activities have elevated nutrition to a much higher priority in many countries. This has attracted significant levels of government and other resources for preparing and implementing effective policies, programmes and activities devoted to better food supplies, household food security, improved health care and education, poverty alleviation and improved overall development. In fact, in FAO Governing Body meetings, the member governments of FAO have regularly given strong support to our nutrition-related activities, particularly in regard to our ICN follow-up work. In addition, FAO has over many years played a major role in promoting better agriculture, food supplies, gender equality in agriculture, environmental protection and rational use of re-

sources, improved access to good quality and safe food, and better overall development and improved incomes and employment. This FAO work is essential to the programmes of all countries in attacking the basic causes of hunger and malnutrition.

Mr. Levinson's paper includes a ranking of a list of entities working in nutrition on the basis of his questionnaire. The list in itself is curious since it omits several ACC/SCN members with broad or specific interests in nutrition, such as UNESCO, IFAD, IAEA, UNHCR, the World Food Programme, UNFPA and UNDP. Although FAO has been working on international nutrition and nutrition improvement for more than 50 years, we note that we have finished last in the questionnaire results which indicates somewhat of a bias among those polled and a definite failure to appreciate the critical nature of access to adequate supplies of good quality and safe food as the first and foremost requisite for good nutrition.

Certainly the ICN brought the topic of improved nutrition and reduction of malnutrition to centre stage and prepared a very clear plan of action showing all the things that need to be done. The heads of state and government and high level ministers from 180 countries who attended the World Food Summit renewed the commitment of all countries to ICN goals and emphasised the need for access by all to adequate supplies of good quality and safe foods as essential to assuring food security and eliminating hunger and malnutrition. All involved in international nutrition should do their best to implement all of its recommendations and work together on the basis of our different mandates to cooperatively address all of the ICN concerns. While there was little appreciation of FAO work over the years by those polled, we at FAO will continue our efforts to implement the ICN recommendations to improve the nutritional status of all, and to continue to do our best to actively cooperate with all.

*By John R. Lupien, Director, Food and Nutrition Division, FAO.  
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3330 Fax: 396 5705 4593 Email: john.lupien@fao.org*



A Reaction to James Levinson's 10th Annual Martin Forman Memorial Lecture (SCN News No.15), presented in the form of a letter to the student 'Erica'

Dear Erica,

You probably did not expect that a concerned question of yours to Professor Jim Levinson would propel you to some notoriety. Your question allowed Dr Levinson to go into some depth on something that has worried us for many years, namely *how we are doing in international nutrition*. Reading his response to you, I found much that I could identify with. But I also found things for which I have a slightly different view and that would help you even better judge what you are planning to get involved in your future career. That is why I am writing you this sequel letter.

Judging the most important advances in nutrition in the last 10 years, the survey respondents chose *advances in reverting micronutrient deficiencies*. This came as no surprise. Most nutritionists still like 'silver bullet' fixes, primarily because they move within the technical realm. But, at its roots, PEM is more of a political problem; it is the biological translation of a social disease.

Of the four next choices for important advances that were chosen, I can agree with two: *greater community involvement in programmes* (not so much projects), and *increased attention to care practices addressing women and children*. But for the other two, I have slightly different interpretations: it is not that we now have a 'better' understanding of the causes of malnutrition; we have rather reached a point in which we have convinced more people about the 'correct' conceptual framework of the causality of malnutrition, one that considers the latter an outcome of those different levels of causality. Further, I take exception to the suggestion that having achieved better designs and management of nutrition interventions in the last 10 years, this has led us to significantly better resolve the problems of PEM - design and management are not the main constraints our nutrition interventions have had in the last 10 years. The main top-to-bottom, often palliative thrust of them has been (and still is) the main constraint. We have not started addressing all underlying and basic causes of malnutrition yet I was definitely surprised, Erica, to read the next major advance chosen by respondents: *'greater sensitivity to the importance of nutrition counselling'*; this just shows the ethnocentric bias of the respondents....as if 'counselling' would solve the problems of poverty and inequity...

The same bias can be found when respondents chose reduced funding as the major problem or constraint to achieving better results in the battle against PEM. If additional funding is used for the wrong priorities and interventions, we might as well not have it! As pertains to available funding going more for field operations than for research, this is a shift that may be pointing to the fact that we do know what to do, we just have to apply it rationally and courageously, even against the opposition of the powers that be.

I propose that we - once and for all - have the courage to separate PEM from micronutrients interventions as two completely different entities, two different universes and two totally different challenges. Only then will we avoid nutritionists running away from the more difficult choices and challenges in the battle against (the real) malnutrition.

I am sorry, Erica, to disagree not only with the respondents, but also with Dr Levinson on the centrality of the issue of *inter-agency infighting*. It exists, and it is a disappointment, granted. But it is not the main obstacle to a faster progress. The issue of a *lack of commitment by governments to meaningful nutrition interventions* was chosen as another major obstacle. But this argument has been made too often, always keeping it as a blanket statement, almost as a slogan. It is time we must analyse this in more depth; only then will we learn how to tackle it better. The frequent *absence of project evaluation*, also cited as a constraint, I am convinced is on purpose; this allows agencies to continue pouring money into actions that do not much alter the balance of power at the base of the disempowerment that breeds malnutrition. Further, I do agree that *bureaucratic problems* in getting things done are a great burden.

Jim Levinson concludes from these responses above something that I cannot agree with. He says that this shows that 'the major negative factors faced in international nutrition are *not* ...structural... constraints, but rather problems that the nutrition community.... can...control'. I could not disagree more. The major negative factors I think are indeed structural and related to the basic causes of malnutrition. Most is ultimately a matter of empowerment. In the years to come, it will take a more sustained (and sustainable) bottom-up activism to revert malnutrition on the scale that is needed.

The respondents were also asked to rank international agencies in terms of how they had served the field of international nutrition. Low rankings received by agencies we thought major nutrition actors do not necessarily reflect them having lost their funding or commitment to international nutrition; it rather reflects that they probably embraced the wrong approaches to solve malnutrition in the last 10 years (perhaps those that were too sectoral?). Lower current funding, in my view, reflects nothing more than one more swing of the pendulum that has affected international nutrition funding following the fashion swings in the thinking of the international community. (Or is it that we have little to show for the increased funding we enjoyed in the last few years...?).

The politics of it all is at the very centre of international nutrition. With this fait accompli, it should be clear that you cannot escape the responsibility of taking a political stand on nutrition yourself. This will help you to question your own current education, as well as all that you see out there in the job market that is waiting for you shortly.

Dr Levinson is right, Erica, when he tells you that the current state of affairs in international nutrition 'will pose increasing

frustrations' and challenges for you and your generation. My doubts though come from looking at how politically uninterested your generation of students in America and Western Europe has become. If you are one of them, don't worry, you will not face increasing frustrations and malnutrition will continue to plague this world in the years to come.

In closing, Erica, Jim Levinson conveys to you his confidence and optimism that our work has the ability to make a difference. The question is which difference. It is not a matter of an increasing number of activities in international nutrition taking place in developing countries; it is a matter of what kind or type of activities. Issues of inequity are at the base of the problems at hand, and if nutrition is used as a port of entry to revert such inequity I would share his optimism. But we need your upcoming generation, Erica, to get the job done.

By Claudio Schuftan, MD, IPO Box 369, Hanoi, Vietnam. Tel/ Fax: 84 4 8260780 Email: aviva@netnam.org.vn



A response by Jim Levinson...

Dear Editor,

I am delighted that my Forman Lecture has generated so much discussion. In my invitation to deliver the Lecture I was asked by Dr. Horwitz to be 'original, stimulating and even provocative'. One measure of success on the last of these was the comment made by one listener who came up to me after the Lecture and said jocularly, "I hope you have tenure!"

As mentioned in the Lecture, I grew up with the greatest respect for both FAO and WHO, and continue to believe that both provide important services. I utilise many of them myself on a regular basis. As indicated, I am genuinely saddened to see that these UN technical agencies do not elicit the same level of confidence, at least within the nutrition community that they once did. Rather than responding defensively, I would hope that these organisations would view the Lecture as an invitation to recapture that confidence.

I should correct a few factual errors in the letters. First, re John Lupien's comment about the questionnaire, it was, in fact, sent to a considerable number of FAO and WHO officials, John included. Many of these persons have acknowledged to me personally both that they received it, and that they completed and returned it. Additionally, rather than ignoring the FAO/WHO sponsored International Conference on Nutrition (ICN), I specifically included it together with the development of country plans of action on a list from which respondents were invited to select the four most important advances in international nutrition over the past 10 years. Nineteen percent of respondents included the ICN and

country plans as one of their choices in the 'most important advances' category.

But, let me be clear. The data I presented in the lecture was a summation of responses from a large number of individuals around the world. A 50% response rate is remarkably high for an internationally mailed questionnaire of this sort. I was able to assure that the information was accurately analysed and tabulated. To say that the material is 'inaccurate' is only to question the judgements of the respondents.

John Lupien may be correct in chiding me for excluding from the organisation/agency rankings a number of other UN organisations which do have some nutrition involvement. The desire here was only to make the questionnaire manageable - as it was, there were 16 organisations or groups or organisations to rank. I took my cues on which to include from several international colleagues and two major international figures, one each from Africa and Asia.

I won't try to respond to all of Claudio Schuftan's interesting remarks, but will comment briefly on a few. First, I think Claudio is correct about underlying structural and political problems which deserve more attention from the development community as a whole. Second, I'm in complete agreement with Claudio's contention with respect to the micronutrients/PEM imbalance. In fact, his letter to the SCN News, which he copied to me earlier, generated considerable correspondence and an eventual letter from the two of us and V. Ramalingaswami which will be published in *The Lancet* this summer.

Claudio and I may agree to disagree on the importance of the 'infighting' issue which was identified by respondents as such a major negative factor in international nutrition. But I should mention that, since presenting the Lecture, I've been absolutely swamped with messages from individuals around the world confirming the insidious effect that such infighting has had on our community. Several individuals even have asked that the issue be placed formally on the agenda of the SCN.

What pleases me most is that the Lecture and SCN's publication of it, have served the purpose of presenting these important issues to the nutrition community at large for our common consideration.

By Jim Levinson, Director, International Food and Nutrition Center, School of Nutrition Science and Policy, Tufts University, Medford MA. 02155, USA. Tel: 1 617 627 3223 x2284 Fax: 1 617 627 3887 Email: jlevinson@emerald.tufts.edu





Dear Editor,

Claudio Schuftan's review of Werner and Sanders' new book 'Questioning the Solution' (SCN News No.15 p58) cannot go unchallenged. David Sanders kindly gave me a copy of the book on his recent visit to Darwin, so I certainly bear him no malice, but this book is too far from evidence-based medicine for my approval. Indeed, the science is used too selectively to justify a political perspective. Many important claims are made with no data to support them. In the end, it is political rhetoric instead of good medicine. This is especially disappointing as a sequel to 'Where there is no doctor', which deserved its good reputation.

The basic argument is for salt-sugar solution (SSS) which can be made up at home instead of ORS in packets, which has been a recurring theme of public health debate, and I am not unsympathetic to that argument. But there have been so few sustainable SSS projects in which families have been shown to remember the formula of the safe solution when children have diarrhoea that this book's argument is unsustainable. ORS has been an important advance for health facilities, so it is a pity this book appears to discredit it without making a convincing case from an evidence perspective. However, it is true that the emphasis on oral rehydration ignored (until recently) the importance of persistent diarrhoea and malnutrition. I would favour home-based programmes under circumstances where health facilities were inadequate, but not as a universal programme for diarrhoea, and certainly not always instead of ORS in packets.

As a paediatrician treating children with diarrhoea, I am too aware of the need for potassium in rehydration solutions and the dangers of incorrect sodium concentrations in home-based solutions. Of course mistakes can be made with packets going into a glass of water instead of a litre, but health facilities need to use the best solution and that means with potassium. Of course, empowering people to manage their children's diarrhoea without the need for health workers is fine, but not in order to deny them optimal treatment which is still accessible to most populations even in very poor countries like Malawi and Zimbabwe (where I have worked). This book does not provide any evidence that home-based solutions are more accessible as a sustainable and effective intervention than ORS made widely available through all levels of health facilities. Successful home-based SSS projects have needed enormous educational and promotional activities, which are excellent but expensive and difficult to sustain.

Cereal-based ORS does seem to have marginal benefits in some of the studies, but not in all. However, the nutritional benefits do not seem to be greater than with early refeeding of malnourished children. The work of Nichols, Lunn, Pappenheimer, Wright and others (see references) on the intestinal mucosa now allow us for the first time to design appropriate diets for malnourished children during early rehabilitation which will be tolerated and lead to faster transition to a high energy rehabilitation diet and recovery. So it is improved diets rather than just cereal-based ORS which are needed.

I feel that Werner and Sander's arguments would have been better supported with more focus on issues such as abuse of medical treatment of diarrhoea (antidiarrhoeals or antibiotics), poor motivation and supervision of health workers, etc., but applied to ORS, I found it unconvincing because ORS has been one of the great successes of diarrhoeal management upon which we need to build.

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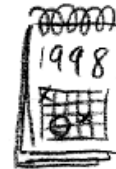
By David Brewster, Head of Paediatrics & Clinical Dean, Northern Territory Clinical School, PO Box 41326, Casuarina, Darwin, Australia. Tel: 61 8 89228765 Fax: 61 8 89228286 Email: david.brewster@health.nt.gov.au



**Corrigendum.** *Guiding principles for feeding infants and young children during emergencies* (SCN News No.15 p. 37). Copies of the final version of the *Guiding Principles* will be available for general distribution only later in 1998. In addition, our footnote at the bottom of the 2<sup>nd</sup> column should have read: Editor's note: World Health Assembly resolution WHA45.34 reaffirmed 'that during the first four to six months of life no food or liquid other than breastmilk, not even water, is required to meet the normal infant's nutritional requirements, and that from the age of about six months infants should begin to receive a variety of locally available and safely prepared foods rich in energy, in addition to breastmilk, to meet their changing nutritional requirements'. The complementary feeding portion of this resolution was reiterated in resolution WHA 47.5, which urged 'fostering appropriate complementary feeding practices from the age of about six months, emphasising continued breastfeeding and frequent feeding with safe and adequate amounts of local foods'. The scientific basis for these recommendations is the 1995 report of the WHO Expert Committee on 'Physical Status: the use and interpretation of anthropometry'.



## COURSES, MEETINGS AND ANNOUNCEMENTS



### **Dr Gro Harlem Brundtland Elected Director General of WHO**



Source: WHO website  
<http://www.who.ch/>

Dr Gro Harlem Brundtland was elected to the post of Director-General of WHO at the 51<sup>st</sup> Session of the World Health Assembly (WHA), Geneva, 11-16 May 1998. This five-year term will start on July 21<sup>st</sup> 1998. In her speech to the WHA, Dr Brundtland immediately affirmed her conviction that societies can be changed and that poverty can be fought. "The challenge goes to all of us. WHO can and must change. It must become more effective, more accountable, more transparent and more receptive to a changing world."

Describing the priorities and reorganisation which she intends to start implementing "from the very first day", Dr Brundtland said that programmes and activities will be organised around key functions focusing on four areas of concern: communicable diseases, non-communicable diseases, building sustainable health systems and advocating health. Some activities will be organised into projects. Among the first priorities for such projects, she proposed to "Roll Back Malaria, by developing a new health sector-wide approach to combat the disease at global, regional and country levels." A second priority is tobacco: "We need to address a major cause of premature death which is dramatically increasing... Tobacco is a killer."

Dr Gro Harlem Brundtland concluded her speech by saying, "I envisage a world where solidarity binds the fortunate with those less favoured. Where our collective efforts will help roll back all the diseases of the poor. Where our collective efforts assure universal access to compassionate and competent health care. Bringing the world one step closer to that goal is our call for action."

In mid-June, a list of provisional organisational clusters (ten clusters in total) placed Food Safety and the Programme for Nutrition in the 'Health, Environmental and Sustainable Development' cluster, with Food Aid Programmes and the Division of Child Health and Development in the 'Health Care Delivery' cluster.

Sources: Transcript of Dr Brundtland's speech to the 51<sup>st</sup> WHA, 1998. WHO press release WHA/3.

**DR GRO HARLEM BRUNDTLAND** was born in Oslo, Norway. She studied medicine at the University of Oslo, from which she obtained her M.D. degree in 1963. She received a Masters degree in Public Health from Harvard University in 1965, following which she served for two years as medical officer at the Norwegian Directorate of Health, and for 6 years as Assistant Medical Director at the Oslo Board of Health, Department of School Services. In 1974, Dr Gro Harlem Brundtland was appointed Minister of Environment, a position she held for 5 years. Appointed Prime Minister for the first time in 1981, she held this position three times, and in total, was Head of Government for more than 10 years.

Among her numerous international positions, Dr Gro Harlem Brundtland chaired the World Commission on Environment and Development (starting in 1983), which coined the concept of 'sustainable development' and made recommendations leading to the Earth Summit in Rio de Janeiro in 1992.

### **Roger Shrimpton – New Chief of Nutrition, UNICEF**

Roger Shrimpton was appointed Chief of Nutrition, Programme Division, UNICEF, New York on 29 December 1997, following the move of David Alnwick from Chief of Nutrition to Chief of Health (see *SCN News No.15 p38*). Prior to his appointment, Roger served as Senior Programme Officer in Jakarta, Indonesia.

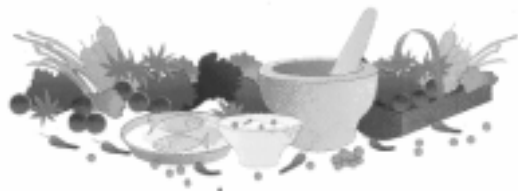
Roger joined UNICEF in 1984 as Nutrition Officer in Sao Luis, Maranhão in the North-East of Brazil. He also served in the Brasilia office for two years, coordinating health and nutrition support to the North-East of Brazil. Following a two-year assignment as a Research Associate with Cornell University's Food and Nutritional Policy Programme, he returned to the Brasilia office in 1989 as Senior Project Officer. In 1991, Roger joined the Jakarta Indonesia office where he remained until his transfer to New York.

### **Milla McLachlan – Nutrition Advisor for the Human Development Network at the World Bank**

Milla McLachlan was appointed nutrition advisor for the Human Development Network at the World Bank on June 8<sup>th</sup> 1998.

Prior to her appointment, Milla worked at the Development Bank of Southern Africa and was chairperson of the Nutrition Society of Southern Africa.

Milla has taught food and nutrition in Botswana, has lectured in food science and adult education at the University of Stellenbosch and was head of department at the University of Zululand. She has written many publications on nutrition, the most recent of which is *'Bold Choices: Making the South African Nutrition Strategy Work'*, written with Pauline Kuzwayo.



### **Rafael Flores Ayala – New Research Fellow for the Fourth Report**

The SCN and IFPRI are collaborating on the production of *'The World Nutrition Situation: Fourth Report'*. To this end, Rafael Flores Ayala has been appointed to conduct research, analyse and interpret global, regional and country trends in nutrition indicators, leading to the publication of the *Fourth Report* in December 1999. Rafael will work closely with the SCN Secretariat in Geneva and the Division of Food Consumption and Nutrition at IFPRI in Washington, USA.

Of Guatemalan origin, Rafael has worked at the Instituto de Nutrición de Centro América y Panamá (INCAP) for most of his career. At INCAP he initially worked as a statistician, becoming head of the Statistical Unit in 1982. In 1993 he was appointed head of the Transfer of Science and Technology Program, and two years later he became head of the Nutrition and Health Program. In 1989, Rafael obtained a doctorate in public health from the Department of Biostatistics, University of California at Los Angeles, USA.

Rafael has experience in technical cooperation activities throughout Central and South America. His main interests include the generational effects of malnutrition and the causal mechanism between malnutrition, infection and diet. Rafael will start work on the *Fourth Report* in August 1998.

### **Joaquin Cravioto - In Memoriam**

Joaquin Cravioto, one of the hemisphere's pioneer paediatric nutritionists, died in Mexico City on April 9, 1998. Born in Mexico on September 12, 1933, his seminal observations of the relation-

ship between growth retardation in rural Mexican children and impaired intersensory integration, while an investigator in the Children's Hospital of Mexico, provided the first convincing evidence that malnutrition influenced learning and behaviour. The findings, graphically presented in his famous lecture *'Children of the White Dust,'* stimulated the research that has now confirmed the relationship in dozens of studies from all parts of the world. Variations in growth among children in middle and upper income families bore no relationship to differences in intersensory integration.

Cravioto also described the relationship between marasmic-kwashiorkor and reduced cognitive performance. This work complemented the significant concurrent work of Fernando Mönckeberg in Chile showing a similar and lasting effect of marasmus in infancy. Cravioto was a charismatic teacher who inspired generations of paediatricians and nutritionists to understand and take into account the impact of malnutrition on the physical and mental growth of children.

From 1961 to 1966 he left Mexico to serve as Associate Director of the Institute of Nutrition of Central America and Panama (INCAP). While there he replicated his famous landmark study of undernutrition in children and demonstrated his outstanding influence on students as a leader of the summer course in Public Health Nutrition. He also had responsibility for INCAP's relationship with its member countries to assist them in the application of its research findings and formulation and implementation of national nutrition policies.

Upon returning to Mexico, he became the Director for the next 16 years of the National Programme for Integrated Family Development of the National Institute of Science and Technology and continued active field research. At the time of his death he was on the faculty of the National Institute of Human Communication of the Autonomous University of Mexico still conducting research on nutrition, growth, and development.

From 1966 to 1971, he was Director of Training in the Children's Hospital of Mexico. He also served for several years as Assistant Director of the Applied Nutrition Division of FAO in Rome. He was a visiting professor at Cornell University, Massachusetts Institute of Technology, and the University of Washington in the United States and universities in the United Kingdom and Sweden. He received honors and awards from many countries and was a member of 25 national and foreign scientific societies.

In addition to his wife Maria Cristina he is survived by a son, Alejandro, and daughter, Patricia, both of whom worked with him in his research, as well as three grandchildren. With his death the world has lost one of the last of the remarkable founders and leaders of modern paediatric nutrition.

*By Nevin Scrimshaw, UNU.*

## **The 8<sup>th</sup> European Nutrition Conference** **Lillehammer, Norway, 17-19 June 1999**



Organised by the Norwegian Nutrition Society (NNS), the Federation of European Nutrition Societies (FENS) and the European Academy of Nutritional Sciences (EANS), the 8<sup>th</sup> European Nutrition Conference will cover the following main topics (preliminary):

- ◇ nutrition and genetics;
- ◇ antioxidants and nonnutrients from fruits and vegetables;
- ◇ obesity in Europe;
- ◇ the nutrition of the foetus and the young child;
- ◇ dietary lipids and health;
- ◇ classical micronutrients;
- ◇ bone development and osteoporosis;
- ◇ food and nutrition policy;
- ◇ food safety and security.

The conference aims to provide a inspiring forum for interactive exchange by any group interested in food and nutrition: scientists, clinical nutritionists, food technologists and producers, policy-makers, students, health workers, dietitians, home economists, public health nutritionists and administrators and journalists.

For further scientific information, please contact Sigrud Berge, Norwegian Nutrition Society, Schweigaards gate 33B, N-0191 Oslo, Norway. Tel: 47 22 17 35 40 Fax: 47 22 17 35 38 Email: sigrid.berge@niif.nlh.no The conference organiser is Trude Arnesen, P.O. Box 14, N-2601 Lillehammer, Norway. Tel: 47 61 25 17 05 Fax: 47 61 25 65 15 Email: lillarra@sn.no Further information and requests for a second announcement leaflet are available on the Web at [http://www.nutrition.uio.no/Nse/8thFENS\\_EANS/](http://www.nutrition.uio.no/Nse/8thFENS_EANS/)

### ***Nutrition and Human Rights – the Rights Way to Approaching Nutrition Challenges in the Future?*** ***A graduate/postgraduate course*** ***Institute for Nutrition Research/School of Nutrition, University of Oslo, Norway. 5 Oct – 3 Dec 1998***

"Everyone has the right to a standard of living adequate for the health and well-being of himself and his family, including food, clothing, housing and medical care..." Article 25 of the Universal Declaration of Human Rights, adopted 50 years ago by the UN General Assembly.

On the 50<sup>th</sup> anniversary of the Universal Declaration of Human Rights, the Institute for Nutrition Research and School of Nutrition at the University of Oslo, Norway is for the second time offering a two month graduate/postgraduate credit course on Nutrition and Human Rights. The aims of the course are to:

- ◇ introduce participants to the evolution and practice of inter-

national human rights, especially economic, social and cultural rights;

- ◇ address human rights issues as they relate to food and nutrition;
- ◇ enable participants to recognise the possible advantages of a human rights approach to nutrition analysis, advocacy and action.

Topics addressed in the course will include:

- ◇ an overview of the international human rights normative system;
- ◇ the content and implementation of economic, social and cultural rights;
- ◇ human rights institutions, mechanisms and procedures for promoting and monitoring food and nutrition policies and programmes;
- ◇ human rights standards and recommendations by major UN development conferences;
- ◇ human rights data bases and information gathering;
- ◇ communication about the right to food and nutrition as human rights.

In addition to the course coordinators (Wenche Barth Eide and Siri Damman), guest lecturers from various institutions will lead the sessions, which may include a few intensive weekend seminars. The course will be participatory and interactive and a substantial amount of time will be required for individual reading.

To be admitted to the course, the student must have a first degree in human nutrition or equivalent documented knowledge, and a good oral and written working knowledge of English. Participation is limited. For further information and application forms, please contact Marius Bergh, Study Administrator, Institute for Nutrition Research / School of Nutrition, P.O. Box 1046, Blindern, 0316 Oslo, Norway. Tel: 47 22 85 13 42 Fax: 47 22 85 13 41 Email: marius.bergh@basalmed.uio.no or Siri Damman, course coordinator, Tel: 47 22 85 13 79 Email: siri.damman@basalmed.uio.no

### ***International Conference on Infant and Pre- School Child Nutrition*** ***Celebrating 50 years of the University of Ibadan*** ***16-21 Nov 1988, Department of Human Nutrition, University of Ibadan, Nigeria***

The overall purpose of this conference is to bring together internationally renowned scientists and practitioners to discuss current issues and future directions on infant and pre-school child nutrition. With an emphasis on Africa, young African scientists will be encouraged to participate more actively in the debate on appropriate strategies for reducing under five malnutrition and mortality. The conference will also review progress made by the State Parties in Africa to achieve the commitments made at the 1990 World Summit for Children and the 1992 ICN.

Topics covered will include:

- ◇ nutrition of the pre-term and term infant;



- ◇ exclusive breastfeeding and maternal care;
- ◇ nutritional requirements of infants in health and disease;
- ◇ nutritional implications of culture in infant feeding practices;
- ◇ complementary feeding, quality and safety;
- ◇ feeding the pre-school child.

The conference will consist of a series of plenary lectures, debates, symposia, workshops, oral and poster presentations in simultaneous english-french translation.

To obtain a copy of the conference booklet, giving full details of the programme, including application forms, registration forms and information about registration fees, travel and accommodation, please contact Professor Isaac O. Akinyele, Coordinator, International Conference on Infant Nutrition, Department of Human Nutrition, University of Ibadan, Ibadan, Nigeria. Tel: 234 2 810 5859 Fax: 234 2 810 5272 Email: laolu.akinyele@skannet.com.ng or for countries other than Nigeria, Dr Serge Treche, Directeur de Recherche, ORSTOM, Lab de Nutrition Tropicale, Centre ORSTOM, 911 Avenue Agropolis, BP 5045, F34 032, Montpellier, Cedex, France. Tel: 33 4 6741 6295 Fax: 33 4 6754 7800 Email: treche@mpl.orstom.fr

## **2nd International Course on Nutrition Surveillance / 2<sup>ème</sup> Cours International:**

### **Surveillance Nutritionnelle**

**October 19 to November 6, 1998**

**19 octobre - 6 novembre 1998, Montpellier, France**

La surveillance nutritionnelle est un volet important des Plans d'action mis en oeuvre par plus de 108 pays, à ce jour, à la suite de la Conférence Internationale sur la Nutrition (Rome, 1992). Au Sommet Mondial de l'Alimentation, en novembre 1996, les Etats participants se sont également donné pour objectif d'établir des systèmes d'information sur l'insécurité et la vulnérabilité alimentaire. L'objectif du cours est de répondre à la demande d'information/formation pour appréhender au mieux les implications et les moyens de mise en oeuvre d'activités de surveillance nutritionnelle. Ce cours est destiné en priorité à des professionnels de la nutrition, de la santé publique, de l'agriculture, impliqués dans des pays en développement.

Renseignements: ORSTOM - LNT, B.P. 5045, F-34032 - Montpellier Cedex 01, France. P. Traissac, tel: 33 4 67 41 61 70 Télécopie: 33 4 67 54 78 00 Courrier électronique: traissac@mpl.orstom.fr

The purpose of nutrition surveillance is to provide regular, relevant and timely information for early warning of impending nutrition emergencies, for on-going programme management and for the development, implementation, monitoring and evaluation of policies and programmes. This three week course, taught in French, is aimed at people dealing with nutrition surveillance in developing countries. Specific topics include:

- ◇ the causal approach to nutrition problems;
- ◇ concepts and methods in nutrition surveillance;
- ◇ lessons from the past;
- ◇ identification of users;
- ◇ set up of nutrition surveillance activities;

- ◇ indicators and the choice of indicators;
- ◇ from data to information;
- ◇ presentation and communication of information;
- ◇ evaluation.

Active participation will be emphasised through individual and group work, including case studies, computer practicals and computer-assisted learning.

This course is jointly organised by ORSTOM (the French Research Institute for Development through Cooperation, Nutrition Unit, WHO collaborating center for nutrition, Montpellier, France), IMT (Institute of Tropical Medicine, Nutrition Unit, Antwerp, Belgium) and the International Course in Food Science and Nutrition, University of Ghent, Belgium. For more information please contact Pierre Traissac, CISN, Montpellier 98, Laboratoire de Nutrition, Centre ORSTOM BP 5045, 34032 MONTPELLIER Cedex 01, France. Tel: 33 4 67 41 61 70 Fax: 33 4 67 54 78 00 Email: traissac@mpl.orstom.fr

## **IBFAN International Meeting on the Issue of Infant Feeding in Emergency and Relief Situations**

**Split, Croatia, 22-24 October 1998**



This three day international meeting, facilitated by the International Baby Food Action Network (IBFAN), is targeted at NGOs working in humanitarian relief, funding agencies (governments, churches and others), UN agencies, recipient communities and other interested parties.

The major objective of the meeting is to ensure a consistent approach to infant feeding in emergencies globally. Specifically, the meeting aims to:

- ◇ raise the issues of infant feeding in emergencies higher up the agenda of all concerned organisations;
- ◇ raise awareness of key issues among international NGOs, humanitarian relief agencies and donor agencies;
- ◇ devise strategies to ensure that policies are transformed into action;
- ◇ form a working group to prepare a framework for future national meetings and for international consultation.

A number of issues will be addressed at the meeting, including:

- ◇ inappropriate donations of infant formula and baby food as aid;
- ◇ lack of awareness and implementation of existing guidelines;
- ◇ the impact of inappropriate infant feeding practices;
- ◇ lack of training of health and aid workers on infant feeding;
- ◇ training of trainers in the field;
- ◇ gaps in information and knowledge among NGOs and UN agencies working in emergencies.

For further information, please contact Margreet Houndijk, Wemos Foundation, P.O.Box 1693, 1000BR Amsterdam, The Netherlands. Tel: 31 20 420 22 22 Fax: 31 20 620 50 94 Email: wemos@tip.nl Web: <http://www.wemos.nl/> or <http://www.gn.apc.org/ibfan/>

## SEAMEO – TROPED Short Courses



The SEAMEO-TROPED Regional Center for Community Nutrition is a training and research centre for all South East Asian countries, located at the University of Indonesia. The SEAMEO-TROPED Community Nutrition Training Programme consists of an MSc in nutrition (2 years), a Doctor of nutrition (3 years), a diploma programme in management of community nutrition (3 months) and a field research programme (6-8 months).

In addition, the SEAMEO-TROPED Nutrition Training Programme offers several short courses on specific community nutrition topics aimed at improving the professional's knowledge and skills. For 1998-99, the following short courses are offered:

- ◇ Nutrition, aging and non communicable diseases (Aug/Sept 1998)
- ◇ Nutritional epidemiology (31 Aug – 18 Sept 1998)
- ◇ Micronutrients programme (1 Sept – 11 Sept 1998)
- ◇ ZOPP<sup>1</sup> and nutritional planning and management (21 Sept – 9 Oct 1998)
- ◇ Public health system and nutrition (12 Oct – 23 Oct 1998)
- ◇ Nutritional anthropology and communication planning for community nutrition programmes (23 Nov – 18 Dec 1998)
- ◇ Food safety and food control (4 Jan-15 Jan 1999)

For further information and to obtain application forms, please contact the Training Programme Coordinator, The SEAMEO-TROPED Regional Center for Community Nutrition, University of Indonesia, 6, Salemba Raya, Jakarta 10430, Indonesia. Mailing address: P.O. Box 3852, Jakarta 10038, Indonesia. Tel: 62 21 330205 / 3913932-3 Fax: 62 21 3907695 / 3913933 Email: gtzseame@indo.net.id or stropmed@rad.net.id

### **Obesity: a Global Challenge** **A British Council International Seminar** **11-17 October 1998, Aberdeen**

Directed by Professor P. Trayhurn and Professor W.P.T. James, this seminar is intended to provide an overview of our current understanding of obesity – its prevalence, causes, consequences – and examine strategies for treatment.

The main topics will include:

- ◇ public health (international perspective, health consequences);
- ◇ body fat (distribution, body composition, endocrinology);
- ◇ energy balance (food intake, dietary surveys, energy expenditure);
- ◇ causes (genetics, neuroendocrinology of feeding and thermogenesis);
- ◇ treatment (dietary, exercise, behavioural, pharmacological etc.).

<sup>1</sup> Objective Oriented Program Planning (ZOPP – Ziel Orientierte Projekt Planning)

The programme will be of particular interest to physicians and other health professionals such as dietitians, government policy-makers, and all those who confront the health implications of obesity in society.

The residential, fully inclusive fee is UK £1,490. For further information and a full prospectus, please contact the Information Manager, International Seminars, The British Council, 1 Beaumont Place, Oxford OX1 2PJ, UK. Tel: 44 1865 316636 Fax: 44 1865 557368 / 516590 Email: international.seminars@britcoun.org Further information, including an application form, can also be found on the Web at <http://www.britcoun.org/seminars/>

### **The 16<sup>th</sup> Leeds Course in Clinical Nutrition** **15-18 September 1998**

This course is intended to provide a thorough grounding in all aspects of clinical nutrition and will appeal to clinicians, dietitians, hospital pharmacists, nursing staff, nutritionalists and others with interests in patient nutrition.

Lectures will include 'The effects of dietary changes in colonic diseases in Africa' by Dr A.R.P. Walker, Johannesburg; 'The psycho-biology of appetite' by Prof. J.E. Blundell, Leeds; 'Managing nutritional problems of patients with stroke' by Prof. K.W. Woodhouse, Cardiff; and 'Medical management of obesity' by Dr P. Kopelman, London. This year's mini-symposium is entitled 'Geographic trends in clinical nutrition'.

This course is approved for a total of 16 hours C.M.E. by the Royal Colleges of Physicians of London and Surgeons of England, and also has PGEA approval (17h A/B). Application forms and further information are available from Samantha Armitage, Course Secretary, Clinical Nutrition, School of Continuing Education, Continuing Education Building, Springfield Mount, Leeds LS2 9NG, UK. Tel: 44 113 233 3241 Fax: 44 113 233 3240 Email: s.armitage@leeds.ac.uk Web: <http://www.leeds.ac.uk/aed/cehome/shortc/clinut.htm>

### **The Doris Howes Calloway** **Endowed Fund in Human Nutrition**

In recognition of Professor Doris Howes Calloway's scholarship, research, teaching, and contributions to the field of human nutrition throughout the world, the College of Natural Resources at UC Berkeley, California, USA, has recently established the *Doris Howes Calloway Endowed Fund in Human Nutrition*. Perhaps best known for her research on protein and energy requirements in a career spanning 50 years, her research agenda has included topics ranging from protein metabolic pathways and space research to the composition of indigenous diets and food and nutrition policy.

The Fund will be used to support continued research and teaching in human nutrition. For further information, including details of how to contribute to the Fund, please contact Rosemary Lucier, Director of College Relations, College of Natural Resources, University of California, Berkeley, USA. Tel: 1 510 643 8861 Email: [lucier@nature.berkeley.edu](mailto:lucier@nature.berkeley.edu)



# INFORMATION RESOURCES

Visit the ACC/SCN website at  
<http://www.unsystem.org/acccsn/>

## New Vitamin A and Iron Email Discussion Groups

The International Vitamin A Consultative Group (IVACG) and the International Nutritional Anemia Consultative Group (INACG) have launched two new email discussion groups to promote networking and sharing of information and expertise related to vitamin A deficiency and nutritional anaemia, respectively. By subscribing to the lists, email messages can be sent to a group of participating subscribers who receive the message simultaneously within minutes. Postings to the two groups should reflect either vitamin A deficiency, or iron deficiency and iron deficiency anaemia, as well as strategies to control these public health problems.

The discussion group is a 'closed' list, i.e., the IVACG or INACG Secretariats monitor subscriptions to the list. To subscribe to one or both of the groups, send an email message to [majordomo@lists.ils.org](mailto:majordomo@lists.ils.org). In the body of the message type either SUBSCRIBE VITAMINALIST then leave one space and type your email address (to subscribe to the vitamin A discussion group), or SUBSCRIBE IRON-LIST then leave one space and type your email address (to subscribe to the iron discussion group). It is not necessary to write in the subject line of the message.

Launched in March 1998, the SCN website provides general information about the SCN, details of SCN publications including an online order form, RNIS and SCN News online, and useful links to other nutrition-related websites. The website is updated regularly. New items include:

**Discussion group:** Enter the discussions from the homepage. Participate via the website or by emailing [acccsn@who.ch](mailto:acccsn@who.ch)

**The Third Report on the World Nutrition Situation:** Now available to view and download in portable document format.

### Clinical Nutrition Update Service

The email-based Arbor Clinical Nutrition Updates are available free to nutritionists, physicians and other health professionals. Some 4800 nutrition and health professionals in 90 countries worldwide receive the updates each week. As a subsidiary service to the Arbor Nutrition Guide on the Web (<http://arbor-com.com/>), the nutrition updates contain abstracts of current clinical nutrition research, comments on the research, and information on the best nutrition resources available on the Internet.

The editor-in-chief, Dr Tony Helman, is keen to reach a wider audience with the Clinical Nutrition Updates. If you would like to receive the updates on a regular basis, either fill in the form on the Arbor Nutrition Guide website or send an email to [helmant@ozemail.com.au](mailto:helmant@ozemail.com.au)

These listserves are a service provided by the IVACG and INACG Secretariats. The ILSI Research Foundation's Human Nutrition Institute serves as the IVACG and INACG Secretariats through Opportunities for Micronutrient Interventions (OMNI), a project of the global Bureau for Programs, Field Support and Research, USAID. For specific questions about the discussion groups, please contact Laurie Aomari or Maribel Flewitt, IVACG/INACG Secretariat, ILSI Human Nutrition Institute, 1126 Sixteenth St., N.W. Washington, D.C. 20036-4810. Tel: 1 202 659 9024 Fax: 1 202 659 3617 Email: [omni@ils.org](mailto:omni@ils.org) Web: <http://www.ils.org/ivacg.html> or <http://www.ils.org/inacg.html>

### The Reproductive Health Library (RHL) – a New Electronic Journal by WHO

In March 1998, a new peer reviewed electronic journal; the Reproductive Health Library (RHL), was launched by WHO in England, China, Mexico, South Africa, Thailand, India and Uruguay. RHL contains:

- ◇ systematic reviews of clinical trials on priority reproductive health topics;
- ◇ expert commentaries on the relevance of the review findings for developing countries;
- ◇ practical advice on the management of reproductive health problems.

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## Low-Cost Newsletters and Journals for Nutritionists

The following list, compiled by the Nutrition Society UK, provides information on low-cost publications that give up-to-date information on human nutrition.

**Breastfeeding Briefs** from the International Baby Food Action Network / Geneva Infant Feeding Association, CP 157, 1211 Geneva 19, Switzerland. (breastfeeding)

**Carotenoid News** from Human Nutrition and Dietetics, M/C 517, University of Illinois at Chicago, 1919 W Taylor St, Chicago, IL60612, USA. (carotenoids)

**Child Health Dialogue** from Healthlink (formerly AHRTAG), 29-35 Farringdon Rd, London EC1M 3JB, UK. Email: info@healthlink.org.uk (control of child diseases particularly malnutrition, diarrhoea, malaria, measles and respiratory infections)

**Community Eye Health** from the International Centre for Eye Health, Institute of Ophthalmology, 27-29 Cayton St., London EC1V 9EJ, UK. (eye health, vitamin A deficiency)

**Field Exchange** from Emergency Nutrition Network, Dept Community Health & General Practice, 199 Pearse St, Trinity College, Dublin 2, Ireland. Email: foreilly@tcd.ie (nutrition in emergencies)

**Food, Nutrition and Agriculture** from Food Policy and Nutrition Division, Food and Agricultural Organization, 00100 Rome, Italy. (food, nutrition, food policy, food regulations)

**IDD Newsletter** from Dr J.T. Dunn, International Council for Control of Iodine Deficiency Disorders, Box 511, University of Virginia Medical Centre, Charlottesville, VA 22908, USA. Email: jtd@virginia.edu (iodine deficiency research, policies, country reports)

**I/D/E/C/G Annual Report** from Executive Secretary International Dietary Energy Consultancy Group, c/o Nestle Foundation, Box 581, 1001 Lausanne, Switzerland. (activities, publications and research on dietary energy)

**IFPRI Report** from International Food Policy Research Institute, 1776 Massachusetts Ave NW, Washington DC 20036, USA. ifpri@cgnet.com (food security, food policy, research)

**Mothercare Matters** from Mothercare Matters, John Snow Inc., 1616 N. Fort Myer Drive, 11th floor, Arlington, VA 22209, USA. (maternal and neonatal health/nutrition)

**NFI Bulletin** from Nutrition Foundation of India, 13-37 Gulmohar Park, New Delhi 110049, India. (nutrition research, programmes, India)

**NU News on Health Care in Developing Countries** from International Child Health Unit, University Hospital, S-751 85 Uppsala, Sweden. (health care, nutrition)

**Nutrient News** from National Institute of Nutrition, Tamaka, Hyderabad 500 007, India. (nutrition, India)

**OMNI Update** from OMNI Project, John Snow Inc., 1616 N Fort Myer Drive, Arlington, VA 22209, USA. Email: omni\_project@jsi.com (micronutrients, USAID projects)

**PAMM Newsletter** from Program against Micronutrient Malnutrition, Dept. International Health, Rollins School of Public Health, Emory University, 1518 Clifton Rd, Atlanta, Georgia 30322, USA. Email: vanderha@sph.emory.edu (micronutrients, training)

**RNIS (Refugee Nutrition Information System)** from ACC/Sub-Committee on Nutrition, c/o WHO, 1211 Geneva 27, Switzerland. Email: accscn@who.ch (nutrition of refugees and displaced people)

**Safe Motherhood** from Division of Family Health, World Health Organization, 1211 Geneva 27, Switzerland. Email: abouzah@who.ch (maternal health)

**SCN News** from ACC/SCN, c/o WHO, 1211 Geneva 27, Switzerland. Email: accscn@who.ch (nutrition, UN and other agencies)

**Sight & Life Newsletter** from Task Force SIGHT & LIFE, PO Box 2116, 4002 Basel, Switzerland. Email: martin.frigg@roche.com (xerophthalmia)

**WHO Collaborating Centres for Nutrition Newsletter** from Lifestyles & Health Unit, WHO/EURO. Scherfigsvej 8, 2100 Copenhagen, Denmark. Email: sal@who.dk (European nutrition)

**Xerophthalmia Bulletin** from Dr D.S. McLaren, International Centre for Eye Health, 27 Cayton St, London EC1V 9EJ, UK. (vitamin A, vitamin A deficiency)

This list of English-language publications was compiled by Ann Burgess at the Nutrition Society, 10 Cambridge Court, 210 Shepherds Bush, London W6 7NJ, UK. Most of the publications are free of charge to people working in low income countries, but it is advisable to check before ordering. If you know of other useful, low-cost nutrition publications, the Nutrition Society will be very happy to hear from you. Please write to the Publications Committee on the Nutrition Society at the address above, or email Ann Burgess at annburgess@sol.co.uk The Nutrition Society thanks everyone who has supplied information. Further information about the Nutrition Society can be found on their website at <http://www.nutsoc.org.uk/>

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Included in the topics (27 reviews and 22 commentaries) covered in the first issue, are nutritional supplementation during pregnancy, and breastfeeding.

Primarily intended for use in developing countries, RHL aims to make available the most reliable and up-to-date medical information to health workers in order to promote evidence-based care in the area of reproductive health. Prior to the RHL, such information was typically scattered in numerous papers and journals, making it difficult for health practitioners to get a good overview of all the data available on a given subject. The systematic reviews included in the RHL are taken from the Cochrane Library<sup>1</sup> and are based on data from controlled clinical trials published in major medical journals worldwide.

RHL is provided on a 3.5 inch diskette and requires no special knowledge of computers to access and read. Subscription to RHL is free of charge for health workers in developing countries. Availability in developed countries will be restricted to scientists and institutions working closely with WHO or in developing countries. It is produced jointly by HRP (the UNDP/UNFPA/WHO/World Bank Special Programme of Research, Development and Research Training in Human Reproduction) and RHT (WHO's Division on Reproductive Health), in association with the Cochrane Collaboration.

For further information, and to obtain a copy of RHL, please contact Jitendra Khanna, Special Programme of Research, Development and Research Training in Human Reproduction, WHO, 20 Avenue Appia, CH-1211 Geneva 27, Switzerland. Tel: 41 22 791 3345 Fax: 41 22 791 4171 Email: khannaj@who.ch

Source: WHO Press Release, 4 March 1998.

## **ID21: a New Development Research Reporting Service**

The ID21 (Information for Development in the 21<sup>st</sup> Century) development research reporting service provides access to the latest and best UK-based development research from academics, NGOs and consultants. This new online service contains hundreds of policy-relevant findings on critical global development issues. These include agriculture and rural livelihood issues, and food, water and environmental security issues. Backed by the UK Department for International Development, this Internet-based system links development research and researchers directly to policy makers and development practitioners around the world through a new website at <http://www.id21.org/> Hosted by the Institute of Development Studies, the key feature of ID21 is a searchable online collection of short, one-page (500-word) digests of the latest social and economic research studies across 30 key topic fields.

<sup>1</sup> The Cochrane Library is a regularly updated electronic library designed to provide a scientific basis for informed healthcare decision making. It is available on disk and CD-ROM (email [info@update.co.uk](mailto:info@update.co.uk) for more information). Details can be found on the web at <http://hiru.mcmaster.ca/cochrane/>

In conjunction with this, an email newsletter is also available called ID21NEWS which provides regular updates and summaries of the latest research finding that have been added to the ID21 collection. A system whereby each digest can be automatically requested via email is currently being developed. To subscribe to ID21NEWS, send a blank email message to: [id21news@ids.ac.uk](mailto:id21news@ids.ac.uk) and in the subject field, write: subscribe id21news

The ID21 team would welcome any practical suggestions for making this online service more useful or accessible in the future. Please email Alistair Scott at [id21@sussex.ac.uk](mailto:id21@sussex.ac.uk)

## **Nutrition Materials Available from TALC**

The new Teaching-Aids at Low Cost (TALC) 1998 catalogue includes the following nutrition related materials.

### **Books**

State of the World's Children (1998) UNICEF £2.50  
Community Nutrition for Eastern Africa (1994) Burgess & others £7.00  
Nutrition Handbook for Community Workers (1993) CFNI £5.20  
Helping Mothers to Breastfeed (1992) Savage King (also in Spanish) £3.00  
Nutrition for Developing Countries (1992) Savage King & Burgess £9.50  
Protein Energy Malnutrition (1992) Waterlow £5.00

### **Slide sets**

Each set contains 24 slides and a script. Prices are £5.50 for self mounting sets, £7 for mounted sets and £11 for sets in a folder:  
Malnutrition in an Urban Environment - revised 1997  
Undernutrition in Young Children: signs and causes - revised 1997  
Complementary Foods and Energy - revised 1997  
Breastfeeding (also in French) - 1990  
Breastfeeding Problems (also in French) - revised 1993

### **Accessories**

TALC Direct Recording Scale (plastic scale, wall chart and plasticised Child Health charts - also available in Arabic, French, Nepali, Portugese, Spanish and Zulu) £16.50  
See How They Grow wall chart £0.60  
Child Health charts (also available in above languages) £0.25  
Weight for Height chart £5.25  
Language stickers available in French, Portugese and Spanish £1.75  
Insertion tape for measuring arm circumference (39cm) £0.25  
Insertion tape for measuring head, chest and abdomen circumferences (100cm) £1.00

For further details, or to order any of the above items, please contact TALC, PO Box 49, St Albans, AL1 5TX, UK. Tel: 44 1727 853869 Fax: 44 1727 846852 Email: [talcul@btinternet.com](mailto:talcul@btinternet.com) All prices are in pounds sterling. Post and packing for books and accessories is 30% of total order surface (minimum £2.75) or 60% airmail (minimum £3.75). The price of slide sets includes surface postage. Payment by sterling cheque, Visa or MasterCard or International Money Order. Contact TALC for other methods of payment. All materials are available in English. Submitted by Ann Burgess Email: [annburgess@sol.co.uk](mailto:annburgess@sol.co.uk)

# PROGRAMME NEWS

AGENCIES REPORT ON THEIR ACTIVITIES IN NUTRITION

## FAO

### **Preventing Micronutrient Deficiencies**

The workshop on the 'Prevention and Control of Micronutrient Malnutrition through Food-based Approaches in SAARC Countries' was held in Dhaka, Bangladesh, from 17-20 November 1997. It was sponsored by FAO in collaboration with the Thrasher Research Fund (USA) and the Micronutrient Initiative and was organised by the Agricultural Research Council of Bangladesh. All SAARC countries - India, Pakistan, Bangladesh, Nepal, Sri Lanka, Bhutan and the Maldives - participated in the workshop. Renowned experts working in the SAARC and other Asian countries were invited to present papers and discuss various facets of food-based approaches for the control and prevention of micronutrient malnutrition.

The workshop reviewed the current status of the problems of micronutrient deficiencies in SAARC countries and discussed food-based approaches for their control including the role of fruit and vegetable gardening, small animal rearing and the aquaculture at household level, processing and preservation to improve food security and nutritional value, nutrition education for improving consumption and selection of micronutrient-rich foods, and food fortification for improving food quality and nutritional value.

The workshop participants agreed that food-based approaches are the preferred, most practical and sustainable strategy for the prevention of micronutrient malnutrition and for the control of mild micronutrient malnutrition in SAARC countries. They recommended that food-based actions should be an integral part of all action programmes, both short- and long-term. They advised that SAARC countries look at their farms and not at their pharmacies for the solution of these problems. A report containing the recommendations, conclusions and technical papers is available from the FAO Food and Nutrition Division (contact details below).

### **Expert Meeting on Risk Communication<sup>1</sup>**

A Joint FAO/WHO Expert Consultation on the Application of Risk Communication to Food Standards and Safety Matters was held in Rome on 2-6 February 1998. The meeting was attended by 18 experts who identified strategies for crisis situations such as food-borne disease or illness outbreaks and for use in on-going risk communication activities. The experts recommended ways to overcome the barriers to effective risk communication and

<sup>1</sup> The Codex Alimentarius Commission has defined risk communication as: 'the interactive exchange of information and opinions concerning risk among risk assessors, risk managers, consumers and other interested parties.'

elaborated guiding principles for effective risk communication within the risk analysis framework.

The Consultation focused on two primary goals - the creation of more openness and transparency in the entire risk analysis process through the use of risk communication and the increased involvement of all interested parties (i.e., the government, industry, consumer organisations, etc.) in risk communication during the risk management process. The report of the consultation will be available later this year.

### **Comparative Analysis of Nutrition Interventions Workshop in Thailand**

FAO, in collaboration with the Institute of Nutrition at Mahidol University, organised a workshop on Comparative Analysis of Nutrition Interventions, held in Bangkok, Thailand, 2-4 June 1998. The preparatory work and proceedings of the workshop has provided a major contribution towards the development of a manual on this subject. The manual will be based on lessons learned and wisdom accrued from comparative analyses of interventions, to identify what works and what does not. It is intended as a source of advice and inspiration for current and planned nutrition interventions by providing information on strategies, approaches and procedures that are known to have resulted in successful outcomes in past and ongoing interventions. The manual is intended to create an understanding of the need for ongoing monitoring to improve the cost-effectiveness and outcomes of nutrition interventions.

### **Development of a National Nutrition Training Programme for South Africa. A Technical Cooperation Project with the Government of South Africa**

The Reconstruction and Development Programme of the Government of South Africa has developed an integrated nutrition strategy aimed at reducing hunger and malnutrition. To this end, FAO is working with the Government of South Africa to strengthen staff training programmes.

Specifically, FAO has helped the Government of South Africa to sensitise top policy-makers, mid-level administrators and programme managers to nutrition problems, their causes and potential solutions, and to increase national capacity to undertake community programmes through the training of resource persons and trainers of community nutrition workers. It is

currently undertaking a needs assessment for the development of future university training/teaching programmes in human nutrition. The project is expected to be completed in August 1998.

### ***Nutrition Education for School Children***

A major component of FAO's normative work on nutrition involves nutrition education for the public. FAO encourages the development of practical and effective programmes of nutrition education in primary schools in developing countries. In cooperation with the School Nutrition Education Section of The Netherlands Nutrition Centre, The Hague, FAO is developing a planning guide for nutrition education in primary schools. The materials to be developed are partially based on the expressed needs of government school staff who have responded to a questionnaire inquiring on the current state and shortcomings of nutrition education in schools in English-speaking countries.

Currently, a planning guide for school inspectors and school supervisors is being prepared to allow them to initiate, support and guide nutrition education for schoolchildren in all schools in developing countries. A draft version of this planning guide will be reviewed and field tested in the beginning of 1999. Complementary documents, such as a teacher's guide and examples of good practice in nutrition education in primary schools in developing countries, will also be prepared. These documents will be particularly useful in schools which have adopted the WHO approach of Health-Promoting Schools (see page 8) but do not require that a school is member of the WHO programme. With a view to further enhance the benefits of the two programmes for the assisted countries, special efforts are being made to actively collaborate in the world-wide School Health Initiative, promoted by the WHO and its respective regional networks for Health-Promoting Schools. This collaboration will strengthen ongoing nutrition education through emphasising the food-based approach. This is hoped to have lasting positive effects on the food and nutrition situation of schoolchildren, their dietary attitudes, practices and choices.

### ***World Food Summit follow-up: Nutrition Information Systems***

To assess progress made in reaching the 1996 World Food Summit goals for reducing undernutrition, FAO is developing the Food Insecurity and Vulnerability Information and Mapping System (FIVIMS). This is part of the international effort to assess the nature, extent, magnitude and severity of malnutrition and to monitor trends over time.

FAO is requesting each country to provide the results of their most recent food and nutritional status surveys so that the database can be updated frequently. Many data collection activities have been undertaken in developing countries that need to be documented and catalogued at the international level. Identifying sources of such data with the help of governments and NGOs would prevent the neglect or even loss of this

information and greatly increase the amount of material to be incorporated into FIVIMS.

FIVIMS will rely on a set of indicators to provide a comprehensive picture of the food and nutrition situation in a country. This will include food trade and production, market conditions, livelihood systems, social institutions, cultural attitudes, natural resources, health and sanitary conditions and feeding practices. Thus, FIVIMS can enable users to describe the food and nutrition situation, discern trends in the prevalence of undernutrition and provide an analysis of the major causal factors.

Within this framework, the Food and Nutrition Division is creating NUTRIDAT, a system to assemble and disseminate information about people who are underfed, undernourished or at-risk of becoming so. The database is currently located and maintained at the central level with copies of relevant country data being made available at the regional and sub-regional levels for trend analysis and policy work. FAO is collaborating with WHO and other agencies in sharing data for NUTRIDAT with a view to linking data from different agencies. Direct access to NUTRIDAT Central will be possible through the Internet and available on CD-ROM in 1999.

NUTRIDAT contains anthropometric information, and where available, consumption data at household level and food supply at national and sub-national level, as well as statistics on health and demography. The FAO database emphasises information on adults and school-age children.

In addition to NUTRIDAT, FAO's Nutrition Country Profiles provide concise analytical summaries of the food and nutrition situation in individual countries. This information is presented in the context of information and background statistics on food-related factors such as agricultural production, and other selected economic and demographic indicators. The information is presented in a disaggregated fashion; trends and sub-national differences are highlighted when available. The profiles include consistent and comparable statistical data that are presented in a combination of colourful graphical displays, tables and maps, each supported by a short explanatory text.

Nutrition mapping is an innovative component of the profiles that presents the data in a visible and eye-catching manner. The maps combine information such as anthropometric status, micronutrient deficiencies, and energy and nutrient consumption where available, with information about safe water supplies and education, to provide an immediate comprehensive picture of the geographical distribution of vulnerable groups at sub-national level. With this visual aid, the locations of populations with major nutritional problems are clear. The maps also highlight gaps in information alerting policy makers that additional data collection is necessary. Nutrition country profiles can be requested from Food and Nutrition Division.

Source: FAO Food and Nutrition Division, Via delle Terme de Caracalla, 00100 Rome, Italy. Fax: 396 5225 4593 Email: Food-Quality@FAO.org or Nutrition@FAO.org Web: <http://www.fao.org/waicent/faoinfo/economic/esn/nutri.htm>

## IAEA

Among the most important events of 1997 for nutrition activities at the International Atomic Energy Agency (IAEA) were two major reviews. The first review focused mainly on the resources needed to ensure the sustainability of the health programme and on the identification of appropriate topics for coordinated research. The second review was concerned with thematic planning for future technical cooperation projects. Both reviews had very positive outcomes; consequently there is a significant expansion in IAEA's nutrition activities expected in the near future.

There are nine current and planned coordinated research projects (CRPs: see *SCN News No. 15 p50*) involving applications of isotopes for which funding is available:

- ◇ 1995-9. Development and application of isotopic techniques in studies of vitamin A nutrition.
- ◇ 1995-9. Reference Asian Man (dietary intake and body composition for selected trace elements of relevance to radiological protection).
- ◇ 1996-2000. Isotopic evaluations of maternal and child nutrition to help prevent stunting.
- ◇ 1998-2001. Isotope-aided studies of nutrient interactions in developing country populations exposed to multiple nutritional deficiencies.
- ◇ 1998-2001. Isotopic evaluations in infant growth monitoring (in collaboration with WHO's Multicentre Growth Reference Study).
- ◇ 1998-2001. Application of nuclear techniques in the prevention of degenerative diseases (obesity and non-insulin dependent diabetes) in ageing.
- ◇ 1999-2002. Development and validation of isotopic and complementary tools for nutritional assessment of iron status in developing country populations.
- ◇ 1999-2002. Development and validation of isotopic and complementary tools for nutritional assessment of zinc status in developing country populations.
- ◇ 2000-2003. Development and validation of isotopic and complementary tools for nutritional assessment of household food security in developing country populations.

Ongoing and planned technical cooperation projects have a common theme in trying to make practical use of nuclear and isotopic techniques to assess the impact of national nutrition programmes. Typical examples include studies of micronutrients (iron, zinc, vitamin A), breastmilk volume, energy expenditure and body composition. Individual technical cooperation projects have recently been carried out in Cameroon, Chile, Ethiopia, Peru, Sierra Leone and Sri Lanka, and new ones are currently being started in Chile, Ethiopia, Senegal and Venezuela. Larger-scale regional projects are in the planning stage in Latin America and East Asia. A new project is also expected to start soon in Indonesia, in collaboration with UNICEF, which will use isotope techniques in support of UNICEF's multi-country field trials of the efficacy of iron and zinc supplementation to reduce anaemia and

growth faltering in infants. Other possibilities for joint projects are currently being explored with WFP, UNHCR and FAO.

For further information on any of these projects, please contact Robert Parr, Head, Section of Nutritional and Health-Related Environmental Studies, IAEA, P.O. Box 100, A-1400 Vienna, Austria. Tel: 43 1 2060 21657 Fax: 43 1 20607 Email: R.Parr@iaea.org

## IFPRI

### **Urban Malnutrition**

Preliminary results from work by Lawrence Haddad, Marie Ruel and James Garrett at IFPRI indicate that urban undernutrition is growing both in absolute terms and in terms of the share of overall undernutrition. Rural areas still contain the majority of undernourished children (except for Brazil), but the gap is closing rapidly. The authors conclude that there is a need for more research on identifying the main constraints to urban food security and good nutrition and on understanding the basis of effective community, programme and policy responses (see page 29).

### **Links between Women's Status and Child Nutrition**

Preliminary results from work by Lisa Smith and Lawrence Haddad at Emory University and IFPRI indicate that women's status has a large positive and significant impact on child nutrition in the developing world. Utilising data from a wide range of carefully documented sources, a cross-section time-series data set was constructed with some 180 data points covering approximately 64 developing countries from 1970-1996. Country fixed-effects methods were employed to estimate the impact of per capita dietary energy supplies, female secondary school enrolments, access to clean water and the ratio of male to female life expectancy (the proxy measure of women's status relative to men) on low weight-for-age prevalence for children under five. Of the four factors, women's relative status has the largest elasticity with respect to child underweight prevalence<sup>1</sup>. The variable has a particularly strong effect for South Asia, a result in line with work suggesting that women's status is key to reducing child malnutrition there.

### **New Partnership with CARE International**

IFPRI's multi-country programme on 'Urban Challenges to Food Security and Nutrition' led by Marie Ruel and James Garrett has established a new partnership with CARE International in an effort to be more effective in linking research to programming in urban areas. Over the last six months, IFPRI

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<sup>1</sup> Elasticity: the percentage change in one variable resulting from a one percent change in another variable.



and CARE have collaborated in carrying out urban livelihood assessments in Bangladesh, Tanzania, Togo and Ghana as part of the initial diagnostic phase in CARE's urban programme development. Honduras is next on the list. Additional collaborative work is planned to work jointly on follow-on phases such as project design, implementation, monitoring and evaluation.

For further information, please contact Bonnie McClafferty, Outreach, FCND, IFPRI, 1200 Seventeenth Street, NW, Washington D.C. 20036, USA. Fax: 202 467 4439 Email: b.mcclafferty@cgnet.com or ifpri@cgnet.com

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## UNICEF

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### ***UNICEF Meeting in Tanzania Develops Proposal for Community-based Programmes to Support IMCI***

UNICEF and WHO are collaborating in the development and implementation of the Integrated Management of Childhood Illness (IMCI) programme (see *SCN News No. 15 p56*). Collaboration to date has largely focused on the integration of management at the level of the health facility, for which WHO has taken the lead. In the last year, a community and household component of IMCI has been developed, including strategies for community-based nutrition activities. Many of the deaths associated with the five IMCI diseases (malnutrition, acute respiratory infections, diarrhoea, measles and malaria) need improved preventive measures at the community and household levels. UNICEF is leading the development of the IMCI components at these levels.

In late April, the UNICEF Eastern and Southern Africa Region Nutrition Network held a meeting in Morogoro, Tanzania that included planning for IMCI at the community level based in large part on existing experiences with community-based nutrition programmes. The meeting drew a total of 78 participants from 19 African countries. Participants included government representatives from health, nutrition and IMCI coordinating units; UNICEF staff in health, nutrition, water and sanitation, communication and evaluation; representatives of WHO, USAID, BASICS, AMREF<sup>1</sup>, and a number of research institutions.

Among the community-based programmes described in detail at the meeting were the Madagascar Project NAC, the Kisarawe District (Tanzania) Child Survival, Protection and Development (CSPD) programme, the Zambia community breastfeeding promotion, community child health projects coordinated by AMREF, and various community malaria and hygiene interventions. The meeting also provided an overview of IMCI, including the concept, components and strategies for the household and community component. There were sessions on communication and social mobilisation, monitoring and evaluation and a field visit to several sites of the Morogoro District CSPD programme.

All countries represented at the meeting formulated plans for further development of the household and community component of IMCI and other community-based programmes.

Some of the main conclusions and findings from the meeting are as follows:

#### ***1. Better attention to documenting lessons learned***

The various case studies showed that there is already a wealth of information on what works, yet systematic documentation of these community-based experiences and utilisation of this information to inform better programme design is lacking. A need was expressed for countries to undertake a more systematic review of community-based programmes. A more critical examination is required of the community processes to ascertain that repeated Triple A cycles are indeed taking place and that projects/programmes are not 'locked' into actions based on only the first round of assessment and analysis.

#### ***2. Scale of community-based programmes***

The UNICEF Nutrition Strategy promotes community-based nutrition-oriented programmes as the best way to accelerate reduction of child malnutrition. Despite a lot of training and effort over the last decade to promote community-based programmes, there are still too few examples of programmes operating at a scale commensurate with a potential for a significant nutrition impact. UNICEF staff and other partners involved in these efforts need new kinds of training for this purpose.

#### ***3. Household and community component of IMCI***

The meeting discussed at length the concept of IMCI and the opportunities it brings to promote improvement in nutrition and better management of childhood diseases through promotive, preventive and curative interventions. Renewed attempts to promote community-based nutrition programmes are necessary. Both through IMCI and independent of it, the pursuit of community-based nutrition programmes should be accelerated across the region. An agreement was reached on the need for individual countries to review what was already on the ground and develop further what may need to be done in order to strengthen or operationalise household and community-based programmes. The draft country proposals were a reflection of this, with several countries having proposed core nutrition-type community-based interventions including growth promotion,

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<sup>1</sup> The African Medical Research Foundation – an NGO based in Nairobi with activities all over East Africa.

breastfeeding, adequate complementary feeding and others proposing to build upon mother support groups, community malaria interventions, and water and sanitation groups.

#### **4. Advocacy**

There was optimism on strengthening community-based interventions but concern for how to get governments to give community-based interventions more importance. Renewed advocacy, making the case for the importance of nutrition to national development, is needed. The 1998 *State of the World's Children Report* on nutrition has put the case forward that nutrition is a lever that can accelerate and potentiate economic development. Good nutrition is also a right that governments have committed themselves to achieving by signing the Convention on the Rights of the Child.

#### **5. Community level 'workers'**

Action at community level relies on a cadre of community level 'mobilisers'. The necessary support to mobilisers from the next level in service delivery, especially from extension workers, was not always forthcoming. The question of appropriate ratios of mobilisers to facilitators requires further discussion. The issue of payment of community-based workers was an area of concern that needs to be analysed carefully in each country. In various countries, the decision to pay community workers had already been made and some had included such considerations in their local government and decentralisation initiatives. The issues around cost-effectiveness and sustainability need to be thought through for each country. Ways of sustaining the motivation of the community workers through non-monetary and in-kind support also need to be developed.

#### **6. Gender issues in community-based programmes**

Health and nutrition programmes have not yet adequately facilitated the process of drawing in men and fathers in programming for improved care at household level. It was proposed that careful attention be given to this in further development of household and community IMCI and community nutrition programmes.

#### **7. Communication and social mobilisation**

Many nutrition and health outcomes are determined by behaviours at household level. The focus of communication programmes seems to be on behaviour modification and not on informed choices. Implementation of communication strategies has to be well founded in the understanding of what motivates people to change and which behaviours are the most important for achieving improved health and nutrition outcomes. The UNICEF programme communication group at UNICEF headquarters is developing tools that will be made available to guide country offices in their communication strategies.

#### **8. Technical support areas**

Countries identified areas for which additional support is required to further action on community-based programmes. These include planning for communication and social mobilisation; proposal development; orientation and training for household and community IMCI; assessing care-seeking behaviours; and community monitoring and information systems.

#### **9. Next steps**

All participating countries developed draft plans for strengthening community-based programmes. These plans need to be further discussed at country level. The UNICEF offices in the phase one IMCI countries - Madagascar, Tanzania, Uganda, South Africa, and Malawi - will receive funds from USAID to help implement their plans.

A meeting report is available on request from Roger Shrimpton, UNICEF, Mail code TA-24A, 3 United Nations Plaza, New York, NY 10017, USA. Tel: 1 212 824 6368 Fax: 1 212 824 6465 Email: rshrimpton@unicef.org For further information, please contact Vincent Orinda at UNICEF Health Section (email: vorinda@unicef.org) or Jim Tulloch, CHD, WHO, 20 Avenue Appia, CH-1211 Geneva 27, Switzerland. Tel: 41 22 791 2632 Fax: 41 22 791 4853 Email: tullochj@who.ch

### **Evaluation of UNICEF Support for Universal Salt Iodisation in South Asia**

UNICEF is undertaking an evaluation of its support to the universal salt iodisation (USI) effort in South Asia. Over the last few years, there has been a tremendous acceleration in progress towards USI in South Asia, resulting from concerted government intervention and support from agencies and donors. Progress has been so great that the type of assistance that can be usefully provided by agencies and donors is changing. This evaluation aims to take stock of the UNICEF contribution country-by-country over the last five years and to guide the process of planning for UNICEF's future support.

The evaluation will include:

- ◇ assessment of the current situation with regard to availability of iodised salt at the household level;
- ◇ measurement of the inputs and outputs of the UNICEF support programme;
- ◇ comparison of UNICEF USI inputs with those of other development agencies and government resources;
- ◇ measurement of the extent to which UNICEF's efforts have tried to stimulate demand and the extent to which they have been aimed at stimulating supply;
- ◇ assessment of the degree to which the private sector has supported the iodisation of salt; and
- ◇ examination of the quality of supply and legislation enforcement.

The evaluation is being coordinated by a steering committee chaired by the UNICEF Regional Monitoring and Evaluation Officer for South Asia. A questionnaire was sent to all UNICEF country offices in South Asia in late 1997 to collect data specifically for the evaluation. Findings will be analysed by an independent evaluator, discussed with the wider Nutrition Initiative in South Asia group (NISA) and reviewed by an external panel. The main output of the evaluation will be a 30-40 page report - stage one of which is expected to be finalised by September 1998.

Both WHO and ICCIDD will be asked to act as external reviewers of a draft report version of the evaluation. If they agree, their views will be annexed in the final version of the report.

The steering committee is actively seeking offers of persons wishing formally to review the evaluation. For further information, please contact Roger Pearson, Regional Monitoring and Evaluation Officer, UNICEF South Asia, P.O. Box 5815, Lekhnath Marg, Kathmandu, Nepal. Tel: 977 1 417 082 Fax: 977 1 419 479 Email: rpearson@uncrosa.mos.com.np

## **The 1997 Afghanistan Multiple Indicator Baseline Survey**

Afghanistan has been in a state of conflict for almost 20 years, leading to large-scale displacement and almost total collapse of the country's infrastructure. With an annual per capita income of approximately US \$220 (in 1994), Afghanistan is consistently ranked among the poorest countries in the world. Access to populations within the country over the last two decades has been sporadic at best, and consequently the national situation in terms of health and sanitation has been unclear. In 1997, UNICEF undertook a multiple indicator survey in Afghanistan. Technical support was commissioned from CIETInternational<sup>1</sup>. This is the first national-level survey carried out in the country for 25 years, and gives baseline indicators for development and relief programmes including health, nutrition, education, food security, water and sanitation.

The survey included over 60,000 people from 96 sentinel communities representing the five operational regions of the country. Mortality rates were very high: maternal mortality rates were around 400 per 100 000, and infant mortality rates were 140-150 per 1000. Female literacy was extremely low: less than 5% of rural women, and around 10% of urban women aged 15-49 years old knew how to read and write. School attendance figures reflected this dismal situation, with only 7% of girls

attending schools in rural areas. Despite the ban on female education, a tiny fraction of female children in Herat and Kandahar regions did attend school at the time of the survey. These informal schools were maintained underground by mothers who defied the law against female education.

The survey showed that nationally, 25% of children aged 6-35 months were wasted and 52% were stunted. Stunting rates were higher among boys than among girls throughout the country. Highest stunting rates were seen in Kandahar region, where 63% of boys and 59% of girls were stunted. These data indicate considerably higher levels of malnutrition than have previously been documented, making Afghanistan one of the worst affected countries in the world.

Vitamin A deficiency (assessed by self-reporting of night blindness), was reported in about 3% of the children (aged 12-23 months) surveyed in Jalalabad and Kandahar. Nationally, 12% of children had received a vitamin A capsule, with higher coverage of vitamin A distribution in Jalalabad and Kandahar. National goitre rates (assessed by self-reporting of visible goiter) were 7.5 cases per 1000 people.

Assessment of breastfeeding practices showed striking differences in reporting from (and opinions of) women and men. Women reported that only 25% of infants were exclusively breastfed to 4 months, whereas men tended to overestimate this figure.

For food security, 42% of households reported that they had sufficient food in the week prior to the survey, implying that 58% did not.

For further information, please contact Roger Pearson, Regional Monitoring and Evaluation Officer, UNICEF South Asia, P.O. Box 5815, Lekhnath Marg, Kathmandu, Nepal. Tel: 977 1 417 082 Fax: 977 1 419 479 Email: rpearson@uncrosa.mos.com.np

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## WHO

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### ***The Innocenti Declaration: Continuing towards its Targets***

The *Innocenti Declaration on the Protection, Promotion and Support of Breastfeeding*, adopted in 1990, includes a number of operational targets. It calls upon international organisations to draw up action strategies for protecting, promoting and supporting breastfeeding, including global monitoring and evaluation of their strategies.

To assist countries in their efforts to monitor and assess progress towards achieving the operational targets of the *Inno-*

*centi Declaration*, and to identify areas where more effort is needed, the Programme of Nutrition recently gathered information in this connection in four WHO Regions. Information has thus far been received from 57% (108) of WHO's 191 member states, many of which have made considerable progress towards achieving the operational targets of the *Innocenti Declaration*.

◇ *Breastfeeding committees*: Several countries have breastfeeding committees (58 % in the Africa Region (AFR), 22% in the Region of Americas (AMR), 65% in the Eastern Mediterranean Region (EMR), and 63% in the European Region (EUR)) and Baby-Friendly Hospital Initiative committees (74% in AFR, 80% in AMR, 53% in EMR, and 71% in EUR). These committees are composed of representatives from relevant government departments, NGOs, edu-

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<sup>1</sup> An NGO registered in the USA dedicated to building the community voice into planning and better governance.

cational institutions, health professional associations and infant-food manufacturers.

- ◇ *National breastfeeding policy:* Sixty-eight percent (AFR), 72% (AMR), 82% (EMR), and 60% (EUR) of countries have formulated national breastfeeding policies, and 57% of countries have plans of action for implementing the BFHI.
- ◇ *Baby-Friendly Hospitals:* The 4 WHO Regions have 13,526 hospitals with maternity services. There were 2,430 hospitals designated as being baby-friendly at the end of 1997, compared with 943 hospitals at the end of 1995. 4,578 hospitals are targeted to become baby-friendly (1,554 hospitals in AFR, 1,294 in AMR, 950 in EMR, and 780 in EUR).
- ◇ *International Code of Marketing of Breast-milk Substitutes:* Many governments have taken responsibility for adopting, implementing and monitoring the Code (61% in AFR, 80% in AMR, 53% in EMR, and 49% in EUR). Some countries are in the preliminary stages of drafting national measures for this purpose, while still others have hardly begun.
- ◇ *Free and low-cost supplies of breastmilk substitutes:* The distribution of free and low-cost breastmilk substitutes has ended in 5,949 hospitals (1,967 in AFR, 995 in EMR, 1,468 in EUR and 1,519 in the AMR).
- ◇ *Maternity legislation:* Governments of WHO member states are using different means to protect, promote and support breastfeeding by enacting imaginative maternity protection legislation (87% in AFR, 100% in AMR, 94% in EMR and 89% in EUR) and by providing information on breastfeeding through the mass media, i.e., television and radio programmes, newspaper articles and breastfeeding weeks.

The WHO Programme of Nutrition has consolidated the survey results in *'The Innocenti Declaration: Progress and Achievements'*, Parts I, II and III, published in the *Weekly Epidemiological Record* (73(5): 25-30, 1998; 73(13): 91-94, 1998 and 73(19): 139-144, 1998).

This exercise will be repeated every 3 years, and the information collected will be included in the reports by the WHO Director-General to the World Health Assembly. To facilitate this process, the Programme of Nutrition has added a module on Innocenti targets to the WHO Global Breastfeeding Data Bank, and these will be seen as part of the Nutrition Surveillance system.

For further information, please contact Randa Saadeh, WHO Programme of Nutrition. Tel: 41 22 791 3315 Fax: 41 22 791 4156 Email: saadehr@who.ch

### ***The Baby-Friendly Hospital Initiative (BFHI)***

In assisting countries to maintain the credibility and sustainability of the BFHI, the Programme of Nutrition is continuing to develop re-assessment and monitoring tools based on the WHO/UNICEF BFHI Global Criteria. The monitoring tools are intended to aid data collection on key indicators related to BFHI and infant feeding practices. They have been field-tested in Poland and Bolivia, (Oman and Malaysia to follow) in close collaboration with Wellstart International (a WHO collaborating centre based in San

Diego, California, USA), and UNICEF. The monitoring tools will be published at the end of 1998.

For further information, please contact Randa Saadeh, WHO Programme of Nutrition. Tel: 41 22 791 3315 Fax: 41 22 791 4156 Email: saadehr@who.ch

### ***'Promoting Breastfeeding in Health Facilities: a Short Course for Administrators and Policy-makers' by WHO / Wellstart International***

This short course (WHO/NUT/96.3) which provides practical guidance on policy and administrative changes needed to promote breastfeeding in health facilities, is available in Arabic, English, French, Russian and Spanish, and will soon be available in Italian and Portuguese. It has thus far been given in Egypt, Ghana, Kenya, Lithuania, Malaysia, Saudi Arabia, Spain, Swaziland, the UK, Ukraine and the USA. The course has had a major impact on BFHI status and progress. For example, in Ukraine alone, the course has been given twenty times and has prompted the establishment of a national breastfeeding committee and development of a breastfeeding policy. In Brazil, it is planned to integrate the course into the overall national training plan for breastfeeding, and it is seen as a tool to sensitise decision-makers and obtain their commitment to becoming baby-friendly.

The course is currently being used as the main advocacy tool to target private and university hospitals.

For further information, please contact Randa Saadeh, WHO Programme of Nutrition. Tel: 41 22 791 3315 Fax: 41 22 791 4156 Email: saadehr@who.ch

### ***Joint WHO / Tufts Consultation on Nutrition Guidelines for Healthy Ageing***

In view of the growing number and proportion of older members in populations of both developed and developing countries and the increase in diet- and lifestyles-related chronic noncommunicable debilitating diseases affecting the ageing population, WHO and the USDA Human Nutrition Research Center on Aging at Tufts University, Boston, USA, organised a joint Consultation on Nutrition Guidelines for Healthy Ageing from 26 to 29 May 1998. The specific objectives of the Consultation were:

- ◇ to review scientific and epidemiological evidence regarding the role of diet and other lifestyle factors, including physical activity, in health protection and promotion and noncommunicable diseases prevention in ageing populations; and
- ◇ to develop a report of a practical nature that will constitute an authoritative source of information for member country governments, nutritionists, medical practitioners, nurses, elderly care-providers, social workers and others.

The agenda of the Consultation included a wide spectrum of subjects related to nutrition and the functional and health status of ageing populations. These included assessment of nutritional status, nutrition and chronic diseases, water metabolism and dehydration, alterations in sensory systems, nutrition and immune function, nutrition behaviour and cognitive function, nutritional requirements and dietary guidelines. The Consultation also reviewed the demographic, epidemiological and social aspects of ageing with particular emphasis on a developing countries perspective and discussed the community support for improvement of nutrition, physical activity and behaviour (lifestyles) of ageing populations.

The report of the consultation will be published by the end of 1998. For further information, please contact R. Buzina, WHO Programme of Nutrition. Tel: 41 22 791 3316 Fax: 41 22 791 4156 Email: buzinar@who.ch

### **Joint Consultations between WHO and FAO**

The FAO/WHO consultation process seeks to periodically bring together world experts on specific questions where areas of responsibility overlap. The consultations are expected to draw conclusions and make recommendations that provide the best and most scientifically sound advice and information possible for Member States.

*Joint FAO/WHO Expert Consultation on Carbohydrates in Human Nutrition:* The purpose of this Consultation was to review the full scope of carbohydrates in foods, including their role in human diet, the effects of processing on their digestibility, their use in manufactured foods, and their role in disease conditions (see *SCN News No. 14 p34*). The report of the Joint FAO/WHO Consultation on Carbohydrates in Human Nutrition has just been published in the FAO Food and Nutrition Series (No. 66, 1998) and is available from FAO (Sales and Marketing Group, Food and Agriculture Organization, Viale delle Terme de Caracalla, 00100 Rome, Italy. Tel: 39 6 5705 5727 Fax: 39 6 5705 3152 Email: Publications-sales@fao.org).

*Joint FAO/WHO Consultation on Vitamin and Mineral Requirements in Human Nutrition:* This Consultation will take place from 21-30 September 1998 in Bangkok, Thailand (see *SCN News No. 15 p48*)

### **WHO Global Database on Obesity and Body Mass Index (BMI) in Adults**

This database was established in 1996 by the Programme of Nutrition, and is being steadily built up. The aim is to provide an up-to-date instrument—the only one of its kind—for establishing the magnitude and distribution of obesity and underweight in adult populations worldwide. Data show that many countries have problems of obesity and undernutrition, occurring side-by-side.

Currently, this database incorporates survey data from 91 countries. Population rates of BMI, or mean BMIs are classified according to the standard BMI cut-off points—i.e. 18.5, 17.0, and 16.0 for Grades 1, 2 and 3 undernutrition (thinness) in adults, and 25.0, 30.0, and 40.0 for overweight, obesity and severe obesity in adults. Some 61 countries (covering 70.4% of the adult population worldwide) have national mean BMI data, whilst 30 other countries have complete data sets including mean BMI and prevalences below and above the standard BMI cut-off points.

WHO welcomes new contributions to this database. For further information about how to contribute to the database, please contact Yun Ling at the WHO Programme of Nutrition. Tel: 41 22 791 3322 Fax: 41 22 791 4156 Email: liny@who.ch

### **WHO Consultation on Behavioural Aspects of Preventing Obesity and its Associated Problems**

A WHO Consultation to address behavioural aspects of obesity prevention and its associated problems is planned for 1-3 October 1998 in Tokyo, as part of WHO's efforts to develop global, regional and national strategies for preventing and managing the increasing global public health problem of obesity (see also page 71).

The Consultation aims to:

- ◇ review and analyse emerging trends of nutrition transition and behavioural factors contributing to the development of overweight and obesity;
- ◇ review various country experiences in promoting healthy diets and lifestyles with respect to obesity;
- ◇ develop guidelines for effective behaviour-related strategies to prevent and manage obesity as a public health problem;
- ◇ identify methodologies for implementing and monitoring behavioural strategies for controlling and reducing obesity.

Multisectoral strategies aimed at reducing obesity and its environmental determinants, and to improve knowledge about obesity, its prevention and management, will be developed. Methodologies will be identified for designing effective community-based nutrition programmes to promote the choice of appropriate diets and healthy lifestyles by individuals and families.

For further information please contact Chizuru Nishida, WHO Programme of Nutrition. Tel: 41 22 791 3317 Fax: 41 22 791 4156 Email: nishidac@who.ch

### **IDD, Vitamin A Deficiency and Anaemia**

In the last fifteen years, WHO, UNICEF and ICCIDD have worked with governments to combat IDD by ensuring adequate iodine intake through consumption of iodised salt. As a result, the elimination of IDD as a public health problem by year 2000 is no longer an utopian view for a large number of countries. A

report on the progress achieved by countries to control IDD will be submitted to the next World Health Assembly in 1999. However, programme sustainability is still a critical concern (see also SCN working group discussions, page 24). In addressing this issue, WHO is currently assessing the quality of IDD monitoring, and the WHO/UNICEF/ICCIDD document on '*Indicators for assessing Iodine Deficiency Disorders and their Control through Salt Iodization*' (WHO/NUT/94.6, WHO Geneva, 1994) is being revised.

WHO, UNICEF and other organisations launched a 4-year project starting initially in Africa in 1998, to provide vitamin A supplements to pre-school children during immunisation contacts and to women at delivery.

In order to assist public health staff to design and implement programmes for control of iron deficiency and its consequences - especially anaemia - WHO, with UNICEF and UNU is about to publish '*Iron deficiency: Assessment prevention and control*' (WHO/NUT/98.6 WHO Geneva).

To assess the magnitude of micronutrient malnutrition, monitor the impact of programmes on populations, and assess the soundness of proposed strategies, WHO maintains the Micronutrient Deficiency Information System (MDIS) which includes three databases on iodine, vitamin A and iron. The iodine and vitamin A deficiency databases have already been published, and are currently being revised. The database on iron deficiency is still being developed.

WHO welcomes new contributions to all MDIS databases. For further information about how to contribute, please contact Bruno de Benoist, Programme of Nutrition, WHO, 20 Avenue Appia, CH-1211 Geneva 27, Switzerland. Tel: 41 22 791 3412 Fax: 41 22 791 4156 Email: debenoistb@who.ch

## **Nutrition in Emergencies**

The Programme of Nutrition is very frequently called upon by other UN organisations, humanitarian/relief NGOs, and member states to provide technical advice on management of nutritional emergencies, famine, or other disaster situations. The Programme of Nutrition provides technical inputs for strengthening capacities at national, subnational, and also international levels for the management of nutrition in emergencies. This is done through the production of guidelines, norms, criteria, methodologies and information on the monitoring/surveillance and management of nutrition in emergency settings, and through information dissemination and training.

*Guiding principles for feeding infants and young children during emergencies, 1997* (see SCN News No. 15 p37).

*A three-part practical manual pack:* This pack, due to be published by the end of this year, is for field staff working at the operational level in emergencies and for programme managers. It includes methods to calculate group nutrition requirements, assess and monitor nutrition status, and also includes information on food distribution and selective feeding.

Specific nutritional deficiency outbreaks still occur in refugee populations, and in other severely deprived or famine-affected population groups. The Programme of Nutrition is currently writing guidelines on how to manage and prevent these deficiencies. The following three technical reviews will be published shortly:

- ◇ *Scurvy and its prevention and control in major emergencies.*
- ◇ *Thiamine deficiency and its prevention and control in major emergencies.*
- ◇ *Pellagra and its prevention and control in major emergencies.*

## **Joint WHO/UNHCR Initiative to Develop Guiding Principles for Caring for the Nutritionally Vulnerable during Emergencies**

In an effort to implement the World Declaration and Plan of Action for Nutrition of the ICN, the WHO Programme of Nutrition has been examining aspects of care-related nutritional vulnerability and household food and nutrition insecurity to develop strategies for caring for the nutritionally vulnerable during emergencies.

In order to develop consolidated strategies for caring for the nutritionally vulnerable during emergencies, a joint WHO/UNHCR Technical Consultation on Caring for the Nutritionally Vulnerable during Emergencies was held in Rome, 24-27 February 1998, hosted by the National Institute of Nutrition.

Two background documents were prepared for the Consultation:

- ◇ *Caring for the Nutritionally Vulnerable during Emergencies: a Review and Implications for Policy.*
- ◇ *Caring for the Nutritionally Vulnerable during Emergencies* (an annotated bibliography).

Specific aims of the Consultation were to:

- ◇ examine care-related and behavioural aspects of nutritional vulnerability and household food insecurity during emergencies, and to possibly develop approaches for assessing and monitoring these aspects of nutritional vulnerability;
- ◇ develop strategies and guiding principles for promoting household food and nutrition security and caring for the nutritionally vulnerable during emergencies, to be used as the basis for developing policies and programmes as well as training modules to assist health personnel and others working in emergencies;
- ◇ identify research needed in the area of care, household food and nutrition security and emergencies.

The Consultation provided a forum for exchanging information and experiences of experts, country representatives, NGOs, bilateral and international agencies. It compiled information on nutritional vulnerability, determining factors and possible approaches for assessing care-related nutritional vulnerability during emergencies. The Consultation also developed generic

guiding principles for each vulnerable group, to be applied and incorporated into policies and programmes, and to serve as a basis for training modules to assist health personnel and others working in emergencies.

The generic guiding principles are being finalised by WHO in collaboration with UNHCR, UNICEF and various NGOs. The final document will also include simple tools for applying and implementing the guiding principles. A draft document will be ready to be circulated for expert peer review in late 1998.

For further information, and to request copies of the documents listed above, please contact Chizuru Nishida, WHO Programme of Nutrition. Tel: 41 22 791 3317 Fax: 41 22 791 4156 Email: nishidac@who.ch

For further information about any of activities of the Programme of Nutrition and requests for documents, please contact the WHO Programme on Nutrition, WHO, 20 Avenue Appia, CH-1211 Geneva 27, Switzerland. Tel: 41 22 791 3326/3321 Fax: 41 22 791 4156 Email: clugstong@who.ch

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### **Food Safety: GEMS / Food**

The Global Environment Monitoring System / Food Contamination Monitoring and Assessment Programme (GEMS/Food), which now includes participating institutions from over 70 countries worldwide, collects and evaluates information on levels and trends of contaminants in food, their contribution to total human exposure and significance with regard to public health and trade. GEMS/Food continues to provide information from its database, held at the WHO Food Safety Unit, Geneva, to various users, including the Codex Alimentarius Commission and its subsidiary bodies. The Programme is described in a new brochure (WHO/FSF/FOS/97.9) available from the WHO Food Safety Unit (contact details on next page).

During 1997, GEMS/Food conducted two Analytical Quality Assurance (AQA) studies. The first - on pesticide mixtures - was coordinated by the WHO Collaborating Centre for Pesticide Analysis and Training located at the GTZ Pesticide Service Project in Eschborn, Germany. A report of this study is now available from the WHO Food Safety Unit (contact details on next page). The second - on heavy metal analysis - was conducted in cooperation with the WHO Collaborating Centre for Food Contamination Monitoring at the BgVV (Bundesinstitut für gesundheitlichen Verbraucherschutz und Veterinärmedizin), Berlin, Germany and the report should be available from the Food Safety Unit shortly.

GEMS/Food has also recently issued a revised version of 'Guidelines for Predicting Dietary Intake of Pesticide Residues' (WHO/FSF/FOS/97.7), which offers simple, practical methods for assessing possible exposure to pesticides based on the best use of available information. In addition, GEMS/Food has pub-

lished its estimates of per capita consumption of raw agricultural commodities and certain semi-processed commodities for five regional diets (WHO/FSF/FOS/98.3). Finally, a full report is now available on the joint FAO/WHO Consultation on Food Consumption and Exposure Assessment of Chemicals in Food, including food additives, contaminants, residues of pesticides and veterinary drugs and certain nutrients which was held 10-14 February 1997 in Geneva (WHO/FSF/FOS/97.5 - see *SCN News No. 15 p55*).

### **Disinfection of Fruits and Vegetables**

WHO, jointly with FAO and in collaboration with the National Sanitation Foundation International, USA, has prepared a document on current practices with regard to disinfection of fruits and vegetables. The document provides a review of the hazards associated with fruits and vegetables, and the efficacy of different disinfection methods on the hazards. The report will be available from the WHO Food Safety Unit (contact details on next page) in September 1998.

### **Food Safety for Nutritionists**

A WHO/Industry Council for Development (ICD) Course on Food Safety for Nutritionists is organised annually in Indonesia as part of the MSc Programme carried out by the South Asian Ministers of Education Organization (SEAMEO) in collaboration with the German Technical Cooperation Agency (GTZ). The objectives of the training course are to promote understanding of food safety and to enable participants to effectively reduce or prevent foodborne diseases. The training course is open to all candidates desiring to be trained in food safety. A training package entitled 'Food Safety for Nutritionists' is made available to the participants of the course, which consists of nine modules, lecture notes, set of overheads and student handouts. The course lasts for two to three weeks (see page 48 for more details).

### **Databank on Foodborne Disease Outbreaks**

The Food Safety Unit, WHO is maintaining a global databank on food borne disease outbreaks published in the literature. The databank collects epidemiological data, including data on causative agents, number of people affected, signs and symptoms, food vehicle involved, place where the implicated vehicle was prepared and consumed, and factors contributing to the outbreak.

The databank has been developed to meet the increased demand for epidemiological information on foodborne disease. The objective is to compile epidemiological information necessary for a variety of purposes, for example, the application of Hazard Analysis and Critical Control Point (HACCP), risk assessment, health education in food safety, and understanding the role of food in the transmission of diseases.

For further information and to obtain copies of any of the documents mentioned above, please contact the Food Safety Unit, Programme of Food Safety and Food Aid, WHO, 20 Avenue Appia, CH-1211 Geneva 27, Switzerland. Tel: 41 22 791 2555 Fax: 41 22 791 4807 Email: [foodsafety@who.ch](mailto:foodsafety@who.ch) WHO Food Safety documents are also increasingly available on the web at <http://www.who.ch/fsf/>

## Health for All in the 21<sup>st</sup> Century – the Nutrition Elements



Since 1978, when the policy on Health for All (HFA) was adopted at the Alma-Ata Conference, political, economic, environmental and social changes have occurred on an unprecedented scale. The need for a renewed vision and model of health to suit these new trends and their huge implications for health has resulted in an intensive worldwide consultation process led by WHO, aimed at formulating a new global health policy. A briefing document is available, together with the policy which has been endorsed by the World Health Assembly during its Session in May 1998.

In building on the strengths of the original policy, Health for All in the 21<sup>st</sup> Century sets out, for the first two decades of the 21<sup>st</sup> century, global priorities and targets which will create the conditions whereby people everywhere will have the opportunity to reach and maintain the highest attainable level of health throughout their lives. It gives added emphasis to 'health as a human right'; to gender sensitivity; and the paramount importance of addressing poverty and inequality as both root causes and results of ill health.

Ten new global targets have been set out to spur action and to define priorities for resource allocation (see Box). Achieving these targets will ensure that the overall goals of HFA are met.

### **How do nutrition concerns fit into the new HFA vision?**

Nutrition is central to the first health target, where stunting rates will be used to assess equity within and between countries as a basis for promoting and monitoring equity in health. Stunting (defined as height-for-age more than two standard deviations below the reference value) has been recommended by WHO<sup>1</sup> as an ideal indicator for determining priorities for allocation of resources to improve equity in health care. It measures the cumulative deficient growth associated with long term factors such as chronic insufficient daily food intake, frequent infection, poor feeding practices and possibly the low socioeconomic status of households. The initial quantitative target utilised for equity is

### **Box: Global Health Targets to 2020**

- 1 Increase equity in health and use the health equity index of childhood stunting.
- 2 Improve survival and quality of life, indicated primarily by reductions in maternal and child mortality rates and increased life expectancy.
- 3 Reverse global trends for tuberculosis, HIV/AIDS, malaria, tobacco-related diseases and violence/trauma.
- 4 Eradicate and eliminate certain diseases (measles, lymphatic filariasis, Chagas disease, leprosy, trachoma and vitamin A and iodine deficiencies).
- 5 Improve access in all countries to safe drinking water, sanitation, food and shelter.
- 6 Promote healthy life styles and discourage health damaging ones in all countries.
- 7 Develop, implement and monitor national policies consistent with HFA.
- 8 Improve access everywhere to comprehensive high quality essential health care.
- 9 Establish and strengthen operational global and national health information and surveillance systems.
- 10 Develop and enhance health research programmes at global, regional and country levels.

that by the year 2020, the percentage of children under 5y who are stunted should be less than 20% in all countries and in all specific subgroups within countries.

Nutrition is also specifically addressed elsewhere in the new HFA vision. In the second health target, a child mortality rate of less than 45 per 1000 live births has been set for the year 2020. In setting this target, the health community has undertaken to give priority to providing resources to the IMCI (integrated management of childhood illnesses), which aims to reduce the impact of the five major causes of death in children - one of which is malnutrition (see *SCN News No.15, p56*). More directly, the fourth health target specifies that by the year 2020, vitamin A and iodine deficiencies have been eliminated. By the same year, target 5 states that through intersectoral action, major progress will have been made in making safe food available to all.

### **Fulfilling the HFA vision**

To achieve these targets, the document emphasises that committed action is needed. At the national level, governments will be responsible for creating an enabling environment for action in support of HFA. And it is the role of WHO, as the world's health advocate, to stimulate global action, provide global leadership for HFA and build strategic alliances with other UN agencies, the World Bank, NGOs, the private sector and other relevant partners in pursuit of HFA goals at all levels.

<sup>1</sup> WHO Technical Report Series, No. 854, 1995.



For general information about Health in the 21<sup>st</sup> Century, please contact Dr Roberta Ritson, WHO, Division of Policy Programme and Evaluation, Policy Action Coordination Team, 20, Avenue Appia, CH-1211 Geneva 27, Switzerland. Tel: 41 22 791 2557 Email: Ritsonr@who.ch, or Mr Chris Powell, WHO, Division of Health Promotion, Education and Communication, Health Communications and Public Relations, 20, Avenue Appia, CH-1211 Geneva 27, Switzerland. Tel: 41 22 791 2888 Email:

powellc@who.ch. For specific information on nutritional aspects please contact the Programme of Nutrition, WHO (Tel: 41 22 791 3326 Fax: 41 22 791 4156 Email: clugstong@who.ch). Based on the WHO document A51/5 and briefing summary 'Health for all in the twenty-first century'. Further information about Health for All in the 21<sup>st</sup> Century can be found on the WHO website at <http://www.who.ch/hfa/index.htm>

## **WHO / UNAIDS / UNICEF**

### **Technical Consultation on HIV and Infant Feeding**

**Geneva, April 20-22 1998**

Three million children worldwide have been infected with HIV. Most have been infected through transmission of the virus from their HIV-positive mother. About two thirds of mother-to-child transmission occurs during pregnancy and delivery, and about one-third through breastfeeding. The number of children infected with HIV is rising, reflecting the increase in numbers of women of childbearing age who are infected. In 1997 alone, more than half a million children were infected worldwide, and in a growing number of countries, HIV is now the single most important cause of child death.

Following the adoption of the Joint Policy Statement on HIV and Infant Feeding in 1997, WHO, UNAIDS Secretariat and UNICEF developed a set of three comprehensive guidelines to assist decision-makers and health care managers to implement the policy:

- ◇ *HIV and Infant Feeding: Guidelines for Decision-makers*, WHO/FRH/NUT/CHD 98.1, UNAIDS/98.3, UNICEF/PD/NUT (J) 98-1.
- ◇ *HIV and Infant Feeding: A Guide for health care managers and supervisors*, WHO/FRH/NUT/CHD/98.2, UNAIDS/98.4, UNICEF/PD/NUT (J) 98-2.
- ◇ *HIV and Infant Feeding: A review of HIV transmission through breastfeeding*, WHO/FRH/NUT/CHD/98.3, UNAIDS/98.5, UNICEF/PD/NUT (J) 98-3.

The documents recognise that HIV can be transmitted through breastfeeding. The documents also cover all alternative feeding options which are: commercial formula, home-prepared formula, heat treated mother's milk, milk from an established milk bank, wetnursing by a relative and earlier cessation of breastfeeding. The documents express the need to support the use of safe alternatives to breastfeeding when an HIV-positive mother makes a fully informed choice not to breastfeed and selects one of the above options. They also strongly emphasise that breast-milk remains the optimal source of nutrition for the majority of infants, including all infants of mothers not tested for HIV.

Implementation of the guidelines was discussed during a meeting convened by WHO in Geneva (April 20-22, 1998) that brought together representatives of governments from countries most affected by HIV/AIDS, scientists, and United Nations agen-

cies. The meeting was also attended by representatives of breastfeeding specialised NGOs and the infant formula industry.

#### **Recommendations and outcome of the meeting**

In addition to the key recommendation of increasing access to replacement feeding for HIV-positive women, the need to improve access to voluntary and confidential HIV counselling and testing, particularly for pregnant women, and counselling on infant feeding, was emphasised.

Participants also endorsed the need to implement measures to prevent breastfeeding from being undermined among HIV-negative women and among those who do not know their HIV status. There was consensus that methods for procuring, distributing and making available breastmilk substitutes should comply with the *International Code of Marketing of Breast-milk Substitutes* (see page 67) and subsequent resolutions of the World Health Assembly.

Strengthening health care services was also a priority, particularly reproductive health services in developing countries, to implement interventions that would reduce HIV infection in women and reduce mother-to-child transmission of HIV and ensure care and social support for HIV-positive mothers.

A full report of the meeting '*Technical Consultation on HIV and Infant Feeding: Implementation of Guidelines* WHO/CHD/98.15, WHO/FRH/NUT/98.4, UNAIDS/98.6, UNICEF/PD/NUT(J)98-4' is in preparation, and will be available on request from the Division of Child Health and Development or the Nutrition Programme at WHO, Geneva, or from the UNAIDS Documentation Centre, Geneva, or the Nutrition Section, UNICEF New York, TA -24A, 3 UN Plaza, New York, NY 10017, USA. The three documents listed above are available upon request from Randa Saadeh, WHO Programme of Nutrition. Tel: 41 22 791 3315 Fax: 41 22 791 4156 Email: saadehr@who.ch (CHF16, CHF11.20 in developing countries).

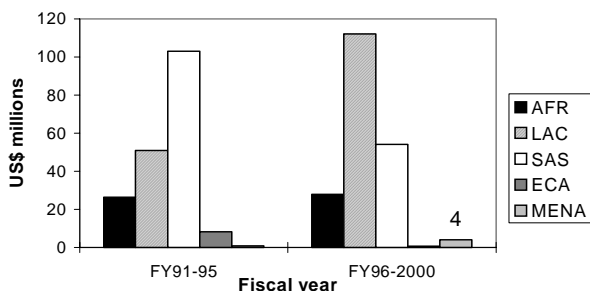
Sources: Felicity Savage (WHO/CHD), Ludmila Lhotska (UNICEF) and Randa Saadeh (WHO/NUT).

## The World Bank

### Nutrition Lending Update

The graph shows the latest figures for regional nutrition lending by the World Bank. South Asia and Latin America regions have the highest estimated lending for nutrition, although the Africa region has the highest number of projects that allocate funds to nutrition.

Yearly average of nutrition lending by region in millions of US\$



The graph shows an overview of the average lending figures per year over the fiscal periods 1991-95 and 1996-2000. All numbers are based on projections; i.e. not actual disbursement.

### Recently Approved Projects

#### Madagascar

The World Bank recently approved a US\$27.6 million equivalent credit for a project to improve the nutrition for children and pregnant and breastfeeding women in Madagascar. The project will focus on reducing the number of underweight children, combatting vitamin A and iron deficiency, and reducing helminth infections. An educational component will increase awareness of malnutrition and its causes. This Community Nutrition II project, which will be national in scope, builds on the successful World Bank-supported community nutrition project *Projet de Sécurité Alimentaire et de Nutrition* currently operating in two provinces.

The project will have several components. A Community Nutrition Programme will support community-based growth monitoring and growth promotion campaigns involving the weighing of children less than 3 years old. Food supplementation will be available for malnourished children as well as pregnant women, and vitamin A supplements will be given to young children and breastfeeding mothers. A School-Based Nutrition Programme will promote good nutrition and hygiene, provide iron and deworming tablets, and treat children aged 3-14 years for worms both in and out of school. The project will also assist in financing nutrition-related activities in the health and agriculture sectors.

#### The Gambia

The World Bank recently approved a US\$18 million equivalent credit for a project to improve family health in The Gambia. This

is the first new World Bank supported project in The Gambia since 1994. The *Participatory Health, Population and Nutrition Project* will have far-reaching beneficial impacts on the health of The Gambia's most vulnerable populations - particularly infants, children, and women of reproductive age - by improving health services and promoting the active participation of individuals and communities in ensuring their own health.

Prepared through an extensive consultation process involving NGOs, community members, other donors, and the government, the project takes an integrated approach to improving family health. World Bank financing will support preventive health care activities, as well as support policy and programme development. A grassroots education programme will encourage community awareness, community involvement in health services, promote safe sex behavior, and strengthen basic health and nutrition. Training for health care workers, the expansion of family planning services and HIV/AIDS prevention programmes, and upgrading and maintenance of existing health infrastructure are also included.

#### The Philippines

The World Bank has approved a US\$19 million loan to the Philippines for an *Early Childhood Development (ECD) Project* that will provide services to reduce childhood mortality and promote the physical and mental development of Filipino children, particularly those who are most vulnerable and disadvantaged. The project also aims to establish an effective partnership between national and local governments in the provision of ECD services. It is designed to assist in compensating for past government under-spending in human resource development and poverty alleviation.

The project is part of a 10-year ECD Programme which seeks to expand and upgrade existing ECD programmes in the Philippines. One component of the project will involve supplying crucial inputs to maintain and upgrade five region-wide ECD programmes covering immunisation, improved management of sick children, prevention and control of micronutrient deficiencies (iron, iodine, vitamin A) through food fortification, education of parents on how to stimulate and promote young child development and improved curricula and health services for children in Grade 1.

For more information, please contact Claudia Rokx (crokx@worldbank.org), or Claire Hervey (Tel: 1 202 473 8294 Fax: 1 202 473 7917 Email: chervey@worldbank.org) at the World Bank, 1818H Street NW, Washington DC 20433. To obtain project documents please contact the World Bank's Public Information Center (PIC), 1776 G Street, NW, Room GC1-300, Washington DC 20433. Tel: 202 458 5454 Fax: 202 522 1500 Email: pic@worldbank.org Further information about the World Bank's recently approved projects can be found on the Web at <http://www.worldbank.org/>

Sources: C. Rokx, C. Hervey and World Bank 1998 press releases.

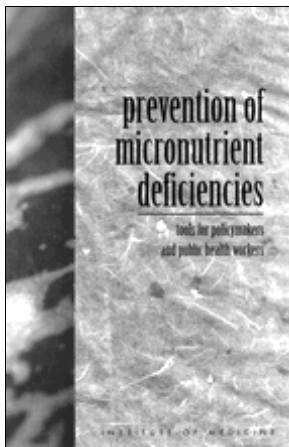
# PUBLICATIONS

**Prevention of Micronutrient Deficiencies:  
Tools for Policymakers**

**and Public Health Workers (1998)**

**edited by Christopher P. Howsen, Eileen T. Kennedy  
and Abraham Horwitz, Committee on Micronutrient  
Deficiencies, Institute of Medicine**

**Review by Frances Davidson, USAID**



**Background**

Together with many colleagues, USAID has a long-standing interest in identifying and sharing analyses of programmes it helps implement so as to extend their impact and encourage others to benefit from these experiences - successes and failures. To a certain extent this commitment comes out of the recognition that meaningful evaluations of nutrition programmes and their

true impact remains a considerable void in our communal development experience. Answers to the question '*what does it really take to develop, implement and sustain a successful nutrition intervention*' remain elusive.

In 1989, the International Nutrition Planners Forum published, '*Crucial Elements of Successful Community Nutrition Programs*'. In this document an attempt was made to develop an analytic framework to identify the crucial issues identified as responsible for the success of a few selected programmes. It was thought this might be a practical way of promoting better nutrition and avoiding failures. The 1989 publication synthesised the experience of USAID's efforts to identify the elements that had been crucial in achieving nutrition programme success. It found that success required broad participation in the planning and implementation by those who are expected to benefit from the programmes and those who are to provide the services. It further documented a developing theme at that time of 'partnerships' between service providers and targeted groups, between government and the private sector, between entrepreneurial groups and volunteer groups, and other partnerships necessary to establish and, more importantly, sustain successful programmes. Since then other agencies, notably the World Bank, the Micronutrient Initiative, and IVACG have made valuable contributions to this discussion.

In attempting to make a further contribution to the state-of-the-art in analysing programme performance, USAID asked the National Academy of Sciences (NAS) to call together an expert group of individuals to do a systematic examination of the reasons for the success of programmes and at the same time, identify the constraints that limited successes. The group included scientists and programme implementers. Their charge was to review past approaches that had or had not resulted in success and to identify the elements of success or failure. The NAS focused on micronutrient malnutrition because it is a topic that has seized a great deal of attention from many donors and country governments. This is due in large part to the elimination of micronutrient malnutrition being seen as something 'doable' and because we hoped that from this beginning, the way in which to ensure progress in the larger issues of malnutrition might be encouraged.

The case studies represent only a fraction of the many successful nutrition programs that have been implemented in developing countries. They were selected as reflecting broad geographical diversity and as illustrative of a variety of community and technical approaches.

**Organisation of the Report**

The Report is organised into two volumes. The first volume is the *Summary and Key Elements*. The second includes the contents of the first, along with the three commissioned background papers on vitamin A (by Barbara Underwood), iron (by Fernando Viteri) and iodine deficiency (by John Stanbury). The NAS report does not offer recommendations on how to alleviate specific micronutrient deficiencies - these recommendations are already available through the publications of diverse organisations, including USAID, WHO, UNICEF and others. Rather, this report provides a conceptual framework based on past experience that will allow funders to tailor programmes to existing regional/country capabilities and to incorporate within these programmes the capacity to address multiple strategies (e.g., supplementation/fortification/other food based approaches/public health measures and multiple micronutrient deficiencies).

Several global conferences have focused attention on micronutrient malnutrition and raised awareness of the problem and the tremendous toll they take in human and country development. Solutions to these micronutrient deficiencies were said to be technologically possible, and substantial financial resources have been committed to solving the problem by many governments and donors. Less attention has been devoted to understanding the key elements needed to implement and sustain a micronutrient intervention on a fully operational scale - regional or national - as opposed to a pilot project scale, at either the national or community level. In fact this has been cited as a

problem not only of micronutrient interventions but nutrition programmes in general.

This report focuses on lessons learned from past interventions to address iron, vitamin A and iodine malnutrition - the committee limited its evaluation to these three micronutrients because it felt there was adequate experience for each. However, they believe that the lessons learned for improving future intervention strategies would also be applicable to prevention and control of malnutrition created by deficiencies of other nutrients. And as the literature and experience accumulate, it will be appropriate to explore similar theses regarding other micronutrients such as zinc, folate and vitamin B12.

Early on in the process, it was recognised by the Expert Committee that there would be an array of potential alternative strategies to deal with micronutrient malnutrition, and that it was unlikely that any one intervention by itself would solve all the micronutrient deficiencies in a given region, country or population group. Thus, the mix of scientists and project implementers invited to the workshop were designed to help ensure identification of the optimal combination of interventions most likely to be successful in a selected context. The range of participants also allowed for complementarities in treating micronutrient deficiencies to be identified.

An important feature of this report is the Committee's attempt to provide a framework for planning intervention programmes that integrate the three micronutrients and provide matrices for assigning priorities to interventions in different contexts. The Committee offers these matrices as guidelines only, recognising that there may be circumstances in which unique opportunities or barriers - in both human and material resources - exist that may lead countries to deviate from the priorities in the matrix. It is hoped that the matrices offer a useful starting point for planners and donor agencies.

A special note of thanks is due to the members of the Expert Committee and the Report Editors who so generously gave of their time and talents to this endeavour.

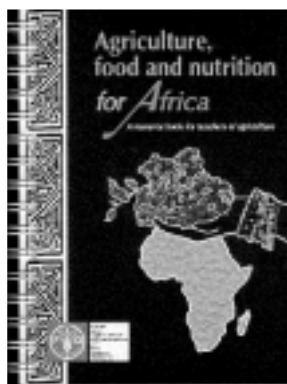
Published by the National Academy Press. 224pp (including 51pp for the *Summary and Key Elements*). US \$30. Special discount price of US \$24 if ordered through the web (<http://www.nap.edu/bookstore>). Discounts are also available for orders of multiple copies. Both volumes of the report are available from the National Academy of Sciences Press, 2101 Constitution Avenue, N.W., Lockbox 285, Washington, D.C. 20055, USA. Tel: 1 202 334 3313 Fax: 1 202 334 2451.

Frances Davidson can be contacted at USAID, Office of Health and Nutrition, RRB, 3rd Floor, 320 21st Street N.W., Washington DC 20523-3708, USA. Tel: 1 202 712 0982 Fax: 1 202 216 3174 Email: [fdavidson@usaid.gov](mailto:fdavidson@usaid.gov)

### **WHO Nutrition Publications - 1998 Catalogue**

The 1998 catalogue listing WHO nutrition publications and documents is now available from WHO Distribution and Sales, CH-1211 Geneva 27, Switzerland. Tel: 41 22 791 2476 Fax: 41 22 791 4857 Email: [publications@who.ch](mailto:publications@who.ch)

## **Agriculture, Food and Nutrition for Africa A Resource Book for Teachers of Agriculture (FAO, 1997)**



The need for a comprehensive source of training materials about African food systems has long been recognised. To address this need, FAO has published 'Agriculture, Food and Nutrition for Africa', which is designed as a source of teaching material for teachers of agriculture in Sub-Saharan Africa who wish to introduce a food and nutrition component into their

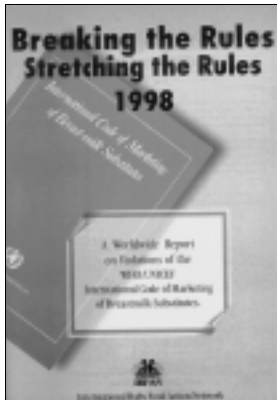
training programmes. Resource material, presented in boxes, tables and figures, has been selected from a range of mainly English-speaking African countries and ecological regions. The material is elaborated in nine chapters covering such topics as the food chain and links among agriculture, nutrition and food security, food supply systems in Africa, food and dietary diversification, food storage and processing, nutrients and diets, malnutrition and micronutrient deficiencies, and nutrition education.

With selection and adaptation of the material to meet specific needs, this resource book may be used for diploma and bachelor's degree-level courses in fields such as general agriculture, agricultural extension and agricultural education; for in-service training courses, workshops and seminars for agricultural extension agents, rural development workers, administrators of agriculture and of rural development programmes, and government policy-makers in food, nutrition and agriculture; and for in-service education of secondary school, college and university teachers of agriculture.

Published by FAO. 412pp. US \$40 (discounts available for developing countries and bulk orders). Copies are available from the Sales and Marketing Group, Food and Agriculture Organization, Viale delle Terme de Caracalla, 00100 Rome, Italy. Tel: 39 6 5705 5727 Fax: 39 6 5705 3152 Email: [Publications-sales@fao.org](mailto:Publications-sales@fao.org) Web: <http://www.fao.org/CATALOG/interact/order-e.html> For more information about this, and other FAO nutrition publications, please email [Nutrition@fao.org](mailto:Nutrition@fao.org)

## **Breaking the Rules, Stretching the Rules (1998) A worldwide report on violations of the WHO/UNICEF International Code of Marketing of Breastmilk Substitutes**

*Breaking the Rules, Stretching the Rules* 1998 reports on violations of the WHO/UNICEF International Code of Marketing of Breastmilk Substitutes<sup>1</sup> and relevant WHA Resolutions revealed during a 31-country survey carried out between January



and September 1997. Even though the marketing practices of the main producers of infant formula and other breastmilk substitutes claim to abide by the WHO/UNICEF International Code of Marketing of Breastmilk Substitutes, the report provides evidence that the producers continue to undermine breastfeeding and infant health.

The major conclusion of the report is that the industry continues to focus on the health care system, building up mailing lists of new mothers. Most companies have stopped advertising infant formula directly to the public. Nearly half of the 56-page illustrated report is devoted to examples of continued violations of the International Code in hospitals and clinics. It also gives numerous examples of companies breaking the rules of the Code and WHA resolutions, by donating samples and supplies, posters, calendars, promotional booklets and gifts to health professionals and to mothers.

The subtitle '*Stretching the Rules*' refers to the final section of the report, which describes how new products and practices have been introduced to a number of countries. One such product, marketed by at least 10 major companies, is a 'formula for mothers', which, says the report, allows companies to ride on the breastfeeding wave, sell a new product, and by promoting it widely, remind mothers, doctors and midwives of their company name.

IBFAN. 56pp. US\$6 to non-profit groups; US\$15 to profit groups, inclusive of airmail postage. Copies of the report are available from IBFAN, Penang: IBFAN, P.O.Box 19, 10700 Penang, Malaysia. Tel: 60 4 6569799 Fax: 60 4 6577291 Email: [ibfanpg@tm.net.my](mailto:ibfanpg@tm.net.my) The report is also available in French and Spanish.

Sources: IBFAN press release 'Baby Food Marketing: More Infants at Risk' 14 March 1998, the report '*Breaking the Rules, Stretching the Rules, 1998*'.

### ***The Code Handbook (1997)*** by Ellen J. Sokol

The Code Handbook provides a guide to implementing the International Code of Marketing of Breastmilk Substitutes<sup>1</sup>. Each article of the Code is carefully analysed and examples are given of how different countries have avoided particular weaknesses and loopholes. It provides a mix of examples of marketing

techniques and their effects, and clear suggestions for drafting protective provisions. The book also presents a complete collection of related documents under one cover: the full International Code, all subsequent relevant WHA resolutions, the Innocenti Declaration and full text of a dozen baby food marketing laws from all over the world. The comprehensive coverage of the history of the Code, the history of baby milk marketing and of the purpose and achievements of the Code, makes this book valuable reading, not only for lawyers but for everyone who wants to study the legal aspects of the breastfeeding campaign.

361pp. US\$130 for profit organisations; US\$50 for non-profit organisations (incl. of surface mail delivery). Published by the International Code Documentation Centre, International Baby Food Action Network, Penang, Malaysia. Available from IBFAN, Penang: IBFAN, P.O.Box 19, 10700 Penang, Malaysia. Tel: 60 4 6569799 Fax: 60 4 6577291 Email: [ibfanpg@tm.net.my](mailto:ibfanpg@tm.net.my)

Source: forward to the '*Code Handbook*' by Ellen J. Sokol, 1997.

### ***The International Code of Marketing of Breast-milk Substitutes (1998)*** ***A summary of action taken by WHO Member States and other interested parties, 1994-1998***

Since the adoption of the International Code of Marketing of Breast-milk Substitutes in 1981, and consistent with its Article 11.7, the Director-General of WHO has reported every two years on the status of the Code's implementation. Thus far 158 of WHO's 191 Member States - 83% in all - have reported to WHO on action taken in this connection. Primary emphasis has been on relevant action taken by Member States, but information has also been included on WHO's technical support to governments and action by NGOs, professional groups, and consumer organisations, which are called upon to collaborate with governments in monitoring the Code's application (Article 11.4).

This document provides a detailed summary of available information on action taken by 63 WHO Member States, technical support provided by WHO, and the activities of a number of NGOs, especially affiliates of the International Baby Food Action Network (IBFAN). It complements information provided in recent reports by the Director-General on infant and young child nutrition presented to the WHO Executive Board at its sessions in January 1996 and January 1998, and the Forty-ninth and Fifty-first World Health Assemblies in May 1996 and May 1998, respectively.

<sup>1</sup> The WHO/UNICEF International Code of Marketing of Breastmilk Substitutes was adopted in May 1981 by the World Health Assembly. It presents a code, developed jointly by WHO and UNICEF, for the marketing of breastmilk substitutes. The code applies to the marketing of breastmilk substitutes, including infant formula, and other milk products, foods, and beverages, including bottle-fed complementary foods, when marketed or otherwise represented to be suitable for use as a partial or total replacement of breastmilk. The code deals in successive articles with information and education needs concerning the feeding of infants, advertising or other forms of promotion to the general public, and standards for product labelling and quality. 35pp. CHF3 (US \$2.70); CHF2.10 in developing countries. Available from WHO, Distribution and Sales, CH-1211 Geneva 27, Switzerland. Tel: 41 22 791 2476 Fax: 41 22 791 4857 Email: [publications@who.ch](mailto:publications@who.ch) Web: <http://www.who.ch/pll/dsa/index.html> The Code is also available in full text on the IBFAN website at <http://www.gn.apc.org/ibfan/fullcode.html> (Source: WHO publications website <http://www.who.ch/pll/dsa/index.html>)

The report concludes that since 1981, Member States have gained considerable practical experience, and have provided a wealth of information on the implementation and monitoring of the Code. Action taken during the period 1994-8 provides convincing evidence that many governments are taking seriously their commitment to safeguarding the health and nutritional status of infants and young children.

WHO/NUT/98.11 31pp. Available in English and French from: Programme of Nutrition, WHO, 20 Avenue Appia, CH-1211 Geneva 27, Switzerland. Tel: 41 22 791 3325 Fax: 41 22 791 4156 Email: akrej@who.ch

**Community Nutritional Problems  
among Latino Children  
in Hartford, Connecticut (1997)  
by Rafael Perez-Escamilla,  
David A. Himmelgreen and Ann Ferris**



Hartford, Connecticut, is an impoverished American city where around 45% of children live in poverty and residents are continually confronted with an array of health and social problems, including poor nutrition. This report presents the results of a needs assessment of the food and nutrition situation of the Latino community living in inner city Hartford, and identifies a

great need for the development of culturally appropriate nutrition education interventions to improve the nutritional habits of Latino families. Results show that special attention needs to be paid to:

- ◇ low levels of breastfeeding (over half the women did not breastfeed their children);
- ◇ poor dietary quality, in particular the very low intake of fresh fruits and vegetables and the frequent intake of high fat foods;
- ◇ physical inactivity;
- ◇ high obesity rate (one in five children were obese);
- ◇ excess stunting (11% of children had stunted growth);
- ◇ iron deficiency anaemia (almost one quarter of children had anaemia);
- ◇ lead poisoning (one in five children had been diagnosed with lead poisoning at some point).

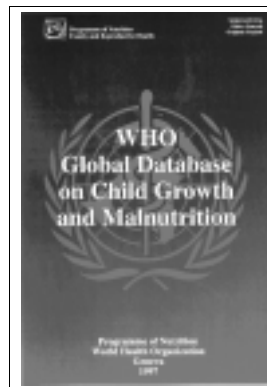
In light of these findings, the report makes a number of recommendations including the continuation of food assistance programmes, monitoring the impact of welfare reform on household food security, development of culturally sensitive campaigns that promote breastfeeding, and promotion of healthier, more nutritious diets and higher levels of physical activity.

The report has ten chapters covering the following areas: project design, description of the environment and project participants,

food assistance and purchase, food insecurity and hunger, infant feeding, dietary intake patterns, child anthropometry, child and child caretaker health, biochemical assessment and conclusions and recommendations. A summary is given at the end of each chapter, and tables, graphs and photographs are used frequently, making the report interesting and easy to read.

Connecticut Family Nutrition Program Technical Report #1, Storrs and Hartford, CT.52pp. Readers from industrialized countries can request copies of this report by mailing a US\$10 cheque/ money order issued to 'UConn' to Rafael Perez-Escamilla, Assistant Professor and Extension Nutrition Specialist, Department of Nutritional Sciences University of Connecticut, 3624 Horsebarn Rd Ext, Storrs, CT 06269-4017. Tel: 1 806 486 5073 Fax: 1 860 486 3674 Email rperez@canr1.cag.uconn.edu There is no charge for readers from developing countries.

**WHO Global Database on  
Child Growth and Malnutrition (1997)  
compiled by Mercedes de Onis and Monika Blössner**



This book presents the vast amount of data contained in the WHO Global Database on Child Growth and Malnutrition. The data, which indicate the growth and nutritional status of children under five, have been collected by WHO since 1986 as part of its efforts to monitor global progress in combating childhood malnutrition and to identify those groups in need of priority interventions.

This detailed account of data on child growth and malnutrition – as measured by underweight, stunting, wasting and overweight – is divided into two parts. Part one explains the importance of global nutritional surveillance and describes the origins and development of the database. Against this background, subsequent chapters summarise global, regional, and national situations and trends for key indicators of child growth and nutritional status. Numerous tables and selected maps are used to indicate the country-specific prevalence and geographical distribution of underweight, stunting, wasting, and overweight for boys, girls and the two sexes combined in developing and developed countries. Countries are classified according to very high, high, medium and low prevalence for each indicator and to global and regional trends are estimated over time. While noting important achievements in overcoming malnutrition among under-fives, the analysis concludes that global progress is entirely inadequate to reach the goal, set for the year 2000, of a 50% reduction in 1990 prevalence levels of moderate and severe malnutrition. Part one concludes with chapters describing the methods used in data collection and their standardised presentation, and offering guidance in the interpretation of the statistical tables.

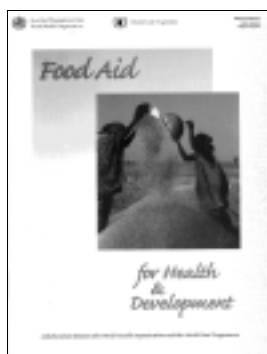
Part two contains over 600 pages of data tables and references. Data on the nutritional status of under-fives in 173 countries are presented, disaggregated by rural and urban areas, by regions, and by sex and age group. Survey data indicate the percentage of children wasted, stunted, and under- and overweight. Each country data table is followed by relevant survey references and additional information useful in interpreting the data.

Published by WHO (WHO/NUT/97.4) 710pp. CHF 50 (US \$45) CHF 35 in developing countries. To order this book, please contact Distribution and Sales, WHO, 1211 Geneva 27, Switzerland. Tel: 41 22 791 24 76 Fax: 41 22 791 48 57 Email: [publications@who.ch](mailto:publications@who.ch). A catalogue of WHO nutrition publications (including an order form) is also available on request. Source: WHO.

The Global Database on Child Growth currently reflects over 1700 nutritional studies and covers 84% of the world's total population of under-fives and 95% of this age group living in the developing world. It is hoped that the continual effort to update this database will stimulate the gathering and sharing of new information, particularly in those countries and regions thus far scarcely investigated. WHO welcomes new contributions to the Database.

Details of how to contribute can be found on the web at <http://www.who.ch/whosis/cgrowth/cgrowth.htm>, or can be obtained from Dr Mercedes de Onis or Ms Monika Blössner, Programme of Nutrition, WHO, 20 Avenue Appia, CH-1211 Geneva 27, Switzerland. Tel: 41 22 791 33 20 Fax: 41 22 791 07 46 Email: [deonism@who.ch](mailto:deonism@who.ch) or [bloessnerm@who.ch](mailto:bloessnerm@who.ch)

### **WHO / WFP Collaboration: Food Aid for Health and Development (1997)**



Conceived initially as a tool for informing governments, nutrition and health professionals, and others in the field of international nutrition about a long-standing, yet little-recognised collaboration between WHO and WFP, *Food Aid for Health and Development* does much more than address the issue of international collaboration.

In moving and graphic terms, this new document addresses in the first section, the issues of malnutrition, health and poverty, and clearly illustrates the links among them. It points out the significant place of women and girls in the cycle of malnutrition and validates the efforts world wide to improve their lot.

The second section introduces the role of food aid provided by WFP and describes its many facets, including not only emergency assistance, but also food aid to primary school children, to food insecure households through food for work programmes, and to pregnant women, breastfeeding mothers and preschool children through health centres. The details of some of these programmes, their links to health and health care, and the role played by WHO in structuring these programmes, are dealt with

in section 3, which focuses on how food assistance, especially when coupled with other programmes, directly benefits the overall health and well-being of targeted populations.

The concluding section points to the future: 'WHO and WFP share a vision for the future that is people-centred and gender conscious, seeking to shape a world where people may be the producers of their own welfare as they contribute to that of others. A vision that has no room for complacency in the face of the misery of people who suffer in a world that has the means and the ability to help them. There is no easy way to improve the quality of life for the poorest. Whether it be individuals who require food, compassion and care, or societies that require human rights or clean water, our future will depend on how we mobilise our technology, our knowledge and our social intelligence to meet the dual challenge of ensuring nutrition and health for the world's vulnerable.' *Food Aid for Health and Development* provides a means of communicating details of this message in a way that is easily comprehended by any reader.

WHO/FSF/FAP/97.2 40pp. Copies are available from the office of Dr M. Mokbel Genequand, Food Aid Programmes, Programme of Food Safety and Food Aid, World Health Organization, 20 Avenue Appia, CH-1211 Geneva 27. Tel: 41 22 791 2758/9 Fax: 41 22 791 4807 Email: [mokbelm@who.ch](mailto:mokbelm@who.ch) or [horsfalls@who.ch](mailto:horsfalls@who.ch)

### **Dietary Guidelines in Asia-Pacific (1997) edited by Cecilia A. Florencio**

Dietary guidelines aim to ensure that sufficient nutrients are present in the diet to prevent the occurrence of undernutrition and nutrient deficiencies, and to reduce the risk of developing diet-related chronic degenerative diseases resulting from dietary excess. '*Dietary Guidelines in Asia-Pacific*' reviews the current status and development of guidelines in the Asia-Pacific region.

Included in this volume are contributions from 14 Asia-Pacific countries: Australia, Bangladesh, Brunei, China, India, Indonesia, Japan, Korea, Malaysia, New Zealand, the Philippines, Singapore, Thailand and Viet Nam. Also included are nutrient standards (Recommended Dietary Allowances, RDA) of the countries.

The introduction to the book, written by the editor, Cecilia Florencio, compares the dietary guidelines that have already been issued for 12 of these countries (Malaysia has finalised its guidelines, which are expected to be formalised soon; and the contribution from India focuses on the concept of balanced diets as translations of RDA). The introductory chapter classifies the dietary guidelines from these 12 countries into two groups: group A, where the major nutrition problems result from dietary inadequacies and group B, where the major nutritional problems result from dietary excess. In comparing the guidelines of countries in these two groups, the author highlights a number of common messages. In particular, there is unanimity in the inclusion of two guidelines: eating a wide variety of foods, and

balancing food intake and physical activity. The introduction also tabulates in detail the dietary guidelines for the different countries. In reviewing the dietary guidelines of all 12 countries, the author draws attention to four central food-based messages:

- ◇ eat enough food to meet body needs and to maintain or improve body weight;
- ◇ choose a diet made up of a variety of foods;
- ◇ select foods that are safe to eat;
- ◇ enjoy your food.

The subsequent 14 chapters form the contributions from individual countries, each focusing on their individual nutritional situations, and the development, current status and details of their country-specific dietary guidelines. Reference lists are provided at the end of each chapter, and a list of all contributors is given at the end of the book.

Published by ASEAN-New Zealand IILP, Project 5, Philippines. 115 pp. Copies of this book are available from The Nutrition Foundation of the Philippines, 107 E. Rodriguez Sr. Boulevard, Quezon City, Philippines 1102. Fax: 632 711-39-80. Further information can be obtained from the Editor, Cecilia Florencio, College of Home Economics, Rm F Ground Floor, CHE Gusalí 2, Ma. Regidor Street, University of the Philippines Diliman, Quezon City 1101, Philippines.

**Advancing the Social Agenda:  
Two Years after Copenhagen (1998)  
Report of the UNRISD International Conference  
and Public Meeting, July 1997**

SCN News No.15 (p52) reported on the UNRISD-sponsored one-and-a-half day public meeting in July 1997, in follow-up to the World Summit for Social Development held in Copenhagen in 1995. The report of the meeting is now available. Contents include:

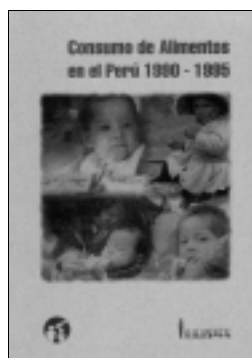
- ◇ Post-Copenhagen: Personal Reflections by Ambassador Juan Somavía.
- ◇ Implementing the Copenhagen Agenda: Achievements and Disappointments.
- ◇ Mobilising Resources for Social Development.
- ◇ Learning from Successes in Social Development.
- ◇ Ethnic Diversity and Social Harmony.
- ◇ Social Cohesion: Healing the Wounds of War.
- ◇ Stemming the Fragmentation of Cities: Community-Based Approaches to Urban Social Problems.
- ◇ Globalisation, Solidarity and Public Policy by Nitin Desai.

US \$8 for readers in the North and US \$4 for readers in the South. Available from UNRISD, Palais des Nations, 1211 Geneva 10, Switzerland. Tel: 41 22 7988400 or 41 22 7985850 Fax: 41 22 7400791 Email: info@unrisd.org. Further information about all UNRISD publications, visit their recently re-designed website on <http://www.unrisd.org/>

**Consumo de Alimentos en el Perú  
1990-1995 (1997)**

**(Food Consumption in Peru)**

**by Cecilia Montes, Luis Segura, Marianella Miranda,  
Miguel Barrientos and Guillermo Lescano**



Established in 1986, PRISMA is a Peruvian NGO involved in developing and implementing programmes in nutrition, health, family planning, agriculture and social development. Through its activities, PRISMA aims to provide the most deprived populations of Peru with better access to the benefits of modern technology.

The 'Consumo de Alimentos en el Perú 1990-1995' presents the results of a food consumption survey involving more than 1900 families with children aged less than 3 years old, and representing 20 socioeconomic dominions within 7 political regions of the country. The regional patterns of nutrient and energy consumption, and food consumption patterns within the family are described. The book is aimed at decision-makers, technicians and professionals involved in health, nutrition and education programmes.

The book is divided into five chapters, each fully illustrated with graphs, tables and photographs. The first chapter describes the study design and methodology; the second and third present results of food consumption in children and families, respectively. The fourth chapter focuses on food consumption patterns of mothers in one region – the Ucayali region, and the final chapter discusses advances in the fortification of foods. A substantial section of appendices is included tabulating the results of the survey.

Published in Spanish. 153pp. The publication is free of charge, but shipment costs range from US\$27 to US\$41. To order, and for information about other PRISMA publications, please contact J. Luis Segura-Garcia, Dirección de Investigación, Asociación Benéfica Prisma, Carlos Gonzales No. 251 Urb. Maranga, Lima 32, Peru. Tel: 464 0490 – 452 9603 Fax: 452 9758. Apartado Postal 170070 Email: lsegura@prisma.org.pe Further information about PRISMA is available on the PRISMA website at <http://www.prisma.org.pe/>

**Complementary Feeding of Infants and  
Young Children (1998)**

The transition from exclusive breastfeeding to consumption of the usual family diet is a crucial period for infants and young children. Infectious disease rates, particularly for diarrhoea, are highest during this period.

As part of a joint initiative on complementary feeding, WHO and UNICEF convened an expert consultation at ORSTOM in Mont-



pellier, France, from 28-30 November 1995. This report summarises the discussions, conclusions and recommendations of the consultation.

The consultation reviewed a state-of-the-art paper on complementary feeding prepared for the consultation by the Program in International Nutrition of the University of California at Davis (USA). On this basis, the group agreed that new, more precise recommendations regarding the introduction and duration for feeding complementary foods are needed.

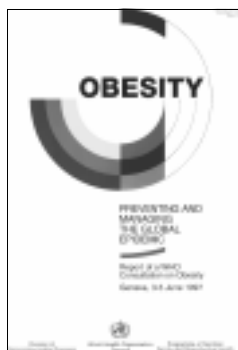
A number of issues were discussed at the consultation including:

- ◇ the energy needed from complementary foods, the basis for estimating needs, and major factors affecting energy intake from complementary foods, in particular energy density and feeding frequency;
- ◇ protein and micronutrient requirements from complementary foods, and how complementary foods can provide adequate nutrient density;
- ◇ issues of food processing and safety;
- ◇ programmatic interventions to improve complementary feeding.

The main conclusion and recommendation arising from these discussions was that further research and discussions are needed. For example, it was recommended that further research be carried out on the bioavailability of micronutrients from complementary foods, and the effects of food processing procedures on bioavailability of nutrients.

This report (WHO/NUT/96.9) is available from the Programme of Nutrition, Family and Reproductive Health, WHO, Geneva. The state-of-the-art review, 'Complementary Feeding of Young Children in Developing Countries: a review of current scientific knowledge' will be published in August (WHO/NUT/98.1) For further information, please contact Randa Saadeh, WHO/NUT, 20 Avenue Appia, Ch-1211 Geneva 27, Switzerland. Tel: 41 22 791 3315 Fax: 41 22 791 4156 Email: saadehr@who.ch

**Obesity: preventing and managing  
the global epidemic (1998)  
Report of a WHO Consultation on Obesity  
Geneva 2-5 June 1997**



SCN News No.14 (p47) reported on the draft version and recommendations of this report shortly after the WHO Consultation on Obesity in 1997. The interim version of the report is now available for limited distribution only, but will be widely available (in final version) at the end of 1998 as part of the WHO Technical Report Series (TRS). French and Spanish versions will follow in 1999.

The document reviews global prevalence and trends of obesity among children and adults, factors contributing to the problem of

obesity, and associated consequences of obesity, such as chronic noncommunicable diseases. It also examines the health and economic consequences of obesity and their impact on development, and makes recommendations for developing comprehensive public health strategies for prevention and management of obesity.

WHO/NUT/NCD/98.1 296pp. For further information please contact Chizuru Nishida, Nutrition Programme, WHO, 20 Avenue Appia, CH-1211, Geneva 27, Switzerland. Tel: 41 22 791 3317 Fax: 41 22 791 0746 Email: nishidac@who.ch

**Guidelines for the Use of Iron Supplements  
to Prevent and Treat  
Iron Deficiency Anemia (1998)  
by Rebecca Stoltzfus and Michele Dreyfuss**

Published by the International Nutritional Anemia Consultative Group (INACG), the purpose of these guidelines is to provide practical, scientifically sound guidance to those responsible for planning and implementing anaemia control programmes.

While the main focus of these guidelines is on iron supplementation programmes and parasite control for pregnant women and children 6-24 months of age, they also acknowledge the beneficial role that food fortification and dietary diversification can have in controlling anaemia. Guidelines for the treatment or referral of people with severe anaemia in primary care settings, and a summary of key steps necessary to develop an iron supplementation programme are also given.

A selected bibliography lists books and documents that provide more in-depth information on topics related to iron deficiency anaemia. Appendices list contact details for international agencies that provide support or technical assistance for the control of iron deficiency anaemia. Some sources for supplements and other supplies needed to establish programmes are also listed.

These guidelines are available free of charge from the INACG website at <http://ilsi.org/inacg.html> Or contact the INACG Secretariat at ILSI Human Nutrition Institute, 1126 Sixteenth Street, NW, Washington, DC 20036-4810, USA. Tel: 1 202 659 9024 Fax: 1 202 659 3617 Email: OMNI@dc.ilsi.org

**Food Quality and Safety Systems: a training  
manual on food hygiene and the hazard  
analysis and critical control point  
(HACCP) system (FAO, 1998)**

FAO is the one of the specialised UN agencies dealing with aspects of food quality and safety throughout each of the stages of food production, storage, transportation, processing, and marketing. As part of FAO's ongoing work to build the capacity of food control personnel, a training manual was recently published which is intended for trainers in food quality and safety assurance at the government and industry levels.

This book is a direct result of an Expert Consultation on Hazard Analysis and Critical Control Point (HACCP) Principles in Food Control, which was held in 1994. Shortly after this meeting, an *Ad Hoc* Working Group developed a core curriculum as a 'train-the-trainer' programme. The core curriculum recognises the importance of basic quality and safety controls which are included in the *Codex General Principles of Food Hygiene and Good Manufacturing Practices* as embodied in the *Codex Codes of Practice* as a basis for the effective implementation of the HACCP system. The training programme has been tested in Thailand, Brazil, Vietnam and Slovakia.

The manual is structured to ensure that essential information is provided in a standardised, logical and systematic manner while adhering to effective teaching and learning strategies. It is composed of three sections: section one pertains to *Principles and Methods of Training*, section two to *Recommended International Code of Practice - General Principles of Food Hygiene*, and section three to the *Hazard Analysis and Critical Control Point (HACCP) System*. Each section is divided into specific training modules. This format allows the instructor to select sections and modules according to the levels of knowledge, experience and specific responsibilities of the students.

FAO has prepared this manual in an effort to harmonise the approach to training in the HACCP system based on the text and guidelines of the Codex Alimentarius Commission. It is clear that HACCP systems can only be effective when they are a part of a broader food quality and safety programme based on the *General Principles of Food Hygiene and Good Manufacturing Practices*. Consequently, these aspects of quality and safety controls are incorporated in the training materials.

Published by FAO. 232pp. US\$30. Copies are available from the Sales and Marketing Group, FAO, Viale delle Terme de Caracalla, 00100 Rome, Italy. Tel: 39 6 5705 5727 Fax: 39 6 5705 3152 Email: publications-sales@fao.org For more information about this, and other FAO nutrition publications, please email nutrition@fao.org

*Editor's note: WHO, jointly with the Industry Council for Development (ICD) has prepared a training manual on HACCP: Principals and Practice. A description of this manual will be provided in the next issue of SCN News (No.17, December 1998).*

### **Poverty Alleviation and Nutrition Program Manuals (1997) Save the Children US-Viet Nam Field Office**

Since the implementation of the Poverty Alleviation and Nutrition Programme (PANP), over 90% of moderate and severely malnourished children participating in the PANP have have responded to nutrition rehabilitation services.

The PANP has four components:

- ◇ a growth monitoring promotion programme, which encourages the weighing of children under 3 years old to determine their nutritional status;

- ◇ a nutrition education programme, which teaches basic nutrition messages and preparation of a nutritious, calorie-dense meal;
- ◇ a nutrition revolving loan programme, which provides supplementary food through in-kind loans; and
- ◇ an endowment and income generating programme, which gives grants to communities so they can generate income through projects.

Interest from other countries to replicate this successful and sustainable programme outside Viet Nam, has resulted in the production of these 10 training manuals, which describe the training of trainers for the PANP.

Available in English (US \$50) and Vietnamese (300,000 VND). For orders and further information regarding these manuals, please contact Nguyen Thi Tuyet Mai. Tel: 84 48 46 1801 Fax: 84 48 46 1807 Email: scusvnfo@netnam.org.vn

### ***New Journal in Public Health Nutrition***

This new journal, launched in March 1998 by the Nutrition Society and the Centre for Agriculture and Biosciences (CAB) International on behalf of the Nutrition Society, offers a population-based approach to the practical application of research findings in the field of public health nutrition, and includes high quality reviews of key topics. The international editorial team include Barrie Margetts (editor-in-chief), from the Institute of Human Nutrition at Southampton General Hospital, UK; Lenore Kohlmeier, from the department of nutrition and epidemiology at the University of North Carolina, USA; Frans Kok, from the Wageningen Agricultural University, the Netherlands; and Michael Nelson, from the University of London, UK. A further 13 associate editors are drawn from institutes and universities worldwide. Topics covered in this new journal include:

- ◇ nutritional epidemiology - studies relating nutrition to health or disease risk;
- ◇ nutrition related health promotion;
- ◇ evaluation of effectiveness of intervention studies aimed at improving health;
- ◇ role of nutrition in high risk and vulnerable groups;
- ◇ development of research methods, validation of measures, calibration;
- ◇ population-based research related to primary prevention of illness.

Public Health Nutrition will be issued four times per year. The inaugural issue was published in March 1998. For more information, or to submit papers or suggest topics of interest for future supplements and special issues, please contact the Editor-in-Chief, Dr Barrie Margetts, Institute of Human Nutrition, Southampton General Hospital, Southampton, UK. Tel: 44 1703 796 530 Fax: 44 1703 796 529 Email: bmm@soton.ac.uk Information about subscription is available from CAB International, Wallingford, Oxon, OX10 8DE, UK. Tel: 44 1491 832111 Fax: 44 1491 826090 Email: marketing@cabi.org or visit the website at <http://cabi.org/catalog/journals/>

*REFUGEE NUTRITION INFORMATION SYSTEM*  
Report on the nutrition situation of refugee and displaced populations.  
Published every three months with an interim electronic mail update.

*SCN NEWS - A periodic review of developments in international nutrition compiled from information available to the ACC/SCN, published twice yearly. Contains features, news and views, programme news, and reviews of publications.*

**No.16, July 1998** - features: Nutrition of the School-aged Child; A summary of Working Group discussions, Oslo 1998; Abstracts from the Symposium on Challenges for Challenges for the 21st Century: a Gender Perspective on Nutrition through the Life Cycle

**No.15, December 1997** - features: Effective Programmes in Africa for Improving Nutrition; the 10th Annual Martin J. Forman Lecture: How are we doing in International Nutrition?

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**Nos.1 and 2, March 1988** - features: Vitamin A Deficiency, Urbanization, World Nutrition Situation, Economic adjustment.

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*How Nutrition Improves*, by S. Gillespie, J. Mason, R. Martorell. July 1996. (SOA No.15)

*Controlling Vitamin A Deficiency*, by S. Gillespie and J. Mason, January 1994. (SOA No.14)

*Effectiveness of Vitamin A Supplementation in the Control of Young Child Morbidity and Mortality in Developing Countries*, by G. Beaton, R. Martorell, K. Aronson, B. Edmonston, G. McCabe, A. Ross, B. Harvey. December 1993. (SOA No.13)

*Nutritional Issues in Food Aid*, August 1993. (SOA No.12)

*Nutrition and Population Links -- Breastfeeding, Family Planning and Child Health*, including papers by S. Huffman, R. Martorell and K. Merchant, R. Short, P. Ramachandran. (SOA No.11)

*Nutrition-Relevant Actions - Some Experiences from the Eighties and Lessons for the Nineties* by S. Gillespie and J. Mason, October 1991. (SOA No.10)

*Controlling Iron Deficiency*, edited by S. Gillespie, J. Kevany, and J. Mason, February 1991. (SOA No.9)

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*Women and Nutrition*, including papers by J. McGuire and B. Popkin, M. Chatterjee and J. Lambert, J. Quanine, P. Kisanga, S. Bajaj, H. Ghassemi, October 1990. (SOA No.6)

*Malnutrition and Infection - A Review*, by A. Tomkins and F. Watson, October 1989, reprinted June 1993 (SOA No.5)

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**How Nutrition Improves** Report based on ACC/SCN Workshop held on 25-27 September 1993 at the  
 15th IUNS International Congress on Nutrition, Adelaide, Australia by S. Gillespie, J. Mason, R.  
 Martorell. (SOA No. 15)

**Controlling Vitamin A Deficiency** Report based on ACC/SCN Consultative Group Meeting held in  
 Ottawa July 1993. Prepared by Gillespie and Mason, January 1994. (SOA No.14)

**Effectiveness of Vitamin A Supplementation in the Control of Young Child Morbidity and  
 Mortality in Developing Countries**, by G.H. Beaton, R. Martorell, K.J. Aronson, B. Edmonston, G.  
 McCabe, A.C. Ross, B. Harvey. December 1993. (SOA No.13)

**Nutritional Issues in Food Aid** Report of symposium on "Nutritional Issues in Food Aid" held at the  
 19th Session of the ACC/SCN in Rome, February 1992. Includes papers on the support of public works  
 by food aid as a nutrition intervention, which age groups should be targeted for supplementary feeding,  
 effects of supplementary feeding in the growth of children with infection, experiences of feeding  
 programmes, and protecting refugees' nutrition with food aid. August 1993. (SOA No.12)

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 the ACC/SCN 18th Session Symposium, held at UNFPA, New York, February 1991. Papers include  
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 Edmonston, and Beverly Winikoff. (SOA No. 11)

**Nutrition-Relevant Actions** - Some Experiences from the Eighties and Lessons for the Nineties Book developed from the original background paper for the ACC/SCN ad hoc group meeting held in London in November 1990. Proposes a framework for the analysis of policies and programmes affecting nutrition, before reviewing experiences during the 1980s in several countries, and moving on to consider options for improving nutrition in the 1990s. Complements and expands on Supplement to SCN News No.7. Prepared by Stuart Gillespie and John Mason, October 1991. (SOA No. 10)

**Controlling Iron Deficiency** Report of ACC/SCN workshop held in Trinity College, Dublin, June 1990. Focuses on iron supplementation and practical means of improving large-scale programmes. Also introduces fortification and diet change. Gives information from six large-scale programmes. Prepared and edited by Gillespie, John Kevany, and John Mason, February 1991. (SOA No. 9)

**Managing Successful Nutrition Programmes** Report of ACC/SCN workshop held at IUNS meeting in Korea, August 1989. Includes reports on 16 large-scale nutrition programmes, and summary of discussions on targeting, staff issues, community participation, management information systems, sustainability and replicability. Edited by Joan Jennings, Stuart Gillespie, John Mason, Mahshid Lotfi and Tom Scialfa, October 1990. (SOA No. 8)

**Appropriate Uses of Child Anthropometry** Report based on workshop held by ACC/SCN, June 1989. Basic concepts, uses for screening, growth monitoring, population assessment, and surveillance. Prepared and edited by G. Beaton, A. Kelly, J. Kevany, R. Martorell, and J. Mason, December 1990. (SOA No. 7)

**Women and Nutrition** Background, and papers presented at SCN Symposium, held at UNICEF, New York, February 1989. Papers include "Beating the Zero Sum Game" by McGuire and Popkin, "Reflections from India and Pakistan" by Chatterjee and Lambert, "Grameen Bank Experience" by Quanine, "Improving the Nutrition of Women in Tanzania" by Kisanga, "Nutrition Security System at Household Level" by Bajaj, "Issues in Need of a Global Focus" by Ghassemi, October 1990. (SOA No. 6)

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**No. 12, early 1995** -- features: The Role of Care in Nutrition -- A Neglected Essential Ingredient; Summary of findings from the recently published ACC/SCN "Update on the Nutrition Situation, 1994"; Specific Deficiencies Versus Growth Failure: Type I and Type II Nutrients; and Enrichment of Food Staples Through Plant Breeding. A New Strategy for Fighting Micronutrient Malnutrition.

**No.11**, mid 1994 -- features focussing on Maternal and Child Nutrition: Adolescent Growth; Prepregnancy Nutritional Status and its Impact on Birthweight; Maternal Nutrition During Pregnancy as it Affects Infant Growth, Development and Health; The Consequences of Iron Deficiency and Anaemia in Pregnancy on Maternal Health, the Foetus and the Infant; Impact of Maternal Infection on Foetal Growth and Nutrition; Maternal Micronutrient Malnutrition: Effects on Breast Milk and Infant Nutrition, and Priorities for Intervention; Vitamin A Deficiency in the Mother-Infant Dyad; Maternal Protein-Energy Malnutrition and Breastfeeding; and Maternal Nutritional Depletion.

**No.10**, late 1993 -- features: Nutrition and Food Aid, Nutrition and Human Rights, The Nutrition Transition.

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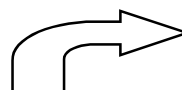
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