# SCN News, Number 15 – Effective Programmes in Africa for Improving Nutrition

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UNITED NATIONS ADMINISTRATIVE COMMITTEE ON COORDINATION

**SUB–COMMITTEE ON NUTRITION**

(ACC/SCN)

The ACC/SCN is the focal point for harmonizing the policies and activities in nutrition of the United Nations system. 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 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 UN members of the SCN are FAO, IAEA, IFAD, ILO, UN, UNDP, UNEP, UNESCO, UNFPA, UNHCR, UNICEF, UNRISD, UNU, WFP, WHO and the World Bank. From the outset, representatives of bilateral donor agencies have participated actively in SCN activities. The SCN is assisted by the Advisory Group on Nutrition (AGN), with six to eight experienced individuals drawn from relevant disciplines and with wide geographical representation. 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 symposia on subjects of current importance for policy. The SCN brings certain such matters to the attention of the ACC. The SCN sponsors working groups on inter–sectoral and sector–specific topics.

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, and flows of external resources to address nutrition problems are assessed. State–of–the–Art papers are produced to summarize current knowledge on selected topics. SCN News is normally published twice a 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 was edited by Cathy Needham**

**The refugee issues section was compiled by Jane Wallace**

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

**Illustrations by Lindsay Barrett**

SCN NEWS is issued twice–yearly by the Secretariat of the UN ACC Sub–Committee on Nutrition.

Your contributions to future issues would be most welcome.

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

If you wish to receive additional copies of SCN NEWS or would like to suggest other names to be added to our distribution list, please write to us:

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## Message from the chairman

A vision without a task is but a dream

A task without a vision is drudgery

A vision with a task is the hope of the world

The above quotation is now printed in large letters at the end of the meeting room in the Human Development Report Office in New York – an inspiration for us as we work on the Human Development Report for 1998.

Equally, it should stand to encourage all of us in the SCN as we look ahead to the challenges of the 21st Century. Much of Sonya's time, with Jane and her other indefatigable supporters in the SCN office in Geneva, is now given to supporting the Commission which is preparing the report Nutrition 21: a Vision for the Millenium.

Many of you attended the briefing led by Phil James in Montreal in July. Since then the Commission has held a full meeting in London in September. This mapped out the approach and identified topics on which background papers and notes were needed. The Commission's next meeting is planned for January 9th after which a first draft report will be prepared, ready for review at the full SCN meeting in Oslo, March 30 to April 2,1998.

This task is one of the most important the SCN has undertaken. Although the SCN meeting in Oslo will provide a full opportunity for detailed discussion, I hope all SCN members and supporters will feel free to submit notes or ideas before that date. If Vision 21 for nutrition is to succeed, it needs to draw on the mass of insights, experiences, understandings and commitments of all us committed to nutrition.

An important element of process was discussed by the Commission's first meeting in London. Their proposal is that the meeting in Oslo should be followed by two or three regional meetings – the first in Africa in 1998, the second in Asia in 1998 or 1999, possibly another in Latin America. The purpose of these regional meetings would be to elaborate the vision for nutrition in terms of the more specific challenges and the opportunities of each region.

They would also provide an opportunity to review the perspectives of the vision in a regional context. I hope that some of the SCN's efforts in the next two years can be to participate in and support these regional efforts.

All of this will provide, I hope, a new enthusiasm and excitement for the work of the SCN. As the Call to Arms Statement (see *SCN News No. 14*) made clear, we face big and mounting challenges. At the same time, we can point to real and substantive successes, with examples from all regions of the world. Now is therefore the time to ask how we can carry forward these elements of progress into a broader front of advance.

I should mention that in New York, we are conscious that the advance needs to be wider still. Our Secretary–General has called for all parts of the UN system to be engaged in a major effort to reduce and eventually eradicate the worst aspects of poverty worldwide. Malnutrition is one of the sharpest signs of the

pain and deprivation of poverty. Nutrition and the work of the SCN is recognized to be a major part of this global effort.

Let me take this chance to say thanks and farewell to Jak Jervell, completing his sixth year on the AGN, SCN's Advisory Group on Nutrition. The AGN has provided real leadership and wisdom over this period and I thank Jak for his own contributions. Jak brought to the AGN not only scientific excellence but enormous enthusiasm for nutrition challenges and, specifically, the critical importance of good nutrition in prevention of chronic disease. We will not lose touch with him – but his role will be changing.

See you in Oslo, if not before.

## AGN Page

*This is the first 'AGN page' in SCN News. The purpose of this page is to introduce the AGN (Advisory Group on Nutrition) and its current members. The AGN page in future issues of SCN News wilt provide a summary and update of the AGN's activities and discussions.*

**What is the AGN?**

The AGN is a group of experienced individuals that provides scientific advice to the SCN. It is an independent technical body. AGN members are drawn from relevant disciplines with wide geographical representation. The group usually meets once per year to advance SCN proposals and initiatives, and to review the progress of the SCN.

**Who are the current AGN members?**

AGN members are appointed by the Chair in consultation with SCN members. Membership is extendable, with an initial appointment for two years.

**Ricardo Uauy** (AGN Chair) is the Director of the Institute of Nutrition and Food Technology (INTA), University of Chile, and is a pediatrician with a Ph.D. in Nutritional Biochemistry and Metabolism from MIT. He is an expert on protein and amino acids requirements and metabolism, but has a breadth of interest embracing food and nutrition policies, nutrition surveillance, and food science. His current research focuses on the influence of essential fatty acids (EFA) on brain development – especially EFA present in human milk.

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**Ruth Oniang'o** (AGN Vice Chair) is a Professor of Food Science and Nutrition at the Jomo Kenyatta University of Agriculture and Technology, Kenya. She holds an M.Sc. in Nutrition from Washington State University, USA, and a Ph.D. in Food Science and Nutrition from the University of Nairobi. She has nearly 20 years experience of university teaching. Her research interests include maternal and child nutrition and food security and policy. She is also interested in linking research and new technologies with rural communities in Africa.

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**Sadia Chowdhury** is Director of the Women's Health and Development Programme, BRAC (Bangladesh Rural Advancement Committee), one of the largest and most successful national NGOs in the world. Her main professional areas are family planning, public health, women's health and development. She is a surgeon by training and also has an MPH in International Health from Harvard, USA.

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**Lawrence Haddad** joined the AGN in July 1997. He has been the Director of the Food Consumption and Nutrition Division at IFPRI since 1994, joining the institute as a Research Fellow in 1990. He is responsible for multi–country research and outreach programmes covering urban food insecurity and malnutrition, the role of micro–credit in securing food security, the design of anti–poverty interventions and gender intrahousehold aspects of food security and nutrition (including care). He has a Ph.D. in Food Research from Stanford University, USA.

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**Jak Jervell** is a Professor of Medicine at the National Hospital, University of Oslo, Norway, and is the immediate past president of the International Diabetes Federation. He has a medical doctorate (from the University of Oslo), specializing in endocrinology. His primary clinical and research interests are prevention and improvement of health care for diabetes and other non–communicable diseases. Prof. Jervell will leave the AGN after six years of service in March 1998.

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**Eileen Kennedy** was very recently appointed Acting Deputy Under Secretary for research, education, and economics for the USDA. Prior to this, she served as the Executive Director of the USDA Center for Nutrition Policy and Promotion. She has an M.S. in Nutrition and a D.Sc. in Nutrition Policy and Planning from the Harvard School of Public Health, USA. She has worked as Technical Director for Food and Nutrition Monitoring at IFPRI where she had first hand experience in the design and implementation of programmes to enhance food security, and the nutritional effects of agricultural policies on human nutrition.

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**Lilian Tendayi Marovatsanga** is the Director of the Institute of Food and Nutrition and Family Sciences of the University of Zimbabwe. She obtained a Ph.D. from Reading University, UK, in 1986. She has been involved in training programmes on food and nutrition for many years in southern and eastern Africa, ranging from short courses to degree–level programmes.

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**Kraisid Tontisirin** is Director of the Institute of Nutrition at Mahidol University in Thailand, where he has expanded its applied research, education and training, and food and nutrition policy activities. He is a pediatrician with a Ph.D. in Nutrition from MIT and a professional interest in public health nutrition planning.

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## ACC/SCN Symposium Report: Effective Programmes in Africa for Improving Nutrition, including household food security

*Presented here is an overview of the Symposium 'Effective Programmes in Africa for Improving Nutrition, including Household Food Security' which was held at the SCN's 23rd Session in Accra, Ghana in February 1996. A summary of the main conclusions and cross–cutting themes arising from the Symposium was presented in SCN News No. 14; this article reports details of the fourteen presentations given at the Symposium.*

"Nutrition is central to the human challenge in Africa today. With the long struggle in many countries against poverty, and with declining incomes and declines in the public services, it is not surprising, though it is still tragic, that we have seen evidence of deteriorating nutrition in many countries. We know why nutrition is deteriorating. Extreme poverty, severe drought, conflict and military spending. Africa is a continent where 179 soldiers exist on average for every 100 teachers or health workers. We also know that the underlying problems of chronic malnutrition are due to marginal access to food, seasonality problems, inadequate diet quality, and the chronic lack of basic services, health, water and education. But there are successes, and one of the exciting features of this Symposium is that we will hear of practical experiences from people in different parts of Africa, commented on by people with a great deal of experience from other continents, in the hope that the lessons learned can be applied to future programmes to improve nutrition".

**Richard Jolly, Chairman, SCN. Remarks in the Opening Ceremony**

***INTERVENTIONS TO ADDRESS HOUSEHOLD FOOD SECURITY IN KENYA – Ruth Oniang'o***

**"Household food security... ensuring enough food of the quality and quantity for every member of the house–hold to maintain, a healthy and active life throughout. That is a tall order... even for Kenya. In the 1980s, many achievements were made in Kenya, but muck of this seems to have stalled – what lessons can we learn from this?"**

The Kenyan government, in collaboration with NGOs and other agencies, addresses nutritional issues ranging from the rehabilitation of severely malnourished children, to broad policies and actions that have an indirect impact on nutritional status. Examples of country programmes that address nutrition and household food security include the rehabilitation of severely malnourished children, feeding programmes, and nutrition education and training. Through improved nutrition and emergency medical care provision, rehabilitation programmes have been successful, but often fail to tackle the root causes of the problem. Feeding programmes vary from feeding the malnourished to maintaining good health of those who are vulnerable or at risk. Nutrition education and training is an area constrained by limited human and financial resources. The ratio of nutritionists to the population in Kenya is around 1 per 40 000, and although the MoH train nutritional field workers, the number of trainees produced per year is too small to make the desired impact on nutrition at the household level. Furthermore, the lack of re–training results in some nutritionalists using old information to address new problems. Despite all these constraints, Kenya has a cadre of field staff with direct links to grass roots problems. Given the necessary support and re–training, they could make a considerable impact on the current nutrition situation.

***What lessons have been learned?***

- Community participation is a must for sustainability.

- Many aspects of communities are still very traditional and programmes must work within this framework.

- It cannot be assumed that every women's group or welfare organization will turn into a business group.

- Donors want to see impact and measurable achievements quickly, but *time* is necessary to allow this to happen. Just going, listening, getting people to accept you – it all takes time.

- It is easier to work with a community after their immediate needs have been addressed.

- Although adult literacy classes are full of women, education is now even more crucial as more girls are dropping out of school, and families who must now pay for primary education often choose to take boys to school rather than girls.

- Indicators to monitor programme success must be discussed and agreed with the community.

- It is easy to mobilize a community around water because water is seen as a real need. Focus on water and an immediate benefit will be seen, then the other issues can be addressed.

- Collaboration between governments, academics, implementers, communities, donors and agencies is key to a successful programme.

- Capacity building must focus on what the community already has and invest in training people.

***Recommendations and suggested strategies to improve nutritional status and household food security***

*Policies*. To effectively address food security at the household level, a review of existing policies and formulation of new policies are required.

*Land*. There is a need to review the land tenure system to ensure that land should not be subdivided into uneconomical sizes, and that those who farm the land own the land.

*Holistic approaches to the food system.* At the household level, on–farm processing and storage should be a major area of focus for purposes of minimizing post–harvest losses and enhancing food accessibility. At the macro–level, food security should be ensured through more efficient mechanisms of storage, distribution and pricing.

*Linkages.* Linkages between various agencies, organizations and disciplines are likely to ensure focused targeting and result in a greater impact while eliminating duplication of activities. Existing structures within the community such as self–help groups should be used as entry points wherever feasible, and community participation should become a practical reality.

*Extension services.* Extension personnel link directly with farmers, and are therefore crucial to bringing about needed change. In the area of food production, drought resistant indigenous food crops should be promoted. On the health and nutrition side, reinforcement and re–orientation towards an outreach community approach is required. School feeding programmes should aim to target the most needy and utilize locally available food items for cultural acceptability and cost effectiveness. Education of women should be a priority.

*Employment.* The root cause of hunger and malnutrition is poverty. Resource–poor people are unable to produce enough food to feed themselves and at the same time are unable to buy food from markets. It is important to develop the off–farm employment sector to enable the landless to earn incomes for livelihood.

*Cash and food crop balance.* Households need food but they also need cash. Farming households use their own produced food to achieve both, however if households use too much land for cash crops at the expense of growing food for their own needs, they will experience hardships and food insecurity.

With political goodwill and concerted efforts on the part of all Kenyans, household food security is achievable.

### *HOUSEHOLD FOOD SECURITY, GHANA – Rosetta Tetebo*

Two major projects incorporating household food security components have been implemented since the ICN. The first is a UNICEF funded project which addresses community participation in development. The second is an FAO funded project on 'Promoting Household Food Security and Improving Nutrition through Nutrition Education and Training'. This examines the effects of processing and storage procedures on the nutrient quality of traditional and indigenous fruits and vegetables. This is a young project, but much is being learned from it. Other projects aim to minimize food wastage during processing and storage by developing new processing machinery for use by rural households.

Women's issues have become central since the ICN and there is increased support from both government and non–government sources to help women with food production and processing.

### *URBAN HOUSEHOLD FOOD SECURITY, MADAGASCAR – Jayshree Balachander*

The Madagascar Food Security and Nutrition project is one of the most successful projects in the World Bank's portfolio on Africa. Since 1993, 28 000 children under five years of age from 300 000 families in two provinces (about 66% of the total number of children under five), have been weighed each month, and malnutrition rates have decreased from 46% to 37%. The nutrition element of this project consists of four components: a targeted nutrition intervention, a referral service for severely malnourished children, an iodization component and a microcredit component.

A community nutrition worker is selected from among the mothers and trained in growth monitoring of all children under five. Children identified as being severely malnourished are referred to rehabilitation centers for therapeutic feeding for up to three weeks, and support and nutrition education are also offered to mothers. The problem with this programme however, is that mothers cannot stay for long periods of time. The iodization component consists of capsule distribution and a long term salt iodization programme supported by UNICEF and the World Bank.

The final component is microcredit. Although not originally in the project, it became clear as the project progressed that this would increase both the level of interest in the programme and the effectiveness of the intervention.

| | **What are the success factors of this project?** |
|---|---|
| • | Effective collaboration between the government and NGOs. |
| • | Capacity building through investment in training of community workers. |
| • | The quality of the community nutrition workers. Candidates were selected by the communities themselves according to their set criteria. |

| | |
|---|---|
| • | Community involvement in the selection of community nutrition workers and in the ongoing dialogue with the NGOs. |
| • | Government commitment. |
| • | Flexible project design allowing the NGOs to add inputs as necessary in response to community needs, whilst focusing on the core nutrition interventions. |

***Discussion by Eileen Kennedy***

*The three presentations highlight the complexity of household food security. Household food security is analogous to a picture puzzle: there are many pieces; some bigger than others and therefore contributing more to the puzzle, but all are needed to make the overall picture.*

*Three themes cut across the three country presentations; firstly the links between national level food security policy and household food security policy. Decisions at the household level that are motivated in part by macro policy, feed back into national level policy and cause a readjustment. It is a very iterative process – national policy affects household policy, which then loops back. These micro–macro linkages will continue to be important. A second theme is the importance of women's roles in household food security. One clear finding from the Ghana work is that in areas where women were actively involved in the design of the credit schemes, the schemes were more likely to be successful in raising women's income. The final theme is the link between household food security and broader issues such as nutrition education, targeting to women, social mobilization and rehabilitation.*

***FOOD SECURITY AND NUTRITION PROGRAMME, BENIN – Joyce Gbegbelegbe***

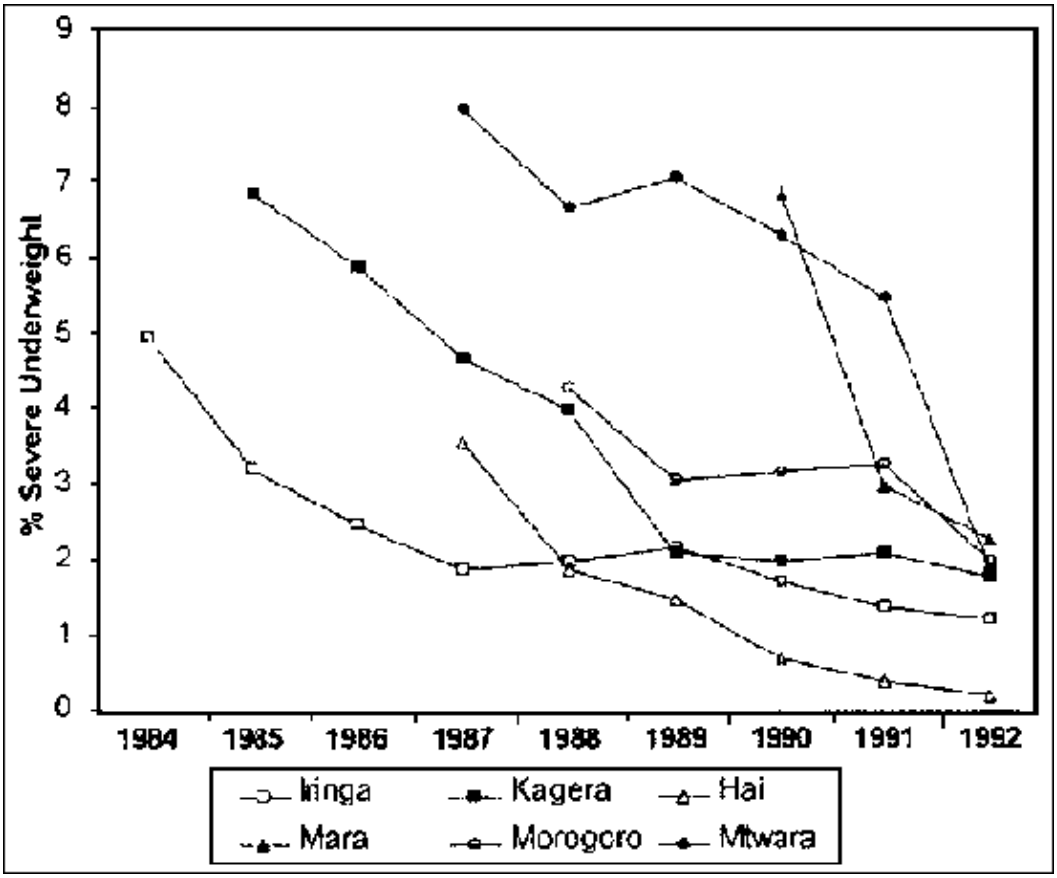
From 1990–1994, the Benin government and the World Bank planned a pilot project that aimed to improve household food security through production and income generating activities. Results showed that stocking (reducing losses) and selling food crops promoted access to food in villages, and that the small development projects – building roads and bridges, increased movement and rendered food more accessible.

This pilot project resulted in a five year programme, which incorporates nutrition in addition to the household food security objectives. The nutrition component of this programme aims to reduce malnutrition through education and the empowerment of women to take charge of the problems in their village. Areas where food production does not cover the needs of the population are identified and targeted using national statistical data.

***NUTRITION PROGRAMMES IN TANZANIA – Wilbald Lorri***

Four major types of programmes are being implemented in Tanzania to reduce malnutrition.

***The Child Survival Protection and Development Programme (CSPD).*** During the early 1990s, total malnutrition levels in areas implementing integrated nutrition programmes decreased from 50% to around 30% in children under five years of age, and severe malnutrition levels decreased from 6% to around 2%. Treatment of severely malnourished children in nutrition rehabilitation units however, does not prevent recurrence of malnutrition nor its appearance in siblings. In contrast, community–based nutrition rehabilitation, where treatment is carried out in the community, emphasizes the role of parents and community leaders. This results in a more sustained improvement of the rehabilitated child and other family members.




**Severe Young Child Malnutrition in Six CSPD Programmes, 1984–1992**

***The National Micronutrient Malnutrition Control Programme.*** Separate programmes for prevention and control of iodine deficiency disorders (IDD), vitamin A deficiency (VAD) and iron deficiency anaemia (IDA) have been formulated. The IDD control programme consists of targeted distribution of iodized oil capsules, with universal salt iodization as the long–term goal. The VAD control programme consists of vitamin A capsule distribution and stimulation of demand for foods rich in vitamin A. The programme on IDA is mainly targeted at pregnant women and promotes the production and consumption of iron and folic acid rich foods.

***The Nutrition Surveillance Programme.*** This is implemented at three levels. At the national level, the aim is to systematize data for use by national decision makers in the planning process; at the district level, the aim is to improve district capabilities to organize, analyze and communicate nutrition data generated from the community based systems; and at the community level, the aim is to empower communities to generate, organize and present nutrition–related data for decision making.

***The Household Food Security Programme.*** This programme focuses on factors which affect food availability and stability of supply, economic and social accessibility to food, and food intake and utilization. A National Consultative Group on Household Food Security has been formed under the Tanzania Food and Nutrition Center to coordinate these activities.

Future action for improving the nutrition situation in Tanzania is presented in the context of the National Plan of Action for Nutrition. Experience in Tanzania indicates that success in nutrition is possible if there is the political will and commitment from the government, a mobilization of resources and the capacity to implement programmes.

### *COMMUNITY BASED NUTRITION PROGRAMMES IN NIGER – Jean Michel Ndiaye*

The nutrition programme in Niger is built on a triple A approach (assessment, analysis, action), with emphasis placed on improving household food security, increasing self–empowerment of the villagers, and improving child care, feeding practices and access to health services. Working in 75 villages covering 80 000 people and including 17 000 children under the age of five, results have shown some success, but there are also lessons to be learned.

To achieve sustainable results, an integrated approach to community–based programmes has to be adopted. The legitimate concern of individual programmes is to be successful. This can lead to self–centered attitudes

when resources are widely available, requiring integration when the situation becomes less enabling. The communities are tired with almost daily demands from each programme. There is donor fatigue, but there is also population fatigue. Deterioration of the financial situation, similarity of approaches and identical target populations should urge policy makers to develop community−based approaches capable of creating synergy among the various programmes. Activities need to be coordinated so that it is possible to:

- accelerate the achievement of national objectives;
- meet more adequately the needs expressed by the communities;
- rationalize the use of human and financial resources;
- create synergy amongst various
- programmes;
- implement broad−based strategies.

An integrated community−based approach can be established gradually, step−by−step, given that the major objective is to achieve country−wide coverage to relieve the suffering of the greatest number of people within a short period of time and in a cost effective manner.

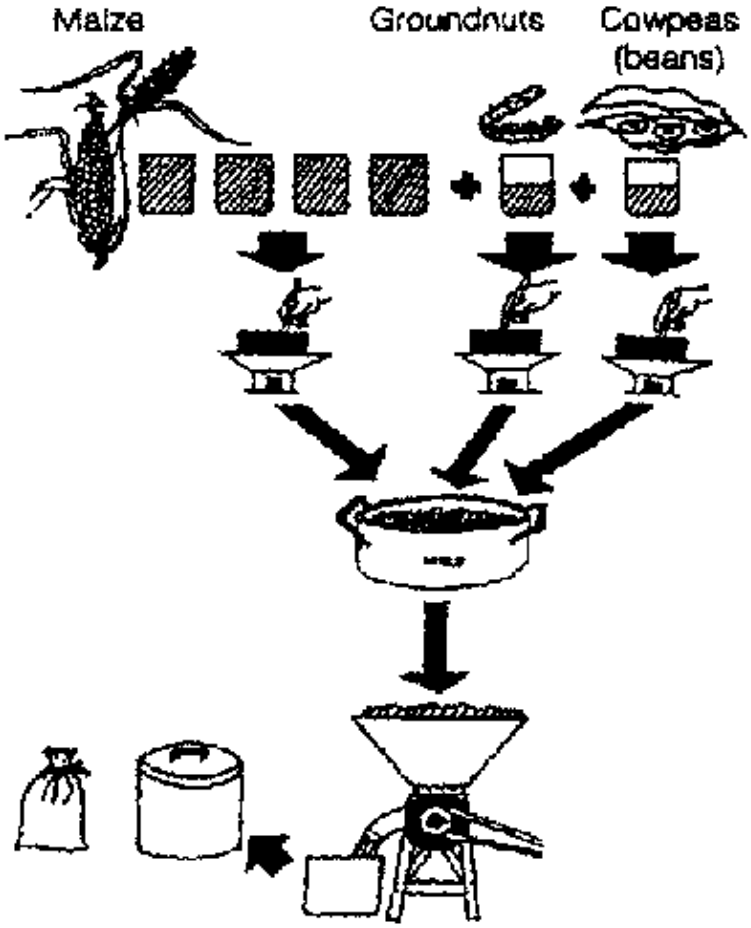
***Discussion by Kraisid Tontisirin***

*It is necessary to re−emphasize the community−based approach, where people are involved in participation and become empowered by training. Extension services and social services are required to support communities. The roles of breastfeeding, and complementary feeding that can occur in households based on locally available foods should also be emphasized. A final point is scaling up the experiences which requires mechanisms at district, province and national levels.*

***EFFECTIVE PROGRAMMES FOR IMPROVING NUTRITION IN GHANA − Rosanna Agble***

In the mid 1980s, a project was initiated to improve infant nutrition and weaning practices in Ghana. The project provided corn milling machines (donated by UNICEF) to over 50 communities for the production of an improved cereal and legume−based weaning food ('Weanimix'). Training was provided and a nutrition education component included in the programme. After several years of producing weaning food, another dimension was added to this programme to improve the income generation of the community. This involved using the income generated from the milling process to support other community−based activities.

Results show that more mothers are using the new weaning food, and maternal knowledge in basic nutrition is significantly better in project communities compared with control communities. There has been an improvement in household food security and nutritional status of children in these communities has improved.




*Flow Chart for Weanimix Preparation*

***What lessons have been learned?***

• The quality of the milling machines must be high and the rate of breakdown low to maintain interest.

• Collaboration between agencies and NGOs and defined roles for all is important.

• The communities who have benefited most from this project and who have achieved its objectives are those located far from urban centres.

• Womens' groups within the community manage the project. It is better to use existing womens' groups rather than to create new ones.

• A simple record keeping system to monitor progress is important.

• The frequency of supervision by the implementing agencies may affect the project. If this is done too often the community tend not to use their own initiative. If supervision is too sparse, it creates laxity in the community.

• The question of incentives for the various categories of people connected with the programme remains problematic.

***COMMUNITY FOOD AND NUTRITION PROGRAMME, ZIMBABWE – Julia Tagwireyi***

The Community Food and Nutrition Programme provides the framework for food and nutrition programme implementation in Zimbabwe. This programme started as a community–based child supplementary feeding programme following the destruction and displacement of communities during the independence war. It has since evolved into a community–based food and nutrition programme in which communities receive technical and resource support from a multisectoral infrastructure at national, provincial, district and village level. The programme has thus evolved from food relief to food production and has access to over a million people in some of the most food insecure and nutritionally at risk areas of Zimbabwe.

The programme involves several components. The group feeding component at pre–school day care centers emphasizes the use of locally available foods. The communal food production component initially provided bean and groundnuts to the communities, and this has since diversified. The nutrition education component looks holistically at the food and nutrition problems of communities and how the community can address these problems. Extension support is provided by the multisectoral training and education component, and the community–based growth monitoring and promotion component continues to reassess the targeting of the programme to vulnerable groups.

***Programme achievements***

During the 1992 drought – 'the worst in living memory' – over one million children received a daily supplementary meal through more than 20 000 feeding points in villages throughout Zimbabwe. The programme significantly reduced the number of hospital admissions for clinical malnutrition and improved the nutritional status of children receiving the supplementary meal. Several evaluations highlighted a high level of community awareness of nutrition. General extension support by key development sectors (agriculture, family planning, health education etc.) has been enhanced, and intersectoral collaboration has been facilitated. This has resulted in a demand for an institutional and policy framework to allow certain sectors such as agriculture, to play their role in food and nutrition in a meaningful way.

| | **What lessons have been learned?** |
|---|---|
| • | Community level organizations are able to manage and implement cost effective nutrition interventions but the support mechanisms must be in place. |
| • | Programmes need to be flexible to allow for community innovation and variations. |
| • | Intersectoral action for food and nutrition is possible but there is a need to work on a specific activity with clearly defined and agreed roles for all the actors. |
| • | Investment in intersectoral training is crucial. |
| • | Targeting is more effective when all the data sources and information from different key sectors are combined. |
| • | Long term commitment and support from the government and donors is essential to allow programmes to evolve. |

***NUTRITION SURVEILLANCE AND INTERVENTION, SOUTH AFRICA – Robert Fincham***

Under the apartheid regime there was no national framework for development in South Africa. Now, for the first time in South Africa, the government of national unity has provided a framework for development. This is a people–centred development strategy that calls for intersectoral collaboration and a vision for community involvement. Within this framework, the Department of Health has developed an integrated nutrition programme with a health–based component and a community–based aspect.

There is now a movement towards community–based programmes and nutrition surveillance. Although it is still early, there are some lessons that can be learned from these programmes:

• growth monitoring can be used to promote community–based surveillance, and to provide information upon which the communities can act;

• training, supervision and information dissemination is essential. It is also important to identify indicators to monitor success;

• building on existing infrastructure and capabilities within communities and linking up with NGOs and other organizations who have long standing relationships with the communities is essential;

• identifying and capitalizing on indigenous resources and capabilities within countries is important;

• there has to be political commitment.

***Discussion by Sadia Chowdhury***

*All three presentations talk about how nutrition has been used as an entry point for much larger activities – in the case of Zimbabwe and Natal, it has been used for dealing with development of the community, going from a crisis situation into a much bigger issue. Nutrition should not be considered separately, but as part of an overall integrated development programme.*

*A clear message that emerged is the need for political will and support. This can be national, but it has to be local. In addition, there has to be continuity in support and a commitment from donors. The presentations also demonstrated that given the relevant support, community–based organizations and groups are capable of implementing and managing programmes.*

*There is no real stereotype of a successful programme, but flexibility, innovation and experimentation is very important. NGOs are in a very good position to do this, but require support and commitment by the national bodies, policy makers and donors. Finally, there is not enough sharing of experiences around the world. There needs to be more information dissemination through documentation of what works and what doesn't work. This dissemination needs to be done nationally, regionally and internationally.*

***VITAMIN A PROGRAMME, UGANDA – J. Sabiiti & D. Lwamafa***

Baseline assessment surveys conducted in Kamuli District, Uganda, indicated high risk (50%) of Vitamin A deficiency (VAD) among children below 6 years. A VAD control project was initiated in Kamuli, which focuses on nutrition awareness building, nutrition education and training, diet diversification, high dose vitamin A capsule supplementation and food fortification. The specific objectives of the programme are to eliminate VAD as a public health problem among children below 6 years of age, and to serve as a pilot project to refine strategies and methods for addressing VAD nationally.

**There is not enough sharing of experiences around the world. There needs to be more information dissemination... regionally, nationally and internationally... through documentation of what works and what does not work**

Community participation is a major component of the programme and involves voluntary land donation, planting and raising seeds and seedlings for sale, and establishing household food gardens with foods rich in vitamin A. Although it is too early to conduct an impact evaluation assessment, there has been district–wide coverage of capsule supplementation and 15 demonstration gardens have opened.

| | ***What lessons have been learned?*** |
|---|---|
| • | There is a need for baseline information and continuous monitoring and evaluation to assess progress towards the achievement of goals and objectives. |
| • | Political commitment is essential. |
| • | The availability of a national policy framework is crucial to guide action towards the elimination of VAD at district level. |
| • | A multisectoral approach greatly assists implementation. |
| | |
| • | The integration of VAD control with other ongoing public health programmes is beneficial because existing structures and personnel can be utilized. |
| • | Awareness building and nutrition education must be continuous to maintain interest and to achieve behavioural change in terms of food production, use, preparation, storage and habits. |
| • | Prevention of iodine deficiency and iron deficiency anemia can be addressed concurrently to promote delivery of a comprehensive package of micronutrient deficiency control. |
| • | Reliable donor commitment (in this case, UNICEF, Uganda) is essential. |

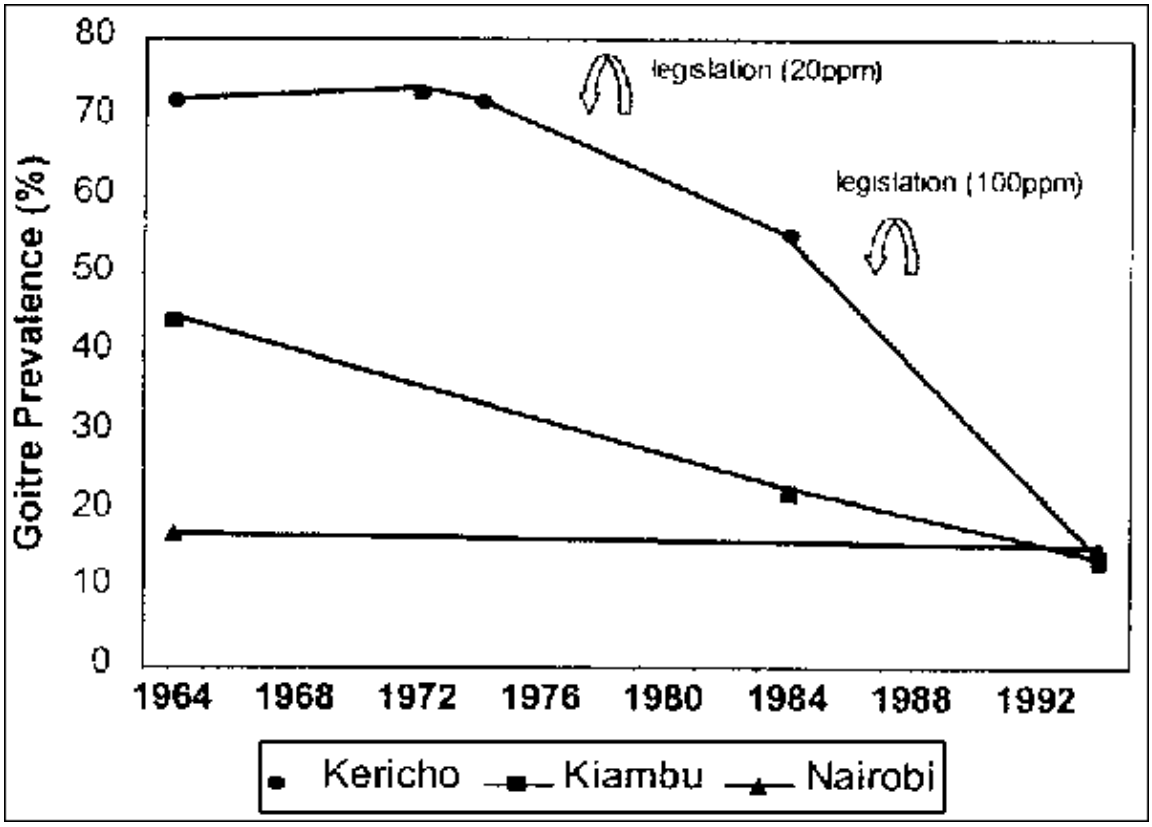
***SALT IODIZATION PROGRAMMES IN AFRICA – Festo Kavishe***

The story of iodine deficiency disorder (IDD) control in Africa is one of success, and provides the best example of how Africa can make rapid progress in the area of health and nutrition. This progress is largely a consequence of affordable cost–effective technology and an unprecedented alliance between governments, the private sector and international agencies. The remarkable feature of the African story is the impetus

towards universal salt iodization (USI). By the end of 1995, almost all of the 50 countries in Africa estimated by WHO to have a significant IDD problem were implementing IDD control programmes using iodized salt as the long term strategy. In February 1996 it was estimated that more than 50% of the salt consumed in Africa was iodized.

In addition to the rapid increase in salt iodization, indicators show that the proportion of households consuming iodized salt is also increasing. There is evidence that the increase in salt iodization is making a difference to the IDD situation in Africa. For example, the graph shows that the prevalence of goitre in three districts of Kenya declined rapidly after the introduction of legislation.

The achievement of objectives in terms of process (USI) and outcome (IDD elimination), capacity building and sustainability define success in IDD programmes. Success factors of salt iodization programmes in Africa can be grouped into four categories: international and national commitment; interagency, public and private sector collaboration; intensive capacity building (training to build up national human resource capacity); and strong networking.




**Trends in Goitre Prevalence in three districts in Kenya, 1964–1994**

There are indications therefore, that despite scepticism, the elimination of IDD in Africa may be a reality during the beginning of the next millennium. This will be a remarkable achievement in the area of public health and nutrition in Africa. Major challenges to complete and sustain USI will require sustained advocacy, resource mobilization and monitoring and evaluation.

***Discussion by Ricardo Uauy***

*The presentation on iodization and conquering iodine deficiency in Africa is a good example of how international agencies and local catalysts are inducing change, and how this has been translated into regulation and legislation.*

*The need for local capacity must be emphasized. Local capacity not only to implement programmes but also to analyze them and took for innovative solutions. The local autonomy that we are looking for depends not only on the applied research and training, but also in building institutions. In the case of vitamin A, the approach taken in the Ugandan programme of using food diversification and using specific intervention, is appropriate. In other settings, the use of fortified foods is one of the most practical ways of controlling micronutrient deficiencies.*

*How do we elicit political will and bow do we get governments to act? The commitment of governments is essential to see long term and sustained solutions. The way to obtain government commitment is related to the way governments work–a government's priority is not only to serve the country, but also to be re–elected. Chile. Costa Rica and Cuba provide good examples of how to get government commitment. In all these countries through various political regimes, a key factor in getting commitment is having nutrition as a political issue. In the Chile election of 1970 for example, the government* was *elected after saying, amongst other things, that every child will have half a litre of milk.*

*We cannot neglect the interface between the role of local institutions, governments and universities. If we over–emphasize NGOs, who may be very effective in implementing and managing programmes, the governments may not take responsibility for the issue. The role of the NGOs and universities should be to create linkages between governments and communities. The role of the international donors is justified only if there is no local institution, and their role, rather than to interact with government community is to support the local catalyst. No amount of international cooperation will do what the local communities and institutions need to do. Partnership means being able to work together, but the definition of what needs to be done should be defined by the local institutions. If international agencies take over this process then there is less likely to be local commitment. One of the ways this process can grow is by the international donors requiring that in any project there is a counterpart that is also investing and is building up the sustainability of the project. There should be a commitment from local governments – it is up to the local institutions, the NGOs and the universities to be more demanding in this role and only in this way can there be success and a sustainable effect.*

### *WEST AFRICAN NUTRITION NETWORK – Kwadwo Okyere*

SADAOC is the French acronym for sustainable food security in Central West Africa. It is a network that addresses food security issues at a sub–regional level. Recognizing the need for a broader approach oriented towards sustainability, the Netherlands Ministry for Development Cooperation in 1989 initiated the creation of a multi–disciplinary alliance of research institutes, universities and government institutes to embark on food security research with emphasis on sustainable development. The initiative is unique in that it defines a joint responsibility of researchers and policy makers for research findings, and the application and implementation of the research recommendations.

The biggest achievement of SADAOC is its contribution to capacity building and institutional development for food policy in West Africa. Capacity for analytical work has been enhanced through the provision of training, development of data banks, and appropriate research methodologies. Research links have been established and the initiation of dialogue among policy makers through the activities of a food policy management group, has promoted discussion on sub–regional issues.

The second phase of SADAOC has now started. The primary aim of SADAOC 2 is to contribute to the design and implementation of national and sub–regional policies for sustainable food security through the strengthening of institutional and research capacity and coordination.

### *REGIONAL TRAINING NEEDS IN ECSA COUNTRIES TO IMPROVE NUTRITION PROGRAMMES – Catherine Siandwazi*

The activities of ECSA (East Central and Southern Africa) are coordinated from the Commonwealth Regional Community Health Secretariat, located in Arusha, which covers 14 countries in southern and eastern Africa. The programme focuses on capacity building to plan, implement, manage and monitor food and nutrition programmes. This is done using training, research, policy advocacy, networking and information dissemination and communication. Some achievements of ECSA include raising regional awareness and setting up nutrition units in appropriate ministries.

In 1991 and 1995, training needs assessments were carried out. Results showed that there were inadequate training opportunities to meet staffing needs, inadequate or inappropriate training content, a lack of training resources and materials, a lack of training standardization in ECSA, and a lack of training fellowships. Countries also reported poor linkages between training and programme management and limited training in programme planning and management.

Several recommendations were proposed to address these problems. It was proposed that modules in pre−service training institutions be strengthened − for example, breastfeeding modules should be incorporated in medical school, nursing school and nutrition training institution curricula. In addition, a long list of training areas and linkages between different organizations has been developed with the aim of linking up research issues that address programme needs.

### *REVERSING NEGATIVE NUTRITION TRENDS IN AFRICA − Richard Heyward*

In Sub−Saharan Africa, with a population of some 600 million people, the nutrition situation is not improving. Nearly 40% of the population is undernourished as measured by dietary energy supply. Forty−two percent of children are stunted and 30% are underweight. Iron deficiency anaemia is widespread, with some 40% of women and children and 25% of men affected, making a total of around 235 million. Iodine deficiency affects around 175 million people and 21 million people are at risk of vitamin A deficiency[1].

[1]Editor's note: In January 1997, WHO's Division reported that the estimated population with iodine deficiency disorders in the Africa Region, as of January 1997, is 145 million (23%). Source: Elimination of Iodine Deficiency Disorders in South−East Asia. WHO. New Delhi. 1997.

Nutrition is not normally on the agenda of national government or of many communities, despite the encouraging number of small projects, initiatives by local associations and activities in the informal sector. The last two deserve much more attention because they show African models of response to nutrition needs.

**Possible reasons for the neglect of nutrition**

• The emphasis has been on the young child and this may have led to the misconception that nutrition is not a problem of the general population.

• Decision makers do not see good nutrition and nutritional improvement as a contribution to productivity, poverty reduction and national development.

• It is not widely known that there actions readily available. The opportunities offered by the enormous number of community associations and existing community structures are not used. The small scale successes are not well documented and widely reported.

• Linkages with other major national problems which countries are facing are not seen.

What can be done? African countries can improve the nutrition of their populations through macro−policy and programmes, and through community−based activities using existing channels, for example, in the sectors of rural development, agricultural extension, health education and women's affairs. In view of economic and financial constraints, it is unrealistic to plan on a substantial increase of central government budgets, or on a separate service for nutrition. Improvement in nutrition should be seen as a factor of development with emphasis on households and communities taking responsibility for their own development. With the support of services that exist but often need strengthening, households and communities can improve their nutrition by actions in the fields of household food supply, eating practices, health and household care. There is little new in these activities; what is relatively new is the process by which communities undertake them. Africa has a wealth of community associations that can become a channel for community responsibility. For communities to become more active in the field of nutrition there is also a need for advocacy, guidance, and technical support.

The costs of adding a nutritional component to existing services are estimated to be some $1 000 million per year in Sub−Saharan Africa − a relatively small amount in relation to government tax revenue. To extend those services is more costly − some $9 000 million. However, the nutrition component would make the sectoral services more effective, and would bring a return in savings and benefits that would far exceed the costs.

External agencies can give valuable support to this community–based movement by contributing to capital and start–up costs, especially orientation and training, transport and other material aid. This implies some changes in their mode of operation: discussions need to be held at the district level as well as at the ministry level, and a degree of flexibility has to be adopted to adapt to community priorities and needs.

**Action that Households and Communities can Undertake to Improve Nutrition**

***Household food supply*** – better methods and inputs for cultivation; a return to more drought–resistant cereals; cooperative purchases of inputs and basic necessities, cooperative marketing of crops; better access to credit and land for women; better annual management of food supplies, especially in areas with a long dry inter–crop season; better methods of conservation; cereal banks

***Eating habits*** – diversification of diet – more groundnuts, beans and other vegetables, fruits and small livestock products; changes in eating practices; more frequent feeding of young children and use of enriched gruels incorporating germinated cereals; use of iodized salt; use of iron pots for cooking (against anemia)

***Health*** – birth spacing, deworming, immunization, protection of breastfeeding; community growth promotion and child weighing; use of latrines, use of safe water or disinfection of water; handwashing especially before meals; protection against malaria–vector mosquitoes and treatment of malaria

***Household care*** – increasing literacy and numeracy, reducing the excessive workload of women by use of more labour–saving equipment, greater participation of men, community production of complementary (weaning) foods.

The following steps could be taken by external agencies to increase their support to nutrition in Sub–Saharan Africa.

• Help national opinion–makers and decision–makers to recognize the nutritional state of the population as a major factor of national development as well as of individual well–being. Use nutrition as an overall indicator of social development ranking alongside GNP as an indicator of economic development.

• Help countries to reach a broad consensus on a conceptual framework.

• Encourage community responsibility and community–based actions prepared with prospects for sustainability.

• Advocate and if possible incorporate an appropriate nutritional content in their county programme cooperation, using all available opportunities.

• Modify if they have not already done so, the mode of programming that they recommend and assist, to include the district level as well as the capital.

• Make their plan of cooperation more flexible than a "blueprint" so that account can be taken of community priorities and readiness to participate, and of annual planning in districts.

• Encourage a more integrated, holistic approach by different services and their supporting agencies from the district to communities. This is easier for countries to do at the district level than at the centre, but as much central support as possible should be sought.

• Encourage communities to set service and impact targets for themselves, to strengthen the capacity of their associations to monitor them, and to arrange for the aiding of their operations.

• Support orientation and training, operationally–oriented, with emphasis on the training of 'practitioners' as discussed in Bellagio, 1994.

• Support operationally–oriented research.

In conclusion, countries of Sub–Saharan Africa can improve their nutrition situation at the price of serious effort. In so doing, they can contribute to dealing with major problems of development they are now facing, for

example the need to deal with the problem of rapid peri–urban growth and poverty. These problems have a major influence on nutrition prospects, but on the other hand, the improvement of nutritional status can contribute to their solution.

We would like to thank Ruth Oniang'o (Jomo Kenyatta University; AGN member), Lilian Marovatsanga (University of Zimbabwe; AGN member) & Bill Clay (FAO) for their helpful comments during the preparation and editing of this report.

***Summary of the Symposium "Effective Programmes in Africa for Improving Nutrition, Including Household Food Security***

The fourteen presentations from different parts of Africa, together with lively discussion, showed conclusively that programmes properly prepared and implemented, with strong community participation, could bring about rapid improvement of nutrition. Seven cross–cutting themes emerged from the presentations and discussion:

- ***Community involvement and participation***
- ***Capacity building***
- ***Necessity of long–term investment***
- ***Scaling up: expanding small successes***
- ***Necessity of intersectoral and inter–agency collaboration and action***
- ***Networking and regional cooperation***
- **Advocacy and raising awareness on nutritional issues at all levels.**

These themes were presented in detail in SCN NEWS No. 14.

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## The 10th Annual Martin J. Forman Memorial Lecture: How are we doing in International Nutrition?

***By F. James Levinson***

*The 10th Annual Martin J. Forman Memorial Lecture was presented by Dr James Levinson at the XVIII IVACG (International Vitamin A Consultative Group) Meeting in Cairo, Egypt, September 1997. The lecture, reproduced below, summarizes the results of a questionnaire, devised by Dr Levinson and completed by 173 individuals working in international nutrition. The purpose of the questionnaire was to compile information – the perceptions and opinions of those asked to complete it – about the field of international nutrition and the people who work in it. The views expressed in the lecture are those of Dr Levinson, and as he himself points out, this is not a comprehensive stocktaking. Nevertheless, some important, and no doubt contentious and controversial issues are raised – issues and views that we hope will generate positive discussion and reflection amongst those involved or interested in the field of international nutrition.*

I am honored to have been selected to deliver the 10th Annual Martin J. Forman Memorial Lecture. Many was a friend, a colleague and a teacher. He was a mentor during my early years in India and during our fledgling efforts at MIT to make some sense of multi–sectoral nutrition planning. And now we also have lost Lainie Forman. Lainie, as most of you know, was actively involved in a host of worthy endeavors, wholly unrelated to her connection with Marty, but she also was a driving force behind these lectures.

During the past year I was visited by a graduate student in international nutrition at Tufts who wanted to talk with me about her future. She wondered about the field of international nutrition. She was anxious about her job prospects. And she also wanted to know about the field as a whole, and about the people in it. What do they do? What are they like? What do they stand for?

I rarely find myself hesitating very long when asked about international nutrition, but these questions, asked with such sincerity, gave me pause. What could I say about this field which would be wholly honest, but at the same time encouraging to this young woman thinking about throwing in her lot with us?

I promised her a letter, and then began thinking about the subject seriously and talking about it with colleagues. It became clear that the subject is serious and deserving of discussion on what can be considered (depending on how we count), the 50th anniversary of sustained, large–scale international efforts, initiated after the end of World War II, to address malnutrition in developing countries.

Accordingly, it struck me that rather than speaking about assessments of program constraints, multisectoral planning, dynamic models, cost effectiveness, or any of the other topics that I teach to graduate students, I would utilize this 10th Forman Lecture, and this 50th anniversary occasion, for a stocktaking of the field of international nutrition itself, and a response to this young woman's questions[1].

[1]A proper stocktaking might have three components: (1) perceptions of persons working in international nutrition, (2) perceptions of our field by others in the broader international development community and by those we are seeking to serve, and (3) an objective assessment of what we've accomplished. The last of these is, of course, the most difficult, given our frequent difficulty in isolating the effects of what we do even on nutritional outcomes, All are important. This discussion addresses only the first.

Because the student's questions deserved a reply broader–based than my own opinions, I formulated a questionnaire that I sent to a large cross section of individuals working in the field of international nutrition. Three hundred and fifty questionnaires were sent out to people whose names were taken primarily from the mailing list of the ACC/SCN. I selected names from this list with the assistance of several international colleagues including two major international figures, one each from Africa and Asia. Of the 350 questionnaires mailed, one third were sent to officials of international or bilateral assistance agencies and NGO's. Of the remainder, 75% were sent to nutrition professionals working in governments or nutrition institutes in Africa, Asia and Latin America, and 25% were sent to similar persons based in Europe or North America.

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Of the 350 questionnaires sent, 49% (173) were returned. Of these, 52% of the respondents indicated primary responsibilities in operational programmes or policy (referred to in the tables as OPP), 39% work primarily in research, teaching or training (RTT), and the small remainder indicated responsibilities divided between the two[2].

[2]This OPP/RTT distinction was selected as an organizing principle in our analysis, although one might have legitimately chosen others, e.g. those who work on PEM vs. micronutrients, or those who focus on nutrition as an input vs. those who are concerned primarily with its role as output indicator.

Utilizing information from this survey I have been able to respond to the graduate student whom I'll call Erica. This is my letter.

September 1997

Dear Erica,

In trying to respond fairly and honestly to the important questions you asked me last year, I've collected information from colleagues in the international nutrition community around the world. Let me share with you some of their responses.

First the good news. Fully, 88% of the respondents to the questionnaire indicated that they would definitely or probably recommend the field of international nutrition as a career to students today (Table 1). Eighty percent believe that, on balance, the field is healthier than it was 10 years ago – an assessment particularly significant at a time when most of the major international donors are cutting back on nutrition–related funding, staff or both.

Job prospects in the year 2000 are considered excellent or fairly good by most respondents – the prospects considered better for students from developing countries than for those from industrialized countries (Graph 1).

We don't know whether the 51% who did not participate in the survey would have been as optimistic, and more generally whether the participation factor introduced bias into the results as a whole, and if so, in what direction.

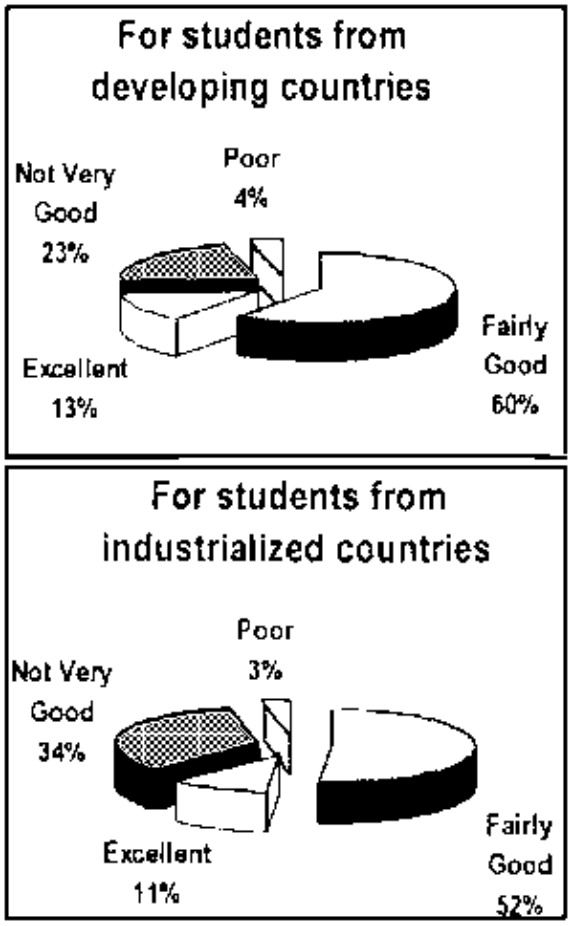
***Table 1:*** **Would you recommend the field of international nutrition as a career to students today? (%)**

| | **OPP** | **RTT** | **TOTAL** |
|---|---|---|---|
| ***Definitely*** | 56 | 34 | 48 |
| ***Probably*** | 31 | 50 | 40 |

| | | | |
|---|---|---|---|
| ***Unlikely*** | 12 | 15 | 11 |
| ***Definitely Not*** | 1 | 0 | 1 |

OPP: respondents with primary responsibilities in operational programmes or policy; RTT: respondents with primary responsibilities in research, teaching or training.

The responses are somewhat less clear on the relevance of the academic training you and your fellow students preparing for careers in international nutrition, are receiving in teaching institutions around the world. Twelve percent of respondents consider the training highly relevant, 72% fairly relevant and 17% largely irrelevant. Research/training respondents, not surprisingly, give such training higher marks than those working in programs (88% as opposed to 77% considering training highly or fairly relevant).




***Graph 1:*** **How would you assess the likely job prospects in international nutrition in the year 2000?**

There was remarkable unanimity among programme and research/training respondents on the question of the most important advances in international nutrition over the past 10 years. Both groups identified new findings on the effects of micronutrient deficiencies and the benefits of increased micronutrient provision as the most important of these advances. Sixty–four percent of respondents who were asked to check up to four advances from a prescribed list or to add their own, checked off this micronutrient category (Table 2). The next four advances, ordered the same by programme and research/ training respondents, are indicated in Table 2.

***Table 2:*** **What do you consider the most important advances in international nutrition over the past 10 years? (%)**

| | |
|---|---|
| *New findings relating to micronutrients* | 64 |
| *Better understanding of the causality of malnutrition* | 42 |
| *Greater community involvement in project design and development* | 41 |
| *Better designed and managed nutrition interventions* | 38 |

| | |
|---|---|
| *Greater sensitivity to the importance of nutrition counseling* | 33 |

(Respondents were asked to check up to four points)

In terms of primary negative factors or disappointments experienced, however, there was a marked difference of opinion between programme and research/training respondents, and this, I believe, is the most important single finding emerging from the survey (Table 3).

Among research/training respondents, the highest–ranking problem was reduced funding (48%). By contrast, among those involved in programmes, the funding constraint was listed by only 18% and was ranked seventh on a list of 11 possibilities (of which respondents were asked to check 3). Clearly the funding constraints of which we in the academic community are so keenly aware, are not as serious a problem for those more directly involved with programmes. Stated another way, donor agencies faced with tighter budgets, appear to be providing an ever larger proportion of their funds to actual programme operations in developing countries themselves rather than to supporting research, teaching and training, particularly that done outside of the developing countries.

And what did the programme respondents list as primary obstacles, primary negative factors? At the very top of the list (44%) is infighting within the international nutrition community. Next in order, as indicated in Table 3, are (1) the continued common assumption that nutrition programmes mean food programmes, (2) inadequate commitment to nutrition by governments of developing countries, (3) the frequent absence of project evaluation, and (4) bureaucratic problems in getting things done.

Looking at this listing, it is striking to note that, at least from the perspective of those responsible for programmes, the major negative factors faced in international nutrition are not, by and large, intractable structural or financial constraints, but rather problems that the nutrition community and its government and donor counterparts can, to a significant extent, control. None of these is more within our control than infighting. The respondents are not referring here to the honest, above–board dialogue over differences of opinion and perspective – which we must have – but to the more insidious hostilities and rivalries we see today in too many facets of our work, and which so many in the international community find debilitating.

What is upsetting to the respondents is the all too frequent bickering over procedures, the posturing, and the territoriality, which characterizes so many of our international meetings and so much of our inter–institutional dialogue. This not only reduces our credibility to others in the development community, but also genuinely obstructs our ability to get things done. In an increasing number of cases, development agencies have intentionally labeled nutrition activities as something other than nutrition, in order to avoid these very squabbles.

***Table 3:*** **What have been the (three) primary disappointments or negative factors you have experienced in international nutrition over the past 10 years? (%)**

| **Operational Programmes or Policy (OPP)** | | **Research, Teaching or Training (RTT)** | |
|---|---|---|---|
| **1. *Infighting*** | **44** | **1. *Reduced funding*** | **48** |
| 2. *Perception that nutrition=food* | 43 | 2. *Bureaucratic problems* | 35 |
| 3. *Absence of valuation* | 40 | 3. *Inadequate commitment by govts.* | 32 |
| 4. *Inadequate commitment by govts.* | 40 | 4. *Inadequately trained professionals* | 31 |
| 5. *Bureaucratic problems* | 35 | **5. *Infighting*** | **29** |
| 6. *Inadequate demand for nutr. services* | 29 | 6. *Absence of evaluation* | 29 |
| **7. *Reduced funding*** | **18** | *7. Perception that nutrition=food* | 27 |

(Respondents were asked to check three points)

This contentiousness – stated by more than a few respondents in the margins of the questionnaire – is not a problem of academics vs. non–academics, or of social scientists vs. natural scientists, but rather an issue of control, and specifically the abundance of inflated egos.

One of the realities behind a portion of the infighting that we see in nutrition today is the conviction many of us hold that the positions to which we adhere tenaciously are the only positions. Doris Lessing, the British writer, wrote in the introduction to her novel. *The Golden Notebook,* the following warning that she offers to her own students, "What you are being taught here is an amalgam of current prejudice and the choices of this particular culture. The slightest look at history will show you how impermanent these must be." This is a warning which perhaps ought to be required on all the courses that we teach or nutrition advice that we give.

Looking back on my own 33 years in this field, I can identify more than a few cases where I crusaded with some zeal for the wrong solution. In the 1960's I was a believer, I regret to admit, in lysine fortification. In the 70's I was a devoted believer in multisectoral nutrition planning as a panacea. And more recently, in one African country, I insisted on targeting in a credit scheme with such tight eligibility requirements that recipients did not, in the end, have the resources to repay the loans.

A 1994 article entitled "Conceptualizing Hunger in Contemporary African Policymaking" by Barrett and Csete, on which I provided perhaps, too harsh a commentary, listed some of the approaches we have followed in this field over the years. The point in the case of each of these approaches is not that they didn't represent our best thinking at the time, but rather that in each case, we were so sure that we were right. The same may be true even of the lofty and presently popular but possibly simplistic notion that communities around the world, or more accurately, those who make decisions within them, are willing to make resource allocation decisions for the benefit of their less privileged, less well nourished residents.

The problems of control, ego and territoriality are perhaps most abundantly in evidence in the frequent inability or unwillingness of agencies to work together, most seriously those within the United Nations. Despite the existence of the ACC/SCN – a U.N. entity established to harmonize nutrition efforts of member organizations and some information sharing procedures – coordination on nutrition within the U.N. system has been poor. Time and again in my work in Africa and Asia I discover remarkably similar projects supported by separate U.N. agencies and functioning wholly in isolation of one another. The idea of agencies thinking strategically together about nutrition with a particular country government is rare.

If I were an official of a developing country, paying dues to the United Nations with the expectation of services, and seeing such wrangling, such unwillingness or inability to work together, I would be disappointed. I would ask whether it is perhaps hypocritical for agencies to be advising my country about the importance of coordination but to be such poor role models themselves. I would ask whether it is acceptable for agencies in the same United Nations system to know so little about the activities being pursued by one another. I would ask whether it is acceptable to see agencies who are assisting our government programs, place a higher premium on getting the credit than on helping to accomplish the task. I would ask whether it is acceptable to see one agency actively undermining the initiative of another at the stage of government negotiation.

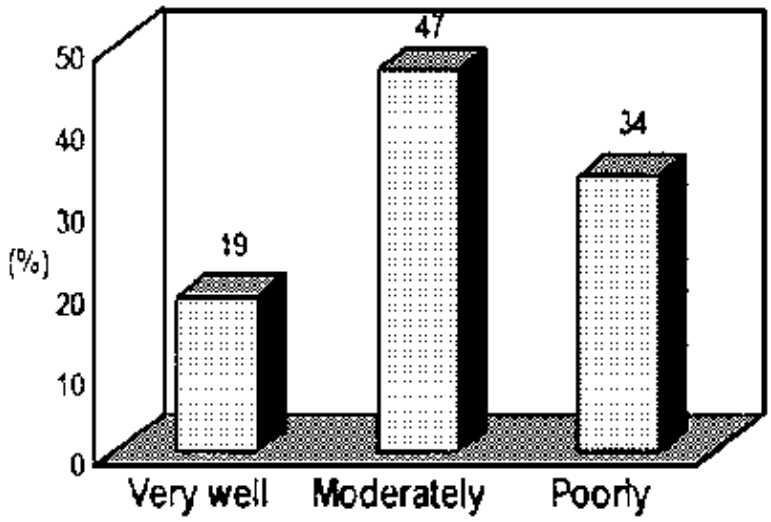
At the same time I would be wrong to lay this problem solely at the feet of the U.N. system. Governments and nutrition institutes themselves are replete with power struggles and disharmony. One long time professional in our international nutrition community put it well recently when he said, "Name me a country and I'll name you at least two prominent nutritionists who don't talk to one another." When I reflected on this problem recently at Tufts, one particularly astute observer of human relations noted that infighting is a problem all of us in the international nutrition community are likely to decry. Yet for all of us, the problem resides with others, not with ourselves.

It may be worth adding that today's sophisticated management techniques of mediation, conflict resolution and cooperative decision making, used regularly in the private sector, are almost unknown in the field of nutrition. Would it be so unrealistic as a first step, for the U.N. agencies themselves, and eventually for others, to agree together on a workable code of behaviour, which they would seek to follow, and to which they would also be held accountable? Such codes, stressing common goals, underlining the need for genuinely cooperative working relationships, and specifying norms for behaviour and methods for the resolution of differences, so common in the medieval guilds and more contemporary trade unions, have never been needed more than in our field today.

Is the problem of infighting more serious in international nutrition than in other fields of endeavor? Perhaps not. And yet, somehow, in this field, I expected better.

How well are women represented in decision making positions in international nutrition? Nineteen percent of respondents answered "very well"; 47% answered "moderately," 34% answered, "poorly" (Graph 2). What seems clear, and was well reflected in the margins of these questionnaires, is that while the number of women with professional positions in international nutrition continues to increase, and while their role in decision

making has no doubt improved, many important decisions continue to be made by the "old boy networks." Having been a member of many such networks, I can affirm this conclusion.




Graph 2: How well do you believe women are represented in decision making positions in international nutrition?

I found it noteworthy that of the total sample of names listed by respondents as role models, only 11% were women. One would hope that percentage would be very different ten years from now, but this may require better means than thus far employed to encourage not simply the participation of women but their access to major decision making.

What about the focus of the work we do? Is it too narrow, are we too insular, are we too far removed from the problems we are seeking to address? How well are our organizations doing in serving the field of international nutrition and malnourished populations in developing countries?

In the questionnaire, respondents were asked whether, after the mixed results of multisectoral planning in the mid–1970s (characterized by what I have sometimes referred to as our "nutriocentric" perspective on development), the field of international nutrition has become too narrow in its focus. Have we become, in some sense, guilty of "nutrition isolationism," characterized by less concern with the socio–economic determinants of malnutrition, less interaction with other development sectors, and a disproportionate focus on micronutrient deficiencies as opposed to inadequate caloric or food intake?

***Table 4:*** **Some commentators have suggested that after the mid–1970s, the field of international nutrition has become too narrow. Do you agree with this assessment? (%)**

| | OPP | RTT | TOTAL |
|---|---|---|---|
| ***Agree Strongly*** | 19 | 28 | 23 |
| ***Agree Generally*** | 36 | 39 | 39 |
| ***Disagree Generally*** | 36 | 27 | 31 |
| ***Disagree Strongly*** | 8 | 5 | 7 |

OPP & RTT definitions: see Table 1.

Overall, 62% of respondents strongly or generally agreed with this formulation, with a higher proportion among research/training respondents (Table 4). The mixed response to the issue of narrowness, however, seems to reflect some genuine ambivalence on the subject. On the one hand we recognize the importance of addressing tougher intersectoral issues. On the other hand we do want to move forward on important opportunities (i.e. micronutrients and breastfeeding) where concrete achievement is possible within relatively short time periods and largely within the control of the nutrition community.

***Table 5:*** **Some commentators have suggested that our various activities related to international nutrition, even those carried out in developing countries, are too far removed, physically and**

**otherwise, from malnourished populations. Do you agree with this assessment? (%)**

| | OPP | RTT | TOTAL |
|---|---|---|---|
| ***Agree Strongly*** | 23 | 17 | 20 |
| ***Agree Generally*** | 49 | 46 | 49 |
| ***Disagree Generally*** | 27 | 35 | 30 |
| ***Disagree Strongly*** | 1 | 2 | 1 |

OPP & RTT definitions: see Table 1.

A slightly higher proportion of respondents (69%, and up to 72% among programme respondents), however, agree strongly or generally with the argument that too much we do in international nutrition continues to be too far removed, physically and otherwise, from malnourished populations and that too large a proportion of financial and human resources continue to be concentrated in the capital cities of developing countries (Table 5).

Does nutrition need to maintain its own identity and institutionalization as opposed to being incorporated into larger programmes and institutions addressing health and population, food and agriculture, or poverty alleviation? The problem is compounded by the fact that the role of nutrition in development is complex. Nutrition functions sometimes as both input and output – as in the case of most community–based projects, sometimes as input but not output – as in school nutrition activities designed to increase active learning capacity, and sometimes as output but not input – as in many agricultural and rural development projects where nutrition and consumption should be important impact indicators – where nutrition should be the "conscience" of agriculture.

With respect to the matter of independent identity, respondents were quite evenly divided with roughly a quarter each indicating strong agreement, general agreement, general disagreement and strong disagreement (Table 6). These results reflect our genuine ambivalence on the issue of self–perpetuation. At the conceptual level, nutrition institutionalization separate from these larger contexts may not pass the test of rationality. At the same time, experience – and the struggles now actively encountered in the major agencies – suggest that an independent identity may still be necessary if nutrition is to be taken seriously.

***Table 6:*** **Do you agree with the following statement: It is necessary for nutrition to maintain its own identity and institutionalization as opposed to being incorporated into larger programmes? (%)**

| ***Agree*** | | ***Disagree*** | |
|---|---|---|---|
| ***Strongly*** | ***Generally*** | ***Strongly*** | ***Generally*** |
| 25 | 29 | 25 | 20 |

What of the agencies themselves? How well have they, or the nutrition–related programmes within them, served the field of international nutrition and malnourished populations in developing countries over the past 10 years, relative to standards we would have set for them?

Institutions or categories of institutions from this list were ranked by respondents, with 5 being the highest ranking, 1 the lowest, and 3 the mid–point (Table 7). At the top of the list is UNICEF, which has been devoting major attention to nutrition at least since the late 1970s. UNICEF today knows a great deal about the design and implementation of effective nutrition activities, and it has learned this in the best possible way – by doing. There can be no question that UNICEF's commitment and dedication to nutrition has had an enormous impact, most importantly on the children of the world.

Looking at this table, I am concerned about the number of agencies or sets of agencies with rankings of less than 3. I am particularly struck by the low rankings of the U.N. technical agencies, which were held in such esteem, when I entered this field in the 1960s. Do these rankings suggest that agencies are no longer adequately committed to nutrition, or that they are committed but poorly equipped, or that they are committed and adequately equipped but less effective because of some of the territoriality or bureaucracy or infighting just discussed? How much of the problem relates to cutbacks in funding making it progressively more difficult for agencies to be proactive and creative? Are we indeed facing a funding crisis in international nutrition, one

which may in time affect even the present optimism of the OPP, as one bilateral agency after another fades out of the nutrition picture, and as the major players. UNICEF and the World Bank, face at least cutbacks in personnel?

Some commentators have argued that international nutrition has had its day, that it is no longer in fashion, that it is no longer cutting edge, that the conditions which gave rise to its major growth spurt in resource availability in the late 80s and early 90s – namely a desire to protect the needy against the effects of structural adjustment – are no longer in place, that public health is taking over nutrition.

I find the argument at its core unconvincing. Whether one calls what we do nutrition, or health, or poverty alleviation, or human resources development, there always will be a compelling case to be made for improving the well–being of a child who, even if only moderately malnourished, is six times more likely to die in childhood than her well nourished neighbour. There always will be a compelling case to be made for improving the food consumption and ante–natal care of pregnant women in countries where over 50 percent of newborn infants weigh less than 2.5 kilograms. There always will be a compelling case to be made for assisting seriously food insecure households where caloric consumption during pre–harvest seasons can be less than two thirds of RDAs. There always will be a compelling case to be made for providing Vitamin A supplements to children, leading to mortality reductions of up to a third in areas of clinical deficiency. The world Turns its back on problems like these at peril of its very humanity. There is an abundance of work for us to do.

***Table 7:*** **How well do you believe the nutrition–related programs of the following have served the field of international nutrition and malnourished populations over the past 10 years, relative to standards you would have set for them?** (5 = Extremely Well; 1 = Poorly)

| | |
|---|---|
| *UNICEF* | 3.83 |
| *Micronutrient Initiative* | 3.40 |
| *ACC/SCN Secretariat* | 3.29 |
| *International NGOs* | 3.24 |
| *IFPRI* | 3.23 |
| *PAMM* | 3.07 |
| *ACC/SCN* | 2.94 |
| *World Bank* | 2.92 |
| *Indigenous NGOs* | 2.92 |
| *Bilateral Agencies* | 2,79 |
| *Academic Institutions (industrialized)* | 2.76 |
| *Academic Institutions (developing)* | 2.73 |
| *Private Foundations* | 2.63 |
| *WHO* | 2.49 |
| *Private Consulting Organizations* | 2.37 |
| *FAO* | 2.28 |

What can we conclude from all this? I think this. The international nutrition community is relatively confident about the work in which we are engaged and optimistic about our ability to make a difference. There is optimism about job prospects, particularly for those from low income countries. It is likely that an ever–increasing proportion of activity in international nutrition will be taking place in developing countries and in the policy and programme arena. But, as I've mentioned, there are problems – some of them quite serious.

If, on balance, this field of international nutrition is of sufficient appeal, my hope for you and your colleagues is that, by the time you are full–fledged professionals, some of what I've described to you will be different and some of you will indeed be instruments of change that will permit the following:

• working relations that bring out the best in all of us rather than undermining the work we do;

• processes that allow the most qualified individuals among us, regardless of gender, to make the decisions that count in our institutions;

• revitalized institutions that regain our confidence;

• reassessed national and international priorities based less on greed and narrow, self serving and short sighted self interest, and more on a spirit of mutual global responsibility.

Finally, you ask what we stand for and what motivates those of us involved in this work. In international nutrition, as in any field, there is surely a wide range of motivations. For some of us it is the challenge of applied science and problem solving. For others it may have to do more with opportunities to exercise influence and effect change in ways that are less common in industrialized countries. For still others, the motivation may be simply a well paid job, sometimes with attractive amenities. But for many of us, at least at the outset, we also were motivated by a desire to help needy people in the world. Yet it sometimes seems that most of us are so absorbed, so driven by the next proposal to be submitted, the next meeting to attend, the next article to write, the next class to prepare, or the next plane to catch, that this commitment to the malnourished sometimes gets lost in the shuffle.

One person who rarely lost sight of why he was in international nutrition was Marty Forman himself. How many of you know the story about Marty's participation in an interagency meeting on child feeding in Brazil sponsored by Operation Ninos in the mid 1960s? The meeting was dreadful. Day after day Marty sat there listening to talk about political constraints and the listing of bureaucratic reasons why the interagency initiative discussed at the meeting couldn't be launched. Marty became more and more frustrated.

As the time approached for Marty's own presentation, he excused himself, went outside to one of the neighbouring favelas, and came back holding the hand of a 5 or 6 year old visibly malnourished little gin. She was dressed in rags, wide–eyed, expressionless. Marty began to speak to the little girl at the podium, explaining that these good people gathered in the room would like to provide food for her and her brothers and sisters, that the food and money did exist in the world to make that possible, but that the bureaucratic problems and financial obligation problems of the particular agencies, and the government's political agenda would not make this possible for at least one more year.

Marty continued talking like this for 20 minutes with the rapt attention of everyone in the room, more than a few visibly moved. By the time the girl had returned to her favela, no doubt with a story her family would find difficult to believe, the tone of the meeting had changed, and ways were found to move the programme more quickly.

My hope for the upcoming generation of the international nutrition community is that amidst the agendas and career advancement, and the balancing of professional and family lives, the malnourished – the children, the mothers, the poor – will not be lost, but will find some room on centre stage. And I hope, in turn, that the upcoming generation will experience in some direct way, the effects of their efforts on people's lives.

## News and Views

*AGN ARTICLE*

***News from Kenya – By Ruth Oniang'o***

The Kenya Agricultural Research Institute (KARI) and the International Livestock Research Institute (ILRI) have been selected as co–winners of this year's Outstanding Scientific Partnership Award.

This award, one of the four Consultative Group in International Agricultural Research (CGIAR) Chairman's Science Awards, is in recognition of the outstanding achievements of the two institutions in collaborative research to enhance smallholder dairying in Kenya. The award was presented on October 31,1997 in Washington D.C. during the international centres week.

The CGIAR Chairman's Science Awards were established in 1996 to honour scientific excellence and achievements in several categories. Each award consists of a plaque and a cash prize of US$ 5,000. I

personally was very excited to learn of this achievement for both institutions. The award comes at a time when local scientists question the legitimacy and relevance of international centres. So much funding has, over the years, been channelled to these centres; some centres have made significant impact globally, and have thus justified the excellent remuneration packages they enjoy, and well equipped laboratories and logistical support. With diminishing support for agricultural research, however, there is increasing scepticism as to the real place of some of these international centres in the uncertain world of agriculture in developing countries. Some organizations exist as islands in their host country, with little interaction with local scientists. In contrast, ILRI needs to be commended for reaching out and working persistently with local scientists and farmers. All centres should take cue from this noble strategy, as it is the only way to justify continued support to their existence.

Similar credit goes to KARI, for adopting a new approach that has involved working with farmers on their own farms. For a long time in developing countries, agricultural scientists have worked, again in isolation, away from the farmer and also away from the extension worker. The scientists have often forgotten that their responsibility is ultimately the farmer. Failure to realise this fact has led to loss of credibility and with it, loss of funding both locally and internationally, for the past nine years. KARI has engaged in a new approach whereby demonstrations are carried out at the farm level, involving the farmer, the extension worker and the researcher. The Dairy Project, for which KARI has been recognized, is but one of the many projects KARI is carrying out in this way: applying a production–consumption systems approach.

Dr Cyrus Ndiritu has been Director of KARI for the past nine years. Dr Ndiritu deserves support as he adopts new and innovative strategies to face up to the new challenges of African agriculture, food security, and possibilities of industrializing and reducing poverty.

Awards are good because they serve both as incentives and examples. One only hopes that somebody somewhere will recognize the extension staff and the farmers, not necessarily with a cash award because there are many forms of recognition. Without these people, there would be no award for either KARI or ILRI.

Ruth Oniang'o is the current vice chair of the AGN (see page 2). She is a professor in food science and nutrition at Jomo Kenyatta University College of Agriculture and Technology, P.O. Box 62000, Nairobi, Kenya. Tel: 254 151 22646/9 Fax: 254 151 21764 or 254 2 631 200 Email: oniango@form–net.com

### *Assessing the Nutritional Vulnerability of Older People in Developing Countries*

With increasing life expectancy and declining birth rates, the world is experiencing a major demographic shift. In 1990,42% of the world's population of older people lived in developing countries. By 2020, this figure will rise to 70%. And yet very little attention is paid to the nutrition of older people in developing countries or how it may affect their ability to lead an independent life. For the poor, retirement is often not an option, and the ability to lead an independent life is crucial to survival and well being.

A Symposium held at the London School of Hygiene and Tropical Medicine on 23–24 September 1997, brought together more than 70 representatives of NGOs, UN agencies and universities, to discuss the assessment of nutritional vulnerability in older people in rural and urban settings, and in refugee camps. The first half of the Symposium programme focused on the results of a research programme carried out by the Public Health Nutrition Unit of the London School of Hygiene and Tropical Medicine in collaboration with HelpAge International. The second half of the programme considered risk factors of nutritional vulnerability and how organizations could work with older people in developing countries.

### *1997 ACC–SCN Statement on Iron*

Iron deficiency anemia is the most widespread nutritional deficiency in the world today. There is overwhelming evidence that it has a serious impact on human development, on the formation of human capital: and on the social and economic development of most developing countries. Of greatest concern is that iron deficiency anemia in infancy results in irreversible cognitive impairment and in adults is associated with weakness and fatigue that reduce work capacity and productivity. Iron deficiency also impairs immune function. Iron deficiency anemia results in poor pregnancy outcomes by contributing to low birthweight and to perinatal, neonatal, infant and maternal mortality. Child growth is also affected. Prevalence rates of iron deficiency are very high in many developing countries and the severity of its consequences is so great as to represent a public health emergency. Good progress is now being made in launching large–scale programmes using effective control measures including fortification of cereal flours and complementary

foods, supplementation, and changes in meal patterns to increase icon absorption. These are extremely important developments and need to be continued and strengthened. The elimination of iron deficiency as a public health problem must continue to receive priority attention. The Sub−Committee on Nutrition calls upon governments, donors, UN agencies, the food industry and the university and NGO community to explore actively new actions and initiatives which can be taken to achieve major reductions in iron deficiency over the next several years.

The collaborative research programme began in 1992. The objectives were to test simple but reliable methods of assessing nutritional status in older people, to identify factors that place the older person at risk of poor nutritional status and to examine the relationship between nutritional status and the ability to lead an independent life. Research was carried out in three settings: the urban slums of Mumbai (India), a refugee camp for Rwandans in Karagwe (Tanzania), and rural communities in Malawi.

In adults, body mass index (BMI: weight/height$^2$) is used to assess nutritional status. However, measuring height in older adults can be problematic due to curvature of the spine. Studies have shown that long bone measures (armspans and knee heights) can be used as proxies for height. As these bones are not affected by aging in the way that the spine may be, the research programme took these measurements to estimate height and hence BMI. The ability to live independently was assessed through questionnaire, observation and performance in specific pre−tested physical tests of functional ability. Socioeconomic and morbidity information was obtained also through questionnaire and examination. In India, blood analyses were also carried out.

The prevalence of malnutrition (BMI<18.5) was similar among urban Indians and rural Malawians (approximately 35%), but considerably lower in the refugee population (16.4%). There are several possible explanations for the relatively good nutritional status of the refugees: they came from a food secure rural region of Rwanda, HelpAge International provided good support in the camp, and only those with better nutritional status arrived at the camp. Physical impairment was highest in India, and increased with age in all populations. It also increased with deteriorating nutritional status and, in India, with lower haemoglobin levels. The prevalence of anemia in India was high: 38% among men and 52% among women, rising to 70% among women over 70.

Preliminary analysis of the data from the three studies has identified some risk factors of nutritional vulnerability, such as living alone, social isolation, reduced food intake, illiteracy, poor socioeconomic status, and certain disease conditions. Symposium participants identified other possible risk factors for different settings, but it was accepted that many would be specific to the location. A field handbook to assess nutritional vulnerability (including the assessment of nutritional status) has been prepared based on the research programme. This was introduced at the Symposium, and will be revised, field−tested and published by early 1998.

The Symposium achieved its primary objective, namely to advocate for greater attention to be paid by development and emergency organizations to the nutritional and related needs of older people in developing countries. Advocacy targeted to international and national policy makers is now needed.

For further information and the full report of the Symposium please contact Suraiya Ismail, London School of Hygiene and Tropical Medicine, Keppel Street, London WC1E 7HT, U.K. Tel: (44−171) 927 2132 Fax: (44−171) 383 5859 Email: s.ismail@lshtm.ac.uk or, Kate Gregory or Karen Peachey at HelpAge International, 67−74 Saffron Hill, London EC1N 8QX, U.K. Tel: (44−171) 404 7201 Fax: (44−171) 404 7203 Email: helpage@dial.pipex.com

### *Reducing Mortality Rates in Severely Malnourished Children*

Severe malnutrition[1] in childhood is widespread in the developing world, with an estimated 69 million children under five currently affected. Frequently associated with diarrhoea and other infections, the most severe forms of malnutrition are marasmus, kwashiorkor and marasmic−kwashiorkor. Growth deficits invariably persist into adulthood, adversely affecting work performance, and for girls, increasing the risk of bearing infants with low birthweight.

[1]weight−for−age <−3SD of NCHS reference median

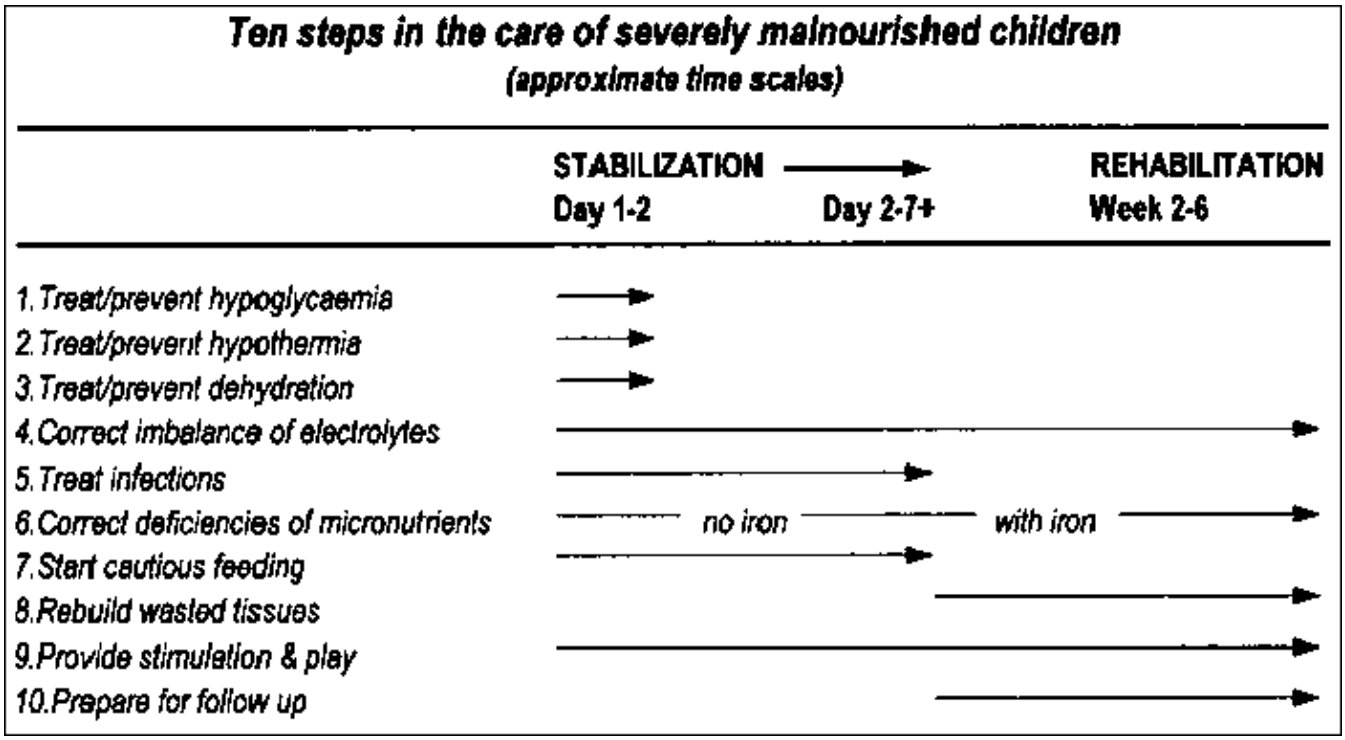
Of great concern is the high mortality experienced by severely malnourished children during treatment. This exceeds 25% in some hospitals where outmoded and faulty practices exist. As a first step to remedying this situation, a set of treatment guidelines (see below) has been prepared by the Public Health Nutrition Unit at

the London School of Hygiene and Tropical Medicine, in consultation with WHO and with financial support from the Canadian International Development Agency.

In 1992, the FAO/WHO International Conference on Nutrition specified the need to develop resources necessary to deal with nutrition problems more effectively, including the strengthening of existing capabilities and provision of improved and appropriate training. These broad objectives are being addressed practically by the WHO/UNICEF initiative on Integrated Management of Childhood Illness (IMCI). The treatment guidelines have made a substantial contribution to the IMCI strategy and are now ready for field–testing.

To help put these guidelines into practice, the next phase of this project involves the preparation of a training programme to teach relevant skills. This phase is currently underway and includes the development of training materials. In the final phase, it is proposed that centres of excellence be set up where practitioners can be trained to treat severely malnourished children using the training materials developed in Phase 2.

For further information about this project, please contact Claire Schofield, Research Fellow, Public Health Nutrition Unit, LSHTM, Keppel Street, London, London WC1 7HT, U.K.. Fax: (44 171) 383 5859 Email: c.schofield@lshtm.ac.uk




*(modified from 'Ten steps to recovery' by Ann Ashworth, Alan Jackson, Sultana Khanum & Claire Schofield, Child Health Dialogue, 1996)*

***Tulimbe Nutrition Project: a Community–Based Dietary Intervention to Combat Micronutrient Malnutrition in Rural Southern Malawi***


Micronutrient deficiencies have far−reaching consequences on growth, development and health. Deficiencies of vitamin A, iron and zinc are widespread in rural Malawi and elsewhere in Southern Africa, where staple diets are plant−based and contain high levels of antinutrients (i.e. phytate, dietary fibre, and polyphenols) which inhibit absorption of non−haem iron and zinc. In addition, intakes of flesh foods and dairy products are generally low. Consequently, the content and bioavailability of iron, zinc, preformed vitamin A and fat in rural diets in Malawi and other parts of Southern Africa are very low.

The approach used by the Tulimbe Nutrition Project to address these micronutrient deficiencies is one of dietary modification and diversification. This is more culturally acceptable and economically feasible than supplementation or fortification. This approach involves changing food selection patterns and traditional household methods for preparing and processing indigenous foods. The goal of the new dietary strategies is to enhance availability, access and utilization of micronutrient−rich foods throughout the year.

The name "Tulimbe" means "let us be strong" in the Yao language. The project, which is funded by CIDA (through the Micronutrient Initiative), World Vision Canada and UNICEF Malawi, began in 1995, working with two communities and 300 targeted families with 3−7 year−old children. Baseline assessment involved focus groups, with men and women, on food practices. Parental knowledge, attitudes and practices (KAP) and socio−economic status (SES) were assessed, and dietary (interactive 24−hour recall), anthropometric, biochemical, clinical and morbidity assessments were carried out on children aged 3−7y. Dietary and anthropometric measurements were repeated after six and twelve months. Morbidity was monitored on a monthly basis. KAP and biochemical measurements were repeated after twelve months.

The intervention introduced ways of increasing the intakes and bioavailability of micronutrients from foods, including the introduction of new cultivars, technologies, and methods for food processing and preparation. To enhance the diversity of the diet and to increase the fat and carotenoid content, soybeans, short duration pigeon peas, groundnuts, sunflower seeds and papaya seedlings were given to each family. The Malawi Industrial Research and Technology Development Centre built and installed solar dryers, seed oil presses and ovens in each community. In an effort to improve the nutrient density and bioavailabilty of calcium, iron and zinc in the porridges used for infant and child feeding, the use of soaked and fermented maize flour and germinated cereal flours was promoted. Parents were also advised on the characteristics of micronutrient−rich foods, meal frequencies, portion sizes and food combinations. Nutrition messages and recipes were introduced to parents through demonstrations, home visits, plays, songs, and booklets.

The impact of the intervention on children and their parents was evaluated using both quantitative and qualitative indicators. Although this evaluation is still in progress, the project appears to have been successful in changing parents' attitudes to child nutrition and child−care, and this is evident by their adoption of new dietary strategies. For the community, its participation in the nutrition project has been an empowering experience, one that has inspired new initiatives in community−based health care. Further reports on the Tulimbe Nutrition Project will appear in later issues of SCN News.

This article was submitted by Rosalind S. Gibson, Nancy Drost, Fiona Yeudall, B. Mtitimuni, and T. Cullinan, of the Department of Human Nutrition, University of Otago, PO Box 56, Dunedin, New Zealand, and the Bunda College of Agriculture and the College of Medicine, University of Malawi, Malawi, Africa. The Tulimbe Nutrition Project is supported by grants from the Canadian International Development Agency through the Micronutrient Initiative and

World Vision Canada, and UNICEF Malawi. Further information about the project can be obtained from Professor Gibson, Tel: +64−3−479−7955 Fax: +64−3−479−7958 Email: Rosalind.Gibson@Stonebow.Otago.AC.NZ

### *Nutritional Situation of Eritrea*

In 1991, Eritrea emerged victorious from 30 years of war against an Ethiopian regime. Currently the Eritrean government and people are trying to reconstruct the country's devastated infrastructure and economy.

Micronutrient deficiencies are of public health significance in Eritrea, and in recent years, the government of Eritrea has started to tackle this problem by creating a national multi−sectoral taskforce. This taskforce began by working towards iodizing salt, and it is hoped that universal salt iodization in Eritrea will be a reality within the next few years. In addition, the Ministry of Health is undertaking a nationwide survey of micronutrients, the results of which will be used to develop a wide−scale intervention to reduce micronutrient deficiencies.

As a consequence of Eritrean government policy however, many NGOs have recently decided to leave the country. The government of Eritrea advocates that self−reliance is the key for a sustainable and lasting solution to nutritional problems in the country, and has a policy against accepting food aid except under life−threatening emergency situations. It is presumed by the government that any aid ("Food Aid") may lead people to be idle, and it is believed that the long−term impact of this will be to direct communities to look for national or international aid rather than working hard to overcome their crisis. The government does not allow international NGOs to implement their own strategies, but allows them to participate in monitoring, evaluating and controlling utilization of funds. All NGOs who plan to launch a national or local programme in Eritrea are required to comply with the existing government policy (e.g. health, education and agriculture policies). If they do not fulfil specific criteria, they do not get a contract or license. With Eritrea being a country emerging from a long civil war and a continuous drought, the view of the author is that Eritrea requires not only food aid, but also aid for development programmes in general.

This article was submitted by Ghermai Berhe, Email: Ghermai_Berhe_at_WVCAN−PO@Worldvision.CA (formerly at World Vision Eritrea)

### *The Integrated Rural Nutrition Project, Kawambwa, Zambia: Successes of a Nutrition Education Programme*

Results from the Integrated Rural Nutrition Project (IRNP) in Kawambwa, Zambia, show that nutrition education programmes can have a significant, positive impact on the nutritional status of children under five years of age. Initiated in 1985, the IRNP, supported by the German Agency for Technical Cooperation (GTZ), applies a multi−sectoral approach with a strong nutritional education component to address the problem of malnutrition. Through this project, combined efforts have been undertaken by the Ministries of Health, Education, Agriculture and Community Development with the aim of reducing the rate of malnutrition in children under five years of age (1996 DHS data: 42% stunting and 26% underweight).

Analyses show that young children in the project area had better weights (for their heights) than children in the non−project area, after controlling for other factors such as wealth, access to services (e.g., water, health), maternal and paternal education level, child gender and child age. For example, 3 year old children in the project area weighed on average 0.3 of a z−score more than 3 year old children in the non−project areas.

Results also show successes in breastfeeding practices. Most children in the district are not optimally breastfed, however children in the project area followed distinctly better breastfeeding practices than those in other areas of the district. Children in the project area were exclusively breastfed for longer periods. In the non−project areas 40−60% of children were introduced to non−breastmilk liquids in the first week of life, compared with 10% in the project area. At the end of the first month, less than 20% of the children in the project area had received non−breastmilk liquids as compared with 80−95% on the non−project areas.

The main activity of IRNP in the agricultural sector is a seed multiplication component aimed at increasing the availability of legumes (beans and groundnuts). Although results showed that the availability of legumes improved through the project intervention period, shortening the "hungry season" (which usually lasts from December to April) by 3 months, this increased food availability did *not* result in improved anthropometric results in children. Positive results were only shown in children who were not part of the seed multiplication programme. The reasons for this might be that the extra legumes were not used for home consumption, but were used as a cash crop. It is also possible that the agricultural extension staff did not put sufficient emphasis on the nutritional message but focused mainly on the technical side of the agricultural production.

These possibilities are currently being investigated.

Throughout the project, the question was raised whether nutrition education alone (via training of extension workers, via direct extension or via social marketing and mass education), can have a significant impact on nutrition without emphasis on increased food production. Through the observations and personal experience of the IRNP project advisor, Juliane Friedrich, the activities aimed at increasing food availability were not as successful as the nutrition education component – those activities aimed at improving nutritional knowledge, attitudes and practises.

This article was submitted by Juliane Friedrich, IRNP Project Advisor, c/o GTZ–PAS, Private Bag RW 37X, Lusaka, Zambia. Fax: + 260 1 291946 Email:gtz–imp@zamnet.zm

***Highlights of the XVIII IVACG Meeting, Cairo, Egypt, September 1997***


The exciting findings reported from the second field trial of the Nepal Nutrition Intervention Project – Sarlahi (NNIPS –2), were one of the highlights of the International Vitamin A Consultative Group (IVACG) Meeting, held this year in Cairo. In this randomized, double–masked community trial, weekly vitamin A supplementation, equivalent to 7000?g of retinol and provided either as preformed retinyl palmitate or as ?–carotene, was given to women of childbearing age. The project was a high–input research trial of great magnitude, involving over 44 000 women who were visited at home on a weekly basis by 432 trained staff. Results showed that this low–dose weekly supplementation markedly reduced the risk of pregnancy–related mortality. Combining the effects of the two interventions, pregnancy–related mortality decreased by 45% compared with that of a placebo control group. ?–carotene had a greater effect than preformed vitamin A, and it was suggested that this may be due to the additional antioxidant and immunoregulatory properties of ?–carotene. No detectable effects of supplementation were observed on fetal mortality or early infant mortality rates.

The incidence of night blindness was also markedly reduced in pregnant women receiving the vitamin A supplementation. This protection was extended into the postpartum period: compared with the placebo group, the incidence of night blindness in the first 6m postpartum was reduced by ~60% in the preformed vitamin A group and by ~30% in the ?–carotene group. The effect of supplementation on iron deficiency anemia was less marked, as parasitic infections – in particular hookworm infection –modified the effect of vitamin A on iron status. It was suggested that vitamin A interventions might play an important role in controlling maternal anemia in Nepal only if combined with hookworm control. Preliminary findings also suggested that supplementation may reduce the risk of ocular birth abnormalities in newborn children.

Currently, 28 countries are providing high−dose vitamin A supplementation to postpartum women. The results of NNIPS−2 suggest that low−dose vitamin A supplementation for women of childbearing age is a strategy that can reduce maternal mortality and may provide significant health benefits for their breastfed children. These quantities of vitamin A are possible to obtain by dietary means as well as through supplementation.

Other news from the meeting included an announcement by USAID of a new initiative to avert one million child deaths each year that are attributed to vitamin A deficiency. Through collaborative effort with other donor agencies, USAID will lead activities in several countries to incorporate vitamin A in all child survival activities and to use vitamin A coverage as a key child survival indicator. Evidence of successful integration of vitamin A supplementation into WHO's Expanded Programme on Immunization (EPI) and national immunization day activities was also provided, as were food−based approaches, including food fortification, to improve vitamin A status.

> The mission of IVACG is to guide activities for reducing vitamin A deficiency in the world. Through its international meetings, IVACG provides a forum for new ideas, encourages innovations, recognizes important research findings, increases awareness of the latest survey data, and promotes action programmes, A complete report of this meeting will be available in spring 1998 from the IVACG Secretariat, ILSI Research Foundation, 1126 Sixteenth Street, N.W., Washington, D.C. 20036−4810, U.S.A; Tel: 202 659 9024 Fax: 202 659 3617 Email: OMNI@ilsi.org. Source: IVACG Meeting abstracts and news release,

### *The Integrated Child Development Services Scheme (ICDS) 1997*

The Integrated Child Development Services (ICDS) Scheme was initiated in 1975 and has since developed into one of the worlds largest and most unique programmes for early childhood care and development. It delivers an integrated package of health, nutrition and education services to 3.8 million expectant and nursing mothers and 20.3 million children under the age of six from disadvantaged groups, with the objective of enhancing childhood care and development. A package of services, including supplementary nutrition, immunization, health check−up and referral services, is provided with early childhood care and pre−school education provided to children below the age of 6 years, and nutrition and health education provided to women of child bearing age and adolescent girls. The programme takes a holistic view of the development of the child and attempts to improve both the pre−natal and post−natal environment. The ICDS operates through a network of *anganwadis,* or courtyard play centres, which form the focal point for delivery of services at the community level. Some 350,000 trained community−based *anganwadi* workers and an equal number of helpers, supportive community structures and women groups are involved.

In 1992, a national evaluation of ICDS was completed and published by the National Institute of Public Cooperation and Child Development, New Delhi ("National Evaluation of Integrated Child Development Services"). A revision of this report was reprinted in 1997. Between the release of the National Evaluation of ICDS in 1992 and its reprint in 1997, several changes have taken place in the policy, thrust and implementation of the scheme.

There has been a strategic shift in policy to focus on reaching the younger child and to adopt a preventative, rather than curative approach to malnutrition. The programme is now focusing on improving the quality of caring practices for children under 3 years of age, on preventing malnutrition as early as possible and promoting psychosocial development during early years.

Pre−school material in local languages has been developed for use in the *anganwadis,* and linkages between the *anganwadis* and primary schools have been strengthened. Efforts have been made to strengthen the

training component of workers and helpers by focusing on field−based, participatory training that is relevant to local needs. The basic infrastructure facilities in the *anganwadis* have been improved with new provision of storage facilities for supplementary food.

To ensure that the benefits under the scheme reach the most disadvantaged areas, 180 new focal districts have been identified for coverage. Greater and more effective involvement of NGOs has also been attempted by exclusively earmarking new ICDS projects for implementation by NGOs. Attempts will be made to hand over 10% of projects in every state to NGOs.

A community−based monitoring mechanism has been introduced to ensure that monitoring and evaluation of the schemes occurs by members of the community. This provides a powerful stimulus to the community to effectively participate in all stages of implementation. A plan for introduction of services has also been formulated through which to initiate new ICDS projects. This emphasizes two phases of activities to precede each project: first, administrative and community preparation, and second, training of frontline workers.

Emerging from two decades of rich experience, the task of the ICDS now is not only to tackle disease and malnutrition, but also to ensure equality of opportunity to present and future generations of disadvantaged groups and to promote every child's right to development with special focus on girls and children with disabilities. The spectrum of ICDS services has broadened with the interventions related to the empowerment of women and communities and convergence of sectoral services. This emerging profile of ICDS has rededicated itself to promoting early child development.

> Further information about the ICDS and the ICDS publications mentioned in this article, can be obtained by contacting Dr Adarsh Sharma, Additional Director, National Institute of Public Cooperation and Child Development, 5, Siri Institutional Area, Hauz Khas, New Delhi 16, India. Fax: 91116851349 Email: syscon@del2.vsn1.net.in

### *New Recommended Normative Values for Thyroid Volume in Children Aged 6−15y*

A recent survey conducted among school children in 12 European countries used ultrasonography to assess thyroid volume in 3474 children (aged 6−15y) born and living in areas where iodine intake is normal (median urinary iodine above 100?g/l), and derived thyroid volume reference values from these data. The survey was conducted by the ThyroMobil Study Group (principal investigator: Prof. F. Delange, ICCIDD; see *SCN News No.13*), and results have recently been published in the *Bulletin of the World Health Organization* (75 (2), 95−7).

Although inspection and palpatation are normally used to determine thyroid volume in areas of moderate−severe iodine deficiency, ultrasonography is considered to be a more precise and objective method in areas of mild endemicity. Presented in the report are the recommended upper normal limits for thyroid volume (assessed by ultrasonography) by age, for iodine−replete boys and girls. Also presented are the recommended upper normal limits for thyroid volume as a function of body surface area, for iodine−replete boys and gins. The latter is more appropriate than thyroid volume as a function of age, for use in countries with a high prevalence of child growth retardation. These reference values are recommended by WHO and ICCIDD for interpreting survey and surveillance ultrasonography data among school children.

> Source: 'Update: Recommended normative values for thyroid volume in children aged 6−15 years. World Health Organization and International Council for Control of Iodine Deficiency Disorders (1997). *Bulletin of the World Health Organization,* 75 (2), 95−7' Requests for reprints should be sent to the Nutrition Unit, World Health Organization, 1211 Geneva 27, Switzerland. Fax: 41 22 791 0746.

### *Human Milk − an Invisible Food Resource*

In a recent IFPRI Food Consumption and Nutrition Division discussion paper, Arne Oshaug and Anne Hatløy argue that overlooking human milk production in calculations of food supply, food and nutrient availability and food economics, has negative consequences for breastfeeding practices, children's health and nutritional status. Based on breastfeeding frequency data, age, demographic data and information on the amount of human milk consumed by children of different ages, the quantity of human milk production was calculated for Koutiala County, Mali, and compared with national data from Demographic and Health Surveys (DHS) and other sources. The annual production of human milk in Koutiala County was estimated to be 116kg per child, with a 9−10% higher production in rural areas than in urban areas. To put the economic value of human milk into perspective, the authors compared human milk production with that of cow's milk, and suggested that the

volume of human milk is at least 50% that of cow's milk production in Sub−Saharan Africa.

Infancy is the only period in life when humans obtain nutrition security by consuming one food, breastmilk. When a mother breastfeeds her child, food security, care and protection against diseases are provided simultaneously. Breastmilk meets all the nutritional requirements of infants during the first 6m of life and is the most important food for more than 10% of the population of Sub−Saharan Africa (i.e. children less than 3y of age). No other single food has such a positive impact on nutrition and health.

Decision−makers do not generally consider human milk to be a food resource, and data on human milk are not normally considered important in the context of food supply statistics. The authors maintain that by not including human milk in food supply data, inadequate attention to breastmilk and breastfeeding will continue to exist with serious health consequences. This is particularly important where accelerating urbanization and other types of social changes may contribute to the decline of breast−feeding. The authors challenge economists, statisticians, and others who are involved in the generation of health and food statistics to include human milk in their calculations, and to compare these data to the economic and social costs of purchasing infant formula due to the decline in breastfeeding, and to additional health expenditures due to the increase in childhood morbidity and malnutrition.

Arne Oshaug and Anne Hatløy work at the Nutrition Institute, University of Oslo, B.P. 1046 Blindern, N−0316 Oslo, Norway. Tel: 47 22 8513 79 Fax: 47 22 85 13 41 Email: ame.oshaug@basalmed.uio.no. IFPRI FCND Discussion papers contain preliminary material and research results and are circulated prior to a full peer review in order to stimulate discussion and critical comment. Copies of discussion papers can be obtained from FCND, IFPRI, 1200 Seventeenth Street, N.W., Washington, D.C. 20036−3006 USA. Tel: 202 862 5600 Fax: 202 467 4439. The full paper will be published in the December 1997 issue of the *Journal of Human Lactation (No.13).*

### *Approaches to Reduce Vitamin A Deficiency in Lagos State, Nigeria*

A recent study by Dr U.A. Adirieje of Optonet International, Nigeria, showed evidence for vitamin A deficiency (VAD) in some communities of Lagos State, Nigeria. Based on the clinical presence of keratomalacia and night blindness, the prevalence of VAD was found to be 10.1% in a sample of 496 people presenting for examination. Dr Adiriege argues that this figure might underestimate the true occurrence of VAD as those with mild or subclinical deficiency were missed.

In response to this problem, Optonet have produced a leaflet "Save a life from Vitamin A deficiency and xerophthalmia − Give Vitamin A", in which recommendations are given aimed at reducing VAD and the consequences of VAD are explained.


***Optonet Recommendations to Reduce VAD in Lagos State:***

- *Vitamin A supplementation:* this is recommended for children and babies with signs and symptoms of VAD.

- *Diet:* it is recommended to feed the family with meals containing lots of green leafy vegetables and fruits, yellow vegetables, yellow fruits, liver (especially of fish), whole milk, eggs and red palm oil.

- *Breastfeeding:* it is recommended to feed babies with breastmilk alone, for the first 4–6 months of life.

The above poster is intended to help spread the message about vitamin A: "vitamin A prevents death and blindness in children". This is presented and interpreted in the 3 major Nigerian Languages of Yoruba, Hausa and Igbo (clockwise).

> For further information and a copy of the leaflet, please contact Dr U.A. Adirieje, Executive Director, Optonet Int'l & Afrihealth Info Projects, P.O. Box 4127, Oshodi, Lagos, Nigeria. Tel: 846892 Email: nipem.lag1@rcl.nig.com or nipem.lag1@rcl.dircon.co.uk

### *Simple Test Kits to Determine Cyanogens in Cassava Roots and Cassava Flour*

A simple and inexpensive test to determine the amount of cyanide compounds (cyanogens) present in cassava and cassava products has been developed and field–tested, and is now available. Cassava is a staple food for 500 million people and is the third most important crop in the tropics after rice and maize. Cyanide intoxication can occur from eating cassava, with symptoms including stomach pains, diarrhoea and dizziness. According to Dr Bradbury (see below), in the past 15 years or so, around 5 000 –10 000 people (mainly children) in Mozambique, Tanzania and Zaire have developed "Konzo", a disease caused by cyanide intoxication and characterized by an irreversible paralysis of the legs. In very rare cases, deaths have occurred. Consumption of cassava containing cyanogens also worsens iodine deficiency disorders, as cyanide is detoxified to thiocyanate in the body, which in turn reduces the uptake of iodine by the thyroid gland.

In the test, a small weighed sample of cassava tuber or cassava flour is mixed with water and placed with a buffered paper containing an enzyme, *linamarase,* that reacts with cyanogens. Indicator paper containing picric acid changes from yellow when there is no cyanogen present, to brown when high levels of cyanogen are present. The colour change is then compared to a colour chart with 10 levels to determine how much cyanogen is present in the sample. This field test requires only a small amount of clean water and a table in the shade to set up the test kit.

In Mozambique in October 1996, the test was used in a field trial to analyze 80 samples of cassava flour. The average level of cyanogens in the samples was found to be 4.5 times the level recommended as safe by FAO/WHO (10ppm)[1] and, in two cases, values of 200 ppm were obtained. Possible interventions to reduce the extent of this health hazard in Mozambique include improved methods of processing to reduce the cyanogen content of cassava flour and introduction of low cyanide cultivars of cassava.

> [1]Recommended safe level: 10mg hydrogen cyanide per kg flour=10 ppm. Codex Alimentarius Commission of FAO/WHO (1988). Report of the 8 Session of the Codex Coordinating Commission for Africa. FAO/WHO.

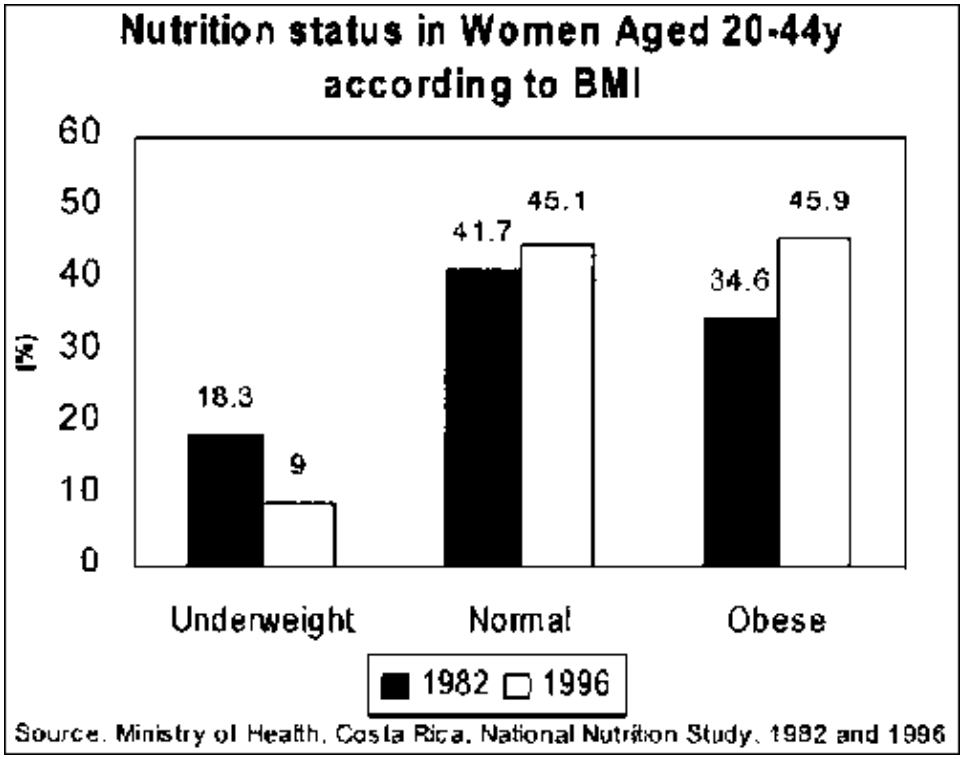
In the past, cassava samples have been sent from Africa to overseas laboratories for expensive and difficult tests to determine the cyanide content. The author hopes that this work funded by the Australian Centre for International Agricultural Research will change this. Two kits are now available free to health and agricultural laboratories in developing countries. Kit A is for determination of total cyanogens in cassava roots. Kit B allows the separate determination of the three different forms of cyanogens in cassava flour.

> This article was submitted by Dr J. Howard Bradbury, Division of Botany and Zoology, Australian National University, Canberra, ACT 0200, Australia. Tel 61 2 6249 0775 Fax: 61 2 6249 5573 Email: Howard.Bradbury@anu.edu.au.

### *Costa Rica National Nutritional Study 1996*


In 1996, a national nutrition study was carried out in Costa Rica to provide information on the nutritional situation of the population and to compare this with data from the 1982 national nutrition study. Results are now available for anthropometric, micronutrient, intestinal helminth, food consumption and oral health analyses. Anthropometric results showed an improvement in nutritional status, but also an increasing prevalence of obesity. Height for age (HA), weight for height (WH), and weight for age (WA) for pre−school children; and body mass index (BMI) for school children and adults, were used as indicators to determine nutritional status.

In pre−school children (1008 children aged 1−6y), 22.4% of children had low WA compared with 30.9% in 1982. The prevalence of stunting (low HA) decreased from 29.3% in 1982 to 21.4% in 1996, In contrast, the prevalence of children who were overweight increased from 2.5% in 1982 to 4.2% in 1996. In children of school age (582 children aged 7−12y), 16.5% were underweight and 14.9% were overweight. Girls represented a higher percentage of those overweight (16.3%) compared with boys (13.6%). Undernutntion was equally prevalent in girls and boys. In women aged 15−19y (69 women), 23.2% were overweight and 1.4% were underweight. In women aged 20−44y (865 women), 45.9% were overweight and 9% were underweight. Obesity was higher in rural zones (50.6%) compared with metropolitan areas (42.3%) and other urban areas (44.8%). No significant differences in undernutrition were found according to geographical area. In women aged 45−59y (120 women), 75% were obese and 2.5% were underweight. In all women, malnutrition decreased from 1982 to 1996, whereas obesity increased (graph).




For further information, please contact Dr Luis Tacsan Chen, Jefe, Departmento de Nutricion, Ministerio de Salud, Republica de Costa Rica. Source: translated from the leaflet 'Ensuesta nacional de Nutricion, 1996 – Anthropometria'. Ministerio de Salud, Costa Rica, 1997.

***Public Nutrition – an Emerging New Field of Study***

Public nutrition is concerned with improving nutrition in populations from both poor and industrialized countries, and forms links with public health nutrition and complementary disciplines. The term was initially proposed in a letter to the editor of the *American Journal of Clinical Nutrition (1996; 63, 399–400),* which in turn, led to a meeting on public nutrition, held on July 24–26 1997 at the University of Montreal, Canada, organized by Dr John Mason of Tulane University, U.S.A. The aim of the meeting was to define a focused approach for redressing the problems of nutrition in populations, and a report of the proceedings of this meeting is due to be published at the beginning of 1998.

The definition of public nutrition as an emerging field of academic study, research and action was discussed in depth at the meeting. Public nutrition encompasses epidemiology, public policy and programme analysis, and in this sense is a field of study that can lead to a professional qualification. The scope of public nutrition is broad, encompassing but not supplanting more focused topics. On this point, there was general agreement that public nutrition is compatible with public health nutrition, but that public nutrition is broader in scope.

A number of proposals to develop the idea of public nutrition as an emerging new field of study were discussed, including the possibility of establishing new courses in public nutrition at universities, developing new training materials on public nutrition, and engaging the public sector in efforts to improve public nutrition. The possibilities of establishing a professional association and national and regional networks for public nutrition were also considered, and it was agreed that further discussion among participants and interested parties should continue by email.

For further information about the outcome of this meeting, and details about publication of the meeting report, please contact Yaw O. Agyeman and John Mason, Dept of International Health and Development, Tulane University, School of Public Health and Tropical Medicine, 1440 Canal St, Suite 2200, New Orleans, Louisiana 70112, USA. Tel: 504 586 3987 Fax: 504 584 3653 Email: masonj@mailhost.tcs.tulane.edu/yagyema@mailhost.tcs.tulane.edu

***Current Issues in Diabetes***

***By Jak Jervell***

***Immediate Past President, International Diabetes Federation***

Diabetes mellitus is characterized by high levels of blood glucose and occurs when the body is not able to make use of glucose in the blood for growth and energy. For glucose to enter the cells and be utilized, the hormone insulin (produced in the Islets of Langerhans in the pancreas) is required. Diabetes occurs either because the pancreas in not able to make enough insulin, or because the insulin that is available is not effective (insulin resistance), or both. It gives acute symptoms and late complications involving the eyes, kidneys, peripheral nerves (micro−vascular complications) and increased tendency to atherosclerotic disease (coronary heart, cerebrovascular and peripheral artery disease). There are two common types of diabetes:

- ***Insulin dependent*** or Type 1 diabetes (IDDM) and
- ***Non−insulin dependent*** or Type 2 diabetes (NIDDM).

Type 1 is an autoimmune disease and results from a destruction of the insulin producing ?−cells of the Islets of Langerhans in the pancreas. This is the most common form of diabetes in children and young adults. People with Type I diabetes are absolutely dependent on daily injections of insulin for survival. Type 2 diabetes usually develops in adults and is the most common form of diabetes. This occurs when the body cannot use insulin effectively. ***Impaired Glucose Tolerance*** (IGT) is a condition, less serious than diabetes, where blood glucose levels are higher than normal. People with IGT have a higher risk of atherosclerotic disease, but no risk of the microvascular complications of diabetes.

***Global prevalence of diabetes***

Recently compiled data show that approximately 135 million people suffer from diabetes mellitus worldwide, and that this number will rise to 300 million by the year 2025 *(World Health Report 1997, WHO).* The epidemic of diabetes (and other noncommunicable diseases, e.g. coronary heart disease) is particularly serious in developing countries, e.g. China, South Asia (India, Sri Lanka, Bangladesh), the Middle East and Latin America. These are also countries where living conditions are changing most dramatically, and urbanization and demographic changes are the greatest. In developing countries, higher total prevalence rates are found and the prevalence starts to rise at an earlier age.

**The International Diabetes Federation (IDF)**

The IDF is a federation of 146 diabetes associations in 121 countries. It has strong links with WHO. IDF and WHO have one permanent working group and a number of joint working groups and publications.

The IDF involves people with diabetes, health care professionals and scientists. Professor Jak Jervell (a current member of the AGN − see page 2) is the immediate past president of the IDF.

***Impact of diabetes***

A study on the global burden of disease giving estimates of cause−specific mortality has recently been published jointly by WHO, the World Bank and Harvard University. Figures presented in the study ranked diabetes as the 16th leading cause of mortality worldwide (see Table), however, as the number of deaths related to diabetes result from complications and infections, the actual number of deaths will be far greater than those ascribed to diabetes on death certificates. Correcting this figure to account for excess mortality in people with diabetes from complications gives 2 800 thousand deaths − equivalent to fifth ranking.

***Table: Leading causes of death worldwide in 1990***

| ***Rank*** | ***Cause of deaths*** | ***No. of deaths (thousands)*** |
|---|---|---|
| | | |
| | All causes | 50 467 |
| 1 | Ischaemic heart disease | 6260 |
| 2 | Cerebrovascular heart disease | 4381 |
| 3 | Lower respiratory infections | 4299 |
| 4 | Diarrhoeal diseases | 2946 |

| | | |
|---|---|---|
| ... | | |
| **16** | **Diabetes** | **571** |
| **#5** | **Diabetes** | **2800** |

# corrected for excess mortality in people with diabetes from micro and atherosclerotic complications. *(Adapted from Murray, C.J.L. & Lopez, A.D. (1997). The Lancet 349,1269–76).*

These figures are from 1990 – by 2010 diabetes will be among one of the leading causes of death worldwide.

***Diabetes therapy***

The main objective of diabetes therapy is to relieve acute symptoms and prevent late complications. Microvascular complications are best prevented by normalization of blood glucose. Specific interventions early on can delay progression, e.g., laser therapy of the retina can prevent blindness. The atherosclerotic complications however, need a much wider approach – smoking control, dietary changes and increased exercise. Finally, education of those with diabetes and their families is most important for success in reaching these goals.

***The role of WHO***

WHO's role has been of great importance to the recognition for the impact of diabetes, and for advocating national programmes and encouraging their implementation. In the NCD (non–communicable diseases) division at WHO headquarters in Geneva, we are lucky in having Hilary King as the diabetes officer, who collaborates extensively with 30 collaborating centres worldwide. The regional offices of WHO in Europe, PAHO, and in the Eastern Mediterranean have been very active in diabetes, jointly with the IDF. The St. Vincent declaration (1989) has led to a permanent process for improving diabetes care in Europe, in partnership with WHO and IDF internationally and between Departments of Health and IDF member associations nationally. A similar process was started in the Americas last year, with the Diabetes Declaration of the Americas. In the Middle East, many countries have developed National Diabetes Programmes together with EMRO (WHO Eastern Mediterranean Regional Office) and IDF. In Africa similar processes have started.

**Current Issues in Diabetes**

• Diabetes (and Impaired Glucose Tolerance) is one of many non–communicable diseases (NCDs). It can be used as a marker for the risk of NCDs in a population.

• Can diabetes and the other NCDs be prevented? Primary prevention cannot be achieved through the health services, but has to be done through changes in the way we organize our societies. Historically, Homo sapiens were hunter–gatherers, and later, farmers. Our biology has been adapted to those life styles – physical activity and a low fat, fibre–rich and varied diet. Positive selection factors may have been a preference for calorie–dense food, avoidance of unnecessary physical activity, and ability to gorge when food was available. The life style of the late 20$^{th}$ century is not suitable for the hunter–gatherer. We must organize our societies so that a healthier life–style becomes the simplest, cheapest and most enjoyable. On the other hand, let us not forget that in this century the duration of life has increased more than 20 years in most countries, infant mortality and mortality due to infectious diseases have decreased markedly and the general health have improved almost everywhere.

• Most of the cost of diabetes, in suffering, in health care, in lost years and lost working capacity, comes from its complications. Investment in primary care, education, simple drugs and monitoring technology is very cost effective. In most countries – developing and developed – too many resources are spent on treatment rather than on 'secondary' prevention and good management to prevent the complications. In Gaza, diabetes is the main reason for non–traumatic amputations, in the U.S. it is the main cause of blindness in younger adults, and in Japan it is the main cause of renal failure.

• Insulin was discovered in 1921, but is still not available to all those who need it. Two thirds of all insulin produced is used on one fifth of the world population, in the fully industrialized market economies. A child with type I diabetes who does not have daily insulin injections will die. The prevalence of type I diabetes in developing countries is low but survival is very short, and children often die undiagnosed. This is part of the general problem of lack of basic health care in many poorer countries, a problem that today can be solved

by concerted efforts by governments together with the international community.

• A chronic disease like diabetes needs a different relationship between the 'patient' and the health services. The outcome depends very much on the choices made by the person with diabetes. The roles of the health care professionals are chiefly that of adviser, facilitator of learning, and provider of necessary services. It has been stated that the role of the health care providers is to help people with diabetes avoid becoming 'patients'.

• The hypothesis that early (intrauterine and first years of extrauterine) undernutrition increases the susceptibility to diabetes, coronary heart disease and hypertension in later life, is gaining acceptance, not only from studies in industrialized countries but also in developing countries. This is yet another argument for looking better after the nutrition of women and children, and an argument I have found leaders in developing countries to be receptive to.

This article was submitted by Jak Jervell, Immediate Past President, IDF, Medical Department B, Rikshspitalet, 0027 Oslo, Norway. Tel: 47 2286 8306/5 and 47 2255 2787 Fax: 47 2244 4895. Editor's note: a WHO factsheet on Diabetes Mellitus (September 1997) is also available from the WHO Press Office, 1211 Geneva, 27 Switzerland. Tel: +41 22 791 2111 Fax: +41 22 791 0746.

## Letters to the Editor

**SCN NEWS NO. 15** sees the start of a new section *"Letters to the Editor".* This section aims to encourage positive discussion and debate about current issues in the field of international nutrition, including reponses to articles published in SCN News Your letters and comments would be most welcome

***Folic Acid Supplementation for the Prevention of Neural Tube Defects. Should it be a Priority for Developing Countries?***

***By Rafael Pérez−Escamilla, Department of Nutritional Sciences, University of Connecticut, U.S.A.***

Dear Editor,

In the recent *SCN News* article entitled "The Nutrition Challenge in the Twenty−First Century: What Role for the United Nations?" *(SCN News No. 14),* it is stated '... *[Folic Acid] Supplementation of women before conception will reduce the incidence of neural tube defects... The beneficial effects of folate are obtained at alt levels well above usual intake'.* In a review article (1) published in 1995,1 argued that massive folic acid (FA) supplementation or fortification of the food supply for the prevention of neural tube defects (NTDs) is unwarranted. First and foremost, it is essential to recognize that the FA−NTD connection is not based on a 'typical' nutritional deficiency paradigm. In contrast with health (e.g., low birth weight, infant mortality) and nutritional (e.g., stunting, iron, iodine and vitamin A deficiency) indicators, the distribution of NTDs does not seem to follow a developed vs. developing country spacial distribution pattern. This is not surprising, because FA−sensitive NTDs are the result of a *genetic defect* in the metabolism of FA and/or other nutrients such as vitamin B−12 and methionine. This genetic disorder is partially overcome by additional FA consumption. Thus, FA deficiency is not the primary cause of NTD's and this is why blood FA levels appear similar when comparing women who develop vs. those who do not develop NTDs. Second, whereas over a billion people suffer from undernutrition and parasitic infestations, the estimated annual occurrence of NTDs worldwide is approximately 350 000 births.

To put this number in perspective, in a country the size of the USA (about 250 million inhabitants and 4 million annual births), it has been estimated that a policy of FA fortification of cereal based products would prevent only about 1000 NTD cases per year. Even though reasonable solutions have existed for decades to prevent some micronutrient deficiencies (e.g., iron supplementation, sugar fortification with vitamin A, salt iodization) and some progress has recently been made, these public health problems still afflict hundreds of millions of individuals. Should we then embark on trying to implement an exceedingly difficult intervention to prevent a relatively small number of NTD cases per year? Implementing an FA supplementation policy is very difficult because sexually active women would have to take the supplement throughout their reproductive life. This is because additional FA can prevent NTDs only if consumed during the periconceptional period (i.e., at a time when most women do not even know that they are pregnant). In addition Demographic and Health Survey

data indicate that in many developing countries over half of the women become pregnant when they were not planning to have another child. Third, it is true that the MRC randomized clinical trial (2) used 4mg FA per day (about 10 times the US RDA for pregnant women) to demonstrate that periconceptional supplementation with this vitamin can indeed significantly reduce the recurrence of NTDs. This dosage, however, was intentionally chosen to be high to avoid the possibility of negative findings due to an insufficiency level of FA exposure. There is a substantial body of observational and quasi–experimental evidence indicating that 0.4mg FA per day may be enough to prevent NTDs. This is why the US Public Health Service bases its recommendation for women without a previous history of NTDs on this low dosage approach. The implications are that women may be able to obtain additional FA through their diets (e.g., by increasing consumption of beans, oranges, green leafy vegetables) or food fortification – an also less than optimal approach – without exposing the population to unsafe FA dosages. In addition to the possibility of PA masking B–12 deficiency, there is limited but worrisome data indicating that additional FA could interfere with the action of some malaria medications and even increase the susceptibility for the development of this disease. In summary, the finding that FA supplementation can prevent the development of some NTDs is a remarkable and landmark finding in the history of developmental nutrition. The implications of these findings for developing countries are not clear due to the difficulty of implementing a FA supplementation policy to prevent the occurrence of a relatively rare outcome. All women in developing countries should be informed about the FA–NTDs findings and be advised on how to increase the consumption of this water soluble vitamin through their diets. It is clear that women who are at risk of NTD recurrence should follow the USA Center for Disease Control and Prevention (CDC) policy (i.e., 4mg of FA perday *under the supervision of a physician* when they plan to become pregnant). This policy, unfortunately does not reach the majority of women as most NTDs are occurrent (i.e., first time event), and the policy may also be difficult to implement in some developing country settings. Meanwhile, it seems clear that it is currently unwarranted for United Nations agencies to invest precious resources on massive FA supplementation for the prevention of NTDs. Improving our understanding of the epidemiology of FA deficiency and NTDs in developing countries, and hunting for the genetic marker(s) that accurately predict risk of FA–sensitive NTD's should be a priority. Perhaps in the not too distant future we will be able to identify women who are at NTD risk before they enter their reproductive years and follow them up accordingly and with much better targeted efforts.

**References**

1. Pérez–Escamilla R. Periconceptional Folic Acid and Neural Tube Defects: Public Health Issues, *Bulletin of PAHO 1995; 29:250–263.*

2. MRC Vitamin Study Research Group. Prevention of neural tube defects: Results of the Medical Research Council Vitamin Study. Lancet *1991; 338:131–137.*

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## Refugee Issues

### *Summary of WFP/UNHCR Guidelines for Estimating Food and Nutritional Requirements*

In line with recent recommendations by WHO and the Committee on International Nutrition[1], WFP and UNHCR will now use 2,100 kcals/person/day as the initial energy requirement for designing food aid rations in emergencies. In an emergency situation, it is essential to establish such a value to allow for rapid planning and response to the food and nutrition requirements of an affected population. An in–depth assessment is often not possible in the early days of an emergency, and an estimated value is needed to make decisions about the immediate procurement and shipment of food.

[1]The Committee on International Nutrition (CIM) was established in October 1993 by the Institute of Medicine (IOM) under the aegis of the Food and Nutrition Board and the Board on International Health, and with support from USAID. The CIN was established in response to agency needs for advice in the areas of nutrition, food, and health policy.

The initial level is applicable only in the early stages of an emergency. As soon as demographic, health, nutritional and food security information is available, the estimated *per capita* energy requirements should be

adjusted accordingly.

Food rations should complement any food that the affected population is able to obtain on its own through activities such as agricultural production, trade, labour, and small business. An understanding of the various mechanisms used by the population to gain access to food is essential to give an accurate estimate of food needs. Therefore, a prerequisite for the design of a longer term ration is a thorough assessment of the degree of self−reliance and level of household food security. Frequent assessments are necessary to adequately determine food aid needs on an on−going basis.

The importance of ensuring a culturally acceptable, adequate basic ration for the affected population at the onset of an emergency is considered to be one of the basic principles in ration design. The quality of the ration provided, particularly in terms of micronutrients, is stressed in the guidelines and levels provided will aim to conform with standards set by other technical agencies.

> Copies of the Guidelines are available from Rita Bhatia, UNHCR, CP 2500,1211 Geneva 2, Switzerland Tel: 41 22 739 7366 Fax: 41 22 739 8308 Email: bhatia@unhcr.ch or Anne Callanan, WFP, 426 Via Cristoforo Colombo, 00145 Rome, Italy. Tel: 396 651 32718 Fax: 396 651 32837 Email: callanan@wfp.org Source: *WFP/UNHCR Guidelines for Estimating Food and Nutritional Requirements* (draft), August 1997.

### *The Sphere Project − Minimum Standards in Humanitarian Response*

Recognizing the need for consistent, effective humanitarian relief, the Sphere Project aims to improve the quality of assistance provided to people affected by disasters (whether natural or man−made) and to improve the accountability of agencies to their beneficiaries, their membership, and their donors. In order to achieve this, a set of agreed−upon minimum standards in the core areas of humanitarian assistance of nutrition and food security, health services, shelter and site management, and water and sanitation is being developed.

The Sphere Project is a collaborative process, initiated in July 1997 by a number of major humanitarian organizations. It involves frontline NGOs, interested donor governments, and UN agencies. The steering committee for humanitarian response (SCHR)[1] and InterAction[2] are the leaders of this effort. Many other organizations are interested in the project as well. VOICE, a European consortium of agencies working in emergencies, holds observer status on the project management committee. UN agencies (including UNHCR, DHA, UNICEF, WFP) have stated their support for the project and are participating in the dialogue.

> [1]An alliance for voluntary action of: Care International, Caritas Internationalis, International Federation of Red Cross and Red Crescent Societies, International Save the Children Alliance, Lutheran World Federation, Médecins sans Frontières, Oxfam International and World Council of Churches.
>
> [2]InterAction is a coalition of over 150 US−based non−profit organizations ("private and voluntary organizations," or PVOs) working to promote human dignity and development in 165 countries around the world.

At the end of the project year a three−part document will be produced, The first part of the Sphere document will describe the Humanitarian Charter − the rights which humanitarian efforts support when normal social mechanisms have been disrupted. Either a natural or a manmade disaster may be the cause of such a crisis situation. The second section of the Sphere document will set out minimum standards in four essential sectors − nutrition and food security, water and sanitation, shelter and site selection, and health services. The third part of the document will take the expression of standards to the next step, demonstrating acceptable implementation procedures with descriptions of best practices from a variety of situations around the world.

Agencies involved in the project will then begin the process of disseminating the product for formal adoption within the international humanitarian system. A number of factors will contribute to compliance with the standards. There exists throughout the humanitarian system forward momentum towards greater accountability in practice. History shows that practice does change to adopt improvements as information is disseminated. Acceptance by the large number of agencies collaborating in the project will be a major step towards compliance.

> These reports and further details are available by writing to Susan Purdin, Sphere Project Manager 150, Route de Ferney Grand Saconnex, Geneva, Switzerland. Tel: 41 22 791 6202 Fax: 41 22 920 0972 Email: purdin@ifrc.org Web: http://www.ifrc.org/sphere/ Source: The

Sphere Project, Minimum Standards in Humanitarian Response, Project Overview, and Project Progress Report Number 1.

### *Vitamin C Pilot Programme*

The USAID Vitamin C Pilot Programme, initiated in March 1996, was designed to produce, provide, and evaluate food aid commodities with increased levels of vitamin C fortification. This was undertaken because general rations containing inadequate vitamin C, combined with a lack of diversity of food sources, have been named as the primary factors for outbreaks of scurvy in refugee, displaced, or famine affected populations. The project monitored the uniformity, stability and physical availability in corn–soy blend (CSB) and wheat–soy blend (WSB) products manufactured in the U.S.A. and distributed to India, Tanzania and Haiti.

Results indicate that the uniformity of distribution of vitamin C in the CSB and WSB products varied from plant to plant. This also varied within a given production run. There was little loss of vitamin C from the point of production to the point of distribution, even when shipping time was as long as nine months, however significant losses of vitamin C (around 70%) occurred during food preparation.

Given that these CSB and WSB products contain 40mg of vitamin C/100g, such cooking losses would mean that a daily ration of 30g would provide only 3.6mg of vitamin C. This is well below the recommended daily allowance of 27g[1]. Fortification levels could be increased and alternative forms of vitamin C that are not affected to such an extent by cooking could also be tried to improve this situation.

[1]Source UNHCR Food Aid and Nutrition Briefing Kit. Minimal allowances have been calculated by aggregating age–specific FAO/WHO RDAs and are based on a typical developing country demographic profile. Taken from Background Document 1 by M Toole for the Machakos Workshop, Dec. 1994.

Based on current production, increasing the level of vitamin C in all CSB and WSB products to 90 mg/100g would reduce the overall production by 4,662 metric tons, and reduce the number of people being fed a ration of 30 g/day for a year by 425,797.

The results of this project have alerted the USDA to review its specifications and monitoring procedures concerning CSB and WSB products.

Taken from: Results Report on the Vitamin C Pilot Program, prepared by SUSTAIN, September 1997. The information contained in this report is not definitive. Sustain, 1400 16th Street, N.W., Box 35, Washington D.C. 20036, U.S.A. Tel: 202 328 5180 Fax: 202 328 5175 Email: sustain@sustaintech.org

### *Guiding Principles for Feeding Infants and Young Children During Emergencies (1997), WHO*

The WHO's 'Guiding Principles for Feeding Infants and Young Children During Emergencies', prepared at the request of the World Health Assembly, is intended to provide a conceptual framework within which to implement programmes intended to protect a particularly vulnerable group – infants and children. When disaster strikes, whole communities are thrown into disarray, and while entire populations often become vulnerable to malnutrition, diarrhoeal diseases, acute respiratory infection, measles and malaria, infants (<12 months old) and young children (<3 years old) are amongst the most vulnerable. The most effective way to avert the disability and death so common among this group in the aftermath of a disaster, is to ensure the adequate feeding and care of infants and children. The document is structured around the following principles:

• All infants should be fed only breastmilk from birth to 4 to 6 months of age[1].

[1]World Health Assembly documents encourage exclusive breastfeeding to about six months – not 4 to 6 months – and endorse appropriate complementary feeding practices from about the age of six months (WHA 47.4, WHA 49.15).

• Every effort should be made to create and sustain an atmosphere that encourages frequent breastfeeding for all children under two years of age. The premature cessation of breastfeeding is the most dangerous deviation from optimal infant feeding practices for young children living in conditions of poor sanitation, or who are already sick or malnourished.

• The quality, distribution and use of breast−milk substitutes at emergency sites must be strictly controlled as emergency conditions tend to aggravate health risks associated with artificial feeding.

• It is important that older children be provided with foods that are easy to eat and digest, and that nutritionally complement breast milk.

• Adequate household food security, and particularly the availability of food suitable for small children, should be an explicit consideration at every step of emergency resource planning and management.

• Care−giving capacities among emergency−affected populations should be strengthened to promote good infant and child feeding practices.

• The health and vigor of all children, but especially newborns, must be protected so they are able to suckle frequently and well.

• Maintaining an active and constant search for malnourished children is important. The underlying causes of malnutrition should be investigated and addressed.

• Interventions should begin immediately during the acute phase of an emergency. Efforts should be made to alleviate pressures on caregivers and to channel scarce resources for the benefit of infants and young children.

• A flexible approach to the care and feeding of infants and young children in emergency situations should be based on continual and careful monitoring.

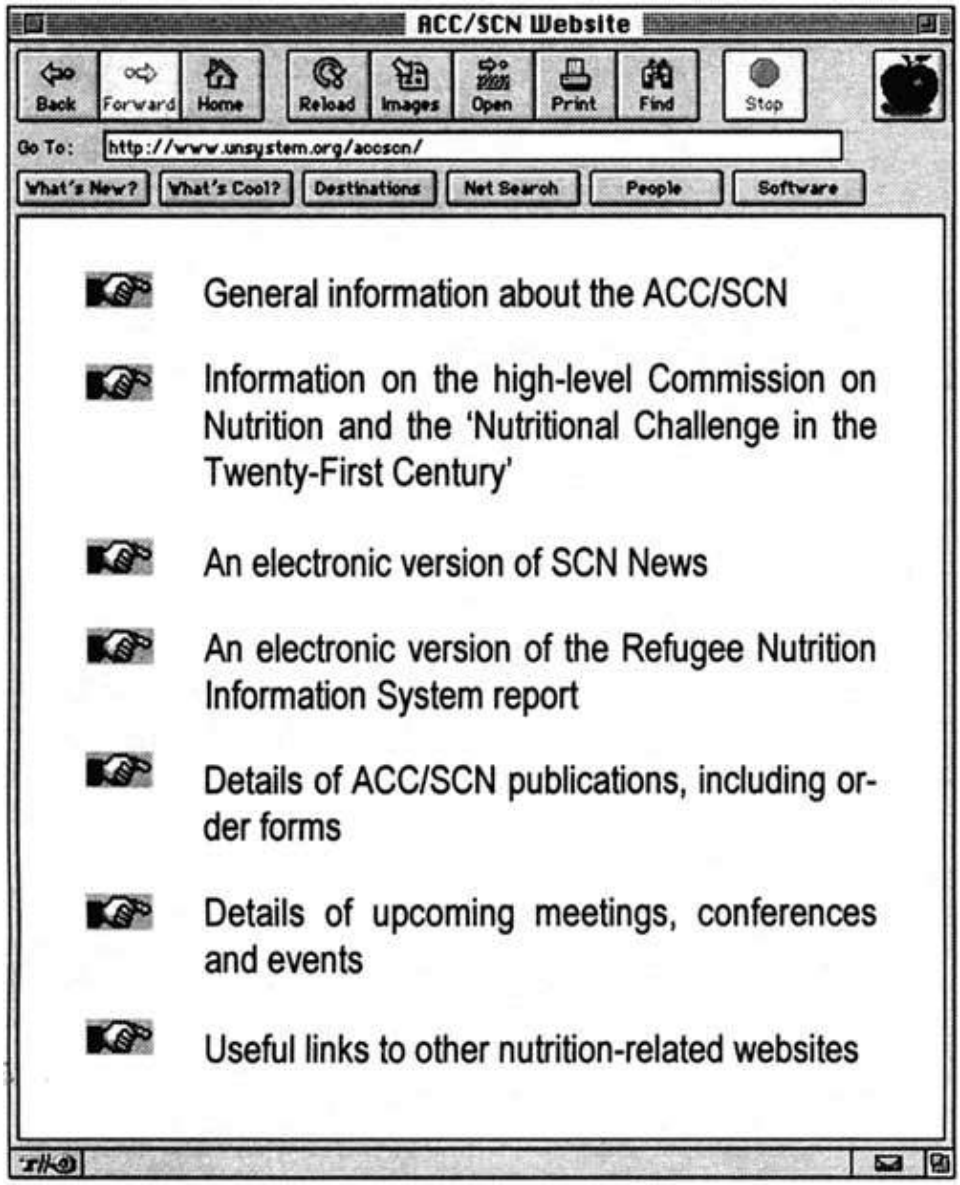
• Members of the international nutrition and emergency relief community have been asked to review the Guiding Principles, which should be available in final form in the first six months of 1998.

Source: *Guiding Principles for Feeding Infants and Young Children During Emergencies − Review Version; World Health Organization (1997) doc. NUT/97.3.* Copies of this document are available from Jim Akre, Programme of Nutrition, Family and Reproductive Health, WHO. Tel: 41 22 791 3325 Fax: 41 22 791 0746 Email: akrej@who.ch.

## Courses, Meetings and Announcements

***Announcing the New ACC/SCN Website***

The ACC Sub−Committee on Nutrition is launching a web−site! The website will provide an additional medium through which to disseminate information on nutrition. The site will include:




The new ACC/SCN website will be available soon on **http://www.unsystem.org/accscn/**

***"Breastfeeding: from Biology to Policy" The Abraham Horwitz Lecture, 1998***

Dr Richard Jolly, SCN Chair, is very pleased to announce that the Abraham Horwitz Lecture, 1998, on "Breast–feeding: from Biology to Policy", will be given by Ms Isatou Semega–Janneh, from the Ministry of Health, The Gambia. The Lecture will be presented at the Symposium entitled "Challenges for the 21st Century: A Gender Perspective on Nutrition Through the Life Cycle" at the SCN's 25th Session, 30 March 1998 in Oslo, Norway.

The Abraham Horwitz Lecture was introduced to the SCN agenda in March 1997 at its 24th Session, in recognition of Dr Abraham Horwitz' outstanding contribution to nutrition, and his exemplary leadership as Chairman of the Sub–Committee. The intention of the annual Lecture is to continue to promote Dr Horwitz' heartfelt, highly valued and extremely generous tradition of mentoring young talent from developing countries. Each year a guest lecturer who possesses the knowledge and commitment to present a 'bold and imaginative' presentation to the SCN Session, is invited to give this Lecture at the Session. The first Abraham Horwitz Lecture was given last year by Professor Siddiq Osmani of the University of Ulster, U.K. on the subject of "Poverty and Nutrition in South Asia".

Ms Semega–Janneh has an M.Sc. in Nutrition from the University of Oslo, Norway, and is currently head of the Nutrition Unit, Social Welfare and Women's Affairs department, Ministry of Health, The Gambia. She is also Chair of the board of directors for the Gambia Food and Nutrition Association and is a national breastfeeding coordinator in The Gambia. The SCN is delighted that Ms Semega–Janneh has accepted the invitation to give the Abraham Horwitz Lecture in 1998.

### *David Alnwick – New Chief of Health, UNICEF*

David Alnwick has been appointed Chief of Health, Programme Division, UNICEF, New York, effective mid–November. Prior to this appointment, David served as Chief of Nutrition from December 1996. Joanne Csete will be acting Chief of Nutrition until David's replacement is appointed.

David joined UNICEF in Soroti, Uganda in 1981 as Nutrition Officer to support UNICEF's efforts during the Karamoja famine emergency and he later transferred to Kampala, Uganda. In 1984, he was assigned to the Regional Office for East and Southern Africa, Nairobi, Kenya, and became the Regional Adviser, Household Food/Nutrition Policy in 1986. In 1989, David joined the Kenya Country Office as the Chief of the Health Section where he remained until his transfer to New York in 1992.

We congratulate David on his appointment. This is excellent news for health programming at UNICEF.

### *Ken Bailey Retires from WHO Nutrition Programme*

Dr Ken Bailey retired mid November after some 35+ years of service and returned to his home in Canberra, Australia. Ken has been a tireless nutrition advocate, a treasured colleague and an SCN friend. His accomplishments have been vast. Ken can be reached by email on Baileykv@ozemail.com.au.

### *Vernon Young awarded the DANONE Prize*

Professor Vernon Young has been awarded the DANONE Prize in recognition of his work on human protein and amino acid requirements. The prize was awarded mid November in Paris and consists of a physical award and some 800 000 FF. Professor Young works at the Laboratory of Human Nutrition, School of Science, MIT, Cambridge, U.S.A. Email: vryoung@mit.edu. We extend our congratulations to Professor Young on being awarded this prize.

### *'The Quest for Food Security in the Twenty–First Century'*

### *Canadian Journal of Development Studies Special Issue 1998*

Food security is a major issue at the turn of this century. The Editorial Board of the *Canadian Journal of Development Studies* (CJDS) has decided to devote a special issue of the Journal to this subject.

Founded in 1980, CJDS is the official Journal of the Canadian Association of Studies in International Development. It is a multidisciplinary and international forum on development. It publishes a special thematic issue every year, in addition to three regular issues with papers coming from all regions of the world.

The special issue on food security is due to appear around World Food Day, October 1998. Food security has many facets and dimensions, and this was taken into account in planning the special issue, as not all aspects can be addressed in depth. Papers will approach the subject from different perspectives, and at different levels – globally, nationally, and at community or household level. Food security issues in developing as well as developed countries will be addressed. The box below lists confirmed contributions (provisional titles).

> For more information, and for suggestions of conference announcements and book reviews to include, please contact the guest editors: Hélene Delisle, professor, Dept. Nutrition, Université de Montreal, Canada. Tel: (514) 343–6406 Fax: (514) 343–7395 Email: delisleh@dsuper.net or John D. Shaw (formerly UN World Food Programme), Kent, U.K. Tel: (181) 402–5614 Fax: (181)289–2909 Email: djohnshaw@compuserve.co

**Contents of the Canadian Journal of Development Studies Special Issue, 1998 (provisional)**

• *Pinstrup–Anderson, P. & Pandya–Lorch, R. (IFPRI).* Prospects for food security in the next century: an overview.

• *Maxwell, S. (IDS).* A world food security contract for the twenty–first century.

• *Clay, E. (ODI) & Shaw, J. (formerly WFP).* Global hunger and food security after the World Food Summit.

• *McGillivray, I. & Strachan L. (CIDA).* Canada and world food security.

• *Rached, E. & El Mekki, G. (IDRC).* Food systems under stress: Linking North and South researchers.

• *Greenfield, J. & Konandreas, P. (FAO).* Trade, production and consumption policies.

• *Haddad, L. et al. (IFPRI).* Women and food security.

• *Buckingham, D.* (University of Saskatchewan). Food security and the right to food.

• *Kneen, B. (Ram's Horn).* Clean? Green? Will biotechnology really feed the world?

• *Mooney, P. et al .(RAFI).* Biodiversity and food security.

• *Phillips, T. & Taylor, D. (Guelph University).* Household food security: assessment issues.

• *Hamelin, AM (Université Laval), Beaudry, M. (Université Laval) & Habicht, IP. (Cornell University).* La vulnérabilité des ménages a l'insécurité alimentaire [Household vulnerability to food insecurity].

• *McRae, R. (Toronto Food Council) & Welsh. J, (Ryerson Institute).* Community food systems and food security. Some lessons from the first world.

• *Jolly, R. (UNDP, SCN Chair).* Food, health and care.

***Advancing Nutrition Education: Moving Toward Healthful, Sustainable Diets***

***Society for Nutrition Education's 31st Annual Meeting Albuquerque Hilton and Holiday Inn Mountain View, Albuquerque, New Mexico July 18–22,1998***

Plan to attend the 31st Society for Nutrition Education's Annual Meeting where you will:

• hear the latest research findings on nutrition education and communication;

• strengthen your linkages with other nutrition educators in government, academic, local, and private sectors, and explore new ways to work together in communities, as nations, and across borders;

• share ideas and information to strengthen and advance your nutrition education practice;

• develop skills for both professional and personal enrichment;

• explore issues of food security, the food system, and the sustainability of the social, economic, cultural, and natural environments upon which they depend, and discover ways to make these connections understandable for the public;

• uncover opportunities to assume leadership positions with the Society;

• network and have fun with colleagues and friends.

You are enthusiastically invited to attend!

Calendar Deadlines: January 9, 1988: abstracts email and postmark deadline for oral and poster presentations. April 1,1988: awards and grants application postmark deadline. For more information, please contact the Society for Nutrition Education, 2850 Metro Drive, Suite 416, Minneapolis, MN 55425–1412. Tel: 612–854–6721 Fax: 612–854–7869 Email: labat004@tc.umn.edu

***Micronutrient Email Conference***

Beginning on January 5, 1998, the Consultative Group on International Agricultural Research (CGIAR) Micronutrient Project will be initiating an electronic mail conference that will bring together experts to discuss *Measuring Bioavailability of Trace–Mineral Dense Seeds* and *Optimal Breeding Strategies in View of Bioavailability Considerations.* These two topics will be discussed sequentially, each session running for several weeks. Participation is encouraged from the human nutrition and agricultural research communities. The conference promises to involve a lively interdisciplinary discussion on the methodology and strategy of the current research agenda.

For more information, contact Howarth Bouis or Bonnie McClafferty at IFPRI@CGNET.COM.

***Fourth International Graduate Course on Production and Use of Food Composition Data in Nutrition (FoodComp '98)***

***Wageningen, The Netherlands, 5–23 October, 1998***

This course is intended for those involved in nutritional database programmes as analysts, compilers or users and will be of value to those teaching nutrition and nutritional aspects of food chemistry. The aim of the course is to show how those involved in the production of analytical data for nutrients in foods, and in the compilation of these data into food composition tables and nutritional databases, contribute to the quality and usefulness of these compilations in nutrition. The course will be based on the philosophy that the preparation of nutritional databases requires close understanding of the needs of the users by both compilers and producers of analytical data. The course will show how this understanding can be achieved and the benefits that flow from the collaboration of users, analysts and compilers. Stages in the production of a nutrient database will be examined.

The course is organized by the Graduate School VLAG (Advanced Studies in Nutrition, Food Technology, Agrobiotechnology and Health Sciences), the Netherlands, in cooperation with the United Nations University, the Food and Agriculture Organization of the United Nations, the COST programme of the European Union and the International Union of Nutritional Sciences.

The course will comprise lectures, seminars and group work. The course fee, including a Dfl 680 non–refundable deposit, is Dfl 6800. The fee covers accommodation and meals at the Wageningen International Congress Centre, course materials, tuition fees and excursions. The closing date for application is 1 July 1998 but candidates are recommended to apply as soon as possible, preferably before 1 March 1998. Further information and an application form can be obtained from Mrs L. Duym, Secretariat FoodComp '98, Division of Human Nutrition and Epidemiology, Wageningen, the Netherlands. Tel: 31 317 483054 Fax: 31 317 483342 Email: lous.duym@staff.nutepi.wau.nl Web: http://www.wau.nl/vlag/foodcopm.html

***International Conference: Working Together for Better Health***

***Cardiff, Wales, 23–25 September 1998***


Health Promotion Wales, in association with WHO, is pleased to invite you to an International Health Promotion Conference in Cardiff on 23–25 September 1998. There are four conference themes: new approaches for a new millennium, enhancing health promotion by the effective use of global communications, effectiveness of health promotion activity, and partnerships that result in health gain. Specific objectives of the conference are:

- to identify the challenges facing health promotion in the 21st century;
- to review the effectiveness of health promotion and identify strategies for future work;
- to develop and build on the work of the WHO Jakarta conference;
- to examine ways in which partnerships can move beyond the planning stage to practical action;
- to share experiences of successes and failures to inform future action;

The programme is made up of plenary sessions consisting of short papers from speakers of the highest international reputation, workshops and poster sessions. Delegates are invited to submit papers on the following topics:

- contributions to health promotion from different disciplines;
- health promotion in different settings;
- skills for health promotion;
- innovative approaches to health promotion topics;
- international collaborations for health promotion;
- health promotion in different parts of the world.

To obtain a copy of the conference brochure, giving full details of the programme, cost and accommodation, including an abstract and registration form, please contact The Conference Office, 'Working Together for Better Health', Health Promotion Wales, Ffynnon–las, Ty Glas Avenue, Llanishen, Cardiff, Wales, UK CF4 5DZ. Tel: 441222 681287 Fax: 44 1222 756000 / 755813 Email: Conference.98@hpw.wales.nhs.uk

***Managing Health Programs in Developing Countries***

***The Seventh Annual Course by the Harvard School of Public Health, Boston, USA 15th June–7th August 1998***

This course is designed for managers and health professionals in government as well as non−governmental organizations, including hospitals, health centers and public health programmes, at the national, provincial and district government levels.

The course content will focus upon the development of practical managerial skills. Instructors will include Harvard University faculty, experienced managers and consultants. Topic areas to be covered include:

- health sector development;
- priority setting;
- organizational strategy;
- social marketing;
- micro computer operations with;
- hands−on training;
- financial management;
- human resource management;
- program financing;
- program evaluation;
- cost effectiveness analysis;
- quality assurance.

The course director is Paul Campbell, M.P.A., Sc. D., Lecturer on Management in the Department of Health Policy and Management, who originated this programme seven years ago and who has extensive experience designing and leading practical training programmes for health professionals in developing countries.

Enrollment is limited and applicants are accepted on a first−come−first−served basis. For further information, including a detailed course brochure and application form, please contact Vivien Goldman, Program Manager, Harvard School of Public Health, 677 Huntington Avenue, SPH 1−1210, Boston, Massachusetts, 02215, USA. Tel: 617 432 4515 Fax: 617 432 1323 Email: vgoldman@sph.harvard.edu Web: http://www.hsph.harvard.edu/mhpdc.html

***Quality Assurance and Marketing in Food Processing Enterprises***

***Eighth International Course on Food Processing International Agricultural Centre, Wageningen, the Netherlands***

***August 16 − November 21,1998***

The International Agricultural Centre, Wageningen, is offering an international postgraduate training course on food processing, focusing on quality assurance and marketing in food processing enterprises. This programme aims to broaden participants' views on problems of small and medium scale food processing, to upgrade participants' knowledge concerning the analysis of problems and the selection of appropriate technologies, and to impart techniques for the implementation of selected technologies, focusing on quality assurance and marketing. The core subjects of the programme include:

- learning instructions, communication and evaluation;
- food technology;
- quality assurance;
- marketing and management;
- training and consultancy;
- group project work;
- individual presentations and group discussions;
- electives.

This course is intended for professionals of business advisory, training and support institutions and small/ medium scale food processing enterprises.

For further information and a brochure giving full details including course fees and an application form, please contact the International Agricultural Centre, P.O. Box 88, 6700 AB Wageningen, the Netherlands. Tel: 31317490111 Fax: 31 317418552 Email: iac@iac.agro.nl

***Faculty Appointment: Tufts University School of Nutrition Science and Policy***

The School of Nutrition Science and Policy is seeking to fill a full time, core position in the Social Science programme, with specialization in political economy, economics, political science, or related discipline, starting in the 1998–9 academic year. Responsibilities will include the following.

• Teaching core courses in the political economy of hunger and malnutrition as it relates to economic, social and political development. Additional courses will be developed in the faculty member's area of interest consistent with the needs of the School.

• Participating in the research, advocacy and action programs of the School's Centers, including the Feinstein International Famine Center, the International Food and Nutrition Center and the Center on Hunger, Poverty and Nutrition Policy.

• Conducting a programme of independent research and publication.

• Advising graduate students and supervising doctoral dissertations.

Qualifications required: an earned doctorate in an appropriate field; a strong record of independent research and publications, significant reports, case studies and/or evaluations related to issues of nutrition an malnutrition, food security and hunger, and the sociopolitical and economic forces affecting food security and poverty; a demonstrated commitment to a multidisciplinary approach to addressing these issues and a broad conceptual understanding of the field. A significant professional experience in the developing world is preferred.

Interested applicants should send a letter and current CV to: Dr Beatrice Lorge Rogers, Dean for Academic Affairs, Tufts University School of Nutrition Science and Policy, Medford, Mass, 02155, U.S.A.

*We would like to take this opportunity to thank Viki Elliot, who worked at the SCN Secretariat in Geneva for 5 years. Amongst other things, Viki compiled and co–edited SCN News. Since Viki left, she has continued to give invaluable help and advice on editing SCN News. Viki was married last June and has moved to live and work in London School of Economies (Email: V.L.Ellliot@lse.ac.uk).*

*Many thanks Viki – we wish you every success with your new career!*

**We are always happy to receive material, books, notifies of events, letters to the editor etc., that you would like to see appear in SCN News.**

**The next issue of SCN News (No. 16, July 1998). will have the theme – Nutrition of the School–Aged Child –**

**Please send us any material or information that you would like us to consider for this issue.**

**We are also looking to receive project Logos, with a view to preparing a special feature on communications in a future issue.**

## Programme News

AGENCIES REPORT ON THEIR ACTIVITIES IN NUTRITION

***How is Interagency Coordination in Countries actually meant to work?***

The global agendas emanating from the series of international conferences during the 1990s have consistently emphasized a holistic approach to development. This in itself has demanded an increasingly intelsectoral perspective. In a climate of resource stringency in both national budgets and aid accounts, international agencies are under pressure to assist in the development of national strategies to fulfill these fundamental yet difficult cross–sectoral agendas.

To facilitate this process, three ACC[1] interagency task–forces were established in October 1995 on (1) an enabling environment, (2) employment and sustainable livelihoods and (3) basic social services. They were asked to provide United Nations Resident Coordinators and country–level teams with coherent guidance and support in their efforts to assist countries to translate the outcome of conferences into concrete national policies and programmes.

[1]ACC is the United Nations Administrative Committee on Coordination – see Box on page 45

Since then, UN Resident Coordinators have been urged to use the overall framework of these taskforces to spearhead country–level follow–up. They have been encouraged to take the lead, in close cooperation with agency representatives, in establishing thematic groups. These thematic groups are expected to utilize work of headquarters taskforces, subcommittees, and networks of the ACC that provide guidance on UN Conferences follow–up. Through this process of consultation, output from thematic groups can be linked to other ongoing initiatives such as the JCGP[2] sponsored common country assessment (CCA), Country Strategy Note process (CSN), and cooperation under the overall UN Development Assistance Framework (UNDAF).

[2]JCPG is the Joint Consultative Group on Policy. JCGP agencies include UNDP, UNICEF, UNFPA, IFAD, and WFP, with UNHCR and UNCDF as observers.

Each Resident Coordinator provides annual reports for each country, and this information is compiled in a number of CCPOQ[3] working papers and reports (this article draws on several of these documents). All three ACC interagency taskforces completed their work during 1997 and have submitted their final reports. A workshop will be held in December 1997 in Turin, Italy, to consolidate their findings and recommendations into a form that can be used to guide Resident Coordinators in their work at country level in assisting interagency coordination.

[3]CCPOQ is the Consultative Committee on Programme and Operational Questions; a subsidiary body of the ACC which incorporates the ACC Sub–Committees (Including the ACC/SCN).

*Present Status of Country Level Coordination*

Thematic groups have been established by the UN system in virtually all countries. Only six countries reported having no thematic groups in 1996. These were Angola, Kuwait, Libya, Saudi Arabia, Afganistan, and N. Korea. Besides meeting periodically for purposes of information exchange and networking, 58% of countries reported some tangible outputs from the work of these thematic groups. Typical examples of outputs are joint programming, development of sector plans, and mobilization of resources. Topics covered by various groups are wide ranging, from very broad themes such as UN Conferences (Colombia and Pacific Islands), to specific priority problems such as safe motherhood (Eritrea, Lesotho), unaccompanied children (Rwanda), natural disasters or disaster management (Kenya, Malawi, Lesotho, Bolivia, Guatemala, Indonesia, Laos, Moldovia and Romania). Most thematic groups include participation by Governments, bilateral donors and NGOs.

In order to characterize this wide range of topics into a form that could be assessed for their significance for nutrition programming, four clusters of thematic group topics were typically formed. These include principally, themes related to food security and agriculture (1), health and population (2), poverty (3), and HIV (4). The Table (next page) shows the frequency with which each of these types of thematic groups has been established by region. Some of the most recent groups are those in the food security and agriculture cluster that were set up with FAO as lead agency following the World Food Summit.

Thematic groups dealing with HIV issues were found more often than any other topic, and were established in 83% of countries (90% of countries in SSA) with UN system presence worldwide. In nearly half of all countries (62% of Asian countries) thematic groups related to health and/or population services have been established. About one third of countries have poverty related thematic groups, and a similar proportion have food security and agriculture related groups. About 28% of SSA countries have thematic groups in *both* the health, and food security and agriculture related topics. In other regions the figures for this are 48% for Asia, 12% for LAC, and 0% for Arab States and 14% for EE and CIS. Countries *without* thematic groups in *either* of these two clusters: 33% of SSA, 80% of Arab States, 29% of LAC, 35% of Asian and 58% of EE and CIS countries.

**Table: *Interagency Thematic Groups on Nutrition–Related Topics in Countries, 1997***

| | **NUMBER OF COUNTRIES** |
|---|---|

| REGION | reporting | with>0 thematic groups | with>0 active* groups (%) | with FSSA[1] groups (%) | with health / nutrition[2] groups (%) | with poverty[3] groups (%) | with HIV/AIDS groups (%) |
|---|---|---|---|---|---|---|---|
| ***Sub−Saharan Africa*** | 40 | 39 | 21 (53) | 18 (45) | 19 (48) | 10 (25) | 36 (90) |
| ***Arab States*** | 10 | 7 | 4 (40) | 0 (0) | 2 (20) | 4 (40) | 7 (70) |
| ***Latin America & Caribbean*** | 17 | 17 | 8 (47) | 4 (24) | 9 (93) | 7 (41) | 13 (76) |
| ***Asia*** | 23 | 21 | 18 (78) | 9 (39) | 15 (62) | 11 (48) | 18 (78) |
| ***Eastern Europe & CIS*** | 14 | 14 | 9 (62) | 4 (29) | 4 (29) | 4 (29) | 12 (86) |
| **TOTAL** | **104** | **98** | **60 (58)** | **35 (34)** | **49 (47)** | **36 (35)** | **86 (83)** |

Source: *"Resident Coordinator Thematic Groups"* note by CCPOQ Secretariat, July 1997

*Thematic groups were considered 'active' if any outputs or achievements were reported for 1996

[1]Food security and agriculture: includes thematic groups on food security, agriculture, sustainable rural development, disaster management and humanitarian issues.

[2]Includes thematic groups on Basic Social Services, safe motherhood, human development social programs, maternal mortality and population.

[3]Includes thematic groups on poverty, enabling environment, environment, sustainable livelihoods, rural development, refugees and rehabilitation.

*Future Needs*

In order for the thematic groups to fulfil their potential, a lot still has to be done. In addition to increasing their coverage, there is a need to adapt technical agendas and strategies of agencies into effective plans and operations for countries, translating cross−sectoral priorities of countries and international agreements into sectoral priorities. Successful national policy formulation requires capacity in, e.g., analytical work in sectors and activities contributing to nutrition and food security outcomes, analysis of national budgets to reassess intra−sectoral priorities, and impact evaluation of on−going policies and programmes. This will facilitate new and concrete opportunities for action, including joint programming, and will also improve the incorporation of policy guidelines in the Country Strategy Note process.

To ensure coherence and integration between macroeconomic and social policy frameworks, and in cross cutting policy dimensions such as food security and nutrition, it is important that the technical knowledge base for translating policy and normative thinking into operations is developed and made available at the country level, taking into account the priorities of individual countries. The lead agency (or agencies) mechanism for providing this kind of support is essential.

For further information please contact Shubh K. Kumar Range, Food Security and Agriculture Programme, Bureau of Development Policy, or Office of UN Support Services, Office of the Administrator, UNDP, 1 UN Plaza New York. Tel: 2129065871 Fax: 212 906 6973 Email: shubh.kumar@undp.org

### *Interagency Follow−up to the World Food Summit*

The World Food Summit was aimed at renewing global commitment to the fight against hunger. Following the decision taken by the ACC (see Box 1) at its April 1997 Session, arrangements are now being made to establish an "ACC Network on Rural Development and Food Security" that will constitute the mechanism for promoting interagency follow−up to the Summit. Within the framework of the ACC, FAO and IFAD are taking

action to ensure the early establishment and operation of the network.

The World Food Summit Plan of Action stresses that the main responsibility for the implementation and monitoring of the follow−up to the Summit lies at the country level, where governments have the primary responsibility for creating an economic and political environment that assures the food security of their citizens. The network will focus on country−level action supported by a group of interested organizations (including non−UN) at headquarters level, to form a two−tiered informal coordination mechanism. At country level, efforts to establish interagency thematic groups on rural development and food security within the Resident Coordinator System are currently underway. Full reporting to the ACC is foreseen in order to place the network activities within the broader context of interagency coordination carried out by the ACC. The ACC will then report to ECOSOC in the spirit of ECOSOC Resolution 1996/36 (see Box 2).

**Box 1: What is the ACC?**

The United Nations Administrative Committee on Coordination (ACC) was established in 1946 to:

- supervise the implementation of the agreements between the United Nations and the Specialized Agencies;
- coordinate the programmes approved by the various organizations of the UN system;
- promote cooperation within the UN system in pursuit of the common golas of the Member States

The ACC meets twice a year, and is made up of the executive heads of the specialized agencies (ILO, FAO, UNESCO, WHO, World Bank, IMF, ICAO, UPU, ITU, WMO, IMO, WIPO, IFAD, UNIDO, WTO), the IAEA, and nine United Nations programmes (UNCTAD, UNEP, UNDP, UNICEF, WFP, UNDCP, UNHCR and UNRWA).

Mr Patricio Civili in the curent secretary of the ACC and the secretariat offices are located in New York.

Source: 'ACC Network on Rural Development and Food Security' note. Information about the World Food Summit is available on the World Wide Web at http://www.fao.org/wfs/homepage.html. Information about the ACC and ECOSOC was obtained from the two websites, http://www.un.org/dpcsa/dpcea/accback.html and http://www.un.org/Overview/Organs/ecosoc.html, respectively.

**Box 2: What is ECOSOC?**

ECOSOC is the Economic and Social council of the United Nations. It was established to promote higher standards of living, economic and social progress, and universal respect for human rights. One of the main functions of ECOSOC in to serve as a central forum for the discussion of international economic and social issues addressed to Member States and the UN system.

ECOSOC has 54 members states each elected for 3y by the General Assembly, and voting in the Council is by simple majority; each member has one vote. ECOSOC hold one major session each year which includes a high−level special meeting attended by Ministers and other high level officials, to discuss major economic and social issues. A number of subsidiary commissions and committees carry out the year−round work of the Council.

ECOSOC Resolution 1996/36 concerns the ‘follow−up to the major international UN conference and summits, including the implementation of their respective programmes of action’.

***Interagency Meeting: Africa Nutrition Database Initiative***

A second meeting of the ACC/SCN working group on the Africa Nutrition Database (ANDB) Initiative was held on 29 September 1997 in Geneva. The Initiative, first proposed by the World Bank, aims to establish a query mechanism to facilitate quick access to good quality nutrition data for African countries. Participants attended from the FAO, UNDP, UNHCR, WHO, World Bank and SCN Secretariat. A new approach to the query system was proposed, based on mirror sites within the local area network of each organization, and it was agreed that

access to the Database during the initial software testing stage, should be limited to within the UN system. A core group of indicators were selected for inclusion in the Database. Once this project is up and running, users will be able to submit queries from one access point, to retrieve data from a number of different nutrition databases.

A copy of the meeting report can be obtained 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

### *Asia Pacific Food Analysis Network (APFAN)*

APFAN commenced in 1989 with about 20 members and has grown steadily to its current size of 350 members from 28 countries. Its aim is to serve the needs of food analysts and thereby to promote food safety and good nutrition. It does this through several programs as follows:

- Annual hands−on Workshops held at the Queensland Health Scientific Services Laboratory in Australia where food analysts from developing countries learn an analysis of their choice. The Fifth Asia Pacific Food Analysis Workshop (5AW) was held on November 7−14,1997.

- Conferences every three years are held in the region. The Third Asia Pacific Food Analysis Conference (3AC) was held in Manila in 1995 and the Fourth Conference (4AC) will be held in Chiang Mai, Thailand on November 16−19, 1998. A first announcement is available.

- Short, hands−on courses of 2 weeks to 6 months duration for individuals from food laboratories in developing countries, who need specific training in certain analyses, techniques or use and maintenance of equipment.

- Inexpensive, standard reference materials are available through ASEANFOODS, supported by APFAN, from Dr Prapasri of the Institute of Nutrition, Mahidol University, Bangkok, Thailand.

APFAN has links with the Federation of Asian Chemical Societies, the Crawford Fund (Melbourne), Ausaid, Australian Centre for International Agricultural Research, Australian Institute of Food Science and Technology, AONBS, IFS, UNESCO, FAO, RACI and COSTED (India).

Food analysts may join APFAN by contacting Dr J Howard Bradbury, Coordinator of APFAN, Division of Botany and Zoology, Australian National University, Canberra, ACT 0200, Australia. Tel 61 2 62490775: Fax 61 2 62495573: Email Howard.Bradbury@anu.edu.au.

### *FAO*

### *Food Composition Activities*

The First FAO/UNU East, Central and Southern Africa Food Composition Network (ECSAFOODS) training course on the Production and Use of Food Composition Data in Nutrition, organized jointly with the Medical Research Council of South Africa, was held at the University of Western Cape, Cape Town, South Africa, from 23 June to 11 July, 1997. Participants came from Botswana, Ethiopia, Kenya, Malawi, Mozambique, Namibia, Swaziland, Tanzania, Uganda, Zambia and Zimbabwe. One professional from Benin attended as observer. The purposes of the course were: i) to review the status of food composition activities in the ECSAFOODS Region and the technical capacity to analyze and report on food composition; ii) discuss priorities for data review and data generation, together with the possible contributions from institutions in the region and, iii) discuss the steps required to compile mutually acceptable databases, with potentially interchangeable data, in each of the represented countries.

FAO organized jointly with the Latin American Nutrition Society (SLAN) and LATINFOODS, a Symposium on food composition activities, held in Guatemala City, Guatemala, from 10−12 November 1997. The Symposium was part of the XI Congress of SLAN and was aimed at strengthening the activities of LATINFOODS and its Subregional Centers. Ongoing food composition activities in Latin America were reviewed and recommendations for the development of a work plan at both national and regional levels were made.

FAO is providing technical and financial assistance to the Institute of Nutrition and Food Technology (INTA) of Chile, for the preparation of a regional food composition database for Latin America, and to publish and

distribute it in both written and electronic form (CD−ROM).

FAO has also provided support for the publication of revised food composition tables in various countries. In addition, a project proposal for food composition activities in Central and Eastern Europe has been prepared with FAO technical assistance and submitted to the INCO−COPERNICUS programme of the EU for consideration and possible funding. Through its Technical Cooperation Programme (TCP), FAO is considering project proposals received from Guinea, and Nicaragua for direct technical assistance in this area.

### *Inter−Country Workshop on Nutrition Education and Food−Based Dietary Guidelines*

Following two expert consultations on nutrition education and food−based dietary guidelines respectively, FAO is promoting the outcome of the consultations in different regions of the world. Inter−country meetings have been supported, partially with ILSI, as follows:

- Séminaire Atelier inter−pays sur l'éducation nutritionnelle, 9−13 June 1997, Lomé, Togo.

- Joint FAO/ILSI Europe Workshop on the development of local food−based dietary guidelines and nutrition education, 22−25 September 1997, Bratislava, Slovak Republic

- Joint FAO/ILSI Europe Workshop on the development of local food−based dietary guidelines and nutrition education, 3−6 November 1997, Vilnius, Lithuania

- Inter−country Workshop on nutrition education and consumer awareness in English−speaking countries of Near East, 3−6 November 1997, Cairo, Egypt.

- Regional Workshop on Diet, Nutrition and Lifestyles for Gulf countries, 6−8 December 1997, Bahrain.

### *Incorporating Nutrition and Household Food Security into Emergency Relief and Rehabilitation*

The Nutrition Programmes Service provided technical assistance to WFP in the organization of a three−day training workshop on household food security and nutrition for Ministry of Health and WFP field staff in Rwanda. Invitations were also extended to relevant Ministries, NGOs and international organizations. The workshop, which drew extensively on participatory techniques, clearly demonstrated the need for intersectoral collaboration and decentralised planning to address the specific needs of vulnerable population groups in a given area and make the best use of available resources.

During a visit by a staff member of the Food and Nutrition Division to the Crop and Food Supply Assessment Mission in Burundi (19−30 June), efforts were made to strengthen the co−ordination of UN agencies operating in the country (particularly WHO. UNICEF, WFP and FAO), NGOs and government institutions in assessing the extent of malnutrition among the civilian population affected by the conflict and developing appropriate interventions.

### *Codex Alimentarius Commission 22nd Session, 23−28 June 1997*

The dual problem of protecting consumers while at the same time facilitating trade in agricultural and food products, led to the creation in 1962 of the Joint FAO/ WHO Food Standards Programme. The Programme operates through an inter−governmental body − the **Codex Alimentarius Commission,** which currently has 159 member countries. The standards, guidelines and recommendations of the Commission are used by the World Trade Organization as reference points. FAO, the major sponsoring body of the Codex Alimentarius Commission (~80%), provides technical assistance to developing countries of the sort provided for in the WTO Agreements. FAO gives assistance to countries in developing food quality and safety legislation, food inspection and analytical services, food control programme management, import/export inspection and certification programmes, contaminants monitoring and more recently in the area of food hazard analysis, risk assessment, risk management procedures.

The Commission held its 22nd Session from 23−28 June, 1997, covering a wide−ranging agenda that included food safety and hygiene, food labelling and additives. The meeting was attended by 444 participants from 86 countries. Some highlights of the Session are summarized below.

*Food hygiene code revised.* The Commission approved a major revision of the code of practice so that it includes all aspects of the food chain, from production on−farm to preparation in the home, concentrating on

the handling, processing and distribution of food products where most of the risks can be controlled.

*Are unpasteurized cheeses safe for human consumption?* In some countries (mostly European), a number of dairy products, particularly soft cheeses, are traditionally manufactured from unpasteurized milk. Some countries, including the USA, requested that pasteurization should constitute the backbone of these Codex standards as a widely accepted and recognized safety measure. A number of European countries however, hold the view that there are other approaches that could achieve safety. Commission participants agreed to return to this issue at the next session in Rome 1999. In the meantime, the matter was referred back to the Codex Committee on Milk and Milk Products and Food Hygiene for further examination.

*Is the use of bovine somatotropin (BST) universally acceptable?* BST, designed to increase milk production, is not authorized for marketing and administration to dairy cows in the territory of the European Union and a number of other countries. On the other hand, BST is fairly widely used in animal husbandry in the USA and elsewhere. The Codex Commission decided to request that the latest scientific evidence be provided for further consideration. The matter will be further examined by the Committees on Veterinary Drug Residues and on General Principles.

*How low is 'low fat'?* In order to facilitate trade in foods claiming to be 'low fat', 'sugar free' or 'light', the Commission approved new guidelines governing such claims as a supplement to the General Guidelines on Claims. For example, to claim that food is 'light' or 'reduced' it must be at least 25% less in energy content than the standard product. The guidelines provide a number of definitions and general requirements concerning consumer information.

*Maximum residue limits for pesticides in food.* Over 2 500 Maximum Residue Limits (MRLs) are currently approved by the Commission. During the June meeting, the Commission deleted 315 MRLs (covering 39 pesticides) from the Codex list as being obsolete. This means that no level of residue is acceptable for those pesticides.

> Source: FAO; FAO News Highlights 1997; WHO Press Release, June 1997; Web: http://www.fao.org/waicent/faoinfo/aconomic/esn/codex/codex.htm/ Further information about the Codex Alimentarius Commission can be obtained by emailing codex@fao.org

### *Hazard Analysis and Critical Control Point (HACCP)*

The HACCP is a control system. It is based on prevention and control of known food hazards by controlling critical points in the food processing, production or manufacturing. It is a management tool that provides a structured approach to the control of identified food hazards that would be ordinarily achieved using traditional inspection, sampling and testing procedures. By using a HACCP system, control is transferred from end product testing – testing for failure – into the design and manufacturing – preventing failure. Today, HACCP is considered to be one of the most effective and efficient ways to enhance food quality and safety, and will soon be required as a mandatory programme for producers to successfully export their food products to many food importing countries.

FAO has developed a HACCP based system training programme for Training of Trainers which will soon be published and available for general use as a harmonized approach to providing practical training in HACCP implementation. The training programme is based entirely on the Codex Alimentarius Commission system of scientifically supported food standards, Codes of Practices and various guidelines on food hygiene, microbiological criteria and on HACCP application and implementation. FAO provides technical assistance in food quality and safety matters and this training programme on the implementation of HACCP based systems is expected to provide significant enhancement to national food safety programmes through training programmes at national training institutions.

> For further information about the HACCP and technical assistance projects from 1988–1997, please contact the Food and Nutrition Division, FAO, Via delle Terme di Caracalla, 00100 Rome, Italy. Fax: 396 5225 4593

### *Joint FAO/WHO Expert Consultation on Vitamin and Mineral Requirements*

A joint FAO/WHO expert consultation aiming to review, revise and update vitamin and mineral requirements is planned for September 21$^{st}$–30$^{th}$ 1998, in Bangkok, Thailand. Recommendations for vitamin and mineral requirements were last published in 1974 (Handbook on Human Nutritional Requirements, FAO/WHO, Rome, 1974), although this has since been updated for certain vitamins and minerals. For example, requirements for

folate, vitamin A, iron and vitamin D requirements were revised in 1985. The panel will consider all essential vitamins and minerals with the aim of ensuring that the latest scientific developments are being incorporated into current recommendations.

For further information, please contact Dr Joan Conway, Project Coordinator (FAO), Food and Nutrition Division, FAO, Viale dell Terme di Caracalla, 00100 Rome, Italy. Tel: 5705 3322 Fax: 5705 4593 Email: Joan.Conway@fao.org

### *Nutrition in GTZ*

The Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ) GmbH, is the German agency for technical cooperation which plans and implements contributions to projects in more than 90 developing economies in Africa, Asia, East Europe and Latin America. Funds are allocated on a project–by–project basis by the German Federal Ministry for Economic Cooperation and Development. GTZ also works for other German Ministries, federal states, the European Union and Development Banks, such as the World Bank and the Asian Development Bank. Around 8% of the budget is dedicated to food emergency and food and nutrition security programmes.

In the late 1980s, GTZ made efforts to integrate nutrition as one central aspect into development projects. The importance of nutrition in the development process has been stressed again more recently in the context of poverty alleviation, which is of crucial priority for German development policy. In several GTZ–assisted projects in Indonesia, nutritional surveys have been carried out to target the poor, to diagnose and analyze the magnitude, severity and causes of poverty, to identify the resources available to reduce poverty, and to set a baseline for monitoring the impact of the projects. Presently, this experience has been extended to GTZ–assisted projects in other countries. With these activities, nutrition has received a new emphasis in the German technical cooperation.

According to GTZ, there are three programme types that may require nutritional expertise in the future.

**1. Freestanding nutrition programmes at the grass roots and policy levels**

Currently, most nutrition programmes are freestanding food and nutrition security programmes, operating at the grass roots level and targeting directly chronic and transitory food insecurity of vulnerable communities and groups. In addition there are programmes which influence and improve nutritional policy at the governmental level. Advanced training programmes in applied nutrition belong to this category.

**2. Emergency relief programme**

Over the last decade, the German government has increased efforts in emergency programmes and as a result, the activities of GTZ in this area have expanded substantially, with food and nutrition playing a major role in emergency relief programmes.

**Advanced training programmes supported by GTZ**

• Institute of Nutrition, Federal University of Rio de Janeiro, Brazil (1983–87) – MSc (2y)

• Department of Applied Human Nutrition, Agricultural Faculty, University of Indonesia, Jakarta, Indonesia (since 1990). Diploma (5mo); MSc (2y); Diploma (4mo)

• National Institute of Nutrition, Ministry of Health, Hanoi, Vietnam (since 1993) – MSc (2y); Diploma (4mo)

**3. Poverty oriented programmes**

Recent experience in the field of poverty alleviation has produced an additional area of action. The design and monitoring of poverty alleviation projects and the evaluation of their impact requires expertise in nutritional epidemiology and planning. In particular, expertise is needed in the following areas: identification of target groups with the greatest needs; identification of causes of problems and potentials for solutions; formulation of problem–solving strategies; and defining monitoring and evaluation. As a result, development agencies such as GTZ need community nutrition professionals with interdisciplinary and intersectoral, problem–oriented knowledge, skills, and attitudes to respond flexibly and innovatively to challenges. Most academic training however, does not respond to these needs and knowledge on indicators for targeting, identifying causalities, monitoring, evaluating and implementing poverty alleviation programmes is still inadequate. Focusing

academic training and research in the field of nutrition on needs will help to improve the quality of programmes and thus also the quantity of basic needs–oriented activities.

This article was submitted by Rainer Gross (team leader of the GTZ–assisted SEAMEO–TROPMED community nutrition project at the University of Indonesia), Rolf Korte (head of the Health, Population and Nutrition Division at GTZ), Hans Pfeifer (senior desk officer of the department of food security in GTZ), and Werner Schultink (team member in the SEAMEO–TROPMED community nutrition programme in Indonesia). For further information about nutrition activities in GTZ, please contact Dr Rainer Gross, GTZ/SEAMEO, P.O. Box 3852. Jakarta 10038, INDONESIA. Tel: 62 21 391401; Fax: 62 21 391 401; Email gtzseame@indo.net.id

### *Nutrition Activities at the International Atomic Energy Agency (IAEA)*

To many people it may seem strange that IAEA has a nutrition programme. In fact the nutrition group is called the 'Nutritional and Health–Related Environmental Studies Section' and is nested in the Division of Human Health, which in turn is part of the Department of Research and Isotopes. The main aim is not to "do" nutrition but to bring isotopic techniques from concept to field application and to show that they can be used to address the nutritional issues of the day. The group works within IAEA's normal programme that:

- supplies research fellowships (often linked to other activities);
- manages coordinated research projects (CRPs);
- brings technical expertise to major technical cooperation projects.

CRPs involve consortia of groups working together to develop and apply isotope (especially stable isotope) tools in nutritional science, with a special focus on developing countries. These generally last 3–5 years and have memberships of up to 20 groups often "twinned" as developing and developed country partnerships. Group memberships of CRPs are of three types; contracts received by countries to help finance the work, research agreements received by countries who have some expertise that is useful to the CRP, and technical contracts received by countries who can provide specialist analytical services. In all cases, IAEA provides the central administration and management of the work.

Currently, there are two CRPs devoted entirely to nutrition. First, the thorny question of the measurement of vitamin A status is being tackled by the use of labelled isotope techniques to measure whole body stores; the methodologies are currently being developed and field–tested. Second, a regional CRP in Latin America is using deuterium labelled water to measure breast milk intake in infants. In this case, a well–established procedure is being used in a standard way to investigate the effects of a various factors (smoking, breast–feeding promotion and advice, supplementation) on milk production and infant growth. Other CRPs, such as one on osteoporosis for example, also have implications for nutrition. Three new CRPs are expected in 1998.

*Isotope–aided studies of nutritional factors associated with chronic and degenerative diseases during aging.* A number of programmes using isotopic techniques are well established in industrialized countries to assess the role of specific nutrient deficiencies or excess in the development of cardiovascular disease, diabetes and other chronic diseases of the elderly. The methods and experience need now to be transferred to the developing world (especially to countries in transition) where under–nutrition in childhood may predispose individuals to greater risks in later nutritional affluence.

*Isotope–aided studies of nutrient interactions in developing country populations exposed to multiple nutritional deficiencies.* The aim of this project is to develop methods to evaluate micronutrient interactions by non–invasively measuring absorption, stores, turnover and balances in chronically undernourished populations.

*Isotopic evaluations in infant growth monitoring (in collaboration with WHO).* Here, collaboration with WHO focuses on nutrient requirements. WHO's nutrition programme is developing new growth curves based on breastfed infants (see page 55), and IAEA will use stable isotope methods to measure the breastmilk and other nutrient intakes that have produced the normal growth.

In addition to these activities, nutrition monitoring has been built into several technical cooperation projects in which interventions (not always nutritional) are expected to have a benefit on the nutritional status of the population.

For further information, please contact Dr Andy Coward, Nutritional & Health–Related Environmental Studies, IAEA, POB 100, A–1400 Vienna, Austria. Fax: 431 220607; Email w.a.coward@iaea.org

### *International Dietary Energy Consultancy Group (IDECG) – Workshop on Causes and Consequences of Intrauterine Growth Retardation*

An IDECG workshop on causes and consequences of intrauterine growth retardation (IUGR) was held in November 1996, and the proceedings of this workshop are currently in press as a supplement to the *European Journal of Clinical Nutrition.* Data presented at the meeting confirmed that the prevalence of IUGR in most developing countries is a major public health problem and that population–wide strategies to reduce it are urgently needed. The causes of IUGR are multiple and interactive, and their relative importance varies with time, place and population. In developing countries, the major determinants of IUGR are nutritional: low gestational weight gain (primarily due to inadequate energy intake), low body mass index at conception (reflecting chronic maternal undernutrition) and short maternal stature (primarily due to undernutrition and infection during childhood). Malaria is a major determinant in malaria–endemic areas. In industrialized countries, cigarette smoking is by far the most important etiologic determinant, followed by low gestational weight gain and low pre–pregnancy body mass index.

IUGR is associated with impaired immunocompetence, increased morbidity and mortality in infancy and growth deficits persisting into adulthood. Neurological, cognitive and behavioural deficits appear to be most marked from the pre–school years through adolescence. Several epidemiological studies have shown associations between low birth weight and earlier and higher prevalence of hypertension, coronary heart disease, adult onset diabetes, chronic respiratory disease, autoimmune thyroid disease and some forms of cancer (see also feature in *SCN News No. 14*). A systematic review[1] of 126 available randomized controlled trials testing the efficacy of 36 kinds of prenatal interventions aimed at reducing IUGR provide strong evidence of benefit only for three of them: balanced protein–energy supplementation, strategies to reduce maternal smoking and anti–malarial prophylaxis. The proceedings of this meeting will be available from the IDECG Secretariat early next year.

[1]Gulmezoglu, M., de Onis, M. & Villar, J. (1997). Effectiveness of interventions to prevent or treat impaired fetal growth. Obstetrical and Gynaecological Survey, 52(2), 139–149. UNICEF Nutrition Paper of the Month, September 1997.

### *Proceedings of IDECG workshops*

The proceedings of earlier IDECG workshops are available on the following topics:

- Chronic energy deficiency: consequences and related issues
- Activity, energy expenditure and energy requirements of infants and children
- The effects of improved nutrition in early childhood: the INCAP follow–up study
- Early supplementation feeding and cognition
- Protein–energy interactions
- Causes and mechanisms of linear growth retardation
- Effects of protein–energy malnutrition on behavioural development
- Energy and protein requirements

Interested professionals working in these areas can obtain these publications free of charge from the Secretariat of IDECG, c/o Nestle Foundation, P.O. Box 581,1001 Lausanne, Switzerland. Fax: 021 320 33 92

This article was submitted by Dr. Lawrence Haddad, Director FCND, 1200 Seventeenth Street, NW, Washington D.C. 20036, USA. Fax: 2024674439. Email: IFPRI@CGNET.COM

### *Food Consumption and Nutrition Research at IFPRI: A Brief Profile of Activities*

Since its inception in the late 1970s, the mission of the Food Consumption and Nutrition Division (FCND) at the International Food Policy Research Institute (IFPRI) has been to generate and disseminate information and analysis for use by decision makers to help design and implement policies and programs to help poor individuals obtain access to food and generate improved nutrition status. In that capacity, the Division is currently undertaking around 20 research and outreach projects in 12 countries in sub–Saharan Africa, South Asia and Latin America. FCND's current work in nutrition focuses on the following.

• Urban malnutrition – levels, determinants, responses (Accra and Lima).

• The development of food and nutrition indicators (Honduras, Mali, Malawi, India).

• The impacts of group–based credit on food consumption and nutrition (Bangladesh, Malawi, Madagascar, Egypt).

• The analysis of tradeoffs between female employment and the provision of care (Ghana, Peru, Bangladesh).

• The nutrition impact of changes in the design of cash and food subsidy systems (Egypt, Mozambique).

• The implications of the human rights agenda for food and nutrition policy research.

• The linkage between global food demand projections and the projected numbers of malnourished children.

• The linkages between democracy and nutrition and health indicators.

• The implications of agricultural technology adoption for micronutrient consumption and child development (Bangladesh).

• The links between women's status and child health outcomes (Ethiopia, South Africa, Bangladesh, Peru).

• The IFPRI–led initiative involving other centers of the Consultative Group on International Agricultural Research (CGIAR) to determine the potential for micronutrient malnutrition reduction through the breeding of nutrient–dense staple foods (e.g. improving the zinc density in wheat).

Related to this last activity, beginning on January 5,1998, the CGIAR Micronutrient Project housed within FCND will be initiating an electronic mail conference that promises to involve a lively interdisciplinary discussion on the methodology and strategy of the current research agenda (see page 40 of this newsletter).

### *IUNS: 50 years of International Cooperation (1947–1997)*

In 1946 a proposal to form the International Union of Nutritional Sciences was discussed at a meeting convened in London by the British Nutrition Society. In 1948, the principal objectives of the Union were defined as being the exchange of information, the organization of international congresses and the publication of results of scientific investigation. Since then the Union has grown steadily. The work of the Union is directed by the General Assembly, which meets at the time of the international congresses. The next international congress (the XVII International Congress of Nutrition), will be held in Vienna, Austria, 24 August –1 September, 2001.

The IUNS has recently published its 1995/1996 Annual Report which aims to inform readers about IUNS activities and the activities of Adhering Bodies, Affiliated Bodies, consultative groups and some nutrition and health–related international agencies. This report will be useful to nutritionalists, nutrition–related scientists and other interested professionals. It is hoped that the report will serve as a background information for representatives of various Adhering Bodies to contribute ideas to the IUNS Assembly or Council in laying the IUNS policy and plan as well as the activities in the next few decades.

For further information, please contact the IUNS Secretary General, O.M. Galal, UCLA School of Public Health, 10833 Le Conte Avenue, Los Angeles, CA 90024–1772, U.S.A. Tel: 1 310 206 9639 Fax: 1 310 794 1095 Email: ogalal@ucla.edu.

### *United Nations Research Institute for – Social Development (UNRISD)*

### *Advancing the Social Agenda: Two Years after Copenhagen*

A one–and–a–half day public meeting sponsored by UNRISD on 9–10 July 1997, Geneva, ended with concrete recommendations for follow–up to the World Summit for Social Development held in Copenhagen in

1995. Development of a legally binding convention for the eradication of poverty and development of South−South solidarity, were among eight points identified for concrete action by Ambassador Juan Somavia, Chairman of the UNRISD Board.

The central theme of social integration was explored in three sessions at the meeting. The session on ethnic diversity reminded the public that over 8000 ethnicities live in 185 states. The need to co−exist peacefully is thus crucial, as most conflicts are related to ethno−political struggle. Emphasis was placed on meeting basic human security needs such as jobs, education, income, food, health and personal safety for all groups if long−term stability is to be achieved. The session on healing the wounds of war took this concept further, stressing that in post−conflict societies rebuilding involves not only physical reconstruction but also reconciliation and forgiveness among affected parties. Finally, the session on urban social problems called for: a legal structure to protect and promote collaborations between local authorities and community organizations; large−scale capacity building for community−based organizations, NGOs and local authorities; and re−orientation of the education of city planners.

Source: UNRISD press release, July 1997

### *Food Security in Cambodia: A Preliminary Assessment*

A major challenge facing countries that have been devastated by war and social upheaval is the restoration of a minimum level of food security. In Cambodia this challenge is particularly great as decades of turmoil have resulted in widespread poverty and vulnerability as well as the breakdown of state and community institutions.

In a 1997 UNRISD discussion paper, Vincent Tickner assesses what is known about the current state of food security in Cambodia, identifies the major factors underpinning food insecurity and considers the role of government and international agencies in dealing with related food security problems. The author identifies principal agro−ecological, institutional and economic factors affecting food security at both national and household levels. He argues that although certain government and international agencies identify food security as a priority development issue, they have not put in place policies or programmes to address the issue directly or systematically. The author also suggests that many international agencies have failed to comprehend the range of strategies and responses that most Cambodians have developed to overcome food insecurity. Agencies that intervene to support food insecure populations should begin by considering household coping strategies, thus building on what people are already doig to overcome this situation.

A copy of this discussion paper can be obtained at $5 for readers from the North or $2.50 for readers from the South. Source: UNRISD discussion paper 80 and UNRISD press release, April 1997. A list of UNRISD's free and priced publications, and more information about UNRISD research programmes can be obtained by contacting Rosemary Max, Programme Information Officer, Reference Centre at: the United Nations Research Institute for Social Development, Palais des Nations, 1211 Geneva 10, Switzerland. Tel: 41 22 798 84 00 / 798 58 50 Fax: 41 227400791: Email: info@unrisd.org of max@unrisd.org: World Wide Web; http://www.unrisd.org.

### *Micronutrient Initiative Ottawa*

### *Expert Consultation on Determinants of Anemia*

An expert consultation on determinants of anemia sponsored and hosted by the MI was held September 16−17, 1997 in Ottawa. The consultation was chaired by Rebecca Stoltzfus. Stuart Gillespie served as rapporteur and some 14 experts attended. The objectives of the consultation were to analyse evidence on the etiologies of anemia including deficiencies of iron, folate, other micronutrients, malaria, hookworm, schistosomiasis, etc., to determine the relative contributions of each to anemia in different regions and different age groups; to identify efficacious and effective interventions; to identify gaps in knowledge and to identify the implications of the above for policies and programs, relating particularly to the issue of integration. The importance of each determinant of anemia in each age/physiologic group should conceivably influence the mix of interventions appropriate for the target group. A matrix was developed to look at each determinant in each age/physiological group and Africa was used as an example. The participants also assessed the relative importance of each determinant for each age group. For example, the biovailability of iron in complementary foods given to breastfed infants less than one year old was considered the primary determinant of anemia in this age group, whereas malaria was considered the primary determinant of anemia in women in first pregnancy (in malarious areas). Tools for assessing each of the determinants in the field were also proposed. A report of the meeting will be available by December 30,1997.

### *Micronutrient Initiative/UNICEF – Eastern and Southern Africa Consultation on Anemia*

The MI and UNICEF Regional Office for Eastern and Southern Africa co–sponsored and participated in an Eastern and Southern Africa Consultation on Anemia, held on 17–19 November 1997, in Arusha, Tanzania. Meeting participants included representatives from national Ministries of Health, Agriculture, Industry, as well as from the research and university communities, food industry and health and nutrition program managers. The meeting aimed to raise awareness of the problem and consequences of anaemia, to discuss a mix of interventions appropriate for the prevention and control of anemia in the region, to review the status of anemia prevention and control strategies in the region, and to develop a workplan and follow–up actions.

> Source: Janice Johnston, Senior Program Officer, Micronutrient Initiative, International Development Research Center, P.O. Box 8500, 250 Albert Street, Ottawa, Ontario K1G 3H9, Canada. Tel: 613 236–6163 x 2427 Fax: 613 236–9579 E–mail: jjohnston@idrc.ca

### *WFP Initiative on "Ending the Inheritance of Hunger"*

Children under five, and pregnant and breastfeeding mothers, have special food needs. Inadequate nutrition in the first years of life and before is likely to damage health, mental development and future labour productivity. The high demands of reproduction deplete a woman's nutrient stores, increasing her vulnerability to disease and reducing her capacity to work and care for her children. The consequences of "early malnutrition" reach beyond the individuals and families involved. Society as a whole suffers losses when children cannot learn, when poor health restricts productivity, and when malnourished women give birth to the next generation that will also be malnourished.

Assistance to mothers and children "at risk" features prominently in the core policies and strategies that govern WFP activities. One of the strategic goals set by the WFP Mission Statement is to provide food aid "to improve the nutrition and quality of life of the most vulnerable people at critical times in their lives". WFP has begun to elaborate this mandate and the strategic implications of increasing its focus on tackling early malnutrition. In 1997, WFP/WHO conducted a thematic evaluation of supplementary feeding programmes targeted to children under five and mothers (document WFP/EB.3/97/5/Add.4). At the request of WFP, WHO conducted a literature review on the role of supplementary feeding and a review of recent WFP–assisted projects of this type (document WHO/FSF/FAP/97.1, Food Aid Programmes Unit, WHO). The role of food assistance in addressing the food needs of women and children at critical times of their lives was discussed at a 2 day technical consultation held in Rome in early May 1997. On 31 May 1997, a seminar entitled "Ending the Inheritance of Hunger" was organized by WFP in partnership with the United Nations University. It brought together representatives of WFP's Executive Board and of other Member States, United Nations agencies, NGOs and eminent scholars (R. Fogel, C. Garza, N. Scrimshaw, A. Sen). Copies of lectures from this seminar are available from the Strategy and Policy Division, WFP (see below).

Based on this process, WFP prepared a policy paper entitled "Reaching Mothers and Children at Critical Times of their Lives" (document WFP/EB.3/97/3–B). In October 1997, the WFP Executive Board considered this paper and endorsed the following policy and operational principles for food assistance.

*Greater focus on tackling early malnutrition.* WFP will increase the share of food assistance to contribute to improving the nutritional status of mothers and children at critical times in their lives.

*Advocacy.* Problems of early malnutrition will receive priority attention in the assessment of country needs for food assistance. WFP will define and communicate this focus in the context of the United Nations country strategy process and through dialogue with national authorities and the bilateral donor community.

*Priority groups.* WFP will limit its assistance to those women and children whose nutritional vulnerability is directly linked to a lack of sufficient and appropriate food intake. Priority will be given to malnourished children and undernourished pregnant and breastfeeding mothers. Food delivery performance, child growth and birth weight are the key indicators for monitoring progress. Food assistance with a focus on the prevention of early malnutrition will require careful analysis and verification that supplementary feeding is indeed the best means of achieving this objective.

*Food rations.* Commodities included in the food basket will be micronutrient–fortified to the extent possible. WFP will strengthen its assistance to the local production of low–cost blended foods.

*Cost–effectiveness.* The appropriateness of the food aid intervention will be judged on the basis of its targeting and transfer efficiency. In LDCs, where it is needed most, such assistance may involve higher costs.

*Safeguarding the effectiveness of food assistance.* To ensure that its food assistance is fully effective, WFP will take pro−active measures such as: strengthened efforts to integrate WFP's work with other United Nations agencies; increased collaboration with NGOs and bilateral donors; and, especially in post−emergency situations and in remote areas where food needs are greatest, increased flexibility to meet a minimum of non−food expenditure such as training, nutrition education materials, weighing scales, growth charts, etc. from WFP's own resources.

*Duration of assistance.* The sustainability and appropriate duration of WFP food assistance to address early malnutrition must be considered in terms of its long−term benefits. Its duration should be determined in light of need, the recipient countries' own capacities and commitment, and the actual performance of the WFP−assisted programmes. Nevertheless, suitable exit strategies will need to be identified at the outset of any WFP involvement in supplementary feeding activities.

*Development in relief.* WFP will continue to make optimum use of targeted supplementary feeding programmes through MCH structures as a safety net during the phasing out of general relief programmes. WFP will encourage the alignment of financial, technical and administrative resources in relief situations with the longer−term strengthening of MCH services for populations in remote, food−insecure areas.

Source: Strategy and Policy Division, WFP, Via Cristoforo Colombo 426, 00145 Rome, Italy. Email: Wolfgang.Herbinger@wfp.org (Tel: 396 6 513 2621) Dianne.Spearman@wfp.org, mokbelm.who.ch. Many WFP documents are available on the Web via the WFP homepage: http://www.unicc.org/wfp/Wfphome.html.

## *WHO*

### *WHO Multicentre Growth Reference Study*

WHO continues its efforts towards the development of a new international growth reference based on healthy growing breastfed infants from different countries (see article in SCN News No. 14). For the past few months the Working Group on the Growth Reference Protocol has been working to produce the generic study instruments, that is, the study questionnaires, interviewer guides, measurement and standardization protocols, manual of operations, standardized data entry forms, and data entry software. The instruments will be finalized at a meeting of the Working Group in Pelotas, Brazil from 16−18 December 1997.

One of the main distinguishing features of the new reference is that it will be based on an international sample of infants. The formulation of a truly international growth reference will avert the political difficulties that arise from using a single country's child−growth pattern as a worldwide "standard" for optimal growth. To this end it is envisaged that the study will involve 6 to 8 geographically diverse sites, covering North and South America, Europe, sub−Saharan Africa, and Eastern, South and Western Asia. Thus far two sites have been selected: Brazil in South America (Principal Investigator. Professor Cesar Victora) and the USA in North America (Principal Investigator Professor Kathryn Dewey). The Brazilian site, located in Pelotas, initiated data collection in July, 1997 and is serving to pilot test the protocol and study instruments.

The initiative has been very well received by governments and research institutions. As a direct result of a write up in *SCN News No. 14* earlier this year, requests were received from several countries and these applications are being evaluated to ensure selection of the most appropriate settings for successful implementation. Norway will participate as a study site, and site evaluation visits to Argentina, Bangladesh, China, Oman and Turkey will be conducted before the end of the year. At the same time funds are being sought for developing country participation as well as for the central coordination of the study by WHO/HQ. Because of its magnitude, is clear that this ambitious international undertaking will not succeed without the support of the international nutrition community.

The study continues to attract considerable attention within the international scientific community. Formal presentations in this connection will be made at the XII International Congress of Pediatrics (Amsterdam, August 1998). In addition, a number of research papers based on the work of the *WHO Working Group on the Growth Reference Protocol* are being submitted for publication to peer−reviewed journals (for example, see *Pediatrics, 1997, Vol. 100* No. 5). The UNU Food and Nutrition Program is cooperating closely with WHO on this project and WHO hopes to have the support of other agencies in the future.

This activity is of great public health significance for the well−being of children. The new international growth curves based on breastfed infants will serve the world community for many years to come.

For further information, please contact Dr Mercedes de Onis, The WHO Multicentre Growth Reference Study, Nutrition Programme, World Health Organization, 20, Avenue Appia, 1211 Geneva 27, Switzerland. Tel: 41 22 791 3320 Fax: 41 22 791 0746/4156 Email: deonism@who.ch

### *Joint FAO/WHO Consultation on Exposure Assessment of Food Chemicals*

As a follow–up to an earlier consultation on predicting dietary intake of pesticide residues, a Joint FAO/WHO Consultation on Food Consumption and Exposure Assessment to Chemicals was held from 10–14 February 1997 at WHO Headquarters in Geneva, to address issues related to estimating food consumption at the international level, assessing risks posed by acute hazards in foods and harmonising exposure assessment methods across various food chemicals, including nutrients. An Executive Summary of the report highlighting the important recommendations is available from the Programme of Food Safety and Food Aid (FSF) at WHO. The full report will be available in the near future from the Programme of Food Safety and Food Aid, WHO (see next page).

### *Study Group on Safety of Aquaculture Products*

A Study Group on food safety issues associated with products from aquaculture convened in Thailand from 22–26th July 1997. The meeting was jointly organised by the Fisheries Department of FAO, the Network of Aquaculture Centres in Asia and the Pacific (NACA) and the Programme of Food Safety and Food Aid (FSF) of WHO. The Study Group considered food safety issues associated with farmed finfish and crustaceans, particularly those associated with biological and chemical contamination that may occur during the production of these aquatic products. It discussed the identification and quantification of hazards and how to implement measures for control of potential food safety hazards, including current national and international programmes. Further information can be obtained from the Programme of Food Safety and Food Aid, WHO (see below).

### *Joint FAO/IAEA/WHO Study Group on Wholesomeness of Irradiated Food*

A Joint FAO/IAEA/WHO Study Group on the whotesomeness of food irradiated with doses above 10 kGy, was convened from 15–19th September 1997 at WHO Headquarters in Geneva. The Study Group reviewed all relevant data related to the toxicological, microbiological, nutritional, radiation chemical and physical aspects of food exposed to doses greater than 10 kGy and came to the unanimous conclusion that the food is safe for consumption. Food irradiated under proper conditions to all doses appropriate to the intended technological objectives is safe to consume and adequate for nutrition and that the process is self–limiting, which means that no upper dose limit should be imposed.

The presence in food of harmful microorganisms such as *Salmonella* species, *Escherichia coli* O157:H7, *Listeria monocytogenes,* or *Yersinia enterocolitica* is a problem of growing concern to public health authorities all over the world. For certain products, food irradiation may be the best method to ensure the absence of these microorganisms, although in some instances, an upper limit of 10 kGy for the overall average dose could preclude the effective use of the technology. In the case of irradiation of spices, the need for a greater dose has already been recognised in several countries, and still higher doses are required for sterilisation of food.

As with other food pasteurisation and sterilisation technologies, the objective of processing with ionising radiation is to destroy pathogenic and spoilage microorganisms without compromising safety, nutrition and sensory quality. The group concluded that food treated with doses greater than 10 kGy can be considered safe and nutritionally adequate when produced under established Good Manufacturing Practise.

For further information, please contact the Programme of Food Safety and Food Aid, WHO. Tel: 41 22 791 2555 Fax: 41 22 791 4807 Email: foodsafety@who.ch

### *Integrated Management of Childhood Illness (IMCI)*

More than 11 million children die each year before reaching the age of five. Seventy percent of these children die from one or more of five causes – malnutrition, acute respiratory infections, diarrhoea, measles and malaria. Of these, malnutrition is the major underlying factor (see graphic in *SCN News No. 14*).

At least 5 million of these deaths can be prevented through successful worldwide implementation of the WHO/UNICEF joint strategy of Integrated Management of Childhood Illness (IMCI), according to WHO. The

IMCI advocates simple preventative measures along with a holistic approach to the management of childhood illness, such that a child being treated for one illness is also checked and treated for the other major childhood killers.

The First Global Review and Coordination Meeting on IMCI, was held in Santo Domingo, Dominican Republic, from 9–12 September 1997, where participants from multilateral and bilateral aid agencies, NGOs and public health specialists reviewed the urgent need to put IMCI strategy into practice. Participants agreed that the three main goals of the IMCI are

- to train health workers;
- to improve the ability of health systems to deliver quality care;
- to improve family and community practices in relation to health care.

Early experience of the IMCI has shown successes. There have been impressive increases in the ability of health workers to detect the five greatest killers of children under five. Furthermore, families taking their children for treatment were substantially more satisfied with the care the children received when they were looked after by IMCI–trained health workers, and studies have shown that doctors' current drug usage costs can be reduced by almost 80% using IMCI.

In the meeting's closing "Call for Action", participants agreed that IMCI "has the potential to significantly improve the quality of child health care, reduce unnecessary hospitalization and to substantially reduce childhood mortality". A call for the IMCI to be adopted as part of national health ministries' policies and to receive substantially more financial support both nationally and internationally was made in order for IMCI to be made available to all children of the developing world.

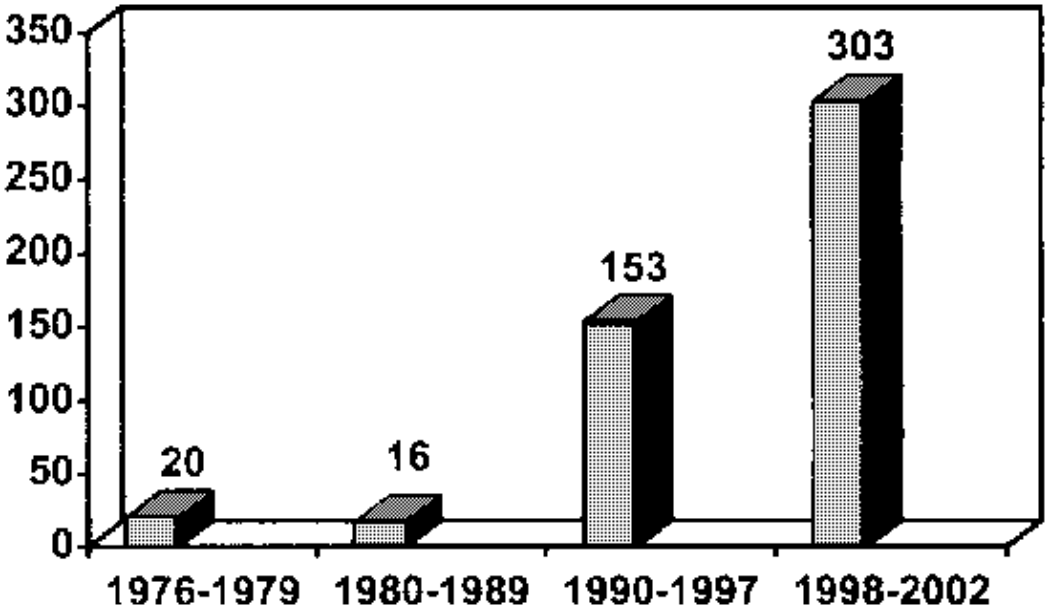
Source: WHO Press Releases September 1997. Details of the IMCI strategy are available on the World Wide Web, via the WHO Division of Child Health and Development home page (http://cdrwww.who.ch/pub/imci/toc.htm). For further information, please contact Dr J.L. Tulloch, Director, CHD, WHO, 20 Avenue Appia, CH–1211 Geneva 27, Switzerland. Tel: 41 22 791 2632 Fax: 41 22 7914853 Email: tullochj@who.ch

### *World Bank*

### *Update on nutrition lending data in World Bank assisted projects*

Since 1976, the World Bank has allocated project funds to improve nutrition through self–standing nutrition projects, health and education projects and to a lesser extent through agriculture and social fund projects. Typical nutrition interventions are community nutrition, maternal and child nutrition, school–based nutrition and health, information, education and communication on nutrition and micronutrient programs.

The graph shows an overview of the average lending figures per year and shows the trend in nutrition lending over the last decades. All numbers are estimates and based on projections; i.e. not actual disbursement.




**Yearly Average of Nutrition Lending in Millions of US$**

The World Bank allocated over 1.2 billion dollars to address nutrition in the last eight years – an average of 153 million per year. An estimated total of 1.3 billion in funds will be allocated to nutrition interventions in the upcoming years – an average of 303 million dollars per year. South–East Asia, with yearly average lending of 66 million per year, and Latin America, with yearly average lending of 43 million are the regions with the highest estimated lending for nutrition. The Africa region however, has the highest number of projects that allocate funds to nutrition, with a yearly average of 20 new projects per year, which include nutrition.

More specific data is available on lending for micronutrients. The Bank has lent an estimated total of US$ 155 million[1] to address micronutrient deficiencies since 1976, with a significant increase in lending for micronutrients during the last decade. From only US$ 230.000 in the period between 1976–1979 and US$ 705.000 in the period between 1980–1989, US$ 154 million was allocated to micronutrients in the period between 1990–1997. The following table shows the yearly average per micronutrient.

[1]All the lending figures are based on estimates from project appraisal documents i.e. projected allocations.

Source: Claudia Rokx, The World Bank, 1818 H Street, N.W., Washington DC 20433, USA. Email: Crokx@worldbank.org

***Yearly average lending per micronutrient***

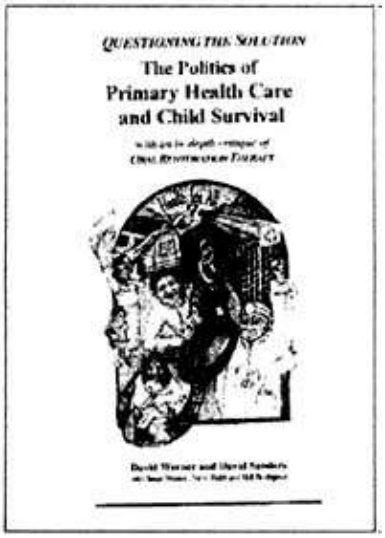
| Period | Number of projects | Vitamin A control | Iron–deficiency control | Iodine–deficiency control |
|---|---|---|---|---|
| 1976–1979 | 1 | US$ 16.000 | US$ 60.000 | |
| 1980–1989 | 1 | US$ 18.000 | US$ 35.250 | US$ 17.250 |
| 1990–1997 | 10 | US$ 4.450.000 | US$ 5.066.000 | US$ 9.800.000 |

## Publications

***Questioning the Solution. The Politics of Primary Health Care and Child Survival with an in–depth critique of Oral Rehydration Therapy (1997)***

***By David Werner and David Sanders with Jason Weston, Steve Babb and Bill Rodriguez***

***Review by Claudio Schuftan, MD***




Here is a new book whose time had come; a book that succeeds in painting the big picture of the health situation in the 1990s worldwide showing us how often the trees do not let us see the forest. The book is a true wake up call to new realities.

It is a book written in a direct language by a group of authors who are no newcomers to the scene. They set out to write a book for a wide readership of students, health workers, activists, primary health care (PHC) workers, health and development planners and policy makers, based on their respective long experience in the field.

The book makes a passionate call for rectifying what the authors see as being terribly wrong with PHC in the mid−nineties. It calls for a strengthening of international solidarity, networking and coalition building among the like−minded progressive health practitioners who agree with the book's arguments. In so doing, it energizes the reader; it makes one question what one is doing and leaves one little chance but to take a stand. Each of its 21 chapters is full of data carefully woven into a lucid argument that is convincing and compelling from beginning to end. The book's many examples give a human face to otherwise faceless social problems and abuses, thus exposing them to the scrutiny of the reader.

In short, we are sternly warned of the current global regressive trend in the health status of the growing number of poor people, and are alerted to the so many unfulfilled promises of PHC and the Child Survival Revolution. The failures and successes of the current health and nutrition system to protect the life and health of poor children are chronicled in a way that show how 'magic bullet' technologies ultimately have only brought about some survival, but not without asking the key question: 'survival at what cost?'... Ultimately, the futility of all safety net approaches used as damage control measures to resolve deep−rooted health problems is masterfully brought to the fore.

The rise and fall of PHC with its (too) many stopgap measures lends itself for the authors to drive their main arguments. One of them criticizes the prioritization of product over process, presented in the form of an in depth critique of oral rehydration therapy (ORT). It contrasts the use of oral rehydration solution packets with the use of home−based, food−based ORT. The book basically objects to the pharmaceuticalization of this simple solution, a typical example of how PHC has been brought into the flawed Western medical model where doctors still feel unmotivated to promote social change and self−reliance.

All this analysis leads the authors to advocate that the ultimate determinants of the health status of poor people are wider social equity issues that can only be addressed by embracing the political dimensions of the problem. Solutions are not about health *per se* we are told, but about triggering organized popular demands for an overall fairer treatment in society. This is made clear through showing us examples of poor people's empowering initiatives from different continents. But they also show us how these initiatives systematically run into obstacles created by the existing national and international power structures. The role of international pharmaceutical houses, the IMF and the World Bank are reviewed in this regard. The latter is seen as excessively intruding into Third World health care policy−making, leaving WHO a weak second. The Bank's 1993 World Development Report on health gets special attention. The authors brand it 'old wine in new bottles', and a report about how to achieve a 'healthier poverty'. The complex concept of disability−adjusted life years (DALYs) introduced in said report is heavily and fittingly criticized as well.

The global roles of WHO and UNICEF are also scrutinized in a special Appendix under the optic of whether they do contribute to a 'real Health For All'. Both agencies are shown to indeed have addressed the real, basic causes of ill–health in the world, but also of implementing measures that ultimately avoid tackling them; they are further made accountable for the non–sustainability of the measures they promote. WHO and UNICEF are thus written off by the authors as potential decisive leaders in the struggle for (needed) social change.

The authors show anger at the mockery made of the empowering part of PHC having replaced it by a drive for what really is a disempowered compliance by people together with a high dose of blaming the victim. A whole rhetoric has risen to justify some of the capital sins being committed in the name of the Alma Ata Declaration, namely sins related to going from genuine popular participation to compliance, from social to technological interventions, from cooperative approaches to private enterprise, from process to product, from problem–posing learning to pre–charted training, from critical analysis to social marketing, from Health for All to raising survival rates, and ultimately from not shifting from a humanitarian to a political agenda.

On the economic front, good evidence is given correlating persistent high child mortality rates primarily with income distribution disparities and this leads the authors to assert that the alleviation of poverty is actually a precondition to health improvements.

In closing, the authors recap on key issues. They think the grim current situation threatens to reverse the hard won global progress made during the last 20 years. We are reminded that it is possible for health workers to function within an inequitable social order while still working to transform it. A call therefore, is made for them to work towards minimizing the inequalities of the existing power structure since this will do more to reduce high infant mortality than all preventive measures put together: social and political commitment to equity is the key determinant of good health at low cost.

The challenge is not only to find and understand the root causes of the problem, but equally to find workable solutions. No road map is offered. But different attempts to find a way are shown in which the social mobilization component of PHC was somehow resurrected.

At the heart of the conclusions of the book is a call for a Child Quality of Life Revolution in which children will not only survive, but will be healthy in the fullest sense of wellbeing.

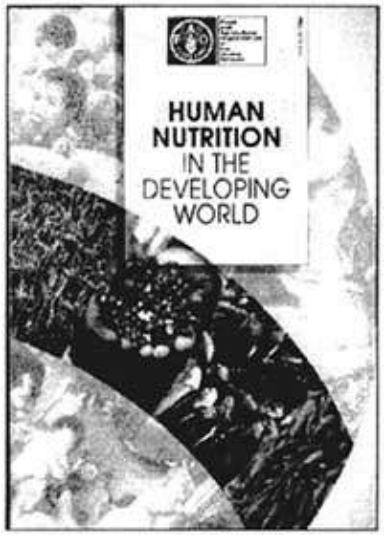
All in all, this is a one–of–a–kind book that reminds us of the groundbreaking role "Food First" by Lappe and Collins played some twenty years ago. It is not without flaws though, and some readers will find some chapter conclusions occasionally being oversimplistic, sometimes using sweeping one–liners. Nevertheless, even people unsympathetic to the book's political line will find it worth reading. Students will find endless inspiration. A good glossary is included and the book is pleasantly and fittingly illustrated. References and endnotes are generous and there is a recommended further reading list plus some addresses to join groups that are working along the lines advocated by the book.

A HealthWrights Paperback, 1997, 207 pp., HealthWrights, P.O. Box 1344, Palo Alto, CA 94302, USA, $30 airmail postage paid. Tel: 650 325 7500 Fax: 650 325 1080 Email: healthwrights@igc.org Web: www.healthwrights.org.

Reviewed by Claudio Schuftan, MD. I. P.O. Box 24 – Hanoi, Vietnam. Tel/Fax: (84–4) 823–6401 Email: aviva@netnam.org.vn, Hanoi, September, 1997

***Human Nutrition in the Developing World (1997)***

***By Michael C. Latham (FAO Food and Nutrition Series No. 29)***




*Human Nutrition in the Developing World* provides a comprehensive introduction to nutritional problems in developing countries. It is a useful reference for workers in agriculture, health, education and other fields who are seeking to promote simple, practical and affordable actions to solve nutritional problems in developing countries.

In this book, Michael Latham, Professor of International Nutrition at Cornell University, draws upon his far–reaching experience in the field of international nutrition to provide a rich source of sound science–based information on food, nutrition, the causes of malnutrition, nutritional disorders and their prevention, and nutrition policies and programmes. The book focuses on the nutritional and health consequences of poor food consumption. Each major nutritional disorder is described and factors contributing to malnutrition such as low food production, food insecurity, poor health status and social and cultural factors are reviewed. Finally, policies and programmes to alleviate malnutrition are discussed, based on the framework set by the 1992 FAO/WHO International Conference on Nutrition and endorsed by the 1996 World Food Summit.

The book emphasizes three prerequisites of good nutrition: food security, good health and adequate care, however fails to display UNICEF's conceptual framework of child survival and development of the triple A process (contrary to the wishes of the author). Special stress is given to applied and multidisciplinary approaches for the alleviation of malnutrition, with food–based approaches emphasized as the only sustainable way to improve the nutritional status of all.

The book has five annexes including tables of recommended intakes of nutrients, anthropometric tables, tables of nutrient content for selected foods, and tables of reference nutrient densities relevant for developing and evaluating food–based dietary guidelines.

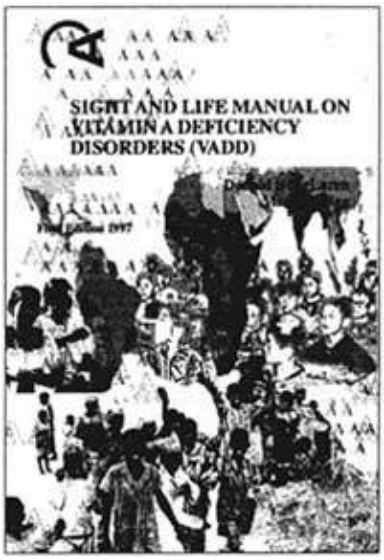
> Published by the FAO. 526 pp. US $52.00. Further information about ordering this book can be obtained from the FAO Bookshop, Viale delle Terme di Caracalla, 00100 Roma, Italy. Tel: 39 6 5705 5727 Fax: 39 6 5705 3152 E–mail: Publications–sales@fao.org. Web: http://www.fao.org/CATALOG/giphome.htm. Sources include the fly leaf cover to the book and the FAO new publication webpage (http:// www.fao.org/CATALOG/interact/inter–e.htm).

***Sight and Life Manual on Vitamin A Deficiency Disorders (VADD) (1997)***

***By Donald S. McLaren and Martin Frigg First Edition***

Established by F. Hoffmann–La Roche Ltd in 1986, the Sight and Life Task Force is a humanitarian programme dedicated to fighting vitamin A deficiency in developing countries. Sight and Life provides free vitamin A and technical know–how, funds study and research grants and participates in educational campaigns to promote sound nutrition. Since 1986, the Task Force Sight and Life has supported over 600 projects in more than 70 countries, and distributed 25 million vitamin A capsules to children between 6m and 5y. The Task Force consists of one full–time manager and specialists drawn from many Roche departments. Doctors, nutritionalists, researchers from various disciplines and specialists in communications take part in its activities. Dr Andres Leuenberger, Vice–Chairman of the Board, Roche Holding Ltd, is at present the chairperson of Sight and Life. Task Force Sight and Life is financed entirely by F. Hoffmann–La Roche Ltd. It publishes regular free newsletters, an annual report giving an outline of activities and projects receiving

support, and posters, brochures and video films in various languages providing additional information on xerophthalmia and the Task Force.




The 'Sight and Life Manual on Vitamin A Deficiency Disorders' is intended to be a guide to those interested in and working in the field of vitamin A deficiency. It is an information tool that presents the complexities of this subject in a clear and understandable fashion without trivializing or oversimplifying the issues. The manual takes a very practical approach, dealing with those problems that are of concern to health and nutrition workers, especially those in the fields of child survival and protection of vision. Its primary aim is to present current knowledge in a form that practitioners can put to direct use.

The manual may be used as a reference text, however it is not the intention of the authors that the information provided be exhaustive. For those readers who wish to learn more about the subject, key references and a short list of publications for further reading are provided.

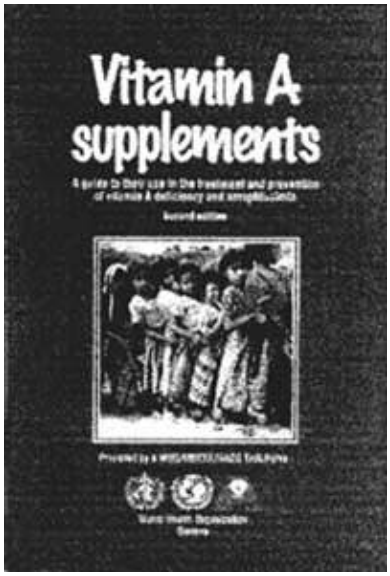
The first two chapters consider the role of vitamin A and its precursor carotenoids in nature, the food sources of vitamin A and the various factors that may influence the concentration of nutrients and their availability in the diet. Chapter 3 describes what happens to vitamin A once it has been ingested, and includes a review of its various functions at the molecular level. This leads to a discussion on human requirements of vitamin A and a summary of current recommended dietary allowances (RDA). There then follows an account of the existing methodologies for the assessment of vitamin A status and their application for drawing up guidelines, in particular, for assessing subclinical vitamin A deficiency. The ocular manifestations of vitamin A deficiency are described, followed by discussion of epidemiological issues and presentation of global prevalence estimates. The final section is devoted to the subject of control of vitamin A deficiency. This is considered under seven headings – treatment, prophylaxis, prevention and management of infectious diseases, fortification, dietary modification, plant breeding and disaster relief. To aid the reader a glossary of terms is also provided.

A slide collection and accompanying notes have also been prepared for Sight and Life. When used together with the slide set, this handbook will serve well as an aid to further education and in prevention campaigns.

138 pp. For more information about this book and the slide set, please contact Task Force Sight and Life, P.O. Box 2116,4002 Basel, Switzerland. Tel: 41 61 691 2253 / 41 61 688 7494 Fax: 41 61 688 1910 Email: basel.sight_and_life@roche.com Web: http://www.sightandlife.org. Source: forward and preface of the book, Sight and Life website.

***Vitamin A Supplements. A Guide to their use in the treatment and prevention of vitamin A deficiency and xerophthalmia (1997)***

***Prepared by a WHO/UNICEF/IVACG Task Force Second edition***




Recent years have seen a steady increase in the number of programmes distributing high−dose vitamin A supplements to treat or prevent vitamin A deficiency and its consequences. Health care workers are sometimes in doubt about how much vitamin A should be given to different age and population groups, how often, and in what form. WHO, UNICEF, and the International Vitamin A Consultative Group (IVACG) have therefore prepared the guidelines contained in this publication, which update and extend those published by WHO in 1988.

New information derived from scientific investigations and practical experience has warranted this revision. Recommendations are based on the best current evidence. Easy−to−follow treatment and prevention schedules are given, and a chapter on operational issues makes suggestions for the integration of vitamin A distribution into a variety of primary health care services. A list of selected further reading is given along with four annexes detailing the members of the WHO/UNICEF/IVACG task force; countries categorized by degree of public health importance of vitamin A deficiency; the rationale for vitamin A supplementation; and the stability of common vitamin A preparations.

Those concerned with the prevention and treatment of vitamin A deficiency and its consequences are invited to consider these guidelines, adapt them as necessary to local conditions, and carefully monitor their application and impact.

> Published by WHO. 28 pp. CHF 14.− (CHF 9.80 in developing countries). To order this publication, please contact Distribution and Sales, World Health Organization, 1211 Geneva 27, Switzerland. Tel: 41 22 791 24 76 Fax: 41 22 791 48 57 Email: publications@who.ch Web: http://www−pll.who.ch/programmes/pll/pll_index_frames.html. A catalogue of WHO publications on Nutrition (including an order form) is also available on request. Source: back cover.

***Health, Nutrition, and Population (1997)***

***The World Bank (Sector Strategy Studies)***

This report presents the World Bank's corporate strategy in the area of health, nutrition, and population (HNP). It is divided into three main sections, with supportive statistical annexes. Section 1 provides a worldwide overview of recent achievements, development challenges, and the emerging consensus on reform strategies in the HNP sector. Section II reviews current Bank trends in policy dialogue, analysis, lending, and quality assurance. The final section provides a discussion of the Bank's objectives in the HNP sector, new strategic policy directions, ways of achieving greater impact, staff development and enhancement of partnerships.

> Published by the World Bank. 112 pp. US $20. To order this report please contact The World Bank, Box 7247−8619, Philadelphia, PA 19170−8619, U.S.A. Tel: 703 661 1580 Fax: 703 661 1501 Email: books@worldbank.org Web: http://www.worldbank.org/html/extpb/HowToOrder.html. Source: world bank publications webpage.

***Breastfeeding and Child Spacing Country Profiles (1997)***

***By Miram H. Labbok, Rafael Pérez−Escamilla, Anne Peterson & Shirley Coly***

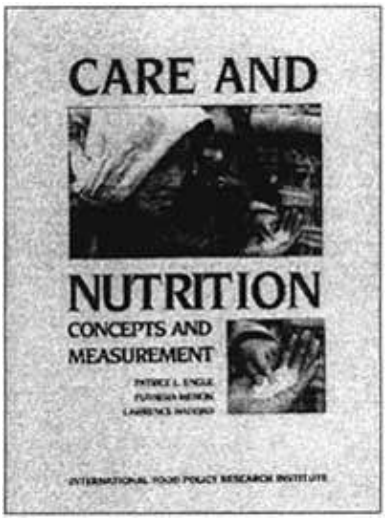

The purpose of this report is to highlight the complementary aspects of breast−feeding and nutrition, health, child spacing, and maternal and infant survival. The book presents the relationships between these different components of public health, and summarizes the issues and recommendations most relevant to decision and policy makers.

Twenty−seven separate country profiles are presented. For each, the purpose of the analysis is to explore breast−feeding patterns, the transition from lactational amenorrhea to the acceptance of a complementary family planning method, and the potential for the use of the Lactational Amenorrhea Method (LAM) to achieve healthy child spacing. Four figures are presented for each country: the percent breastfeeding as a function of number of months postpartum; the percent breastfeeding in the first six months by sociodemographic variables; lactational amenorrhea, family planning use and risk of pregnancy; and fertility−inhibiting effect of the intermediate fertility variables. The data sources and survey techniques, and the methodology applied to each figure and the definitions used are fully explained in Chapter 2. Each country profile concludes with a brief interpretive comment on breast−feeding and family planning−related issues that may be amenable to program and policy change. A summary of the analysis and recommendations for all 27 countries is presented at the end of the report, with breastfeeding, fertility and family planning information for all countries summarized in a table.

Published by Washington DC: Institute for Reproductive Health. 98 pp. For details of how to obtain copies of this report, please contact Dr Rafael Pérez−Escamilla, Assistant Professor and Extension Nutrition Specialist, Department of Nutritional Sciences, University of Connecticut, 3624 Horsebarn Rd Ext, Storrs, CT 06269−4017, USA. Tel: 860 486 5073 Fax: 860 486 3674 Email: rperez@canr1.cag.uconn.edu. Source: introduction and preface to the book.

***Care and Nutrition. Concepts and Measurement (1997)***

***Edited by Patrice L. Engle, Purnima Menton & Lawrence Haddad***




This paper is intended to provide an effective introduction to the concept of "care" as a determinant of child nutrition and to offer a useful summary of attempts to develop care indicators and measurements of care in different cultures.

Care is the provision in the household and the community of time, attention, and support to meet the physical, mental, and social needs of the growing child and other household members. The links between food availability, care practices, and nutrition of the child are well established but hard to measure. The significance of care has best been articulated within the framework developed by UNICEF. This paper extends the UNICEF model in two ways: it defines resources needed by the caregiver and specific care practices, and it presents an argument that the child's own characteristics play a role in the kind of care that he or she receives. That is, the way that the child and the caregiver interact can affect the health and nutritional status of the child.

The paper discusses is detail two of the least studied care practices: feeding practices and psychosocial care. It also discusses measurement of care and suggests appropriate tools for measuring resources for care and the two care practices, based on a summary of recent literature. A substantial bibliography is included.

> Published by IFPRI. 50 pp. To order a copy of this paper, please contact IFPRI, 1200 Seventeenth Street, N.W. Washington D.C. 20036–3006, U.S.A. Fax: 202 467 4439, or send an email to IFPRI–info@cgnet.com. Further information on IFPRI publications can be found on the Web at http://www.cgiar.org/ifpri/pubs/pubs.htm. Single copies are sent free of charge; additional copies may be purchased for US $7.50 each. Source: summary of paper.

***Height Census and Its Uses: Technical Report (1997)***

***A joint publication by the Pan American Health Organization and UNICEF***

Height censuses of schoolchildren have been used by several countries in Latin America to gauge nutritional status in the population. This report summarizes the main results of a joint UNICEF / PAHO/WHO technical meeting held from 18–20 October, 1994, to evaluate experiences with height censuses in the Americas. The report presents a critical analysis of the uses of height censuses and sets forth the theoretical bases for their use and interpretation. After reviewing the causes of stunting and its biological and social consequences, the publication describes a series of potential uses of height censuses related to policy planning or program evaluation. For each of the potential uses, the advantages, disadvantages, conditions for successful application, and alternative activities are described. To aid the reader, this information is summarized in a table at the end of the report. Also included are the conclusions and recommendation stemming from the expert meeting and an extensive list of references. Poliymakers and program planners will benefit from this concise yet comprehensive explanation of height censuses and how they can be put to optimum use.

This publication is also available in Spanish *'Los censos de talla y sus usos. Infrome technico'.*

> PAHO Technical Paper No. 45. 16 pp. US $8. Copies of this report are available from PAHO, World Health Organization, 525 Twenty–third Street, N.W. Washington, D.C. 20037, U.S.A. Fax: 202 338 0869. Further information about PAHO publications, including order forms, can be found on the Web: http://www.paho.org/english/publicat.htm. Sources: PAHO publication

web page and introduction to the report.

### *WHO Programme of Food Safety and Food Aid: New Documents (1997)*

The following new documents are now available from the Programme of Food Safety and Food Aid, WHO:

• *HACCP: Introducing the Hazard Analysis and Critical Control Point System* (WHO/FSF/FOS/97.2). This document explains the international status of the HACCP system and provides guidance for the implementation of HACCP by industry and government agencies. Annexed to the document is "Hazard Analysis and Critical Control Point (HACCP) System and Guidelines for its Application", adopted by the 22nd Session of the Codex Alimentarius Commission (Geneva, 1997).

• *Food Safety and Globalization of Trade in Food* (WHO/FSF/FOS/97.8). This document was prepared in cooperation with the WTO. The document explains the implications of the WTO Agreements to the public health sector and provides advice to the decision–makers of health authorities on how the national food control system needs to be strengthened to comply with the WTO Agreement on the Application of Sanitary and Phytosanitary Measures (SPS Agreement).

• *Surveillance of foodborne diseases: what are the options?* (WHO/FSF/FOS/97.3). This document explains the need for the collection of the epidemiological data and reviews the advantages and disadvantages of various objectives and needs.

Copies of these documents can be obtained from the Programme of Food Safety, World Health Organization, 20 Avenue Appia, CH–1211, Geneva 27, Switzerland. Tel: 41 22 791 2555 Fax: 41 22 791 4807 Email: foodsafety@who.ch. Web: http://www.who.ch/programmes/fsf/publist.htm Source: Programme of Food Safety, WHO.

### *GTZ Guidelines for Nutrition Baseline Surveys in Communities (Version 1.2,1997)*

***By Rainer Gross, Am fried Kielmann, Rolf Korte, Hans Schoeneberger & Werner Schultink***

The purpose of this book is to provide guidelines for nutrition surveys. The guidelines serve to:

• initialize the assessment of the nutritional situation of communities;
• assist in planning and implementing surveys;
• standardize survey methods and techniques;
• be used for training of nutrition and public health workers and specialists;
• help bring about an improvement of the nutritional situation of target groups.

The guidelines do not contain new methods but describe international standard operating procedures for nutrition surveys. Where these fall short, illustrations from practical experiences of the authors fill the gap.

The guidelines can be ordered at the following address: SEAMEO–TROPENMED Network, Central Office, 420/6 Rajvithi Road, Bangkok 10400, Thailand. Fax: +66 2 2477721 or +66 2 6444331

### *Rapid Assessment Procedures (RAP) Ethnographic Methods to Investigate Women's Health (1997/1998)*

***By Joel Gittelsohn, Pertti J. Pelto, Margaret E. Bentley, Karabi Bhattacharyya, and Joan L. Jensen***

This book contains guidelines and procedures for carrying out a community–based ethnographic study of women's health in general, rather than on a specific disease or cluster of related illnesses. The main goal of the protocol is to provide techniques for the generation and analysis of data that will facilitate programme development and implementation in organization's working in women's health. The results of the ethnographic study are intended to help identify women's health problems as perceived by women, to develop recommendations for appropriate communication with women, and to enhance development of effective health care advice through description of ethnomedical models of women's health problems. They also aim to identify constraints to improving the conditions of women's health and suggest appropriate strategies to deal

with them, to prepare an ethnographic report and to improve surveys that examine patterns of morbidity and mortality in women by suggesting ways of adapting questions to consider/acknowledge community perceptions and practices. The first part of the protocol is centered on an intensive training period in ethnographic methods, during which preliminary data on women's health are collected. The main body of the protocol focuses on a series of data collection exercises that will permit an organization to develop a sizeable body of data on local perceptions and practices regarding women's health in the study area. The final section presents several ways to apply the data to programmes and future research activities.

Published by Boston, *MA, USA: International Nutrition Foundation, Inc. To be published late 1997 or early 1998.* Further information can be obtained from the International Nutrition Foundation, Inc., Charles St. Sta, P.O. Box 500, Boston, MA 02114–0500, USA, Tel: (617)–227–8747 Fax: (617) 227–9405 Email: unucpo@zork.tiac.net. Information including an order form is also available on the World Wide Web: http://oz.plymouth.edu/~food/orderform.html. Source: Nevin Scrimshaw, UNU.

**– Request for Logos –**

We may include a special feature section on Communications in a later issue of SCN News, and are interested in gathering material for this. In particular, we are keen to receive project logos, developed and used to symbolize the goods of a project**.**

**SCN NEWS NO. 16**

JULY 1998

The next issue of SCN News (No. 16, July 1998) will have the theme

**Nutrition of the School Aged Child**

Please send us any information or material that you would like us to consider for this issue.

We are always happy to receive material, books, notices of events, letters to the editor, etc., that you would like to see appear in SCN News. Please contact Dr Cathy Needham, Editor, SCN News, ACC/SCN, 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

**Many thanks to all those who contributed to this issue!**

## Publication List – Dec 1997

***UNITED NATIONS***

***ADMINISTRATIVE COMMITTEE ON COORDINATION***

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***Secretariat: ACC/SCN, c/o World Health Organization***

***20, Avenue Appia, CH–1211 Geneva 27, Switzerland***

***Telephone: [41–22] 791 04 56, Fax: [41–22] 798 88 91, Email: accscn@who.ch***

REPORTS ON THE WORLD NUTRITION SITUATION

***First Report on the World Nutrition Situation,*** *November 1987*

***Supplement on Methods and Statistics to the First Report on the World Nutrition Situation,*** *December 1988*

***Second Report on the World Nutrition Situation, volume I, Global and Regional Results,*** *October 1992*

***Second Report on the World Nutrition Situation, Volume II, Country Data,*** March 1993

***Update on the Nutrition Situation,*** November 1994

**Update on *the Nutrition Situation 1996,*** November 1996

ACC/SCN STATE−OF−THE−ART SERIES (SOA) NUTRITION POLICY DISCUSSION PAPERS

***Delivery of Oral Doses of Vitamin A to Prevent Vitamin A Deficiency and Nutritional Blindness,*** by Keith P. West Jr and Alfred Sommer, June 1987, *reprinted June 1993. (SOA No. 2)*

***The Prevention and Control of Iodine Deficiency Disorders,*** by Basil S. Hetzel, March 1988, *reprinted June 1993. (SOA No. 3)*

***Women's Role in Food Chain Activities and their Implications for Nutrition,*** by Gerd Holmboe−Ottesen, Ophelia Mascarenhas and Margareta Wandel, May 1989. *(SOA No. 4)*

***Malnutrition and Infection − A Review,*** by A. Tomkins and F. Watson, October 1989, *reprinted June 1993 (SOA No. 5)*

***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)*

***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)*

***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)*

***Controlling Iron Deficiency*** Report of ACC/SCN workshop held in Trinity College, Dublin, June 1990. Focusses 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)*

***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)*

***Nutrition and Population Links − Breastfeeding, Family Planning and Child Health.*** Papers from the ACC/SCN 18th Session Symposium, held at UNFPA, New York, February 1991. Papers include "Nutrition and Family Planning Linkages: What More Can be Done?" by Sandra Huffman, "Reproductive Stress and Women's Nutrition by Reynaldo Martorell and Kathleen Merchant, "Breastfeeding, Fertility and Population Growth" by Roger Short, "Nutrition and its Influence on the Mother−Child Dyad" by Perm Ramachandran, and with final comments by Miriam Labbok, Barry Edmonston, and Beverly Winikoff. *(SOA No. 11)*

***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)*

***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)*

***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)*

***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)*

***Nutrition and Poverty,*** by S. Gillespie, N. Hasan, S. Osmani, U. Jonsson, R. Islam, D. Chirmulay, V. Vyas & R. Gross. *(SOA No. 16)* Planned publication date December 1997.

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 (Free of charge)

***Nos. 1 and 2,*** March 1988 – features: Vitamin A Deficiency, Urbanization, World Nutrition Situation, Economic adjustment *(limited number of copies remain available).*

***No. 3,*** early 1989 – features: Does Cash Cropping Affect Nutrition?, Nutrition in Times of Disaster.

***No. 4,*** late 1989 – features: Update on the Nutrition Situation, Women and Nutrition, Malnutrition and Infection (Part I), Targeted Food Subsidies. *(out of print).*

***No. 5,*** early 1990 – features: Nutrition and School Performance, Uses of Anthropometry, Malnutrition and Infection (Part II), Flows of External Resources for Nutrition.

***No. 6,*** late 1990 – features: Preventing Anaemia, Policies to Improve Nutrition – What Was Done in the 80s, Weaning Foods – New Uses of Traditional Methods. *(out of print).*

***No. 7,*** mid 1991 – features: Refugees' Nutrition Crisis, Breastfeeding, Birth Spacing and Nutrition, Community–Based Development – From a Programme Towards a Movement, Micronutrient Intakes, Incomes and Prices. Supplement: Some Options for Improving Nutrition in the 1990s – Reviews experience of policies and programmes, and grouping nutrition issues, leads to identifying options as building blocks for future action.

***No. 8,*** late 1992 – features: Highlights of the World Nutrition Situation, Food Prices and Nutrition, Food Security and Nutrition 1971–91 – Lessons Learned and Future Priorities, Long–Term Effects of Improved Childhood Nutrition.

***No. 9,*** mid 1993 – Focus on Micronutrients. Features: Addressing Micronutrient Malnutrition, Micronutrient Deficiency – The Global Situation, Effectiveness of Vitamin A Supplementation in the Control of Young Child Morbidity and Mortality in Developing Countries, Zinc Deficiency – Is It Widespread but Under–Recognized?

***No. 10,*** late 1993 – features: Nutrition and Food Aid, Nutrition and Human Rights, The Nutrition Transition.

***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. 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. 13,*** late 1995 – features: Interview with Dr A. Horwitz, SCN Chair, 1986–1995; Behavioural Change and Nutrition Programmes; and Poor Nutrition and Chronic Disease Part I.

***No. 14,*** July 1997 – features: The Nutrition Challenge in the 21st Century: What Role for the United Nations? Meeting the Nutrition Challenge: A Call to Arms; Update on the Nutrition Situation, 1996; Poor Nutrition and Chronic Disease Part II; Effective Programmes in Africa for Improving Nutrition.

COUNTRY CASE STUDIES

***Brazil:*** The improvement in Child Nutritional Status in Brazil: How Did it Occur? by R. F. lunes & C. A. Monteiro. September 1993.

***Egypt*** Review of Trends, Policies and Programmes Affecting Nutrition and Health in Egypt (1970–1990), by H. Nassar, W. Moussa, A. Kamel & A. Miniawi. January 1992.

***India:*** Nutrition in India, by V. Reddy, M. Shekar, P. Rao & S. Gillespie. December 1992.

***Indonesia:*** Economic Growth, Equity and Nutritional Improvement in Indonesia, by I. T. Soekirman, G. S. Idrus Jus'at & F. Jalal. December 1992.

***Tanzania:*** Nutrition–Relevant Actions in Tanzania, by F. P. Kavishe. April 1993.

***Thailand:*** Nutrition and Health in Thailand: Trends and Actions, by Y. Kachondham, P. Winichagoon & K. Tontisirin. December 1992.

***Zimbabwe:*** Nutrition–Relevant Actions in Zimbabwe, by J. Tagwireyi, T. Jayne & N. Lenneiye. December 1992.

REFUGEE NUTRITION INFORMATION SYSTEM

Report on the nutrition situation of refugee and displaced populations. Published every three months with an interim electronic mail update

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[_] *Second Report on the World Nutrition Situation, Volume II, Country Data* (March 1993)*

[_] *Update on the Nutrition Situation* (November 1994)*

[_] *Update on the Nutrition Situation, 1996: Summary of Results for the Third Report on the World Nutrition Situation* (Late 1996)

[_] *Third Report on the World Nutrition Situation* (Expected to be available December 1997)*

[_] SOA No. 2 *Vitamin A* (1987) (Reprinted 1993)*

[_] SOA No. 3 *Iodine* (1988) (Reprinted 1993)*

[_] SOA No. 4 *Women's Rote in the Food Chain* (1990)*

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