SCN News, Number 10

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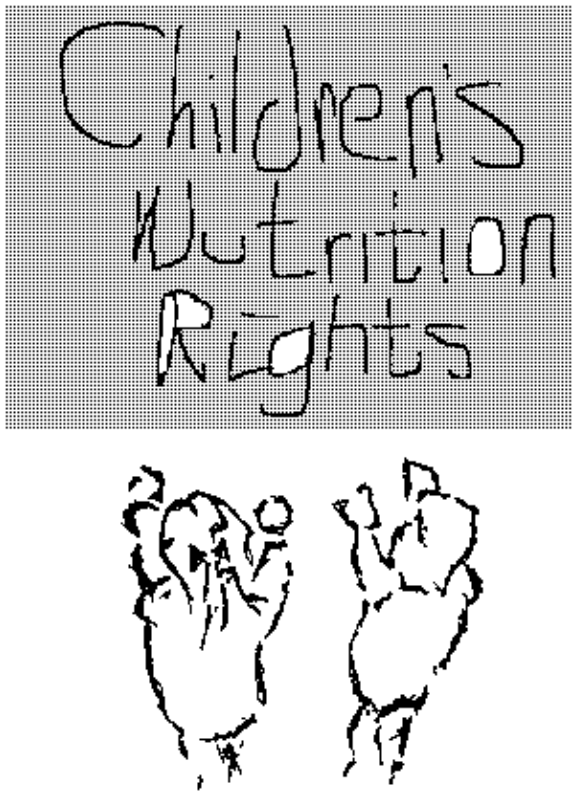
UNITED NATIONS **NATIONS UNIES**

ADMINISTRATIVE COMMITTEE ON COORDINATION – SUBCOMMITTEE ON NUTRITION

A periodic review of developments in international nutrition compiled from information available to the ACC/SCN



RECENT ACC/SCN PUBLICATIONS

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)

Nutritional Issues in Food Aid (SOA No. 12) (August 1993)

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 on the growth of children with infection, experiences of feeding programmes, and protecting refugees' nutrition with food aid.

Effectiveness of Vitamin A Supplementation in the Control of Young Child Morbidity and Mortality in Developing Countries (SOA No. 13) (December 1993)

by G.H. Beaton, R. Martorell, K.J. Aronson, B. Edmonston, G. McCabe, A.C. Ross, and B. Harvey. Report of the findings of a review of the scientific evidence on the effectiveness of vitamin A supplementation on mortality and morbidity in children from developing countries.

Controlling Vitamin A Deficiency (SOA No. 14) (January 1994)

A report based on the ACC/SCN Consultative Group Meeting on Strategies for the Control of Vitamin A Deficiency, July 1993, Ottawa, Canada.

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Your contribution to future issues would be welcome. Please send us items for inclusion in "News and Views", "Programme News" and/or "Publications". Letters to the Editor for possible publication in future issues are also most welcome. SCN News aims to help the sharing of experience in nutrition.

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FEATURES

Nutrition and Food Aid

Highlights of the Symposium held at the ACC/SCN 19th Session.

Public works, supplementary feeding and emergency assistance for refugees are three areas in which the impact can be improved.

Food aid provides a direct contribution to improving nutrition. In fact, food aid is the largest externally available resource directly applicable to nutrition, amounting to over $2 billion per year.[1] There is long experience in applying food aid, in the UN context through the World Food Programme, and this experience raises a number of nutrition issues. The SCN decided that at its 19th Session, hosted by the World Food Programme in Rome in February 1992, the annual Symposium would be on the topic of "Nutritional Issues in Food Aid". The proceedings of this Symposium have just been published by the SCN (see inside front cover of this issue of SCN News).[2] Here we summarize some of the main points.

The Symposium was opened by James Ingram, then Executive Director of the World Food Programme, and was chaired by Judit Katona–Apte, Senior Programme Advisor at the World Food Programme. The

Symposium was organized into three sets of topics. Public works as a nutrition intervention was introduced by Joachim von Braun of IFPRI. Issues to do with supplementary feeding of young children were covered in papers presented by George Beaton (University of Toronto, Special Advisor to SCN), Juan Rivera (Institute of Nutrition of Central America and Panama), and Philip Musgrove of the World Bank. The SCN returned then to the issue of nutrition of refugees, which had been highlighted in previous sessions, with a third section of the Symposium on this topic, introduced by Mike Toole of CDC. All these themes sought to provide an update of recent knowledge, relevant to improving the nutritional impact of food aid.

The scope ranged from use of food aid in development – "through some three billion dollars worth of development resources that provide food aid to more than 80 million people, WFP tackles the root cause of hunger and malnutrition – namely poverty" as stressed by Mr Ingram in his keynote address, to emergency relief: "WFP's relief work counted for just under half of all shipments of WFP food aid in 1991, to bring succour to 21 million people". One overall conclusion, introduced by Judit Katona–Apte whose article appears in the SCN publication, was that "food by itself can contribute significantly to improving the health and nutritional status of people... to withstand infections better and recover more quickly... pregnant and nursing mothers who receive proper nourishment have healthier babies. Children are better able to learn when they're properly fed. Workers can be more productive if they eat a sound diet. However, as emphasized throughout, food aid is far more effective when combined with other inputs, particularly financial and technical assistance". The first topic, concerning public works as a nutrition intervention, illustrates this point.

Public Works to Improve Nutrition

"By supporting appropriate interventions and instruments, food aid can play a role in promoting food and nutrition security and in reducing poverty. Food aid can be used both to increase demand for food (by backing higher employment policies) and to decrease the cost of production (by supporting labour–intensive investment)", Dr von Braun stated in his introduction. Public works programmes have been widely used, particularly in Asia, to improve food security. Indeed, supporting public works is probably one of the more effective uses of food aid for improving food security. It is important to emphasize that public works can be supported either by cash or by food, both approaches when properly designed and managed helping to improve nutrition. "Whether wages should be in the form of cash or kind (food) depends on local circumstances relating to the risk of market failure" according to von Braun.

The importance of public works in providing for food security was well illustrated in the case of Botswana, described by Mrs T C Moremi, of the Botswana government. Here, a significant part of the population was protected from the effects of prolonged drought through cash–for–work projects. Mrs Moremi explained that Botswana opted for cash–for–work projects because the markets functioned well, and "we thought that in the end it was better not to have parallel food distribution programmes running". However, it is acknowledged that under different circumstances using food directly for payment may have advantages.

The end result of using food aid to support food–for–work or cash–for–work is similar: increased food availability for those employed in the public works schemes thus supported. The two routes for using food aid in this way are illustrated in figure 1. In addition, food aid can be used to protect food supplies when wages are in the form of cash, if this is sufficiently extensive to expand demand for food.

Public works programmes improve welfare in a number of ways, importantly including: increasing income through wage employment in the short run: insuring against risk, particularly when public works are designed as employment guarantee schemes with low wage rates; and employment and income effects from assets created, and improvement in human resources in the long run –this would include through improved nutrition. "Combined, these three effects simultaneously address both transitory and structural food security problems of the poor" said von Braun. In particular, the employment guarantee schemes in India have been widely viewed as an effective buffer against acute food shortage. China has expanded public works programmes enormously during the 1980s. Certain African countries have also used emergency public works to improve food security in times of shortage – including Zimbabwe and Ethiopia, as well as Botswana.

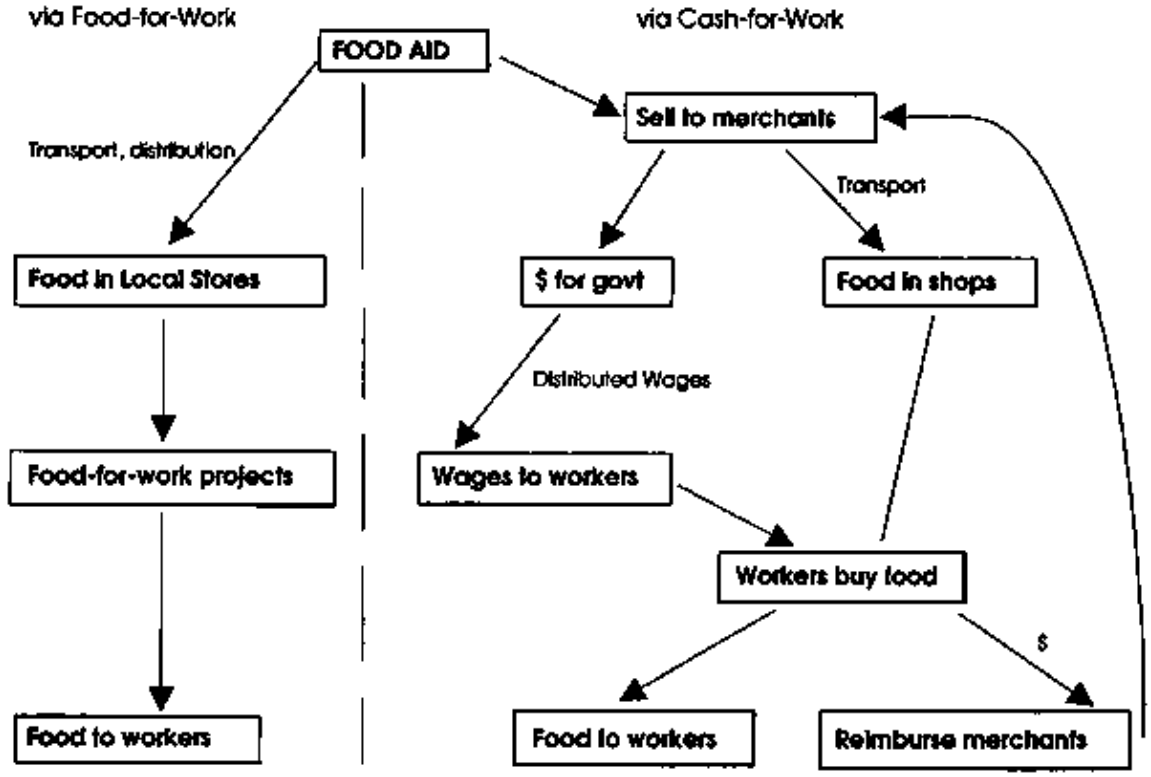

Figure 1 – Two Ways of Using Food Aid for Public Works

One important feature of properly designed public works, in relation to poverty alleviation with low administrative cost, is their capacity to be self–targeting. "At properly defined wage rates, the working poor identify themselves by turning up at public works schemes. The self–targeting feature of public works programmes only operates effectively with an appropriate (low) wage rate policy and a flexible absorption of applications without rationing workplaces" said von Braun. This feature also leads to the possibility of using public works as a test for the actual need for emergency employment programmes. Labour–intensive public works programmes thus also can provide for food security monitoring information themselves, from the extent to which workers enrol in these programmes.

On the other hand, as von Braun as well as the discussants emphasized, public works programmes are not always straightforward to design and manage, and require a significant input of non–wage resources. Issues such as land ownership need to be carefully considered. Non–labour costs may be up to 50% in road construction projects, for example, or lower in other schemes such as forestation or anti–erosion. It is here in particular that coordination with other inputs is valuable. At the same time, the design and management of projects is crucial, and often overlooked, for the public works to be a worthwhile and sustainable investment. There was wide agreement that simply providing employment with little attention to the product was clearly wasteful. Public works projects, even in emergencies, need to be implemented with the same management criteria as other development projects.

At the same time, optimizing the nutritional benefit of the increased food consumption brought about by effective labour–intensive works projects may require complementary inputs, for example in health and sanitation. Moreover, problems of displacing labour, and effects on child care, need to be taken seriously.

In the discussion, Jens Schulthes of the World Food Programme emphasized that the potential of public works programmes was enormous, and providing an important possibility for investment. "Only about 20% of the food aid today is targeted, and out of that about half goes to direct feeding schemes. You can see that food–for–work schemes at the moment take up less than 10%. Retargeting to public works schemes should be feasible, and would have a big effect". In conclusion, Schulthes emphasized that public works, which have had a big effect in India for example, in guaranteeing employment, need to be more widely used. "In Africa, where this is now most needed, there is little yet of the required administrative infrastructure. I think this is where we have to concentrate".

Drawing on experience from Botswana, Mrs Moremi (Coordinator of Rural Development) stressed their generally successful experience in guaranteeing employment and supporting food security through widespread public works schemes. Nonetheless, it should be remembered that "quite a lot of female–headed households who are among the poorest groups, as well as the aged and the disabled, may together account

for something like 25% of the absolute poor (in Sub–Saharan Africa), and are simply not able to participate in public works because they do not have time or they do not have the labour". According to Simon Maxwell, who summed–up the discussions "the first conclusion is that... there is enormous scope, and we ought to pursue it. The second conclusion is that food aid can play a very large role in supporting public works, both directly through food–for–work, and indirectly through monetization. A third conclusion is ... that we should not underestimate the real practical problems. In practice public works are extremely demanding in terms of preparation and design... and cash is crucial".

"Beyond this, the scope of public works needs to be looked at carefully. Questions include: exactly *which* works?" stressed Maxwell "this needs review in terms of labour intensity, nutrition impact, long–term employment effects, etc. Decisions need to be made concerning the type of public works, roads, forestry projects, erosion control, school buildings and health centres, etc. A further step needed is to substantially *increase* the amount of food used to build public works. Finally, there is a lot we still need to know, particularly on the choices: maybe you cannot have supplementary feeding and food–for–work, so we need better information on relative costs and benefits of these different interventions".

Supplementary Feeding

One major use of food aid is in supplementary feeding of vulnerable groups – for example in 1990/91 this amounted to some 200 million dollars per year, about 25% of WFP's expenditures. The second part of the Symposium addressed a number of issues concerning how to get maximum nutritional benefit from these resources. The first issues concern both the expected benefit, and which age groups to target. The important background here is that for many years preventing growth failure has been seen as the major objective of supplementary feeding, but many programmes have not been very effective in reaching this. Now it is becoming clear that preventing growth failure is not the only benefit, and moreover that this growth failure occurs at an age much earlier than programmes had hitherto been primarily targeted at. This crucial question was first addressed by George Beaton, of the University of Toronto and Special Advisor to the SCN.

An important earlier review of the effectiveness of feeding programmes for young children in developing countries had been completed in 1982 by Beaton and Ghassemi, for the SCN[3], and one major conclusion quoted again was: "The general impression gained from that review is that food distribution programmes directed toward young children, as (then) being operated, are rather expensive for the measured benefit. However, the reviewers remain unconvinced that the benefit usually measured, physical growth and development, is either the total benefit to the family and community, or the most important benefit..." Since that time, a number of advances have been made. First, as mentioned above, the timing of growth failure is much better understood now. Second, the complex of disadvantages associated with growth failure is now clearer – including lowered immunity and hence increased morbidity and mortality, physical activity, and psychological development. Third, the very long–term effects of early malnutrition on educability and intellectual development are now becoming established.

Growth failure provides a marker of situations in which a number of aspects of functional development have been impaired. "However," as Dr Beaton said in his introduction "while these different failures may stem from the same cluster of environmental deprivations, it does not follow that they are linked through the same physiological processes, and hence that correction of growth failure will necessarily confer the same benefit as addressing the original causal situation – or that the other aspects of functional development might not be influenced without evidence of a growth response." Nonetheless, as emphasized in comments by Dr Martorell, "the massive growth failure that occurs in early childhood and at no other period in life is a marker of functional impairment in a number of other domains... I also believe that in preventing this massive growth failure through diet and health interventions, we will prevent most of these associated effects". This reemphasizes that intervening at the age at which growth failure is most active is of primary importance. The ACC/SCN Statement agreed at the meeting elaborates on this topic, and is included in box 1.

Growth failure is most active between six and around 24 months of age (see figure 2), and this age range provides a "window of opportunity" for prevention. Results of studies which have led to establishing this rather specific age of growth failure, measured usually in terms of length increment, were presented in some detail by Dr Beaton. Three lines of evidence all pointed to the same conclusion. First, observation of patterns of spontaneous growth faltering in developing countries – data from India, China, Uganda and a number of other countries were quoted – all showed clearly that this growth faltering began at around six months, and was generally complete by around 18–24 months. Second, rapid secular trends in reduced growth faltering observed in China illustrate clearly that this difference occurs in, again, the same period of around 6–24 months. Thirdly, recent carefully designed supplementation trials, as well as reexamination of older data from these, have shown that the major effect in preventing growth failure is in this same early period.

Box 1

ACC/SCN Statement on the Benefits of Preventing Growth Failure in Early Childhood

Growth in young children tends to falter very early in many developing country populations, usually beginning by four to six months and ending by two to three years of age. This growth failure is often pronounced, so that by three years of age the size of the majority of children is outside the normal range expected in a well–nourished, healthy population. Once this faltering has occurred, linear growth tends to resume at a rate similar to that observed for children of that age in healthy populations.

The growth failure which occurs in young children is only one result of the common combination of inadequate child feeding, high rates of infection, and poor child care. It is now realized that there are other very important effects that need to be prevented. Small size indicates other risks, such as reduced nutrient stores, depressed immunocompetence, increased severity of infections, and poor motor and mental development. It is also a marker of risk of long–term functional impairment, including poor educational and intellectual performance.

Among the direct consequences of early growth failure are very short stature and reduced lean body mass in the adult, characteristics which constrain reproductive performance in women and work capacity and productivity in adults engaged in hard physical labour.

Attention to child feeding, the control of infections, and good care results in improvements in child growth and other crucial functions. Specifically, some significant recent evaluations have shown that *supplementary feeding programmes, where enough food is delivered to and consumed by young children in need,* are effective in:

– preventing growth failure;
– protecting against the negative effects of diarrhoeal diseases on child growth;
– improving educational performance, in later years.

Programmes that integrate interventions designed to attack the multiple causes of growth failure are most effective in improving child growth. These programmes can be viewed as investments in the future, for they lead to adults with a greater capacity for healthy, productive lives. Interventions that prevent growth failure in early childhood, it is now clear, can be expected to have a range of important short– and long–term benefits.

Extracted from: ACC/SCN (1993) (see endnote 2)

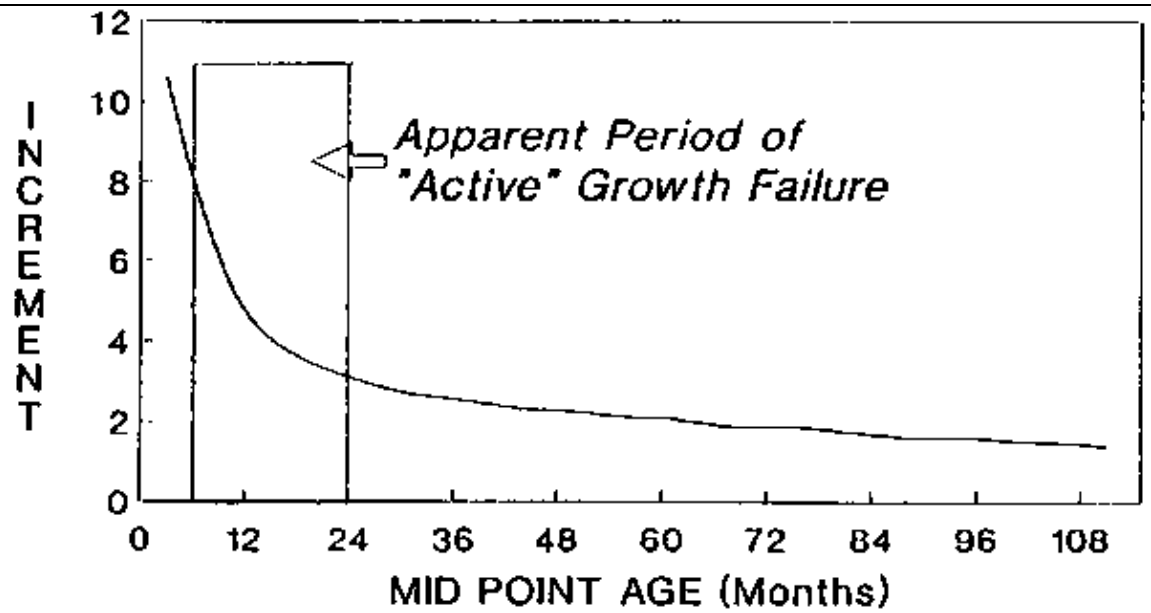

Figure 2 – LENGTH INCREMENTS BY AGE IN BOYS (cm / 3 months)

Extracted from: ACC/SCN (1993), p.45 (see endnote 2)

At the same time, these data tend to show that while linear growth failure can be prevented before around two years of age, supplementation *after* this age does not very effectively produce catch–up of established stunting. As Beaton says "... while responses can be generated up to three or more years, these do not appear to represent true catch–up as much as what might be called damage control..." Two different perspectives of catch–up growth should be distinguished. "Recovery" (of weight) in the intervals between intercurrent bouts of infection undoubtedly occurs at all ages in the presence of adequate food intake. "There is ample evidence to support the assertion that feeding programmes targeted to persons exhibiting evidence of underfeeding will lead to weight responses and probably improved functional health," whatever the age. It is the longer–term catch–up, to restore growth failures (especially height) occurring months or years earlier, that is in question.

Food supplementation in pregnancy and lactation should be aimed at benefiting the mother herself, as much as the infant *in utero* or at the breast. Women in developing countries face major responsibility for the health and wellbeing of the household, and inadequate food intake undoubtedly has a negative impact on the mother. In particular, there is now good evidence that the supplementation of pregnant women in severely constrained settings can improve intra–uterine growth and birthweight; although the effects are small, they do appear to have an impact on infant morbidity and survival. Thus, in a sense, the opportunity for protecting infant growth and development also exists before birth. "If once we accept this argument, then we must also accept the logical argument that we should be concerned about the adequacy of food intake of girls before pregnancy begins", says Beaton. Thus the inter–generational effect of small babies becoming small adults and having small infants needs to be interrupted at several stages.[4]

Establishing that the age range of around 6–24 months is the period of active growth failure goes a considerable way towards explaining the often negative findings in the review of feeding programmes ten years ago: most of these programmes reached children of two years and older. The overall conclusion here then is that "one should no longer feel doubtful about the potential impact of supplementation programmes on growth... the effect is concentrated in the 'window of opportunity' of 6–24, or possibly 36 months old" as summarized by Dr Martorell. We should not be reticent in laying out the benefits to be expected from preventing this growth failure: in sum, better health, better individual development, happier people, higher educational attainment: better "human capital".

Supplementation is Particularly Effective in Counteracting Growth Failure from Diarrhoea

Striking results have been found when the effects of supplementation on growth have taken account of diarrhoea. Three studies were described in some detail by Dr Juan Rivera, INCAP, based on work in Colombia, Guatemala, and Peru. These all showed, with some variation, an interactive effect of diarrhoea and food intake – that is that food is especially effective in counteracting diarrhoea. In all three cases, there was a much greater growth inhibitory effect of diarrhoea among children who were not receiving a supplement, or otherwise eating less. For example, in Bogota, Colombia, a five cm difference in achieved height by 36 months of age was found between those with and without the supplement and having the greatest degree of diarrhoea; while those without diarrhoea grew much the same either way. In the INCAP study, in Guatemala, a similar result was found, except that some effect of the supplement on growth was also found in those with less diarrhoea. This difference was ascribed to a lower underlying intake of energy in the latter study. Confirmatory results from observing usual energy intakes, diarrhoea incidence, and weight change, from studies in Peru, again showed a greater effect of diarrhoea in those with inadequate food intake (less than 75% of recommended intakes).

"A possible mechanism explaining the larger effects in children with diarrhoea is an increase in appetite immediately after the diarrhoeal episode" according to Dr Rivera. When appropriate foods are available to meet the increased appetite, the negative effects of diarrhoea on energy balance may be offset.

Other interesting conclusions from the studies, pointed out by Dr Martorell, were "first, growth rates after about three years of age were similar in the Guatemalan population to values found in well nourished populations". This links with other findings, that growth over longer periods (up to 18 years of age) in Guatemala was *just* a few centimetres less than seen in the United States – and in fact a little *more* than found in Mexican Americans growing up in the US.

These studies also reinforced the characterization of the first few years of life as the age of growth failure. The studies quoted by Dr Rivera showed that the supplement had no effect on growth rates after three years of age.

Related studies on long–term effects of improved childhood nutrition[5] are also relevant in this context. Studies at INCAP had also shown that "improving the diets of young children in Guatemala had both an immediate payoff in terms of reduced prevalence of stunting, and also resulted in enhanced physical and intellectual status in adulthood".

Education and Weaning Food Supplements

The use of external food aid in supplementary feeding and weaning of young children poses some specific problems, brought out by Dr Ken Bailey of WHO and the AGN. One well known issue concerns the introduction of non–traditional foods, such as wheat, into many rural areas in Africa, which can induce a change in dietary patterns. This is particularly concerning when the food aid itself is only transitory. In the case of feeding young children – a point made later in the context of Latin America – it is often important to be aware that the problem is not so much a lack of food in broad terms, as constraints in the feeding and care of young children. "... my estimate is that food aid is often used in countries and even for vulnerable group feeding, where there is no real shortage of food", says Bailey.

Better use of local foods can be promoted by "making suitable weaning food mixtures locally, using appropriate technology in the form of simple equipment of existing machinery such as corn mills" according to Dr Bailey. "In a few countries, WFP is using local weaning food plants to produce mixtures of local beans and cereals, such as *Weanimix* in Ghana, *Misala* in Burundi and *Likuni Pala* in Malawi. WFP purchases these products locally and thus the possibility exists at least, to show the people the proportions used, and how to make these mixtures themselves using local cornmills."

This also emphasizes the need for targeting in terms of seasonality. It would be much better to provide food aid to needy families in rural areas during the pre–harvest season. This sensible idea is as yet not widely enough applied.

Feeding Latin America's Children

Turning to the practical application of food aid and supplementary feeding, experiences in Latin America were presented by Philip Musgrove of the World Bank.[6] "More than US$1.6 billion is spent annually on 104 programs in nineteen Latin American and Caribbean countries to subsidize or provide food for people supposedly at risk of malnutrition. This amount constitutes only 0.2 percent of these countries' gross national product. If there is no double–counting, these programs reach more than 80 million people, or 21 percent of the population, at a cost of $20 per beneficiary or $4 per capita. Yet some 10 million children are malnourished, which suggests that the expenditures are poorly directed or ineffective. There is little hard evidence that these programs are preventing much malnutrition; even curative results are seldom measured. The effort is too small in some countries with great needs, while other countries have nearly eliminated malnutrition. Where coverage is high, programs – although generally targeted and with sensible criteria – do not always reach the neediest. They may also fail to provide enough food or to combine food with the health care and nutritional education necessary to attack all three root causes of malnutrition: poverty, disease, and ignorance. The evidence, limited mostly to program inputs rather than results, suggests that greater progress against undernourishment is possible even with current spending levels."

Overall, the programme participants (nearly 100 million people) are about half primary school children, and a quarter children under five. This amounts to around 54% of the under five population, and 65% of the total primary school population. "If the expenditures ($20 per beneficiary, or about $4 per caput) were concentrated on the nutritionally neediest one tenth of the population, that would mean a transfer on the order of $40 per beneficiary per year." Moreover, Musgrove concludes that "if the resources now being spent were concentrated on currently malnourished children... it seems plausible that malnutrition could largely be eliminated from the region." The range of expenditures per beneficiary varies from around $10 per year up to nearly $60 per year (e.g. in Peru or Jamaica). A figure of around $35–40 per year is taken as that likely to be effective – based in part on experiences in Chile, with the National Supplementary Food Programme. With a unit cost of $35, the 1.6 billion dollars spent on these programmes could adequately cover 47 million beneficiaries or about 56% of the present coverage.

Malnutrition has not been eliminated despite these programmes although the trend has generally been for improvement in the region.[7] One reason is that the coverage of programmes is not necessarily related to need, both between countries and within countries. "At one extreme is Chile, where malnutrition has been reduced so far that current spending covers 70 times as many beneficiaries as there are malnourished children in the country" explains Musgrove. "At the other extreme are countries where current spending simply would not be enough. This is the case in Bolivia and Guatemala which could only provide (with current

resources) for some three fourths of children in immediate need." But uneven coverage is only part of the story. "Ineffective use of resources within countries is the other reason why the substantial level of expenditure reported here has not succeeded in eliminating malnutrition". However, information on effectiveness of resource use is scarce. Impact evaluations are necessary, but rare. In fact, "most of the programmes reviewed here have never been evaluated". But those evaluations that have been undertaken have, unfortunately, shown that a number of programmes have had little effect. There are various reasons for this, among which is the "failure to measure preventive benefits... another is that rations are often too small to make much difference... and finally, failure may easily result from simple irregularity of operation that plagues many programmes".

In the ensuing discussion, introduced by Dr Eileen Kennedy from IFPRI, this question of level of supplementation was again raised – "from a low in Mexico of 140 kcals (per beneficiary per day) and high of slightly over 1000 in Costa Rica... it is unclear exactly *how* one decides where to set the level of supplementation...". "Recommendations on levels of micronutrients are also needed – in southwestern Kenya, holding total calories constant, a beneficial effect was found of increasing the percentage of animal protein in the diet. Thus in considering supplementation packages, we should not only be thinking about absolute levels, but also about quality issues, including micronutrients".

The issue of what the objective of supplementary feeding is – as introduced in earlier papers – returns in this context. As Musgrove put it: "the problem is this: turn it around, start at age ten and look back. At age ten, I want a healthy, normal size child that has already been in school for three or four years. Now, what is the best distribution of resources between the child's conception and its tenth birthday, to get there? This is what I think we do not know." Emphasis was placed on the point that non–food inputs are crucial – not only addressing poverty, but ill–health and educational issues. Many agreed that "in most programmes (not all) too much emphasis is on food, too little on the other inputs, and this tells you the direction to push in – move away from the present balance towards more health care and more education. But back to the objectives: try to figure out what the problem is before specifying the solution". (See also box 2.)

Nutrition of Refugees

Refugees are the most nutritionally vulnerable group in the world, by far, and their numbers are increasing fast. The refugees' nutrition crisis has been of major concern to the Sub–Committee, for example as described in SCN News No. 7, mid–1991. International refugees, and many internally displaced, are dependent upon food aid, so issues of protecting refugees' nutrition with food aid were of priority in the Symposium. The subject was introduced by Dr Mike Toole, of CDC Atlanta, who summarized the problem both in terms of malnutrition and mortality, and micronutrient deficiencies.

"The synergism between high malnutrition prevalence and increased incidence of communicable diseases explains much of the excess mortality in refugee and displaced populations" he said. Many studies have now shown that where acute malnutrition prevalences are low (e.g. less than 5% wasting) crude death rates (CDRs) tend to be similar to the host population, around 0.3/10,000/day. Refugee populations with malnutrition prevalences much higher, for example around 50%, experience crude death rates very much higher. These high prevalences of acute malnutrition are due to either quite inadequate food rations, high incidence of infections, particularly diarrhoeal disease in camps, and usually a combination of both.

"The importance of micronutrient deficiencies in refugee and displaced populations has only recently been extensively documented. In addition to deficiencies of vitamin A and iron... large epidemics of scurvy and pellagra have been reported in refugee populations during the past decade." The risk factors for, for example, scurvy and pellagra are now well understood, as indeed are the prevention measures. "Both protein–energy malnutrition and micronutrient malnutrition among dependent refugees can be readily prevented by the prompt provision of a basic food basket sufficient in quantity and quality," emphasizes Dr Toole. "The world's response to refugee and other international emergencies needs to be consistent, based on sound technical assessments, and systematically evaluated to ensure that food and other humanitarian assistance produces the desired impact on the affected population."

Box 2

"The other problem is that the people who defend these programmes politically do not always do so on *nutritional* grounds – they are just as likely to defend them on the basis of income distribution. In fact that's often the last resort. If you take a look at a long list of objectives that somebody would state for his programme and it was possible (with data) to go knocking them off one by one – say, well you say that the

kids will grow faster but here's the data and they don't; and you say that they are going to stay in school longer, here's the data and they don't – when you get them all the way back in a corner, he will throw up his hands and say "but we redistributed income!" and he's got you there. This is a real serious problem – and it's the scoundrel's last resort. How do we value this? What is it worth to us – anything? If nothing then we should not allow this, but if it is worth something, we need a way of judging it compared to the other things that we are trying to accomplish. One of the advantages of claiming a long list of objectives is that you always have this escape. I think we have a problem of not having any idea how to value one objective versus another; we have something much worse than apples and oranges here. We have no notion in general, of whether it is worth more for a one year old to be the right size at age three or whether it is worth more for a seven year old to stay in school for another year. If somebody says "I'll give you what it costs to produce *either* of these results, but you can only have one of them" I think we have no idea what to do next."

Extracted from: ACC/SCN (1993), p.80 (see endnote 2)

Comments were given by John Seaman, Save the Children Fund (SCF) UK, Basra Hassan, SCF Sudan, and Ms Rita Bhatia, UN High Commission for Refugees. The comments revolved substantially around issues of information and accountability: "...there is no system whereby anyone can be held accountable if the proper information is not available..." said Rita Bhatia. Such considerations contributed to a coalition of SCN members and NGOs beginning in September 1993 to systematically report on refugees' nutrition.

There were around 18 million international refugees, of whom approximately 13 million were living in camps in remote areas of Africa, the Middle East, and South West Asia. In addition, up to 20 million internally displaced persons were dependent on some kind of international food aid for their survival. These figures have only increased since then. To give a picture of the desperate nutritional deprivation of these people, many tragic stories can be told. Basra Hassan, a nutritionist with Save the Children Fund in Sudan, and herself a refugee from Somalia, told of outbreaks of anaemia in Somali camps from which many women died within 2 months of giving birth; leading to a programme of supplementation with liver on a daily basis for those who were strong enough to take it, others receiving iron injections.

She illustrated the dilemma of registration, from the refugees' perspective with a dialogue between two women. One went to a registration centre and when she came back she met another on the way: "Where are you coming from?" "*I am coming from the registration centre."* "What did you tell them?" *"I told them about the members of the family."* "How many?" *"Nine"* "You are foolish, you know. You are not intelligent enough. Why did you not double the number?" "*I do not like lying and also it is against the religion."* "Do you want to starve the children? There are times the religion allows you to tell lies when these things touch on your survival."

And she finished by saying "for refugees, the UN is their parent, particularly UNHCR and WFP people. They should think of themselves as the fathers of their families. A concerned father who left his children at home knowing that there was nothing left to feed them would think about and be very concerned about how he would feed his family, unlike a father who is not concerned. What is the use of a father who cannot feed his family?"

J.B.M.

1. From "Updated Report on the Estimation of External Resource Flows in Relation to Nutrition". ACC/SCN, 8 December 1993 (table 10). The 1989–91 figures were: WFP total funding $864 million; bilateral $1,292 million.

2. ACC/SCN (1993). *Nutritional Issues in Food Aid.* Papers from the ACC/SCN 19th Session Symposium. State–of–the–Art Series Nutrition Policy Discussion Paper No. 12, ACC/SCN, Geneva.

3. Beaton, G. & Ghassemi, H. (1982). Supplementary Feeding Programs for Young Children in Developing Countries. *American Journal of Clinical Nutrition,* 35, supplement, 864–916.

4. See ACC/SCN (1992). *Second Report on the World Nutrition Situation.* Volume 1, p.56–57; SCN News No. 5, Early 1990, p.19.

5. See SCN News No. 8, Late 1992, p10–12, "Long–Term Effects of Improved Childhood Nutrition"

6. Dr Musgrove's presentation was based on the World Bank publication "Feeding Latin America's Children" (Musgrove 1991); the text here is taken directly from the article published in January 1993 in *The World Bank*

Research Observer, 8, 23–45 – reproduced with the permission of the World Bank.

7. See ACC/SCN (1992). *Second Report on the World Nutrition Situation.* Volume 1, p.34–38; SCN News No. 8, Late 1992, p1–3.

Nutrition and Human Rights

> Although the idea that adequate nutrition should be regarded as a fundamental human right appears in many different contexts in international law – these are not binding in practice. George Kent, of the University of Hawaii summarizes the current situation.

by George Kent, Coordinator, Task Force on Children's Nutrition Rights, University of Hawaii, USA.[1]

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The idea that adequate food, or more broadly, adequate nutrition, should be regarded as a fundamental human right has a long history. In 1948 the *Universal Declaration of Human Rights* asserted in article 25(1) that "everyone has the right to a standard of living adequate for the health and well–being of himself and his family, including food ....". The *International Covenant on Economic, Social, and Cultural Rights,* which came into force in 1976, says in article 11 that "The States Parties to the present Covenant recognize the right of everyone to an adequate standard of living for himself and his family, including adequate food, clothing, and housing..." and also recognize "the fundamental right of everyone to be free from hunger ...".

In the *Convention on the Rights of the Child,* which came into force in 1990, two articles address the issue of nutrition. Article 24 says that "States Parties recognize the right of the child to the enjoyment of the highest attainable standard of health . . ." and shall take appropriate measures "to combat disease and malnutrition" through the provision of adequate nutritious foods, clean drinking water, and health care. Article 27 says that States Parties "shall in case of need provide material assistance and support programmes, particularly with regard to nutrition, clothing, and housing."

The rights idea was voiced frequently at the International Conference on Nutrition organized by the Food and Agriculture Organization of the United Nations and the World Health Organization and held in Rome in December 1992. In his address opening the conference His Holiness Pope John Paul II said "It is up to you to reaffirm in a new way each individual's fundamental and inalienable right to nutrition. The Universal Declaration of Human Rights had already asserted the right to sufficient food. What we must now do is ensure that this right is applied and that everyone has access to food, food security, a healthy diet and nutrition education."

In the conference's concluding *World Declaration on Nutrition* the nations of the world agreed that "access to nutritionally adequate and safe food is a right of each individual." However, there was nothing in the accompanying *Plan of Action for Nutrition* to elaborate that right, nothing providing for clear entitlements with effective accountability.

While the idea of the right to food appears in many different contexts in international law, most are not binding. In some cases, as in the *International Covenant on Economic, Social, and Cultural Rights,* the obligations are technically binding on the States Parties. However, because the obligations lack specificity and because there are no effective mechanisms for implementation and accountability, they are not binding in practice.

Several nations have articulated nutrition rights in some form in their laws. Cuba's constitution assures that "no child be left without schooling, food and clothing." The Italian, Spanish, and Greek constitutions assure a right to health. In many countries there is language referring to other sorts of assurances, such as the right to social security (as in the Netherlands and Spain) that can be interpreted as implying nutrition rights. In most cases, however, the assurances are vague and have not been enforced through the courts. There is practically no elaboration in detailed statutes of distinct nutrition rights, and no legal enforcement. Although there have been many expressions of concern, and many laudable anti–hunger programs at local, national, and global levels, the idea of the *right* has not yet been implemented.

On reviewing the hunger data, Philip Alston and Katarina Tomasevski observed that "these statistics make hunger by far the most flagrant and widespread of all serious human rights abuses." Alston (who presently chairs the United Nations Committee on Economic, Social, and Cultural Rights) added that "the right to food has been endorsed more often and with greater unanimity and urgency than most other human rights, while at the same time being violated more comprehensively and systematically than probably any other right." The idea that people should have a right to adequate nutrition is an old one, one whose vision has not been fulfilled.

New Initiatives

Local, national, and international nongovernmental organizations have been working on the problem of malnutrition in many different ways for decades. Now, for the first time, several have emerged specifically to press the view that people should be adequately nourished *as a matter of human rights.* During the International Conference in Rome in December 1992, several international nongovernmental organizations agreed to work together under the umbrella of the *World Alliance on Nutrition and Human Rights.* Its newsletter and other information on WANAHR can be obtained from the Secretariat at the Norwegian Institute of Human Rights, Gensen 18, N–0159 Oslo, Norway (Phone: 47 22 42 13 60; Fax: 47 22 42 25 42).

Several distinct but overlapping ways of dealing with nutrition as a human right have emerged. A comprehensive analytic approach has been developed by Asbjorn Eide, Arne Oshaug, and Wenche Barth Eide in their work at the Norwegian Institute of Human Rights and the Nordic School of Nutrition at the University of Oslo in Norway. It is based on a detailed analysis of the root causes of malnutrition. It treats the alleviation of malnutrition not as something held in isolation but as an integral part of the challenge of national development. Their analysis shows, in a matrix format, that there are specific national obligations to *respect, protect*, and *fulfil* the right to adequate nutrition. These obligations apply to food security, adequate care, and adequate prevention and control of diseases.

FIAN is the acronym for the *Foodfirst Information & Action Network,* an "International Human Rights Organization for the Right to Feed Oneself." It focuses on the international dimension, calling attention to what it identifies as violations of the right to feed oneself. Through its international newsletter and its chapters in several countries around the world, it organizes "FIAN Urgent Actions" to correct these violations. At the World Conference on Human Rights in Vienna in June 1993, FIAN took the lead in advocating an *Optional Protocol* to the *International Covenant on Economic, Social, and Cultural Rights* that would allow individuals to bring complaints to the United Nations Committee on Economic, Social, and Cultural Rights. The FIAN International Secretariat can be contacted at: PO Box 102243, D–Heidelberg, FR Germany. (Phone 49 62 22 50108; Fax 49 62 22 50107).

Several Task Forces under WANAHR pursue particular themes. *The Task Force on the Use of Food as A Weapon of War or For Political Purposes* promotes compliance with the prohibition of food deprivation as a method of war. It advocates a total ban on the withholding of food for political ends when it deprives needy people of food.

The *Task Force on Monitoring and Implementation of the Right to Food,* working closely with FIAN, is promoting three major types of activities. First, it proposes a meeting to further clarify the obligations of States Parties to the International Covenant on Economic, Social, and Cultural Rights. Second, with FIAN it is campaigning for the *Optional Protocol* to the covenant. Third, it proposes strengthened monitoring procedures in relation to the work of the United Nations Committee on Economic, Social, and Cultural Rights and the Committee on the Rights of the Child.

Another approach is promoted by the *Task Force on Children's Nutrition Rights* (of which the author of this article serves as coordinator). Its premise is that the idea of the right to adequate nutrition is likely to be more acceptable, more politically feasible, if it focuses on children. The Task Force encourages the organization of national workshops on the theme. Their purpose is to launch locally–based long–term campaigns to strengthen children's nutrition rights, giving attention both to their articulation in the law and the effective implementation of that law. Individuals from both governmental and nongovernmental organizations are invited to participate.

The first workshop was held in Guatemala in February 1993 and the second in Mexico in May 1993. Others are planned, and discussions are underway with potential organizers elsewhere. Organizers are being asked to invite individuals to their workshops who might arrange similar programs in other nations in their regions. Hopefully this will lead to an ongoing process of facilitation, networking, and learning. The Task Force is confident that this process will in time lead to increasing recognition of children's right to adequate nutrition.

The Task Force has been concerned with elaborating the conceptual bases for its work, especially to set its directions for the future. Some of these views are described in the following sections.

Rings of Responsibility

Our principal obligation toward children is to promote their development, understood as empowerment or increasing self reliance. The task is to help increase children's capacity to define, analyze, and act on their own problems. Who is responsible for carrying out these obligations? Many different social agencies may have some role in looking after children, but what should be the interrelationships among them?

As children mature the first priority is to help them become responsible for themselves. So long as they are not mature, however, children ought to get their nurturance from their parents. Failing that, they ought to get it from their local communities. Failing that, they ought to get it from the local governments. Failing that, it should come from their national governments. Failing that, they ought to get it from the international community. The responsibility hierarchy looks like this:

child
family
community
local government
state government
national government
international nongovernmental organizations
international governmental organizations

We can picture this as a set of nested circles, with the child in the centre of the nest, surrounded, supported, and nurtured by family, community, government, and ultimately, international organizations.

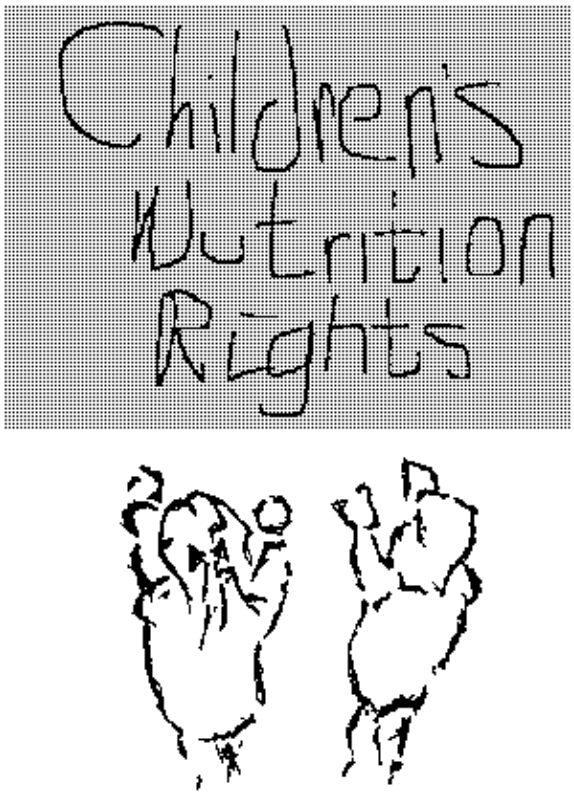
This is straightforward. The idea that needs to be added is that in cases of failure, agents more distant from the child should not simply substitute for those closer to the child. Instead, those who are more distant should try to work through and strengthen those who are closer to help them become more capable of fulfilling their responsibilities toward children. To the extent possible, local communities should not take children away from inadequate parents but should help parents in their parenting role. State governments should not replace local governments, but should support local governments in their work with children. The international community should help national governments in their work with children. To the extent feasible, those in the outer circles should try to empower those in the inner circles so that they can meet children's nutritional and other needs.

The Principle

In the perspective of the Task Force on Children's Nutrition Rights, past efforts to ameliorate malnutrition have been valuable, but they have been matters of charity and chance, and not the implementation of real rights. True implementation of a right to something means not just providing some amount of that thing to some people; it means assuring that every individual who is entitled to it gets his or her full share of it. Adequate nutrition for children should be recognized as an assured, unqualified right.

Perhaps capable adults should not be cared for by the state, but few would argue that small children in crisis should be ignored. Certainly the responsibility for nourishing children falls in the first instance on the child's family, but the community and the government bear some responsibility as well. Childhood malnutrition is one of those issues for which there should be a recognized obligation of government to provide some sort of services. Thus *there should be a recognized legal obligation of government to provide services to assure that every child is adequately nourished.* This principle is the foundation of the Task Force's work.

The family and the community also have responsibility for assuring that children are adequately nourished. The point is that there should be a clear duty of government, enshrined in law, to do what needs to be done if the family's and the community's response is inadequate. If the principle is accepted, there will still be a need to discussion of the exact nature of the services and the conditions under which they must be provided. The services provided by government could take several different forms, including not only direct feeding programs but a variety of health and care services as well.



International Obligations

The international human rights instruments are concerned primarily with the responsibilities of States Parties to their own people, not to people elsewhere. Article 11 of the International Covenant on Economic, Social, and Cultural Rights does require States Parties individually and through international cooperation to take the measures needed to implement "the fundamental right of everyone to be free from hunger," so the language does in fact speak of international obligations. In practice, however, there is no clear duty with corresponding measures to assure accountability. There is no international history of case law with respect to the right to nutrition. There is no hard international law with respect to the right to nutrition.

In the Task Force's view, children of particular nations are also children of the world. The international community should take responsibility when national governments are unwilling or unable to fulfil children's most basic needs. Thus the principle applied within nations also should be applied internationally: *There should be a recognized legal obligation of the international community to provide services to assure that every child is adequately nourished.* There could be an international agreement that certain kinds of international assistance programs *must* be provided, say, to children in nations in which children's mortality rates exceed a certain level.

This international obligation to provide assistance should stand unconditionally where national governments, or more generally, those in power, consent to receiving the assistance. The obligation must be mitigated, however, where those in power refuse the assistance and delivering the assistance would require facing extraordinary risks.

Implementation Internationally

In advancing nutrition rights within nations it is wise to work with nutrition programs that are already in place. In many cases the rules under which people have access to these programs can be revised to guarantee that those who are most needy are assured of receiving services. Similarly, there already are institutional arrangements for dealing with nutrition issues at the global level. Their methods of work can be adapted to advance nutrition rights.

The most prominent International Governmental Organizations (IGOs) concerned with nutrition are the Food and Agriculture Organization of the United Nations (FAO), the World Food Programme (WFP), the International Fund for Agricultural Development (IFAD), the World Health Organization (WHO), and the United Nations Children's Fund (UNICEF). They are governed by boards of directors comprised of member states. Responsibility for coordinating nutrition activities among these and other IGOs in the United Nations system

rests with the Administrative Committee on Coordination –Subcommittee on Nutrition (ACC/SCN). Representatives of bilateral donor agencies such as the Swedish International Development Agency (SIDA) and the United States Agency for International Development (USAID) also participate in ACC/SCN activities. There are also numerous international nongovernmental organizations (INGOs) concerned with nutrition.

The main role of the IGOs is not to deliver services directly but to help nations use their own resources more effectively. To the extent possible, they empower national governments to do what needs to be done. In much the same way, an increasing rights orientation among the IGOs would not require massive new international transfers of food. Their main function would be to press and help governments to adopt a nutrition rights approach in their own national programs, using the food, care, and health resources within their nations. For example, the World Food Programme could make it known that in providing food supplies for development it will favour those nations that are working to establish clear nutrition rights for the most needy in their nations. All of the IGOs could be especially generous in providing assistance to those nations that create national laws and national agencies devoted to implementing nutrition rights.

The IGOs could encourage and support nations in conducting national workshops on children's nutrition rights of the sort described earlier. With modest incentives, many might be willing to review their existing nutrition programs to determine ways in which the rules governing access to them could be improved through careful use of the law.

Currently, international assistance (including food aid, development aid, health services, and other forms of assistance) is intended to serve a very broad range of purposes. Only a small fraction of the total is intended to alleviate malnutrition directly. When wastage of different kinds is taken into account, the proportion of international assistance that is used to alleviate malnutrition directly is very small. When such assistance is provided it is usually in acute crisis situations such as famines, natural disasters, and armed conflicts. Most international assistance bypasses those who are chronically malnourished or reaches them only indirectly. The argument here is not that there should be massive increases of international assistance, but rather that there should be more systematic targeting to assure that extreme malnutrition is ended everywhere. International assistance programs would become more orderly and effective if they were based on the principle that under specified conditions the needy have a right to assistance.

As a minimum, it should be recognized that children everywhere have a right to adequate nutrition. Consequently, it should be recognized that national governments and the international community have positive duties to help fulfil that right. There is a great deal of work remaining to be done to articulate those rights in the law and to assure that the law is effectively implemented.

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The Nutrition Transition

> Large shifts in dietary composition are taking place in some lower income countries with important implications for health and development. Barry Popkin of the University of North Carolina at Chapel Hill presents evidence from selected countries.

by Barry M Popkin, Department of Nutrition and Carolina Population Centre, University of North Carolina at Chapel Hill.

Scientists have long recognized the importance of the demographic and epidemiological transitions in higher income countries and have more recently understood that similar sets of broadly based changes are occurring in lower income countries. What has not been recognized is that concurrent large changes are occurring in nutrition with equally important resource allocation implications for many low–income countries.

Two extant theories of change address key factors that affect and are affected by nutritional change. One relates to the demographic transition – the shift from a pattern of high fertility and high mortality to one of low fertility and low mortality (typical of modern industrialized nations). Even more directly relevant is the concept of the second theory of change, the epidemiologic transition, first described by Omran. The epidemiologic transition describes the shift from a pattern of a high prevalence of infectious diseases and malnutrition, resulting from pestilence, famine, and poor environmental sanitation, to a pattern of a high prevalence of chronic and degenerative diseases strongly associated with life style. A later pattern of delayed degenerative diseases has been more recently formulated. Accompanying this progression is a major shift in age–specific mortality patterns and life expectancy. The concepts of demographic and epidemiologic transition share a focus on the ways in which populations move from one pattern to the next. The framework for the nutrition transition mirrors these concepts of demographic and disease change.

Human diet and nutritional status have undergone a sequence of major shifts among characteristic states, defined as broad patterns of food use and corresponding nutrition–related disease. Over the last three centuries, the pace of dietary change appears to have accelerated to varying degrees in different regions of the world (see Popkin, 1993a). The concept of the nutrition transition focuses on large shifts in diet, especially its structure and overall composition. These dietary changes are reflected in nutritional outcomes, such as changes in average stature and body composition. Further, dietary changes are paralleled by major changes in health status, as well as by major demographic and socioeconomic changes. Modern societies seem to be converging on a pattern of diet high in saturated fat, sugar, and refined foods and low in fibre – often termed the "Western diet." At its most basic level, the changes presented here represent a simple imitation of the "Western diet" and there is little evidence yet to indicate what else is involved. As this author and others have shown, the nature and pace of change varies significantly and there are important differences in the food pattern changes; nevertheless the net effects on nutrient intake and nutritional status are similar.

Examples of these Transitions

The progress of dietary change throughout the world will not necessarily replicate the pattern of nutritional change that has occurred in high–income countries. Clearly, the patterns of dietary change over time and space that constitute the nutrition transition have occurred concurrently with demographic, socioeconomic, and epidemiologic changes. The long–term relationships among these factors are complex and heretofore unexplored. In the short presentation of data for one country and the discussion of relationships for others, we focus on results from surveys of individual and household diet and body composition since aggregate food supply data do not explain the nature of the distribution of food and can at best give us some sense of the trends in food availability or consumption (cf. Popkin, 1993a).

Western High–Income Model. The pattern of change in the United States appears to be one that has been followed often during the past century by other countries. This is a more gradual shift in the structure of diet toward what we define as the Western diet. There are significant differences in the food sources for various components of the diet and therein lie some important differences in the health implications of the dietary changes in each country. In no Western countries other than the Scandinavian ones has there been any systematic national effort to change the structure of diet.

Japanese and Korean Accelerated Model. Following World War II, dietary energy intake in Japan increased slowly toward a peak around 1970–75, whereas intake of animal products and fat increased continuously from 1946 to 1987. Obesity is increasing rapidly among the Japanese. Moreover there is evidence that fat patterning is very different with a much greater likelihood that the obesity is associated with greater visceral fat area. Moreover, much lower levels of BMI are associated with adverse coronary heart disease (CHD) outcomes. South Korea, another Asian country that achieved remarkably rapid economic growth during the last three or four decades, appears to be experiencing a change in dietary structure similar to that of Japan and is beginning to see problems of dietary excess appear.

Emerging Asian Models. China and Thailand are indicative of countries with recent economic and demographic change. The rapidity of the economic change and the resulting shifts in the structure of diet and the distribution of body composition patterns in China appears indicative of a pattern appearing in other Asian societies. Information presented next comes from the China Health and Nutrition Surveys (CHNS), a longitudinal survey designed to monitor these issues in China (for detail on the CHNS, see Popkin *et al,*

1993b).

Over the last decade, China has attained overall adequacy in diet and has seen a marked change in dietary structure. Included have been large increases in the dietary intake of edible oils, sugar, eggs, and dairy and meat products. While the traditional Chinese diet was felt to be a low–fat one, we now find a small proportion of the population following this traditional low–fat pattern and an ever–increasing proportion consuming more than 30% of their energy from fat. In figure 1 I show that this high–fat diet was significantly more common in urban and higher–income populations than in rural and lower–income ones. Moreover, between 1989 & 1991 we see large increases in the proportion of the higher income urban sample consuming a high fat diet and decreases in the proportion of adults consuming a low–fat diet among all income groups.

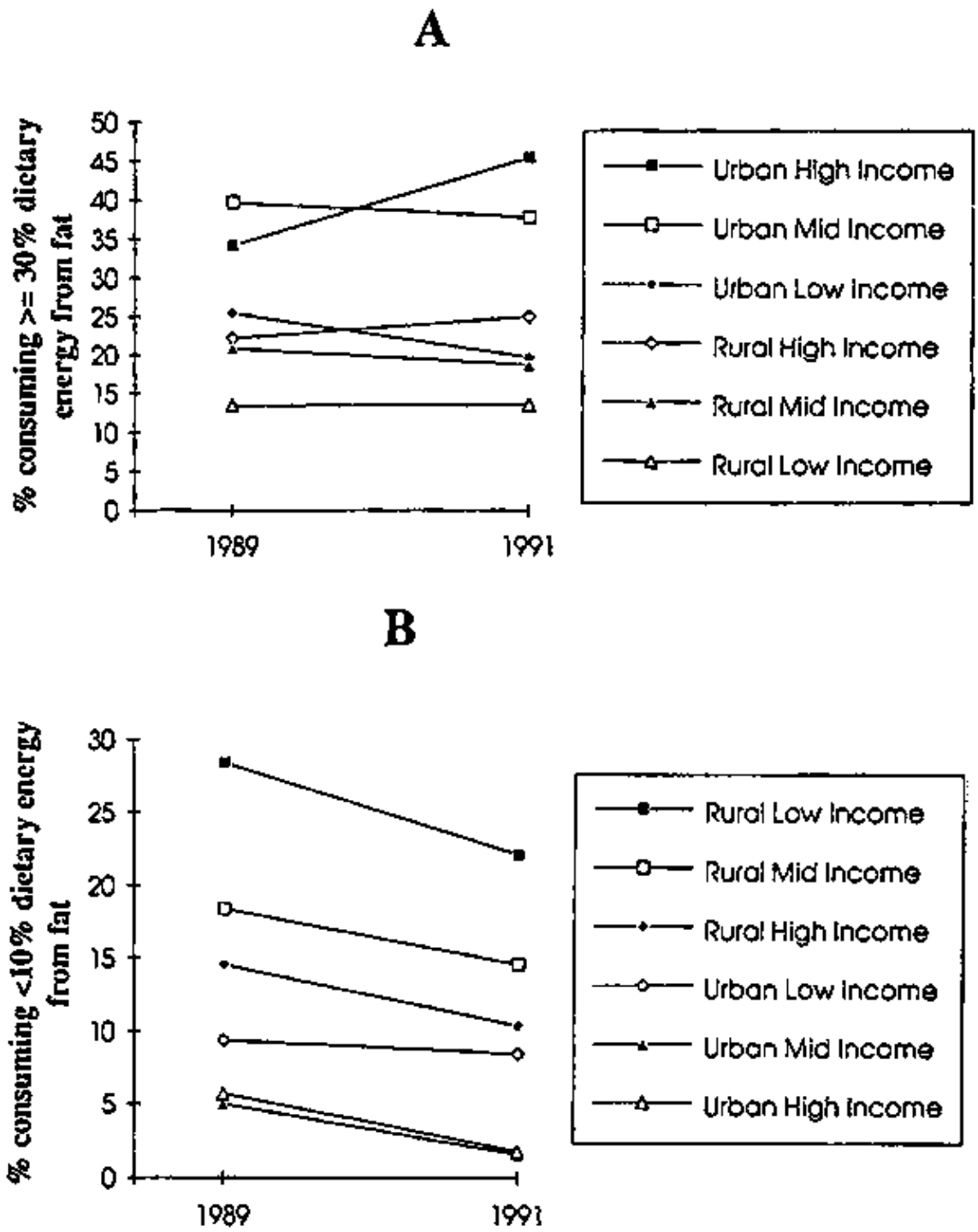

Figure 1. Percentages of Study Population with High (A) and Low (B) Energy Consumed from Fat, China: Adults (Aged 20–45), by Tertile of Household Income, CHNS 1989 and CHNS 1991.

Thailand is undergoing an economic transition about five years after China and at a slightly slower pace. It has achieved a rapid decline in the proportion of underweight children, partly through economic growth and partly through targeted nutrition and health actions. Yet, we are beginning to see increases in obesity in urban

areas, not just in Bangkok, but also in other parts of the country which approximate in speed of change the increases in obesity seen in China.

Latin American Pattern. Brazil, Mexico, Colombia, Chile, and Argentina are some of the countries in the Americas where problems of excess have begun to dominate. At the national level there is not a food security problem and even most of the low–income populations in these countries do not face problems of dietary deficit. In this region, where patterns of dietary change have been much slower, we have begun to face the problem of obesity and other problems of dietary excess among not only the rich but also the poor (cf. Popkin, 1994). For instance, there has been a large increase in the proportion of obese Brazilians between 1974–75 and 1989 and the largest increase has been among the lower income groups. In fact, the situation in many areas approximates that of the United States where the poor suffer more from problems of dietary excess than do the rich, and noncommunicable diseases and mortality from cardiovascular and other diseases is greater among the poor.

Government and Nutrition Professional Responses: What Can Be Done?

The nutritional and health communities need to consider how to respond to this emerging crisis. Ideally, we should be prepared to prevent the undesirable dietary changes and the related chronic disease patterns before they reach the level of the higher income countries. To do this, we must ensure that as with China and some of the other countries noted in this brief overview, we examine survey data beyond national averages to understand the segments of the population who are at risk. Aggregate data will hide the true problem far more in lower income countries where the overall national averages found in food balance sheets belie the extent of the problem. One of the more profound points is the feeling that the emergence of these new problems of excess threaten support for control of the problems of deficit and that the nutrition community must keep its focus on only problems of undernutrition. Most nutrition professionals working in lower income countries have focused their careers on problems of poverty and undernutrition and this represents a most important and difficult topic to address. At the same time, the response should not be one of attempting artificially to magnify the problems of deficit which will distort resource allocation and may actually hurt the poor.

It is possible to use the concern for both under– and overnutrition to craft a joint set of messages. It is becoming increasingly clear that there are common underlying sets of concerns that can unite nutritionists to push for selected common nutritional objectives. Among these are the promotion of the consumption of carotene and breastfeeding. Prevention of xerophthalmia and increased consumption of antioxidants combine to give advocates of prevention of under– and overnutrition a common goal. The same is true for the promotion of breastfeeding though this is not the place to list the increasing understanding of the role of breast–feeding in the prevention of chronic diseases and the enhancement of growth and development.

While there may be a perceived short–term competition for resources to solve problems of dietary deficit and excess, we must not ignore the role of nutrition in chronic diseases because the long–term effects of failure to act are potentially serious. A failure to articulate the role of nutrition in coronary heart disease, cancer, and other problems associated with dietary excess will lead to increased likelihood that medical interventions will dominate all treatment, and prevention will take a backseat. One example is the recent 1993 World Development Report on health which focuses on a range of interventions for addressing problems of deficit and excess. A wide range of public health interventions was discussed for the prevention of undernutrition and various communicable diseases. Problems of dietary excess and overnutrition were largely ignored. The result was a listing of chronic disease–oriented interventions that focus almost entirely on medical interventions and exclude the role of food and nutrition policies and other education interventions related to nutrition.

The other side of the coin is the need to adjust our understanding and prioritization of scarce nutrition resources to changes in need. Professionals and programs focused on problems of deficit must be adjusted as the nature of the problem occurs or we may actually hurt those who are in need. Chile is an important example.[1] There has been a significant shift in the problems and needs in Chile. Today, only a small segment of the population suffers from malnutrition. To assist this target population would require a new set of more focused programs and a new type of surveillance system. Fewer resources might be needed but they would need to be much more closely targeted. Rather than adjust to the new reality, there has been an effort in Chile to revise criteria for providing food program resources to those preschoolers whose anthropometric status places them minus one standard deviation below the growth curve for weight or height for age rather than the previous minus two standard deviation units (that is one rather than two Z–scores below the reference median used to define undernutrition). This would provide resources to a larger population but there is considerable concern that the result will be to use scarce resources for those not in need rather than to develop a more precise focus.

China faces a similar problem to that of Chile. In the past China has not had poverty alleviation programs *per se.* Rather, economic development was viewed as the engine to eliminate poverty. For much of the population this has worked admirably. At the same time, information presented here documents an emerging problem among the Chinese low–income population that requires new and targeted assistance to help them take advantage of the tremendous economic and social changes shaping China during the 1990s.

How nutrition ultimately adjusts to this set of changes that are rapidly coming to the lower income world will to a large extent affect its role. There is a considerable need to develop a set of cost–effective programs and policies to address these problems of dietary excess. Yet without experimentation and evaluations, we have little to offer to provide preventive low–cost solutions to problems higher income countries have also not systematically succeeded in tackling. Two sets of efforts provide a starting point–the Scandinavian countries and China.

Program and Policy Arsenal. Ideally, we would like to have a set of options for addressing problems of excess similar to those used to battle deficit and to be able to combine them to fit the needs of each country. We are at far too early a stage in the process; too few countries have tried to address problems of excess. As the China figures show, we must work on solutions that let us consider both problems of deficit and excess, in particular if increasing polarization occurs as it may in many countries with development.

The effect of the changes in diet and physical activity in China has been a significant change in adult body composition. The proportions of adults aged 20–45 years in different weight categories, according to the level of household income, are shown in figures 2 and 3. During 1989–1991, a decline in proportion underweight was observed among those in the middle– and high–income tertiles, while there was an increase in underweight among those in the lowest income tertile. This increase in proportion underweight among low–income adults is particularly noteworthy.

During the same period, there was an increase in proportion overweight in middle and upper income groups (see figure 3). The largest increase in proportion overweight was observed among the middle–income sample. Elsewhere we have shown that the changes in physical activity and diet (both energy and the proportion of energy from fat) were significantly associated with body mass index (Popkin *et al.,* in press). Thus, polarization of nutritional problems are emerging in China. Increasingly, it appears that the earlier equal distribution of nutritional problems is being replaced by a situation where problems of excess and deficit are found among the rich and poor, respectively.

The Scandinavian country that has most systematically merged health and agricultural concerns into an effective nutrition policy is Norway (Oshaug, 1992). Norway began to be concerned with reducing dietary fat in the 1960s and developed the Norwegian National Nutrition Policy in 1976, formally linking economic and agricultural policy with nutrition and health (Milio, 1990). The results are impressive: Norway has stimulated research on breeding cows for lower–fat milk; denied consumer price subsidies when sugar import prices soared in the mid–1970s; increased consumer subsidies for skim milk more than for whole milk, for poultry more than for pork, and for fish more than for beef; and implemented a set of producer subsidies to favour fish production over beef production. Thus research and price policy have been used actively. As noted above, the results were dramatic, including a large change in the proportion of whole and reduced–fat milk, rapid increases in the consumption of poultry, and changes in the amount of edible fat and the proportion of margarine and light margarine. Milio hypothesizes that a systematic nutrition information policy directed at producers, government and private organizations, and consumers (along with significant agricultural policy changes) has been a key factor in Norway's dietary changes of the past decade.

Through debate, the Norwegian model developed a national consensus and several coordinating bodies, one of which became the active group to lead the changes in legislation, regulations, and education policy. Although Norway's National Nutrition Council had been established in 1946, the major breakthrough was creation of a national expert committee that established and publicized the linkage between diet and coronary heart disease. This began a series of national meetings and attempts to implement new dietary guidelines. The Ministry of Agriculture finally developed a White Paper in 1975 that led to the significant shift in government policy (Milio, 1990).

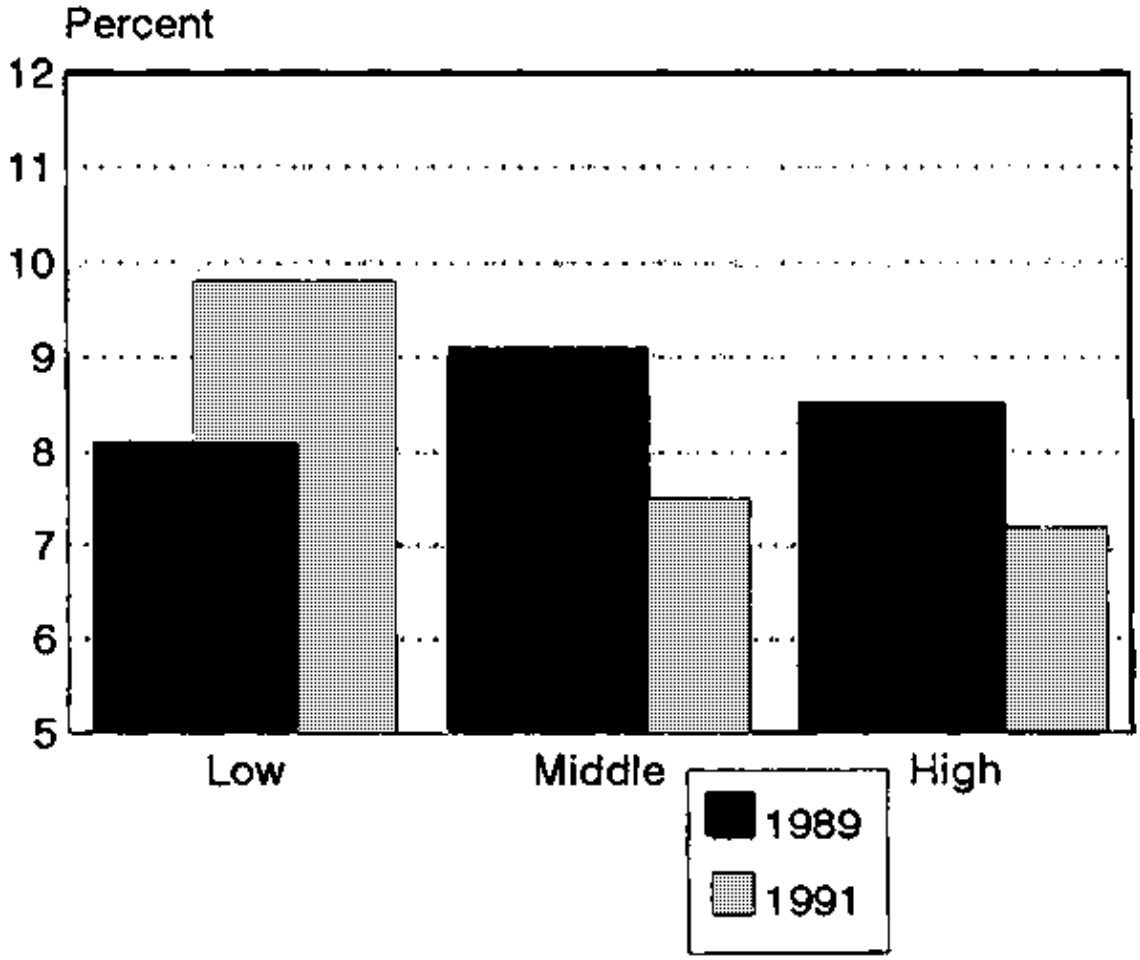

Figure 2 – Percentages of study population underweight By income tertiles (low, middle, high) China, 1989–1991

Underweight = BMI < 18.5

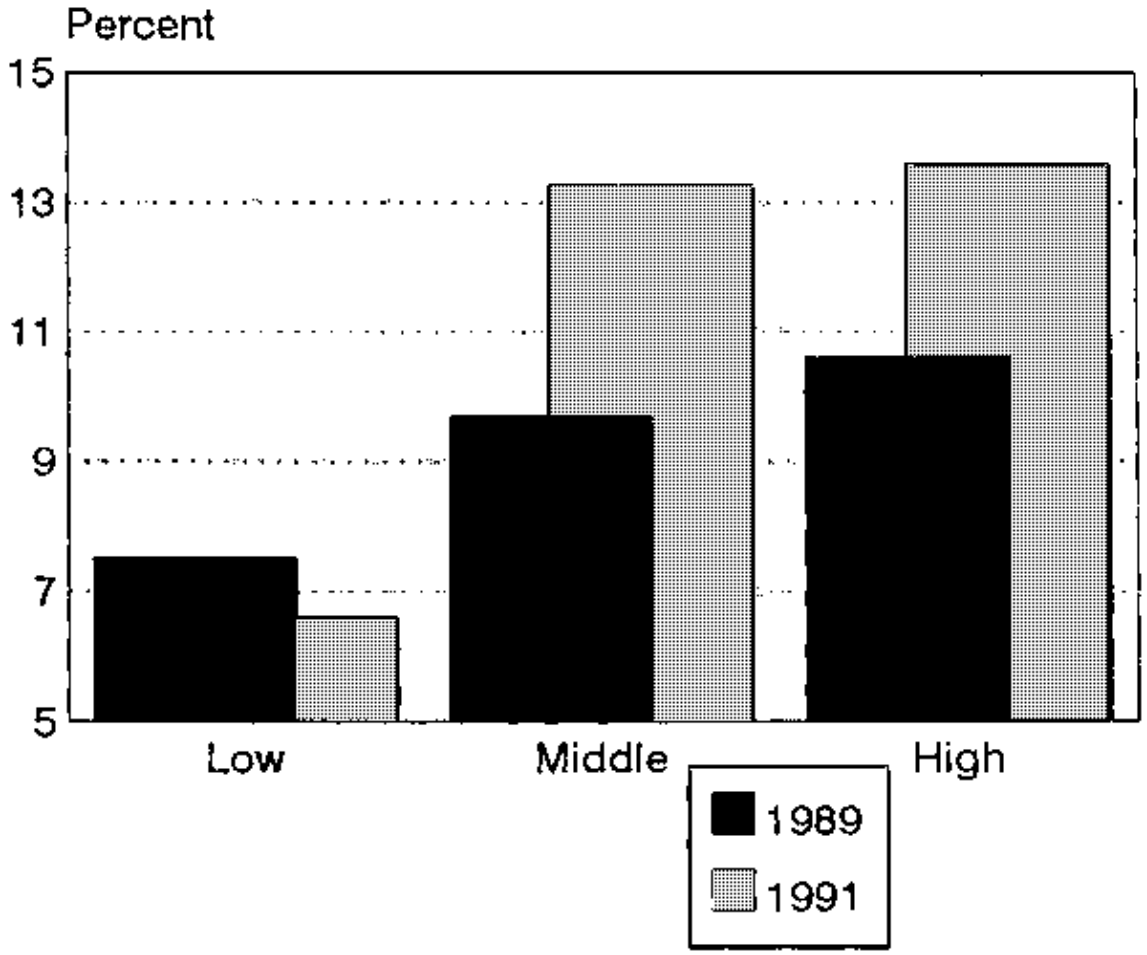

Figure 3 Percentages of study population overweight By income tertiles (low, middle, high) China, 1989–1991

Overweight = BMI > 25.0

The first low–income country to address problems of overnutrition systematically appears to be China. In 1993, the Chinese government organized the National Commission for Food Reform and Development. The State Council issued the first document addressing future food production and marketing in terms of their significance for nutritional well–being. In effect, they have issued the first Chinese dietary guidelines. These guidelines focus on production to eliminate undernutrition or dietary insufficiency and also to address "diseases of affluence" or dietary excess and obesity. Public education and other activities during this past year have focused on retaining current levels of fruit and vegetable intake and affecting the proportion of high–fat sources of protein relative to low–fat ones. These guidelines explicitly attempt to increase considerably fish and seafood, poultry, and soybean production and consumption. The guidelines point out many difficulties the Chinese face since large pockets of undernutrition exist but they do provide a clear policy basis for developing and implementing food and nutrition policy to shift the composition of the diet. What is unique about this proclamation and the ongoing government effort in China is the Ministry of Agriculture's recognition of the need to achieve a more balanced diet for the Chinese people and the role that the nutrition community is playing in this activity.

Future needs. We are a long way from understanding the effectiveness of the array of food price policy, regulations, and other tools for addressing the problems of the nutrition transition. Aside from the Scandinavian countries, few countries have systematically tackled these problems over the past two decades and the China experience is too new to be able to use that to draw any conclusions. This is not a reason to argue for inaction but rather to imply that solutions will not be easy to develop and adequate evaluation must accompany them. While it will be difficult for many agencies and professionals who have focused our careers on problems of hunger and deficit to deal with these newly emerging problems, it is very important that we begin to work out ways to address these problems.

1. This example is based on thoughtful communication with Francisco Mardones (World Bank) and Reynaldo Martorell (Emory University). No readily available published material exist on this shift.

Dr. Popkin is Professor of Nutrition at the University of North Carolina at Chapel Hill. His current research focuses on the patterns and determinants of the nutrition transition and the relationship of social change and nutritional change.

Acknowledgement

The author acknowledges his collaborators in the CHNS, in particular Dr. Ge Keyou with whom he has prepared related research on obesity, and the National Institute of Health (NIH) (P01HD28076–01) for its support of his research.

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NEWS AND VIEWS

including:

Nutritional Crisis of Displaced People in Africa/FAO/WHO Recommendations on Consumption of Fats and Oils/Nutritional Health Surveys in Former Yugoslavia/Planning for the Future through Participatory Rural Appraisal/Human Growth Patterns/Meetings and Conferences.

Nutritional Crisis of Displaced People in Africa

Ethnic conflicts in Africa are a major cause of severe malnutrition and avoidable death. They are causing displacement of millions of people, who then suffer severe food shortage and dreadful living conditions, leading to severe ill health and malnutrition. By the end of 1993, it was estimated that up to 16 million people were displaced (as refugees or internally), of which at least one million were severely malnourished with greatly increased mortality.

So widespread is this disruption that it is increasing significantly the extent of malnutrition in Africa – a substantial proportion of all the severely malnourished children, for example, are among the refugee and displaced populations. Severe wasting, defined as weight–for–height of less than –3 sds of the standard, is rare in normal populations – certainly less than 1%. Yet surveys in refugee and displaced populations where the situation is uncontrolled, regularly report severe wasting prevalences of 5% or even 10% or more. Very high mortality is associated with this degree of emaciation and it is causing widespread child deaths. Indeed, in these situations, young child mortality rates are reported as five times normal or higher – as are overall mortality rates –and a substantial proportion of the three million or so African child deaths per year are among the refugee and displaced population.

The refugee and displaced populations are numerically the greatest in the Liberian and Burundi situations, in Sudan, Mozambique, Rwanda, and Angola – see figure 1. Some indications of the severity are also shown, in

the figure, emphasizing high levels of malnutrition in the situations in and around Liberia, Angola, Burundi, and Southern Sudan. A number of recent nutrition surveys have found very high prevalences of wasting in many situations – up to 50% wasting in young children, for instance. Trends in the situation show a probable increase in recent months of the proportion of severely malnourished or at high risk among the 16 million or so people displaced. Here we summarize some features of the current situation (as reported to the SCN's Refugee Nutrition Information System).

Although the main underlying factor precipitating and prolonging these nutritional and health crises is war/civil conflict and resulting inaccessibility of affected populations, other factors have also played a major role in constraining effective emergency responses. Amongst the factors reported are:

- Inadequate donor pledges of food aid and insufficient resources for local and regional purchase – especially in the early stages of an emergency;

- Poorly established registration systems, leading to excessive ration card allocation and consequent reduction in per capita food receipts;

- Logistical difficulties caused by poor infrastructure and insufficient donor resources for establishing adequate transport capacity;

- Inappropriate siting of camps and over–crowding creating serious health problems; and

- Unbalanced and inappropriate general rations leading to outbreaks of micronutrient deficiency disease and elevated levels of wasting in young children.

Some of the worst situations currently are:

Liberian Situation – Civil wars in Liberia and Sierra Leone have caused the displacement of almost three million people. Many have become refugees in Guinea, Cote D'Ivoire, Liberia or Sierra Leone while others are internally displaced. In Liberia, recent surveys have found prevalences of wasting rising to 55%, and crude mortality rates up to seven times normal in the most insecure counties. It is estimated that some quarter of a million people are currently in a critical nutrition situation. Although the situation in Sierra Leone is far better, recent escalation of fighting in the South East and resulting cessation of food distributions places many thousands at risk.

Ogaden Region of Ethiopia – The situation in three camps for 45,000 returnees/displaced people in the Ogaden region in South East Ethiopia continues to be disastrous with levels of wasting greater than 30% and crude mortality rates 3–6 times normal. There are also reports of widespread micronutrient deficiencies such as scurvy and xerophthalmia. This situation has persisted for more than a year.

Angola – The resumed civil war in Angola has now led to a situation where an estimated 3.2 million people are in urgent need of food or non–food aid. Many of this population are in large besieged towns, where, until recently, international aid agency access had been denied. Thus starvation and epidemics have reportedly decimated many of these populations. Recent reports from Huambo cite levels of wasting between 36–48%, while eye–witness accounts from Cuito and Menongue describe a "catastrophic nutritional and medical situation"

Southern Sudan – The continuing civil war in Southern Sudan – recently escalating – is placing almost 2 million displaced/war affected people at constant risk. Although the aid operation which has had to rely upon air and river transport has so far staved off the worst excesses of famine, the rapidly changing security situation and external resource factors periodically create pockets of crisis. For example, recently over 15,000 people in a displacement camp in Kotoba were exhibiting levels of wasting between 20–40%.

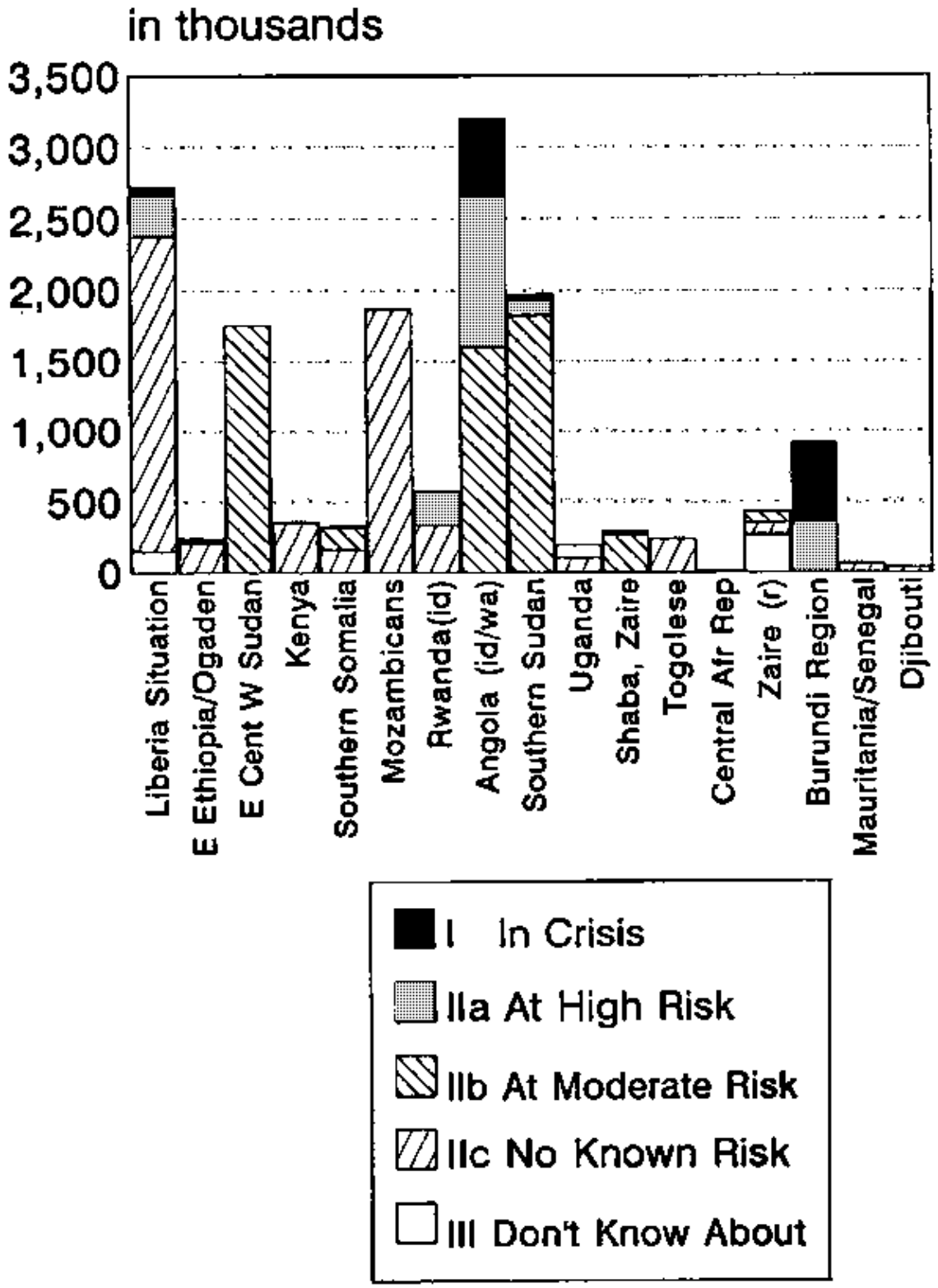


Figure 1 – REFUGEE AND DISPLACED POP Selected Areas (Dec–Jan 1994)

Zaire – The ethnic violence which erupted last year in Shaba region has led to the displacement of almost 300,000 people. Approximately half of this population have returned to their former homes in East and West Kassai, while the other half reside in transit camps/sites. Recent data on those in transit show continued crisis with levels of wasting between 25–38% and crude mortality rates over 4/10,000/day, over ten times normal. Pellagra has also been reported.

Burundi Situation – This is the most recent emergency (October 1993) and has, with Angola, the largest numbers of people currently known to be in a critical nutrition situation. The failed Burundi coup and subsequent fighting led to the displacement of almost one million people to surrounding Rwanda, Tanzania, and Zaire, and within Burundi. Most recent data indicate that almost all of this population have excessive levels of wasting. Crude Mortality Rates in some Rwanda camps vary from 3.7–5.6/10,000/day (10 to 15

times normal). Lack of food, appalling sanitation and overcrowding are major factors in prolonging this emergency.

Two nutritional aspects of these situations demand attention. First, some situations become stabilized with unacceptable malnutrition, especially micronutrient deficiencies: scurvy and xerophthalmia in the Ogaden in Ethiopia is an example. Second, the rate of improvement in emerging crises is too slow: many people die before situations are brought under control.

But they *are* often brought under control, and we should emphasize successes too. Normal nutrition, health and survival *is* achieved – for example, in Northern Kenya, Mozambique, and Rwanda outside the Demilitarized Zone. Here, security plus effective efforts by relief organizations *have* brought nearly normal health, nutrition, and survival situations. It can be done. To save lives, one crucial issue is to achieve this faster.

UNICEF – Halving Child Malnutrition by the Year 2000

The XV International Congress of Nutrition took place in Adelaide, Australia from 26 September to 1 October 1993. The following is extracted from a report on the opening address of Dr Urban Jonsson, Senior Nutrition Adviser, UNICEF, published in issue no. 3 of the Congress newsletter "Daily Delegate News".

In his opening address Monday morning, Urban Jonsson, Senior Adviser Nutrition, UNICEF, presented delegates with the greatest nutritional challenge for the remainder of the century – malnutrition.

"As was stated at the Rome ICN last year, we regard malnutrition as one of the most serious and embarrassing problems in the world today. Serious because it affects hundreds of millions of people – mostly innocent children. Embarrassing because the world has the knowledge and the means to solve it. The shocking fact is that malnutrition is a factor in around 40 per cent of the 13 million child deaths each year. As nutritional scientists gathered here today from all comers of the globe we have the knowledge and ability to develop, promote and implement the actions required to solve this issue."

At present, malnutrition is decreasing at only 1/2 percentage point per year in developing countries. Four times this rate is required to halve malnutrition and meet the year 2000 goal. Overall the percentage of underweight children has fallen by 2% since the 80s. However, due to rapid population growth the total number of underweight preschool children has in fact risen from around 164 million to 193 million.

The extent of the problem varies across the regions – Southeast Asia, some countries in South America and the Middle East are improving rapidly. Whereas areas such as South Asia and Sub–Saharan Africa have a long way to go.

"The problem of undernutrition is compounded by the fact that nutrition is marginalised by governments, universities and agencies. Nutrition work is often coordinated by small nutrition units – with inadequately trained staff and small budgets. At the same time, senior health officials often fail to realise that major programs undertaken – such as diarrhoeal disease control and immunization against measles – are important factors related to improving local nutritional status" he added.

The Convention on the Rights of the Child provided a significant step forward in the fight against malnutrition. Adopted by the UN General Assembly in November 1989, this 'Magna Carta' for children and youth took just a year to become international law. Among many other landmark provisions, the Convention states to ensure, to the maximum extent possible, the survival and development of all children.

The principle of 'first call for children' was also agreed upon at the first World Summit for Children in 1990. At the summit world leaders committed to achieve over 20 measurable health, nutrition and education goals for children and women by the year 2000 in addition to producing national and sub–national programmes of action to reach these targets. And at the International Congress of Nutrition in Rome last year, the world reiterated its commitment to fight malnutrition. "At last we can see humankind's first social 'contract' between children and leaders of the world. We must ensure that these nutritional goals agreed on by the international community are promoted as a moral minimum. We must remember our children are the most vulnerable and powerless." continued Dr Jonsson.

Mid–decade targets including universal iodization of salt; virtual elimination of vitamin A deficiency; implementation of the Baby Friendly Hospital Initiative and 20 per cent reduction of PEM are among these 1995 targets. Other key areas to address are diarrhoea – a major cause in malnutrition – in addition to

protecting, promoting and supporting breastfeeding.

Access to food is only a small part of malnutrition. Nutrition security for all is required – security of this kind may be separated into three components:

– access to appropriate quantities and types of food for each household;
– access to basic health services and a healthy environment;
– care for children and women in their family and community environment.

UNICEF's Nutrition Strategy promotes a practical approach to social mobilization and empowerment recognising the fact that poor people already use very resource–relevant coping strategies for their survival and development. There are essentially two strategies:

– community participation and empowerment through improved assessment, analysis and capacity to design and implement sustainable development;

– improved national nutrition policies and strategies through policy dialogue, training and the use of improved nutrition information systems.

"The nutrition community represented at this Congress can contribute to and even lead a global movement for the eradication of malnutrition. An increasing number of people today know that the nutrition goals can be achieved. With your help, an ever increasing number of people will continue to think the world should achieve these goals and an ever increasing number of people will start to question why governments do no more. Our efforts for human progress in the 90s will not only influence what political leaders choose to do – but also which political leaders are chosen" Dr Jonsson concluded.

(Source: XV International Congress of Nutrition *Daily Delegate News,* issue No. 3, September 1993)

FAO/WHO Recommendations on Consumption of Fats and Oils

On 19–26 October 1993 a Consultation on Fats and Oils in Human Nutrition was held in Rome, jointly organized by the Food and Agriculture Organization of the United Nations (FAO) and the World Health Organization (WHO). The meeting – a follow–up of a joint FAO/WHO consultation on the same subject held in 1978 – was attended by 20 experts from 13 countries in Africa, the Americas, Asia and Europe representing fields ranging from public health to food science and technology, as well as the food industry.

The consultation discussed both the positive and negative roles of fats and oils in human nutrition and health. Data were reviewed which suggest that certain fatty acids may play a role in the function of the immune system, child growth and brain development (see also article below "Maternal Nutrition and Neurodevelopmental Disorders"). Other data, suggesting that fat soluble antioxidants such as carotenoids and vitamin E may offer protection against the toxic effects of free radicals – formed in the body during metabolic processes – were also reviewed.

In addition, participants noted that "fats provide energy in concentrated form, often associated with other important nutrients like carotene, vitamins A,D,E & K", and recommended that "where possible they provide at least 15–20% of dietary energy". In non sedentary populations a healthy fat intake is considered to be one which accounts for from 15 to about 35% of dietary energy, with an adequate supply of essential fatty acids, fat soluble vitamins, and other essential nutrients, and with saturated fatty acids providing less than 10% of energy.

The consultation discussed the role of specific fatty acids in relation to cardiovascular diseases (blood lipids, atherosclerosis, thrombosis, hypertension), cancer (especially mammary, colorectal, prostate), obesity, diabetes mellitus, and gallstones. They recommended that "sedentary persons with high fat intake – and much of that derived from land–animal sources – should reduce their fat intake to no more than 30% of energy intake as a possible means of reducing the risk of ischaemic heart disease and types of cancer that are positively associated with dietary fat".

In general, according to recommendations resulting from the meeting, "consumers should be encouraged to use liquid oils or soft fats wherever possible, and avoid large intakes of fat from land animals". In addition "people who are currently using oils rich in monounsaturated fatty acids such as olive oil may be encouraged to continue their use ...In countries where vitamin A is a health problem, the use of red palm oil, wherever readily available, should be encouraged".

For further information, please contact Dr Ratko Buzina, Nutrition Unit, Food and Nutrition Division, WHO, Geneva. Tel: 41 22 791 3316.

(Source: WHO Press Release, 8 December 1993)

Maternal Nutrition and Neurodevelopmental Disorders

Every year, approximately 1.4 million babies are born with, or develop, severe neurodevelopmental disorders, which will stay with them throughout their lifetimes. Disorders include cerebral palsy, blindness, deafness, mental retardation and autism – and although infant mortality rates have declined, the number of babies suffering from this type of handicap has not shown a corresponding reduction.

The causes of these handicaps have largely remained a mystery, but studies carried out at the Hackney Hospital in London have attempted to piece together the existing evidence in an effort to help prevent these debilitating disorders.

Low birth weight babies are known to be at increased risk of neurodevelopmental disorders – incidence increases from 6.8 per 1,000 births in the 3.5–4.5 kg birth weight range to over 200 per 1,000 below 1.5 kg. In addition, it is known that all these defects occur during brain development.

Over 60% of the structural material of the brain is lipid, which uses arachidonic acid and docosahexaenoic acid for growth, function, and integrity. Both these acids are essential fatty acids (EFAs) which the body is unable to synthesize, and which must therefore be provided in the diet. Development of the brain in the embryo is dependent on the nutrition of the mother. Approximately 70% of brain cells have divided before birth – and the most active period of brain cell division is in the first few weeks of pregnancy, before the placenta has formed, and often before the mother is aware she is pregnant.

In studies of low birth weight babies, it has been found that the levels of arachidonic and docosahexaenoic acids in the umbilical endothelium and maternal and cord blood at delivery correlate strongly with birthweight. And a study in London of over 500 pregnancies found "significantly reduced intakes of several vitamins, minerals and fatty acids by mothers who produced low birth–weight babies compared to those whose babies were in the 3.5–4.5 kg reference range". Importantly, the study found that "maternal nutrition at or before conception was more strongly correlated with birth dimensions than nutrition during pregnancy itself. What the evidence appears to suggest, then, is that poor maternal nutrition, especially during the first few weeks of pregnancy, results in a lack of essential nutrients needed for brain development – in particular the EFAs arachidonic and docosahexaenoic acid – and leads to low birthweight babies with increased risk of having or developing neurodevelopmental disorders.

Professor Michael Crawford – author of the reports –concludes that "if the sum total of this evidence is true, then clearly the health of the next generation can be influenced by maternal nutrition prior to and during pregnancy, and lipids and their associated nutrients play an important role in this process. Given these findings, preventative measures could have wide implications for human health and intellectual abilities in subsequent generations."

(Source: (i) Crawford, M.A. (1993). The Role of Essential Fatty Acids in Neural Development: Implications for Perinatal Nutrition. *American Journal of Clinical Nutrition.* **57** (suppl.), 703–710. (ii) Crawford, M.A. (1992). The Role of Dietary Fatty Acids in Biology: Their Place in the Evolution of the Human Brain. *Nutrition Reviews,* **50**(4), 3–11.)

Low Birthweight Babies – A Global Problem

According to information taken from the World Health Organization's Safe Motherhood database, in 1990 close to 25 million infants worldwide were born with a low birth weight – defined by the World Health Organization as a weight at birth – whatever the gestational age – of less than 2500 grammes.

Low birth weight babies are at increased risk of becoming malnourished in their first year of life – and are more likely to succumb to malnutrition and infection by the age of four or five – especially in developing countries.

Low birth weight can be caused by either prematurity –defined as birth at less than 37 weeks – or retarded intra uterine growth – or both. The main causes of prematurity are reproductive tract infections and sexually transmitted diseases, although cigarette smoking and low weight of the mother also contribute.

Causes of poor intrauterine growth are low maternal calorie intake or low weight gain, low weight before pregnancy, short stature, cigarettes smoking or malarial infection.

The 25 million low birth weight babies represented approximately 17% of live births in 1990. The highest incidence was in Asia, where 21% of babies had low birth weight. In Oceania 20% of babies had low birth weight, followed by Africa (15%), Latin America (11%), North America (7%) and Europe (6%).

(Source: One Newborn in Six Weighs Less Than 2,500 Grammes. *Safe Motherhood Newsletter,* Issue **12**, July–October 1993, p8–9).

Breastfeeding Counselling: A Training Course

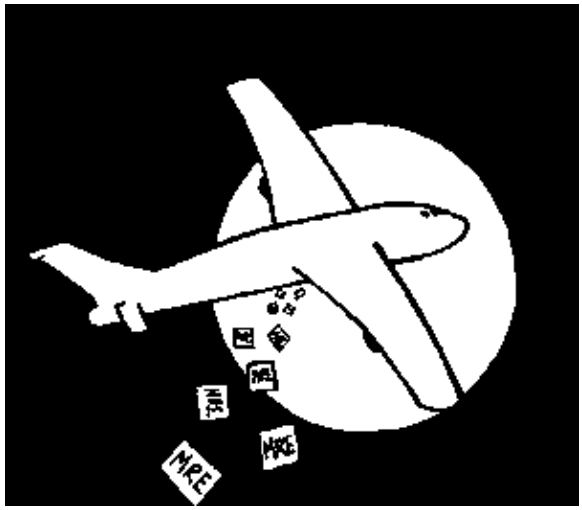
The World Health Organization has just released materials designed for use in a 40 hour training package for health workers who care for mothers and young children in maternity facilities, health centres and hospitals – including nurses, midwives and doctors – entitled "Breastfeeding Counselling: A training course". The course has been developed by the WHO Programme for the Control of Diarrhoeal Diseases (CDD) with the cooperation of UNICEF and provides basic training designed to enable health workers to support optimal breastfeeding practices, and where necessary to help mothers to overcome difficulties. It will be reviewed in more detail in the next issue of SCN News. The illustrations below – extracted from the course materials – depict one aspect of the changes in caring practices the course will encourage.

BEFORE

AFTER

Meeting Cultural Requirements with Ready–to–Eat Meals

Over the past two years, over 53 million Meals, Ready–to–Eat (MREs) – originally designed as combat rations for soldiers – have been provided by the Pentagon in humanitarian efforts to help alleviate malnutrition amongst refugees. These meat–containing meals, however, have occasionally been rejected for religious and cultural reasons, and so a variety of new recipes, called Humanitarian Daily Rations (HDRs), have been developed by Pentagon food scientists.



According to an article in *New Scientist* "the new meals can safely be dropped from aeroplanes and require no refrigeration or water. They have a shelf life of two years. Unlike meals designed for soldiers, they contain no animal products. Each package is designed to sustain one person for one day, providing between 1900 and 2200 calories at a cost of $3.95."

The rations are not designed to be a long−term solution −but rather to help in emergency situations, to provide nourishment until other relief efforts such as feeding stations can be set up.

(Source: Kiernan, V. (1993). Menu Change for Air−Dropped Meals. *New Scientist,* 16 October, p. 10.)

Nutritional Health Surveys in Former Yugoslavia

As part of a joint initiative by UNHCR, UNICEF and WHO, four surveys were carried out in Bosnia−Hercegovina during June and July 1993 with the aim of assessing three main areas of health: nutritional status; breastfeeding practice; and vaccination coverage.

Data were collected on a representative sample of about 500 children and their mothers in each of four areas: Bihac Pocket; Sarajevo; Tuzla Region; and Zenica Municipality. Analysis of the data collected led to the following conclusions:

- No signs of protein−energy malnutrition were detected in underfive children in the four areas surveyed.

- The level of protein−energy malnutrition among mothers was low. However, many adults report having lost about 10kg on average since the war began.

- Clinical signs of serious micronutrient deficiencies among mothers and children were few. However, data from some areas, notably Bihac, suggest that anaemia may be a growing problem.

- Breastfeeding levels are very low and bottles are introduced at an early age. Concerted efforts need to be made with local health services to promote breastfeeding. The first priority should be to re−educate hospital staff.

- Vaccination coverage is not universal. Action and tangible help is needed to undertake health protection strategies. These should include strategies to maintain the nutritional status (to increase the body's natural resistance to infectious diseases), and increase vaccination coverage.

- It is likely that if humanitarian food aid had not been supplied, the nutritional status of the population would have been seriously compromised. For the health of the population to be maintained, it is vital that food distribution is continued in the areas where the population is largely reliant on humanitarian aid.

(Source: Robertson, Aileen. (1993) *Summary Report of Nutritional Health Surveys Carried out in Bosnia−Hercegovina during June−July 1993,* WHO Nutrition Unit, Zagreb, September 1993)

1994 − UN International Year of the Family

On 8 December 1989 − recognizing that, as an important part of global social development, there was a need for greater awareness and international cooperation on issues relating to the family − the United Nations General Assembly unanimously proclaimed 1994 as the International Year of the Family. The theme of the Year is "Family: resources and responsibilities in a changing world" and its motto is "Building the smallest democracy at the heart of society."

The specific objectives of the Year are to:

- increase awareness of family issues among Governments and the private sector;

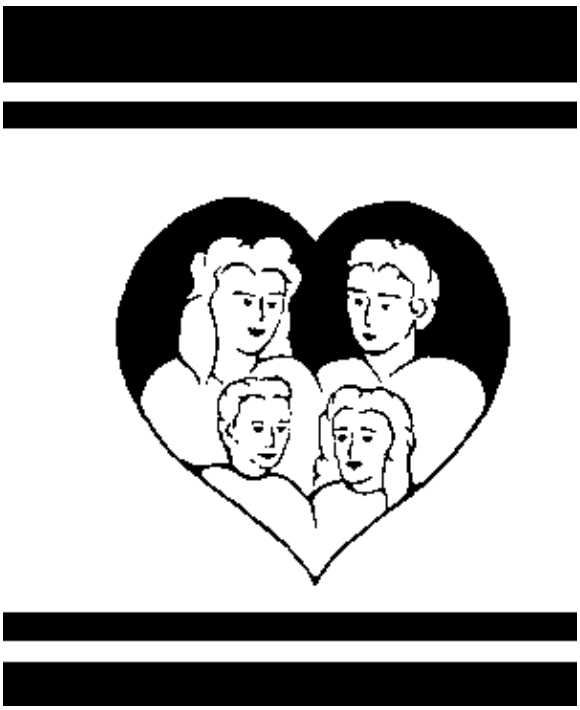
- strengthen national institutions to formulate, carry out and monitor family policies;

- stimulate efforts to address problems affecting the situation of families;

- enhance the effectiveness of local, regional and national efforts to carry out family programmes;

• improve the collaboration among national and international non–governmental organizations (NGOs); and

• build upon ongoing international activities benefiting women, children, youth & ageing and disabled persons.



Amongst the issues to be focused on is that of the implications of rapidly changing family structures. The concept of the "family" exists throughout the world – but it takes many forms and these are undergoing rapid change under the influence of strong demographic, social, political and economic forces. For example, improvements in health care have increased life expectancy and lowered infant and child mortality rates. In regions where fertility levels are still high, including Africa and much of Southern and Western Asia, the age structure is becoming younger – and in regions where fertility rates are still falling, the population is ageing. In countries where significant fertility decline started before 1950 (mainly industrialized countries), 12% of the population is aged 65 and over.

In addition, in many areas the length of widowhood has increased, due to the increase in men's life expectancy lagging behind that of women. As one background paper prepared for the Year states "such shifts and many others will have far–reaching consequences for social security systems, national economies and societies as a whole."

There will be no major United Nations meeting to mark the Year – the General Assembly has decided that major activities should be organized at local, regional and national level, assisted by the United Nations and its system of Organizations.

Preparatory activities for the Year have been taking place in many countries. As of 11 May 1993, 83 countries had set up national coordinating mechanisms, 80 countries were developing national programmes of action, and 91 Governments had created national focal points for liaison with the IYF Secretariat – which is situated in Vienna, Austria.

At least 34 organizations and agencies of the United Nations system are preparing activities and NGOs have responded positively to an invitation by the General Assembly to become actively involved in the preparations and observance of the year.

For further information please contact: Coordinator for the International Year of the Family, United Nations Office at Vienna, PO Box 500, A–1400 Vienna, Austria. Tel: (43 1) 21131 4223 Fax: (43 1) 23 74 97.

(Source: 1993 "Backgrounders" provided by the UN Office of Information, Geneva.)

Planning for the Future through Participatory Rural Appraisal

A new approach to addressing problems of development and environmental improvement called *Participatory Rural Appraisal* (PRA) is showing promising results. According to an article in *New Scientist* the approach is "very different from the orthodox 'top–down' approach to rural development planning, where outside specialists get information from field workers and fit it into an official plan of action in which locals are only invited to participate". In contrast, PRA, with the help of "facilitators" effectively "hands planning initiative over to local people who are encouraged to use their first–hand knowledge and expertise of practices and priorities to construct charts, maps and matrices, all of which yield information making it easier to plan for the future."

In many cases, local people are first encouraged to make maps and models of their surroundings – highlighting details that are important to them. According to *New Scientist* "these maps – of villages, farms, community resources and relations – then become a basis for further analysis to show, say, the flow of essential resources such as water and food into and out of the communal pool. While constructing their diagrams, villagers identify key problems and new ways to tackle them. The process emphasizes environmental care and sustainable living... Paper and ink could be used – but more often diagrams are made with sand, sticks, seeds, chalk, leaves, or any other materials at hand, and arranged in a village square or other public place."

The most important attribute of the designs, says *New Scientist,* is that they really do work. "Maps provide a framework for people to plan and monitor innovations in farm management, agroforestry, resource distribution, community health care and so on. By putting local people in the centre of the picture – their own picture – PRA helps them set and achieve their own management standards working within local means."

"In one village in India where I was working with a Kenyan colleague, Elkanah Odembo, we asked a young farmer if he could plot the local rainfall month by month. He plotted the last year's rainfall, using lines of seeds on the ground for the rainy days in each month. The chart showed the number of days in rain, but not their frequency, so we asked him to do this. 7 can do that,' he said, 'but I'll need more seeds' Elkanah and I looked at one another: to us the request made no sense. But we found more seed and he used these to make each of the four rainy months into a line of 30 seeds. Then he started taking them away for the days when it didn't rain, leaving those when it did. To cap that, he then took a new kind of seed and contrasted a normal year alongside it."

Robert Chambers of the Institute of Development Studies at the University of Sussex as reported in *New Scientist* describing one aspect of Participatory Rural Appraisal.

And communities are adapting the applications of PRA to their own needs. "Health mapping, for instance, was invented by a voluntary community health care group in India which had heard about PRA in general terms and had assumed it was a system for improving health care. Now its medical applications range from assessing demand for (and obstacles to) family planning and immunization projects, to identifying the kinds of health care and nutrition programmes that are best suited to local needs."

Despite its many strengths, however, PRA has been shown to have limitations – such as whether it is possible to scale up locally–based schemes to the national level. However, Parmesh Shah, who has helped pilot the PRA approach in many parts of Asia and Africa, believes the situation will be resolved over time as larger cooperation results from the pooling of knowledge from several sites.

(Source: Lamb, R. (1993). Designs on Life. *New Scientist,* **30 October,** 37–40.)

Use of "Tippy Taps" in the Prevention of Diarrhoeal Disease

Diarrhoea is largely caused by oral intake of faecal germs (faecal–oral transmission) which can occur in several ways including not washing hands after defecating – or cleaning up children's faeces – and then touching food, water or eating utensils, or touching mouths or other people's hands.

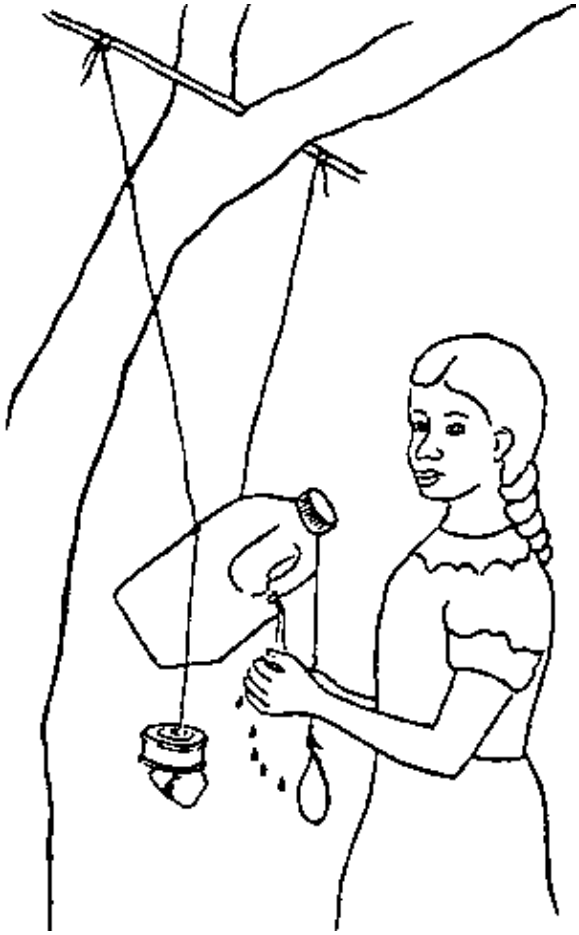


Illustration by Ingrid Emsden, extracted from Dialogue on Diarrhoea no. 54 (see end of article).

One way in which the transmission of diarrhoeal germs can be prevented is therefore to promote handwashing after defecating or after handling babies' faeces and before preparing food. Hands should be washed with an agent such as soap, mud or ashes in addition to water, which alone will not remove faecal contamination.

Studies in a highland village in Guatemala revealed that handwashing was not commonly practised there due to water shortage. In order to address this problem an intervention was designed based on the use of a simple device made from a plastic bottle called a "tippy tap" requiring about a tenth of the water normally used to wash hands.

In a trial project, selected mothers in the village were given tippy taps together with hanging soap and clean cloths for hand drying – and also guidelines as to how to use the "tippy tap" for handwashing.

Despite problems with older children being tempted to play with the "tippy tap" – and the requirement of extra work in using and maintaining it, ten months after the start of the intervention more than half the intervention mothers (54%) were still using it for handwashing. The average incidence of diarrhoea among children in families belonging to the intervention group was lower than in a control group – but the difference was not statistically significant. This might be partially explained, however, by the fact that a cholera outbreak occurred in Guatemala during the intervention period during which the Ministry of Health (MOH) initiated community clean–up campaigns and distributed hygiene information pamphlets house–to–house. Of 19 cases of cholera that occurred in a population of 10,000, none occurred in houses with tippy taps.

(Source: Hurtado, E. (1993). Tippy Tap' Saves Water. *Dialogue on Diarrhoea,* **54**, 6. Instructions on how to make a 'tippy tap' are also included in that issue.)

WHO Strategy to Reduce Mortality from Acute Respiratory Infections

According to World Health Organization estimates, 4.3 million young children die each year from Acute Respiratory Infections (ARI). 1.5 million of these deaths occur in Africa – which is the focus of a new WHO report being distributed to health authorities throughout Africa "The Control of Acute Respiratory Infections in Africa, Time to Act".

The most serious disease amongst ARIs is pneumonia –often part of the cycle of malnutrition and infection –which can result in death in days if not treated. In Africa, 80% of childhood pneumonia is caused by bacteria, and most cases can be treated successfully if diagnosed in time and an appropriate antibiotic is administered. However, whilst treatment will help save lives in the short run, preventative measures – such as improved nutrition with particular emphasis on breastfeeding, reduction of the incidence of low birthweight, and cutting down on indoor air pollution – could potentially avoid much suffering in the longer term. It is also estimated that 10% reduction in mortality from pneumonia could be achieved through high coverage with measles and pertussis vaccination.

WHO advocates "standard case management" as the main strategy for the reduction of mortality from pneumonia, and has developed a simple and effective diagnosis and case management procedure which, it believes, could prevent at least 65% of pneumonia–related deaths.

The diagnostic procedure, whilst simple, can detect more cases of pneumonia than the clinical methods traditionally used, and it can be used by health staff at all levels of the health system. The "standard case management" strategy includes the use of oral antibiotics that are effective, cheap, and readily available (usually cotrimoxazole or amoxycillin) at the first level, with injectable second–line antibiotics for children who have been referred for hospital care. This case management system is at the centre of ARI control programmes which WHO, UNICEF, and other major agencies are supporting in developing countries throughout the world.

According to Dr Jim Tulloch, Director of WHO'S Division of the Control of Diarrhoeal and Acute Respiratory Diseases: "so far, less than half the countries in Africa have adopted ARI control, but many more are now recognizing it as a major priority. In the coming years the WHO ARI programme will be giving special emphasis to the needs of African countries."

(Source: WHO Press Release, 15 October 1993)

Malaria Vaccine Rights Donated to WHO

The rights to the first synthetic vaccine shown in field trials to offer protection against malaria have been handed over to WHO by the Colombian immunologist Manuel Patarroyo.

The first published results of a field study of the vaccine appeared in *The Lancet* in March, 1993 – and showed that it gave almost 40% protection overall against malaria in an at–risk Colombian population. In some age–groups results suggested higher protection rates. Further field trials are currently taking place or planned in South America, Africa and Asia – the results of which it is hoped will lend support to the findings of the Colombian study.

It is thought that WHO will await the results of these trials, expected by 1995, before deciding whether and how the vaccine will be used. The Colombian Government is planning to begin work on a US$4 million facility to produce the malaria vaccine and other peptide vaccines, if necessary – and says that production could be expanded very quickly should WHO decide that the vaccine is to be used for disease control.

(Source: "Colombian Scientist Donates Malaria Vaccine Rights to WHO". *TDR News,* **42** (July 1993), 1–2)

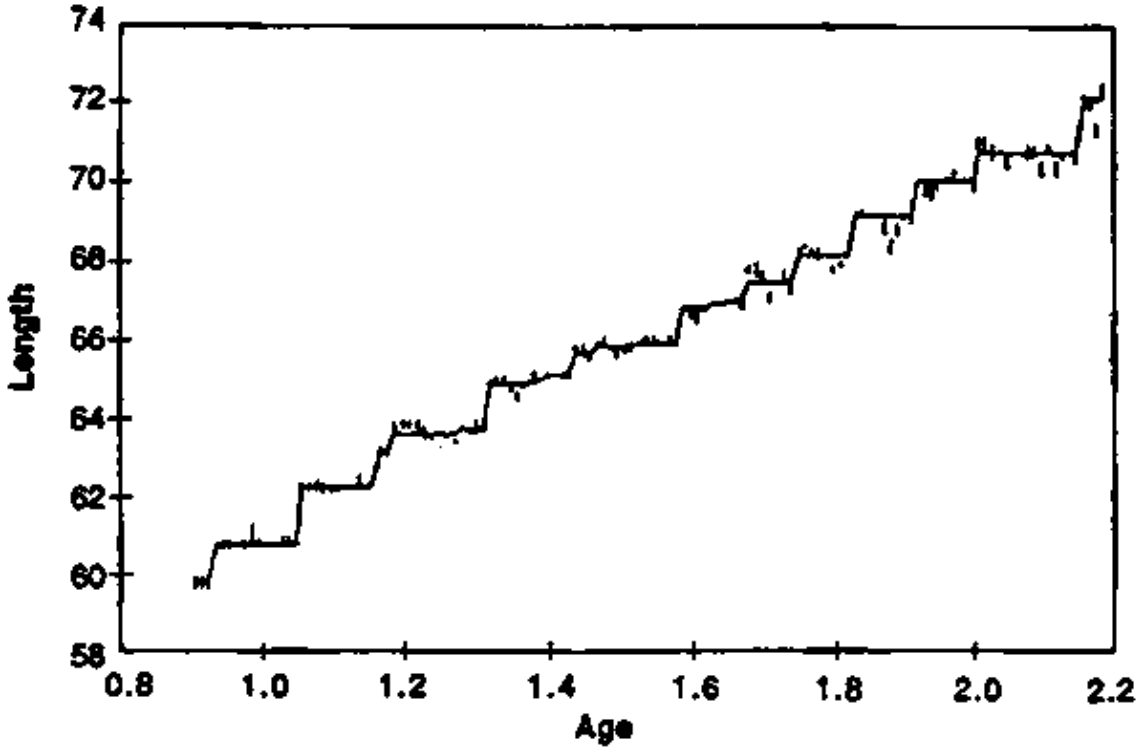
Remodelling Human Growth Patterns

Researchers investigating the nature of human growth have found evidence to suggest that it occurs not as a continuous process over time with velocity depending on age, as traditionally thought, but as a series of discontinuous jumps (saltatory spurts).

The study tracked the linear growth of 31 clinically normal Caucasian American infants – 19 females and 12 males –between the ages of 3 days and 21 months. The recumbent length of 10 of these infants was measured weekly for periods of 4–12 months, 18 were measured semi–weekly for 4–18 months, and 3 were measured daily for 4 months.

Results revealed that infants measured weekly grew in length increments of 0.5–2.5cm with 7–63 day intervals of no growth in between (stasis); those measured semi–weekly grew in increments of 0.5–2.5cm with 3–60 day intervals of stasis; and those measured daily grew by 0.5–1.65cm separated by 2–28 days of stasis. As the authors of the study point out "the daily data suggest that many of the weekly and semi–weekly increments may have occurred during individual 24–hour (or shorter) intervals" – and conclude that their

findings "generate the hypothesis that human length growth during the first two years occurs during short (<=24 hours) intervals that punctuate a background of stasis."



Daily length measurements of a male infant from 90 to 218 days of age (with the exception of 11 days). Data are plotted by length (cm) and age (days × 10^2). The saltatory model identified 13 significant increments separated by 2 to 15 days of stasis.

Source: see end of article

(Source: Lampi, M., Veldhuis, J.D. & Johnson, M.L. (1992) Saltation & Stasis: A Model of Human Growth. *Science,* **258**, 801–803.)

Anthropometry and Public Health: Expert Committee Meeting

On 1–8 November, 1993, an Expert Committee convened by the World Health Organization (WHO) on "Physical Status: The Use and Interpretation of Anthropometry" met in Geneva to discuss the potential uses of anthropometry in the health and other sectors, and to formulate recommendations for the development of appropriate anthropometric reference data and anthropometric indicators of health, nutrition and social and economic welfare.

Anthropometric measurements – such as height and weight – are a simple means of assessing the extent of inadequate or excess food intake, insufficient exercise, and disease, and they allow targeting of individuals, families and communities for interventions to improve nutritional status and health.

The Expert Committee Meeting was the culmination of three years' work by subcommittees focusing on appropriate uses of anthropometry to assess health and nutritional status of pregnant and lactating women, infants, children, adults, adolescents and the elderly, and to monitor fetal growth.

Recognizing that public health and clinical practice have as yet benefited little from the potential applications of anthropometry, the Expert Committee called on WHO Member States to adopt policies favouring the use of anthropometry as a social and technical instrument for assessing health and nutritional status and, more broadly, for measuring social and economic conditions and the impact of development. The Committee also recommended that anthropometry be incorporated in national and local health and nutrition surveillance systems and become part of clinical screening for health and nutrition interventions.

At present anthropometric reference data and indicators of health, nutrition and social and economic welfare concentrate on preschool children and infants. The Expert Committee recommended therefore that working groups be established by WHO to compile reference data and indicators for other age groups, as well as

improving the existing data.

The inadequacy of infant data was particularly highlighted due to differences in growth patterns between formula fed infants – on which current WHO reference data is based –and breastfed infants (see SCN News #9, p.53 "Growth Patterns in Breastfed and Formula Fed Babies").

The value of anthropometry in assessing and monitoring public health was summed–up by Dr Fernando Antezana, Assistant Director–General of WHO, in his opening statement: "anthropometry is the single most portable, easily applied, inexpensive and non–invasive method of assessing body composition, which reflects both health and nutrition, and predicts performance, health and survival."

(Source: WHO Press Release, 12 November 1993)

New Method for Combating Iodine Deficiency Tested in West Africa

The World Health Organization estimates that over 1570 million people worldwide are at risk of iodine deficiency which can result in various disorders including goitre, hypothyroidism, impaired mental function, spontaneous abortions, stillbirths, congenital anomalies, increased perinatal and infant mortality, and neurological and myxedematous cretinisms.

The three main methods used to combat deficiency have been iodization of salt, intramuscular injection of iodinated oil, and oral intake of iodinated oil. In certain situations, however, these methods have been shown to have limitations, and so an alternative method of providing iodine to deficient populations has been developed by researchers. The system – also reported in SCN News No. 5 (p.27–28), but in less detail – consists of a silicone elastomer – platinum matrix containing a dispersion of sodium iodide which, when immersed in water, releases iodine at a constant rate over a period of one year. Depending on the average daily consumption of water per person, and the flow rate of the water source, the system is adjustable to provide the required concentration of iodine in the water.

The system was tested in Mali, West Africa over one year from November 1988 to November 1989. Two villages were involved in the study, Woloni and Sirablo. Sample sizes were 94 subjects for Woloni and 107 subjects for Woloni. Both villages had a single water source consisting of a bore well with a manual pump.

One silicon elastomer device designed to release 720mg of iodine/day – with the aim of providing approximately 100 ug of iodine per person per day, the amount recommended by the World Health Organization – was immersed in the well in Woloni, and one not containing iodine was immersed in Sirablo's well on day 0. Neither village received any other intervention for controlling iodine deficiency during the one year study period.

Previous to the study the water supply in both villages had had a very low iodine content of around 4 ug/L. Constant and continuous iodine release in the test village was observed from day 2 until the end of the study, averaging 163.2 ug/L whilst the concentration in the control village remained unchanged.

Urine iodine content was measured in the sample subjects from the two villages, and reported in terms of the WHO definitions of severity of deficiency (<25 ug/L = severe deficiency; 25–50 ug/L = moderate deficiency; 50–100 ug/L = slight deficiency; and >100 ug/L = no deficiency). Before the start of the study, on average 3/4 of the subjects in the two villages had severe deficiency. From six months after the installation of the elastomer system in Woloni until the end of the study, 90% of the subjects had "no deficiency", and 10% had "slight deficiency", and "moderate" and "severe" deficiencies disappeared altogether. There was no significant change in the control village over the same period.

Overall goitre frequency at the beginning of the study was similar in the test (53.2%) and control (56.5%) villages. 12 months later, the overall frequency of goitres in the test village had significantly decreased to 29.2%. Severe forms were particularly affected – their frequency relative to all goitre forms fell from 78.4% to 57.3%. In the control village, no change in goitre frequency was observed.

In summary, the authors of the study conclude: "for a year, the controlled release system supplies a physiological supplement of iodine that is beneficial for all subjects, whatever their age, sex, nutritional status, or previous medical status, while having no ecological effects. In addition, its large–scale feasibility is not impeded by any of the obstacles that applied to previous methods for combating iodine deficiency".

(Source: Fisch, A. *et al* (1993). A New Approach to Combatting Iodine Deficiency in Developing Countries: The Controlled Release of Iodine in Water by a Silicone Elastomer. *American Journal of Public Health,* **83**(4), 540–545)

World Federation of Public Health Associations (WFPHA) VII International Congress

The WFPHA – a nongovernmental organization composed of national public health associations from 41 countries around the world – is holding its VII International Congress on December 5–9, 1994, in Bali, Indonesia. The theme of the Congress will be "Health, Economics, and Development: Working Together for Change."

Participants are expected to include: health practitioners, policymakers, administrators, development workers, economists, researchers, and many others from governments, international organizations, and private groups. The main aims of the Congress will be to examine the linkages among health, economics, and development, and to develop an action agenda to integrate health concerns with economic and development policies.

WFPHA Congresses are held every three years and are cosponsored by the World Health Organization and UNICEF. This Congress will be hosted by the Indonesian Public Health Association. Participation is open to all.

For further information and abstract forms contact: WFPHA Secretariat, c/o APHA, 1015 15th Street, N.W., Suite 300, Washington DC 20005, USA. Tel: (202) 789 5696 Fax: (202)789 5681.

(Source: WFPHA Communication, November 10, 1993).

Seventh Annual Hunger Research Briefing and Exchange, Brown University, 13–15 April 1994.

"Hunger and Development: Balancing Actions – Linking Local Solutions to Global Policies" will be the theme of the Seventh Annual Hunger Research Briefing and Exchange to be held at Brown University on 13–15 April, 1994. Organized by the Alan Shawn Feinstein World Hunger Program at Brown University, and Inter Action, the American Council for Voluntary International Action, the topics to be addressed will include the following:

* How do Programs Balance Overcoming Hunger With Sustainable Development?;
* What Impact do Changing International Health Initiatives have on Hunger?;
* Food Security and Economic Development: Do Small Landholders Benefit?;
* Hunger and Economic Development: Safety Nets and Other Strategies;
* Sanctions: Need There be Tradeoffs Between Hunger and Democracy?;
* Linking Hunger and Populations: Shared Goals, Shared Resources; and
* Linkages: Public and Private Partnerships for Combating Hunger.

IUNS Declaration: Nutritional Goals for the Nineties: A Call for Advocacy and Action

The International Union of Nutritional Sciences (IUNS) is the union of nutritional scientists from countries throughout the world.

During the XV International Nutrition Congress in Adelaide, Australia, the General Assembly with delegates from over 50 countries agreed to issue the following statement:

The IUNS strongly supports the World Declaration and Plan of Action for Nutrition, in its entirety, as agreed at the International Conference of Nutrition (ICN) in Rome, December 1992. It also reiterates its commitment to the nutritional goals of the Fourth UN Development Decade, the Convention of the Rights of the Child, the World Summit for Children and Agenda 21.

The ICN Declaration pledges countries to make all efforts through their national plans, by the end of this decade to eliminate:

- famine and famine–related deaths;
- starvation and nutritional deficiency diseases in communities affected by natural man–made disasters; and
- iodine and vitamin A deficiencies.

The Declaration also calls on countries within this decade, to substantially reduce:

- starvation and widespread chronic hunger;
- undernutrition especially among children, women and the aged;
- other important micronutrient deficiencies, including iron;
- diet–related communicable and non–communicable diseases;
- social and other impediments to optimal breastfeeding; and
- inadequate sanitation and poor hygiene, including unsafe drinking water.

IUNS joins the ICN signatories in their resolve to promote active cooperation between governments, multilateral, bilateral and non–governmental organizations, the private sector, communities and individuals to progressively eliminate the causes that lead to the scandal of hunger and all forms of malnutrition in the midst of abundance.

IUNS calls on nutrition scientists in its member countries to prompt and assist their governments to implement nationally appropriate nutrition plans and policies in line with the International Plan of Action.

Considerable acceleration of the rate of nutrition improvement is needed. For this to occur, there must be greater support of basic, clinical and applied research in nutrition worldwide. Training in nutrition at all levels must be action–oriented to focus on solutions to current problems.

We declare our intention to mobilize all our efforts and resources in the pursuit of achieving the nutritional goals for the nineties.

The countdown to the year 2000 is on.

(Source: IUNS Communication, October 1993)

The ceremony for the 1993–1994 Alan Shawn Feinstein World Hunger Awards will also take place during the Briefing.

For further information and registration details please contact: The World Hunger Program, Brown University, Box 1831, Providence RI 02912, USA. Tel: 401 863 2700. Fax: 401 863 2192. EMail messer@brownvm.brown.edu.

(Source: World Hunger Programme Announcement, December 1993)

XVI International Vitamin A Consultative Group Meeting

The XVI International Vitamin A Consultative Group (IVACG) Meeting will be held 24–28 October 1994 in Chiang Rai, Thailand. The meeting will take the theme of "Two Decades of Progress: Linking Knowledge to Action." The program will include invited presentations on this topic and on the development of national plans of action as part of the follow–up to the International Conference on Nutrition. Other presentations will be selected from submitted abstracts on the following topics:

- Dietary approaches to combat vitamin A deficiency

  This topic includes assessment, dietary diversification, fortification, food composition, food production through home gardens, appropriate food preservation technology, home food preservation, and intra–household determinants of diets.

- Education and communication strategies to promote change in vitamin A–related behaviours

  This topic includes person–to–person communications, presentations and group interactions, print media, audiovisuals, songs, broadcast media, and especially multimedia.

- New human research related to vitamin A

  This topic includes childhood morbidity, immune response, detection and consequences of subclinical deficiency, and safety issues.

The International Vitamin A Consultative Group (IVACG) guides international 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 programs.

For more information about IVACG and the XVI IVACG Meeting, please write to the IVACG Secretariat, The Nutrition Foundation, Inc., 1126 Sixteenth Street, N.W., Washington, D.C. 20036, USA. Tel: 202 659 9024; Fax: 202 659 3617."

(Source: *IVACG Secretariat communication,* 5 November 1993)

Network for the Pan−European Food Data Bank Based on Household Budget Surveys

Household Budget Surveys (HBS) are carried out regularly in all European countries and represent a valuable source of dietary information for use in nutritional analyses.

Previously there has been no mechanism for consolidating national HBS information into one central database, but now a new initiative called the Scientific Network for the Pan−European Food Data Bank Based on Household Budget Surveys, or DAFNE (DAta Food NEtworking) will attempt to create an operational European HBS Food Data Bank, accessible to all.

DAFNE is supported by the EC Programme "Cooperation in Science and Technology with Central and Eastern European Countries". Its activities will be to facilitate the expansion of a data communication infrastructure between countries and the exchange of background information concerning national HBS sources and methods; promote the elaboration of a common methodology, which includes analysis and comparison of national reports, their consolidation, development of statistical methods for processing HBS data in each country, formation of a common method for integrating the national ones, and standardization of data collection; build statistical models to convert HBS data into food and nutrient related information; and finally design, develop and carry out pilot operation of the Data Bank in preparation for its implementation.

It is envisaged that the Data Bank will constitute an important source of information for activities such as nutrition strategy planning, agricultural strategy planning, marketing foodstuffs, and assessing dietary intake of additives and contaminants.

Partners in DAFNE are: Dr Kristo Haxhi, Ministry of Health, Department of Public Health, Tirana, Albania; Prof Dr H.K. Henderickx, Faculty of Agricultural Science, Department of Nutrition, Gent, Belgium; Pr Dr I.U. Leonhaeuser, Institute of Nutrition − JLU University, Giessen, Germany; Dr W Sekula, National Food & Nutrition Institute, Warsaw, Poland; and Dr G Zajkas, National Institute of Food Hygiene and Nutrition, Budapest, Hungary.

The project coordinator and contact for further information is: Prof. Antonia Trichopoulu, Dept. of Nutrition and Biochemistry, Athens School of Public Health, 196 Alexandras Ave., Athens, Greece. Tel: 30 1 6428677/6461831 Fax: 30 1 6436536.

(Source: DAFNE leaflet 1993)

UNHCR Announces 1993 Nansen Medal Winner

The United Nations High Commissioner for Refugees has announced that Medecins Sans Frontieres (MSF) has been chosen to receive the 1993 Nansen Medal in recognition of its exceptional service to refugees.

MSF is a non−governmental organization, established in France in 1971, which has expanded its operational network throughout Europe with sections in Belgium, Luxembourg, The Netherlands, Spain and Switzerland, and a dozen branch offices worldwide.

For more than 20 years, MSF staff members have been among the first to arrive on the scene of refugee crises around the world, often risking their lives to provide emergency medical assistance. Seven MSF staff have been killed in the line of duty.

The 1993 winner was honoured at a ceremony on 12 October, 1993, in the Palais des Nations where High Commissioner Sadako Ogata presented the medal to Jacques de Milliano, President of Medecins Sans Frontieres International.

The Nansen Medal, awarded 34 times since 1954, is named after the Norwegian diplomat and explorer Fridtjof Nansen, the first High Commissioner for Refugees under the League of Nations. The award is aimed at focusing attention on the plight of refugees and at giving new impetus to international support for the uprooted.

The Nansen Committee, composed members designated by the Norwegian Government, the Swiss Government, the Council of Europe, the International Council of Voluntary Agencies (ICVA) and UNHCR, was unanimous in its decision to award the Nansen Medal to MSF for its advocacy and longstanding commitment to the refugee cause.

In awarding the 1993 Nansen Medal to MSF, the Nansen Committee also emphasized the crucial role played by NGOs in assisting refugees and advocating for their rights.

On many occasions, the High Commissioner has emphasized the need to strengthen UNHCR's partnership with NGOs and is convening a conference with NGOs worldwide to achieve this goal. This conference known as PARINAC (Partnership in Action) will take place in Oslo in June 1994 preceded by regional preparatory meetings.

(Source: *UNHCR Information Section Release,* 17 September 1993)

Second International Postgraduate Course on Production and Use of Food Composition Data in Nutrition

Organized by the Graduate School for Advanced Studies in Nutrition, Food Technology, Agrobiotechnology and Health Sciences, in cooperation with the United Nations University (UNU) and the Food & Agriculture Organization of the United Nations (FAO), the Second International Postgraduate Course on Production and Use of Food Composition Data in Nutrition will take place from 3–21 October 1994, in Wageningen, The Netherlands.

The course is designed for those involved in nutritional database programmes as analysts and/or compilers and those who teach nutrition and nutritional aspects of food chemistry. The organizers also consider that users of nutritional databases interested in how databases are prepared and their limitations may also find the course useful.

The course will comprise lectures, seminars and group work on the following subject areas:

- Introduction to the use of databases at different levels: international, household, and individual;
- Introduction and organization of a food composition database programme;
- Selection of foods, establishing priorities;
- Sampling;
- Methods of analysis, a critical evaluation; and
- Assuring the quality of analytical data.

For further information please contact: Mrs L Duym, Secretariat Food Composition Data Course, Department of Human Nutrition, Wageningen Agricultural University, PO Box 8129, 6700 EV Wageningen, The Netherlands. Tel (31) 8370 83054/82589. Fax: (31) 8370 83342.

(Source: *Course Announcement Leaflet,* September 1993)

New Chief of WHO Food Aid Programmes Unit Appointed

Dr Mirella G Mokbel – formerly Technical Officer with the Food Aid Programmes unit (FAP) of the World Health Organization – has been appointed Chief, FAP with effect from 1 August 1993. The FAP Unit, together with the Food Safety Unit (FOS) and the Nutrition Unit (NUT) comprise the newly established WHO Division of Food and Nutrition (see SCN News No. 9, p.58).

(Source: WHO Information Circular No. 73, 7 October 1993)

World Breastfeeding Week 1994

The following is extracted from the World Alliance for Breastfeeding Action (WABA) Newsletter *WABA Link,* December 1993, p.1.

"Making the International Code Work is (this) year's World Breastfeeding Week (WBW) theme. The WBW themes are focused on the Innocenti targets as part of WABA's mandate to act on the Innocenti Declaration.

WBW 1994 will try to explain the *International Code of Marketing of Breastmilk Substitutes* to the average breastfeeding supporter and show how society can become involved in 'making it work'.

"While the Baby– and Mother–friendly initiatives both support and promote breastfeeding, an emphasis on putting the International Code into practice nationally is essential to *protect* breastfeeding.

"WABA is distributing the WBW 1994 calendar to announce the theme and give further information.

"The focus on the Code also reinforces UNICEF's work to end the distribution of free and low–cost supplies of breastmilk substitutes in 1993 for developing countries and by June 1994 for industrialised countries.

"The **WBW 1994 Action Folder** is being written and scheduled for distribution by February 1994. The French and Spanish versions should be available a month later."

For further information please contact: World Alliance for Breastfeeding Action, PO Box 1200, 10850 Penang, Malaysia. Tel: 60 4 658 4816 Fax: 60 4 657 2655.

(Source: as above)

World Bank Conference on "Overcoming Global Hunger"

A two–day World Bank Conference on "Overcoming Global Hunger" was held in Washington, D.C. on 30 November and 1 December, 1993. The aim of the workshop was to bring together specialists from governmental and international agencies and NGO's both in the North and in the developing world, to agree on specific practical priority actions for achieving results. The participants worked in small groups to discuss questions related to the four major themes and sessions of the conference: Macro–economic Reform: Its Impact on Hunger and Poverty in both the Short and Medium term; Targeted Interventions: What Works Best to Reduce Hunger?; The Political Economy of Hunger: The Need for Focal Points & Decision–Making; and Commitment to Action.

Amongst the dignitaries who addressed the Conference were: UN Secretary General Boutros–Boutros Ghali, former US President Jimmy Carter, Botswana President and World Hunger Prize winner Ketumile Masire, Grameen Bank president Mohammed Yunus, philosopher/economist Amartya Sen, and the heads of USAID, IFAD, the World Food Program and the executive vice–president of IDB. NGOs actively participated on the Steering Committee and had a sizable voice in the agenda and selection of speakers and attendees.

The following paragraphs are extracted from the address made at the Conference by former US President Jimmy Carter.

"I speak today not as a former President but as the leader of an NGO, one of hundreds that are deeply committed to resolve the problem of hunger. Like many NGOs, the Carter Center is free to try new ideas, and is eager to cooperate with others...

"...We have many projects, several dozen in fact, most of which are in African nations. We know that people suffering from starvation are more likely to erupt into civil war and, in a war–torn society, starvation is almost invariably prevalent. The afflictions feed on each other. In fact, we have found that peace, freedom, democracy, human rights (including the right to food), and the alleviation of human suffering are inseparable...

"...We are all concerned about employment, but we should remember that a successful farmer has a good job. One Tanzanian farmer, who lived near the base of Mount Kilimanjaro, was proud of his harvest of 26 bags of maize, comparing it with his previous high yield of six or seven bags on the same fields. He told me that his two sons, who had moved to Dar es Salaam to seek a livelihood, would now be returning to the farm...

"...Recognizing that development aid in general has been relatively ineffective, UN Secretary General Boutos Ghali and I co–chaired a conference last year, sponsored by Carnegie Corporation, to assess what might be done. The World Bank and other major agencies attended, and we derived the final conclusions from them.

One proposal that is being initiated is called a "Global Development Initiative." First in Guyana and then in one or two other countries, we will attempt to forge closely coordinated task forces of donors on one hand and recipients on the other. Lessons learned can be applied in many other countries.

"Hopefully, we can evolve a more effective way to alleviate hunger, using some of the principles outlined by all of us here in these sessions. Although past experiences make me skeptical, I hope that this conference will result in common action, and not in just another beautiful report and the creation of another agency. We are eager to cooperate, adding our small capabilities to an overall effort. Success or failure in reducing hunger worldwide will depend on all of you – and of me."

(Source: World Bank Communications, November 15 *and* 3 December 1993.)

New Agency and Appointment

We were delighted to receive this news about a valued colleague:

"The White House has appointed Eileen Kennedy, research fellow at the International Food Policy Research Institute in Washington DC, as Administrator of a new agency called Nutrition Research and Education under the US Department of Agriculture effective February 16, 1994."

Eileen Kennedy has contributed to many SCN activities, including articles for SCN News (e.g. Number 8, p8–9) and reviews.

(Source: IFPRI communication, February 1994)

PROGRAMME NEWS

Update on progress around the world.

CANADA

Centre for Nutrition and the Environment of Indigenous Peoples (CINE)

Why CINE was created

The Centre for Nutrition and the Environment of Indigenous Peoples (CINE) has been created in response to a need expressed by Aboriginal peoples for participatory research and education to address their concerns about the integrity of their traditional food systems. Deterioration in the environment and in lifestyles have resulted in serious questions about the impact on human health, and in particular health and nutrition as derived from food and food traditions. The expertise of Centre staff will address problem–solving on these issues in collaboration and partnership with the Centre Board and communities of Indigenous Peoples.

What CINE is

CINE is a permanent research and education resource for Indigenous Peoples. In concert with Indigenous Peoples, CINE will undertake community–based research and education related to traditional food systems and nutritional well–being. The empirical knowledge of the environment inherent in Indigenous societies will be incorporated in all of its efforts.

The Centre has a Governing Board of representatives of the following: the Dene Nation, the Metis Nation of the Northwest Territories, the Inuit Tapirisat of Canada, the Inuit Circumpolar Conference, the Council for Yukon Indians, and the Assembly of First Nations. The Aboriginal host for CINE is the Mohawk Council of Kahnawake. The first Governing Board is chaired by Bill Erasmus, National Chief of the Dene Nation. CINE has a focus with Indigenous Peoples in Canada and the circumpolar North. Its scope will be extended to other parts of the world as funding becomes available.

Funding for the establishment of the Centre was obtained in 1992. The Centre has its physical resource base on the Macdonald Campus of McGill University in Ste. Anne de Bellevue, Quebec. It is affiliated with McGill's School of Dietetics and Human Nutrition and the Faculty of Agricultural and Environmental Sciences. There is an initial staff of four Ph.D–level researchers, and 5 support personnel. CINE and McGill have a partnership

with Arctic College and Yukon College to provide training to Aboriginal People on topics related to nutrition and the environment.

What CINE will do

CINE is an independent research and education centre with activities promoted and directed by the Governing Board to serve Indigenous Peoples in partnership at the community level.

There are three primary areas of interest and activities in research and research training at CINE:

> A. The social sciences of what foods people select, how much, and why, in relationship to environment and culture. This is important to understand the balance of traditional to market foods, and the various social forces contributing to changing dietary patterns and nutritional health.
>
> B. The laboratory sciences of the nutrients and contaminants in foods and people. CINE has the analytical chemistry needed to understand the quantities of elements and compounds in specific food items; also to understand their impact in humans.
>
> C. Data management sciences provide the application of the extent of food use (A) and the quantities of nutrients and contaminants (B) to address questions of holistic human nutrition and health, and to explore the limits of nutrient and contaminant exposure to people in specific age and gender categories.

Education programs are being developed at several levels (community, college, university), to meet the needs of the Centre.

(For further information please contact Dr Harriet Kuhnlein, Director, CINE Centre, Macdonald Campus, McGill University, 21,111 Lakeshore, Ste. Anne de Bellevue, Q.C. H9X 3V9, Canada. Tel: (514) 398 7544 Fax: (514) 398 1020.)

(Source: *CINE Communication,* October 1993)

FAO

Implementation of the ICN World Declaration and Plan of Action for Nutrition: The Role of FAO.

The World Declaration and Plan of Action for Nutrition, adopted unanimously at the December 1992 International Conference on Nutrition (ICN), confirms the determination of all nations and other concerned parties to work together to eliminate hunger and all forms of malnutrition, calls for concerted action to direct resources to those most in need, and stresses the need to protect the nutritional well–being of vulnerable groups.

The ICN Declaration and Plan of Action is being used to stimulate effective follow–up activities, particularly in the form of practical actions at the local and national levels, undertaken by the cooperative efforts of governments, nongovernmental organizations (NGOs), the private sector, communities, individuals and international development agencies. The broad–based participation which was so essential to the success of ICN is continuing to be a fundamental element in the follow–up. FAO, along with WHO, actively endorses the need for continued and expanded collaboration, including wide–ranging participation of multilateral and bilateral organizations.

Incorporation of nutrition objectives into development activities

At the country level, FAO is taking an active role in identifying and trying to meet needs for technical and financial assistance in follow–up activities, especially in the formulation of national plans of action for nutrition, which all countries have agreed to prepare by the end of 1994. Guidelines for preparing national plans of action have been written and distributed to countries through FAO Representatives, who are serving as a primary focus for encouraging the development and implementation of follow–up activities. FAO Representatives are facilitating the preparation of national plans of action and are working to foster interagency cooperation by keeping in contact with representatives of WHO, UNICEF, UNDP, World Bank, and other concerned agencies. To encourage the participation of NGOs in ICN follow–up activities, FAO is actively promoting the establishment of international and regional NGO networks which aim to improve food

supplies and nutritional status. Work with the non governmental organizations, particularly the NGO working groups which were formed to promote participation in the ICN, is continuing.

Agriculture is of prime importance

One of the key strategies endorsed by the ICN is the explicit promotion of better nutrition through a range of agricultural and development policies and programmes. Indeed, without improved agricultural performance and the integration of nutritional considerations into agricultural development, many countries will not be able to attain their nutritional goals. As the leading UN technical agency for agriculture and rural development, FAO is eager to provide advice on most aspects of policy and technology in this crucial sector.

FAO will concentrate its efforts on five aspects of the ICN Plan of Action in which it has a "comparative advantage", thereby complementing the work of other UN agencies which have different mandates. FAO offers assistance to Member Countries in the following areas.

Promoting Household Food Security and Community Development

An objective of FAO's work is to assure that households have access to adequate amounts of good quality food throughout the year. Beyond national food security, households must have the economic and physical means to obtain the foods they need. FAO can assist governments in accomplishing the fundamental goal of alleviating poverty and improving household food security by promoting strategies of economic and community development in which the rural poor participate and benefit.

Providing Nutrition Education

Even when the potential for an adequate amount and variety of foods exists, individuals may lack information about how to best use the resources which are available to improve their nutritional status. Furthermore, misinformation about particular foods can inhibit production and consumption of foods which can bring nutritional and economic benefits. FAO is increasing its activities in the area of nutrition education and communication.

Combating Micronutrient Deficiencies

Believing that food–based strategies are the only sustainable means to combat micronutrient deficiencies, FAO is involved in promoting the production and consumption of foods rich in micronutrients, especially Vitamin A. With the combined efforts of its plant, animal, and fisheries divisions, FAO is able to provide technical assistance in all aspects of this long–term strategy.

Assessing and Monitoring Food and Nutrition Situations

FAO has advised governments on the collection and analysis of data on nutritional status for many years. Data on food supplies and nutritional status are indicators of a country's level of development and can inform policy makers and planners. One example of FAO's monitoring efforts is a global early warning system. As an agency with expertise in surveillance, nutrition, and development, FAO is able to inform the international community when food shortages occur, provide nutritional advice for the provision of food aid and assist in rehabilitation and resettlement when crises occur.

Assuring the Quality and Safety of Food Supplies

FAO's expertise in the area of food quality and safety is widely acknowledged. Through its food quality and safety work, FAO directly contributes to improved nutrition by protecting the health of consumers. By assisting developing countries in establishing food control systems, FAO attempts to remove non–tariff barriers to trade. The economic benefits of increased trade can stimulate agriculture and help to reduce poverty within a country, thus improving access to food. In addition to the ongoing activities (some are noted elsewhere in this issue) FAO is exploring the possibility of establishing an FAO/IAEA Training and Reference Service for Food Quality and Pesticides.

Nutrition: an FAO Priority

To mobilize FAO's agricultural and rural development experts to assist in the ICN process, the Director General has placed nutrition high on the Organization's agenda. Two major FAO meetings, the Committee on Forestry (COFO) and the Committee on Agriculture (COAG), as well as the FAO Council, met last spring and

the ICN follow–up activities were major items for discussion. The Committee on Forestry endorsed the intersectoral approach to improving nutrition, emphasizing the importance of strengthening the communication and collaboration among foresters, agriculturalists, nutritionists and health officers at the country level. Recognizing the central role of national and local governments in achieving the goals of the World Declaration and Plan of Action for Nutrition, the Committee on Agriculture emphasized that FAO support should be primarily directed towards strengthening national capacities to identify, address and monitor food and nutrition problems, and to alleviating poverty, ignorance and social inequity. The FAO Council reiterated its support for the goals and approaches set forth in the World Declaration and Plan of Action for Nutrition as adopted by the ICN, supported overall FAO efforts to promote follow–up activities, and endorsed FAO's emphasis on providing support for strategies and actions in the five areas of major focus. Within FAO, Special Action Programmes are being established to better coordinate support to countries in the ICN follow–up. These are the Programme on Nutrition and Food Quality and the Programme on Policy and Planning Assistance on Household Food Security and Sustainable Agricultural and Rural Development. Through the mechanisms and strategies described above, FAO is working vigorously to initiate and implement follow–up activities to meet the goals and objectives agreed to at the ICN.

(Source: FAO, 1993)

Codex Alimentarius: A New Approach

The FAO/WHO Codex Alimentarius Commission held its Twentieth Session in Geneva in June/July 1993. The Session marked the transition of the Commission's previously commodity–oriented work programme to a programme based on general considerations for protecting the consumer – facilitating international food trade. The new Codex approach is consistent with the Plan of Action adopted by the ICN and by the FAO/WHO Conference on Food Standards, Chemicals in Food and Food Trade, March 1991.

The Commission, chaired by Professor F.G. Winarno (Indonesia), called on its Member governments to strengthen the role which consumers played in the development of food standards at the national and the international Codex level. More importantly it called for a partnership between consumer and producer organizations and national food control authorities in the development and operations of national food control, inspection and certification systems. Responding to its future responsibilities within the framework of GATT agreements on sanitary and technical barriers to trade in foods, the Codex Commission reviewed the risk analysis and assessment procedures inherent in its decision–making processes and undertook to make these procedures more transparent, more uniform where possible, and better understood.

New standards, recommendations and guidelines were adopted by the Commission in the areas of food additives, pesticide residues, food labelling, food hygiene and handling, and nutrition. Commodity standards for cereals, fresh fruit and vegetables, and fishery products were also adopted. For the first time, the Commission adopted a series of maximum residue limits for the presence of veterinary chemicals in foods; detailed codes of practice for the hygienic handling of fresh meat and game and for ante– and post–mortem inspection of meat and meat–producing animals were fully revised. The Commission extended the coverage of its work to include the development of quality assurance principles in its work on food import and export inspection and certification systems.

Codex standards, maximum residue limits, guidelines and other recommendations are being published in a new series. They are available from the world–wide sales offices of FAO and WHO or directly from the Distribution and Sales Service of FAO, Via delle Terme di Caracalla, 00100 Rome, Italy.

(Source and contact for further information: Director, Food Policy and Nutrition Division, FAO, Via delle Terme di Caracalla, 00100 Rome, Italy.)

ICCIDD

Increased Governmental Support for IDD Control

The striking recent feature about IDD has been the increasing political support for national programmes. The objective of elimination of IDD by the year 2000, accepted by the World Summit for Children 1990 and the World Health Assembly 1990, followed up by the 1991 Montreal conference on "Ending Hidden Hunger", has led to a number of governments giving top priority to IDD control. The governments include Indonesia, the Philippines, Thailand and China.

National Advocacy

In association with a National Advocacy Meeting in June 1993, President Fidel Ramps of the Philippines appeared on television to promote the IDD elimination programme and has called on his government to fully support IDD elimination in order to ensure that no baby is born physically or mentally handicapped because of iodine deficiency.

A National Advocacy Meeting for the Elimination of IDD in China by the Year 2000 was held in the Great Hall of the People under the sponsorship of Premier Li Peng. This meeting brought together Provincial Governors and staff from all Provinces and representatives of International Agencies. The Chinese Vice Premier Mr Zhu Rong Ji, made a commitment of full government support to the Provincial Governors. He also indicated the strong support of the government to a meeting of representatives from the World Health Organization, UNICEF, UNDP, World Bank and ICCIDD, and the Ministry of Public Health. This decision recognizes the significance of the threat of IDD to neonates born in China in light of its one child family policy.

Salt Iodization

The mid decade goal of 95% access to iodized salt has been accepted by UNICEF and WHO for December 1995. Assessments of verification of progress towards the mid decade goal are now proceeding and will be reviewed at Joint ICCIDD/UNICEF/WHO Regional Meetings in Latin America, Asia and Africa over the next 2 years.

A procedure for monitoring salt iodization is now being developed following a joint ICCIDD/UNICEF/WHO Consultation on IDD Prevalence and Programme Indicators held in Geneva 3–4 November 1992. Criteria for tracking progress towards elimination of IDD involving salt iodization, measurement of urine iodine, to be followed where possible by measurements of thyroid size and blood TSH, have now been agreed. A full report is available from the offices of WHO, UNICEF and the ICCIDD.

IUNS Congress

At the recent IUNS International Congress of Nutrition in Adelaide, the ICCIDD arranged a symposium which reported substantial progress towards the goal of elimination with papers by Hetzel (ICCIDD), Pandav (India), Gutekunst (UNICEF), Kavishe (Africa), Wang (China), Darnton–Hill and Clugston (WHO). An informal consultation was also held with progress reports from Bangladesh (PROFILES study), Indonesia and India, and discussions of the UNICEF strategy for salt iodization.

KIWANIS

At its recent World Congress, Kiwanis International announced a fund raising target of $100M towards the elimination of IDD in association with UNICEF over the next five years. This is the first World Service Project of Kiwanis International which has 9,000 clubs with over 300,000 members throughout the world. The ICCIDD is already involved in assisting in the IDD education programme for Kiwanis members throughout the world.

(Source and contact for further information: Dr Basil S Hetzel, Executive Director, ICCIDD, c/o Health Development Foundation, 8th Floor, Samuel Way Building, Women's and Children's Hospital. 72, King William Road, North Adelaide 5006, Australia. Tel: 61 8 204 7021 Fax: 61 8 204 7221)

IDECG

Benefits of Early Supplementary Feeding on Child Development

In the summer of 1990, IDECG sponsored a workshop bringing together scientists involved in the follow–up of a longitudinal food supplementation study in Guatemala. Data presented at the meeting indicated that nutritional improvements during the critical period of gestation and the first 2 to 3 years of life can enhance human development assessed by a wide range of variables not only in infancy and during the preschool years but also in adolescence.

A first series of papers with the background of the Guatemala Oriente Study, the supplementation effects in early childhood, the demographic and social changes between the initial and the follow–up, as well as the design and main findings of the follow–up, appeared in the Food and Nutrition Bulletin, Volume 14, Number 3, September 1993.

Supplementation effects on cognition are presented and discussed in a Monograph of the Society for Research in Child Development (Serial No. 235, volume 58, number 7, 1993) entitled "Early Supplementary

Feeding and Cognition". Interested individuals who do not have easy access to this monograph series can obtain a free copy from the IDECG Secretariat.

A third series of papers, focusing on the follow−up study and presenting its results in detail will appear as a supplement to the Journal of Nutrition in 1994.

Causes and Mechanisms of Linear Growth Retardation (Stunting)

A workshop on this topic, proposed and organized primarily by John C. Waterlow, was held at the Ciba Foundation in London from January 15−18, 1993. The meeting brought together scientists who had made observations on causes, correlates and patterns of linear growth retardation, with experts on the cellular biology and hormonal regulation of bone growth who could speculate on the mechanisms involved. Twenty−eight scientists from 12 countries were involved in the presentation and discussion of the following issues: The genetic determinants of stature (S.J. Ulijaszek); prenatal influences on child growth (F. Falkner); the three−phase pattern of child growth (J. Karlberg); the reversibility of stunting (M. Golden and R. Martorell); relations between gains in weight and gains in height (J.C. Waterlow and M. Golden); nutritional influences on linear growth (L. Alien, M. van Dusseldorp, Ch. Neumann); effects of socio−emotional deprivation on linear growth (D. Skuse); cellular biology of bone growth (J. Price); hormonal regulation of bone growth (A. Nilsson); mineral supply, bone growth and mineralization (A. Prentice); mechanical influences on bone growth (J. Golding, B. Torun); inflammatory response and bone growth (T. Skerry); and the possible usefulness of metabolic markers (S. Robins).

The workshop proceedings, published as a supplement to the European Journal of Nutrition, are available from the IDECG Secretariat free of charge.

Proceedings of Earlier IDECG Workshops

Earlier IDECG workshops dealt with

- chronic energy deficiency: consequences and related issues
- biology of adaptation to seasonal cycling of energy intake
- activity, energy expenditure and energy requirements of infants and children
- protein−energy interactions

Free copies of the proceedings of these meetings can still be obtained by writing to: Beat Schurch, M.D., PhD, Executive Secretary of IDECG, c/o Nestle Foundation, Case Postale 581, 1001 Lausanne, Switzerland.

Reanalysis of Human BMR Data

IDECG has commissioned Dr CJK Henry to reanalyze human BMR data meeting stringent validity criteria. Scientists with access to unpublished BMR data meeting such criteria are kindly requested to contact Dr CJK Henry, School of Biological and Molecular Sciences, Oxford Brookes University, Gipsy Lane Campus, Headington, Oxford OX3 OBP, UK. Fax: 00 44 865 48 32 42.

(Source and contact for further information: Beat Schurch, IDECG, Secretariat, c/o Nestle Foundation, PO Box 581, 1001 Lausanne, Switzerland. Tel: 021 20 33 51 Fax: 021 20 33 92)

IDRC

Within the Health Sciences Division of IDRC, malnutrition has been recognized as a significant global threat to health. As such, the Division has identified among its priority areas of research malnutrition, including protein energy malnutrition, micronutrient deficiencies, the effects of supplementation on infectious and non−infectious disease, and improving household food security.

This year the Health Sciences Division has funded two new projects related to malnutrition and infection, one investigating the effects of iron supplementation on malaria risk (Ethiopia) and one on iron and/or vitamin A supplementation impact on growth and morbidity in anaemic preschool children (Ethiopia).

Of the on−going projects, several are also related to micronutrient deficiencies: two are epidemiologic studies on the prevalence of iodine deficiency disorder (Ghana, India); IDRC is also supporting a Canadian project on the development of dually fortified salt with iodine and iron.

IDRC is supporting Ethiopia's research contribution to the Multi−centre Trial on Immunization−linked Vitamin a Supplementation.

Food−based strategies to overcome vitamin A deficiency are the focus of two on−going projects (India, Canada).

IDRC is also supporting five projects related to protein energy malnutrition; one is a longitudinal study of the growth of children in Benin, one is a cross sectional study of the children of banana plantation workers (Uganda) and two are interventions, one with the utilization of legumes (Philippines); in the second nutrition and morbidity is being investigated in India.

Five projects are investigating educational strategies to solve nutrition−related problems, one on nutrition education of young women (India), in urban slums (India), of preschool children (Nepal), for families through home−based and hospital−based rehabilitation of malnourished children (Philippines), and for communities (Thailand, Indonesia).

In order to strengthen the capacity of nutrition research and training institutions, IDRC is currently supporting projects for nutrition surveillance training and nutrition research in Colombia, China, India, and Kenya. Other on−going projects include: the evaluation of a community nutrition/agricultural development project in Nigeria, an epidemiologic study of the nutritional status of women subsistence farmers in Malawi, and two studies on food security (Lao PDR and the Congo).

IDRC is also providing financial support for the global nutrition reporting of the ACC/SCN.

(Source and contact for further information: Janice L. Johnston, PhD., Nutrition Coordinator, Health, Society and the Environment, Health Sciences Division, IDRC, 250 Albert St., PO Box 8500, Ottawa, Ontario, Canada K1G 3H9. Tel: (613) 236 6163 Fax: (613) 567 7748).

IFAD

IFAD's Evolving Nutrition Strategy

Focus on Food Security of Poor Rural Households within the Context of Poverty Alleviation

IFAD's mandate is to increase food production, alleviate poverty and improve nutritional levels among poor rural households. In 1993, IFAD presented a Strategy to its Executive Board outlining how it proposed to strengthen its efforts towards addressing the nutritional objectives of its mandate. While a number of activities had been undertaken during the 1980s to include nutritional objectives in IFAD project design, the recent strategy builds on more systematic efforts to establish nutrition−relevant objectives as an integral part of the Fund's lending operations.

IFAD is a multilateral financing institution focusing on the agricultural sector. Its operations promote the capacity of small farmers and the landless to improve their production and income−generation potential in poor rural areas. IFAD is now in the process of employing the Nutrition Strategy to set clear priorities as to where its resources can best be channelled to promote nutrition−relevant objectives within this broad context. This means identifying elements within the broad nutrition spectrum where the comparative advantages of IFAD can make a difference. In so doing, the Fund seeks to link measures for poverty alleviation, both on− and off−farm, with those that will ensure that such linkages would lead to improved access to adequate food and better food intake. The strategy proposes a range of instrumentalities by which these linkages can be established and also other more direct measures. Among these, efforts towards the mobilization of people to enhance their own household food security conditions are very much at the forefront of the Fund's approach to a participatory self−reliant rural poverty alleviation strategy.

IFAD recognizes that improving access to sufficient food will not *per se* ensure adequate nutritional status, for which additional measures are needed within the field of health and sanitation. These measures are normally not within the scope of IFAD's lending programmes. However, the opportunity for cofinancing with other agencies whose tasks are to provide support in these areas, is an option which is being increasingly pursued by IFAD, to enhance the nutritional levels of its beneficiaries through integrated, mutually supportive activities along the spectrum of nutrition−relevant action. The conceptual framework for the causes of malnutrition, originally promoted by UNICEF, has been found extremely useful as a point of departure for strengthening the focus on nutrition as part of rural poverty alleviation. Furthermore, as conceived in its Nutrition Strategy, IFAD considers nutrition security to mean "the sum total of the socio−economic, cultural, physical and behavioural

conditions that mutually reinforce each other in affecting the situation which will favour or disfavour the physiological nutrition outcome". Nutrition security thus embraces a wider notion than "nutritional status" and facilitates communication regarding complementary nutrition–relevant action.

The Fund decided to further elaborate on the household food insecurity "cluster" as an underlying cause of inadequate dietary intake – given that its operations, by their very nature, are more likely to impinge directly on this aspect of Nutrition Security. This provided the basis for constructing a supplementary framework, or analytical model, for the factors *conditioning* household food security in given field situations. It is indeed at the specific investment project level that IFAD can promote household food security conditions relevant to that particular context, rather than at the macro level of policy advice. With this new model, essential aspects of household food security (HFS) can now be more systematically discussed and operationalised for assessment, planning and evaluation.

This work benefited form a previous major effort undertaken by IFAD and UNICEF jointly: the preparation of a review of the HFS concept as it has evolved over the last ten years or so, as well as the corresponding indicators and systems of measurement that have been proposed and used in the field. A technical discussion paper was subsequently prepared by IFAD on the occasion of the ICN, which included the analytical model for HFS assessment. Following field testing in various countries, so far by soliciting reactions and ideas from IFAD project field managers and other government personnel in selected countries, the concepts used in the model are currently being fine–tuned.

The model will now be introduced in a logframe approach in order to develop monitoring and evaluation of household food security conditions and changes in these. This will mean translating each "cluster" of conditions for HFS into feasible indicators for field monitoring, supervision and evaluation. These indicators will, in turn, facilitate the formulation of objectives directly pertaining to HFS and also to other project concerns that can enhance HFS through horizontal and vertical linkages and effectively find their place in overall project design.

IFAD is thus confident that a systematic approach to HFS as an important outcome goal of agricultural production and poverty alleviation will not only respond to the nutrition challenge but could also be a means of integrating the activities of an investment project, thereby resulting in greater coherence and synergism between these activities vis–a–vis the overall project goals. In any case, the increasing interest in HFS that has been observed both within IFAD and among field personnel, holds promise for a renewed opportunity to support agricultural development in a manner which may lead to a positive nutritional outcome.

IFAD is pursuing strong collaboration with other UN and bilateral agencies in further developing the basis for Household Food Security and Nutrition Security. The Fund especially welcomes opportunities to work with other partners at field level to enhance the effectiveness of its investment operations. Plans are underway, with UNICEF in particular, to work out a common basis for field interaction between investment activities and social intervention programmes so as to maximize the impact on the food security of poor rural households and enhance nutritional objectives in the context of promoting global nutritional goals. Fruitful collaboration has also been initiated with FAO, i.e. through the organization of a joint workshop on indigenous underutilized foods in promoting HFS in Luapula Province in Zambia, and in ongoing preparations for an HFS project in the Southern Province. Dialogue with the World Bank is also being pursued to build up complementary initiatives involving both the WB's sectoral lending operations and IFAD's investment projects.

(Source and contact for further information: Wenche Barth Eide, IFAD, 107, Via del Serafico 00142 Rome, Italy. Tel: 54591 Fax: 5191702)

IFPRI

International Policy Workshop on Employment for Poverty Alleviation and Food Security

The International Food Policy Research Institute coordinated an international policy workshop on Employment for Poverty Alleviation and Food Security at Airlie House, Virginia, from October 11 to 14, 1993. Participants included policymakers in charge of employment and poverty programmes, policy advisers, analysts, and experts from 20 developing countries, as well as representatives from various aid agencies and nongovernmental organizations such as ILO, WFP, USAID, World Bank, IMF, EuronAid, GTZ, and FAO. Eleven papers addressing strategic and conceptual issues or reporting new research results from long–term studies in Africa, Asia, and Latin America were presented. In addition, policymakers and programme planners shared experiences through three panel sessions.

The workshop aimed to identify effective, sustainable, and efficient employment policies that address the rural and urban poor in different country circumstances. It is now widely accepted that the poor are increasingly dependent on labour markets, which is why understanding the labour market today is as important as understanding the food market for addressing the food security problems of the poor in developing countries. Employment policies have become more relevant, and there is a need to address sources of growth jointly with poverty alleviation. The changing linkages between employment, poverty, and food security must be taken into account.

Despite growing recognition that productive employment is fundamental to overcome the food entitlement failures of the poor, there is much less understanding and agreement on how to go about doing that. Insufficient attention has been given to the potentials of investing in productive employment as an alternative to subsidizing food or capital. Of particular relevance for policy strategy is the question of the role of the state and of public action for employment creation. This, of course, relates not only to the question of *whether* public policy should or should not play a role in productive employment generation but also to the question of *how* it should play a role.

The 1980s have seen a tremendous growth in poverty–alleviating employment programmes. The workshop considered what prompted these types of programmes to be initiated at that particular point in time in so many countries or, where they had existed before, to be substantially expanded. Was this due to changes in the economic and political environment or was it due to the infeasibility of or frustrations with other programmes with similar objectives of poverty alleviation? Also considered were the impacts of such programmes on poor people in the short run and on development in the long run. Issues of implementation of employment programmes, including questions of programme design, wage policy, and modes of wage payment were also discussed, as was the issue of how to target, directly and indirectly, the impact of these programmes on the poor.

The ultimate objective of the workshop was to stimulate action by governments and international organizations to improve existing policies and programmes and to establish appropriate programmes where they are lacking.

(Source and contact for further information: Ms Rajul Pandya–Lorch, IFPRI, 1200 Seventeenth Street, NW, Washington DC 20036, USA. Tel: 202 862 5600 Fax: 202 467 4439)

NORWAY

Norwegian Development Assistance for Nutrition

Nutrition is not defined as an explicit issue of priority for Norwegian development assistance. Nutrition work in the field is often carried out by health workers, and a lot of the general education regarding nutrition is taking place in the school system. There are normally separate nutrition units at ministerial level, and within research it is, of course, a separate discipline.

A general improvement in living conditions in a population will normally improve the nutritional status, although this connection is not direct and totally predictable. Norway gives priority to the poorest of the poor, and they are also the ones most vulnerable to mal–and undernutrition. Norway's focusing on women, who have a main responsibility both in production and preparation of food, will also have consequences for nutrition. This goes both for the women themselves and for other members of the family. Support for general education, child care, and environment are also relevant. Furthermore, efforts to create and sustain peace and to avoid political unrest have indirect implications for food security and nutrition. The strong emphasis Norway has put on population has also been seen as important for the nutrition situation. This may be true for smaller communities, but does not hold at global level. White Paper No. 51 (1991–92) on North–South collaboration refers to the estimates of FAFO, which is the research unit of the Norwegian Labour Organization, that the total production of food in the world is 10% more than what would have been sufficient for all the people living on the earth, if the distribution had been fair.

UNICEF has promoted a model for good nutrition, and it has been recognized by most of the international organizations and by donors. The model has been designed for children, but can be used in a more general way. It states three preconditions for good nutrition:

1. Household Food Security
2. Care
3. Prevention and control of diseases

The model can be applied to developing and developed countries alike, and is used in the Norwegian country paper to ICN. The model is important, among other things, for its showing that food alone is not sufficient for achieving good nutrition.

Norwegian development assistance to nutrition involves food security, monitoring of nutritional status and nutrition education, general health conditions and water supply. The latter is important both for agricultural reasons and for provision of drinking water.

Bilateral Assistance

Nutrition concerns are indirectly assessed, e.g. in water programmes (irrigation and drinking water), and in health sector collaboration. Some examples are: in Sri Lanka, two Integrated Rural Development programmes are supported, where there are health components. Norway contributes to the funding of the Welfare Programme of the Estate Sector, which provides water supply, primary health care and child care (creches). Norway has a health sector agreement with Botswana. In Zimbabwe, Norway supports the Family Health Project, which is a strengthening of the primary health care. The project has a nutrition component that Norway supports. Rural District Development programmes in Tanzania are supported, and the water sector is supported in Zimbabwe and Zambia.

Private Organizations

Most of the Norwegian organizations for development assistance have projects and programmes linked to food security and nutrition. This is especially so for the district development programmes, and for Mother–and–Child health programmes. Some of the school programmes are also of relevance, as education in nutrition related topics is given, and meals are provided both on an ordinary basis and as demonstration for the school children. In addition, private organizations are involved in relief programmes, where food distribution is essential.

Research Collaboration

There are two central agreements for research that are relevant for nutrition. One is an agreement with the Sahel countries – the drought stricken belt south of Sahara. Projects on food security in Mali, Sudan and Ethiopia come under this agreement. The University of Oslo is the collaborating partner for Mali, and the University of Bergen is collaborating with Sudan and Ethiopia.

The other agreement, the so called NUFU agreement, runs for the period 1991 to 1995, and the Norwegian partner is the University Council. The objective is to establish collaboration between universities in Norway on one hand and in developing countries on the other. Presently there is an ongoing project on nutrition and food security with the University of Botswana under NUFU.

The Nordic School of Nutrition at the University of Oslo is involved in education of nutrition professionals at various levels, both in developing countries and in European countries. The institute is a collaborating centre for WHO.

(Source and contact for further information: Berit Austveg, PO Box 8128 Dep, 0032 Oslo 1, Norway. Phone: 47 22 34 95 90 Fax: 47 22 34 88 24)

UNICEF

"20/20" – Mobilizing Resources to Achieve the World Summit for Children Goals

"20/20" is UNICEF's packaging of a set of ideas and figures – originally put forward by UNDP in their Human Development Reports of 1991 and 1992 – which UNICEF has found to be useful in global efforts to mobilize resources for achieving the goals for children and development in the 1990s.

The strategy advocates the allocation of a minimum of 20% of developing country budgets, and a matching minimum of 20% of development aid, to "human development priorities": primary health care, including family planning; basic education; nutrition; and low–cost water and sanitation. The bringing together of the "20" and "20" fundamentally implies a reciprocity of donor and recipient country commitment to these priority areas.

It is acknowledged that the 20/20 message can only be one of broad advocacy, not one of precise proportions which any or every country must achieve if they are to reach the Summit goals: the proportion of total

government expenditure in relation to GNP varies considerably among countries, and thus 20% of government expenditure can represent very different levels of resources in different countries; in many countries a significant portion of public expenditure in the social sector occurs at the state and local levels, and information on this is not included in data on government expenditure; and in many countries, the private sector plays an important role in financing of the social sectors.

However, at its centre, the 20/20 concept focuses on the fact that sufficient resources *do* exist to drastically reduce poverty and achieve the goals for children by the end of this century. The principal constraint is a lack of political will. 20/20 is thus a key instrument for broad advocacy and for stimulating dialogue both with governments and donors on these issues.

(Source: Advocacy Strategies for "20/20": An Information Note for Field Offices, 20 October 1993. UNICEF, New York)

UNICEF Nutrition Strategy Training Workshop for Consultants

Embu, Kenya, 17–23 September 1993

Instead of increasing the number of staff at headquarters, UNICEF Nutrition Section has chosen to establish, support and use a global network of experts, who can provide technical support to UNICEF field offices on a consultancy basis. A five–day workshop was arranged for a group of potential consultants to familiarize themselves with UNICEF's procedures in general and to allow them to learn about the UNICEF Nutrition Strategy in particular. Twenty–three consultants attended the workshop and four UNICEF staff facilitated the work.

The workshop started with an open discussion of knowledge and perception of the nutrition problem among the participants. This was followed by nine topics which were introduced by the facilitators and discussed in plenary. These included: (1) scientific and ethical aspects of the problem of malnutrition in society; (2) a theory of the nutrition problem – the UNICEF conceptual framework; (3) the practice of solving nutritional problems; (6) protection, promotion and support of breastfeeding; (7) basic causes of malnutrition; (8) nutrition information strategies and systems; and (9) iodine deficiency disorders. A full day was used for a field visit, followed by the last day of group–work, presentations and discussion. The field visit was organized as the action–component of a Triple–A process.

The evaluation showed that all participants were very satisfied with the workshop and that its objectives have been achieved. They are now better prepared to provide technical support to UNICEF's field offices.

(Source and contact for further information: Urban Jonsson, Senior Adviser (Nutrition), UNICEF, 3 United Nations Plaza, New York, New York 10017.)

UNRISD

(United Nations Research Institute for Social Development)

UNRISD and the World Summit for Social Development

As the only centre in the United Nations system devoted exclusively to research on problems of social development, UNRISD is giving highest priority over the next one and a half years to contributing to the preparatory process for the World Summit for Social Development.

The Social Summit will be held in Copenhagen in March 1995. The three core issues which it will address are eradicating poverty, enhancing productive employment and promoting social integration. The need for a World Summit for Social Development is stark: recession in the industrialized West, unless it can be quickly reversed, is likely to worsen the already difficult situation of most people in Africa, Latin America, Central and Eastern Europe, and the former Soviet Union. A long economic crisis, too often associated with civil strife, has left its mark on hundreds of millions of people, whose welfare is now in grave jeopardy. Despite their national and regional specificities, enduring solutions to many social problems cannot be sought within regional or national boundaries alone.

Just as there are global elements in the current crisis, there must be international involvement in developing acceptable and useful remedies.

As a first step towards promoting discussion of major issues of social development and for considering the objectives and potential of the Summit, UNRISD held a conference in July 1993 on the Crisis of Social Development in the 1990s: Preparing for the World Social Summit. In addition, the Institute has recently initiated a number of new research programmes which address themes of direct relevance to the Summit. They include Rethinking Social Development in the 1990s, Rebuilding Wartorn Societies, Ethnic Diversity and Public Policies, and Economic Restructuring and Social Policy. Papers and studies produced during the coming year within the framework of these research programmes will be systematically channelled into the preparatory process of the Summit.

UNRISD also intends to launch a Briefing Paper Series for the Social Summit, consisting of brief monographs on key issues of social development. Each briefing paper will provide a concise analysis of the nature of a particular problem (such as ethnic conflict, political violence, the social implications of economic restructuring or environmental change), its dimensions, attempts to cope with the problem, lessons learned and central issues requiring discussion and debate. The series is intended to be of special assistance to governments, nongovernmental organizations, the media and the public at large as they develop positions on the social issues that will be addressed at the Summit.

(Source and contact for further information: Adrienne Cruz, Programme Information, UNRISD, Palais des Nations, CH−1211 Geneva 10, Switzerland. Tel: 798 8400 Fax: 740 0791)

UNU

Rapid Assessment Procedures (RAP)

The original RAP guidelines for the evaluation and improvement of programmes of nutrition and primary health care, first published in August 1987, has now had five printings and sold nearly 5,000 copies in English as well as nearly 1,000 in Spanish and 250 in French. Portuguese and Arabic versions are in preparation. The report of the RAP conference held at PAHO in Washington D.C. was published in February. Nearly 2,000 copies have already been sold. The 1993 RAP newsletter was distributed to a mailing list of over 800 persons. UNU continues to receive cited evidence of the wide use of the UNU pioneered methodology.

These publications are being followed up by a series of specialized RAP guidelines. The first to appear was "A Manual for the Use of Focus Groups" published in September and the second Rapid Assessment Procedures to Improve Household Management of Diarrhoea" published in November. A guideline "Rapid Anthropological Approaches for Studying AIDs Related Beliefs, Attitudes and Behaviours" is planned before the end of the year and the report of a December 1992 RAP training manual task force meeting is in preparation. Among the workshops in which RAP was presented were the UNICEF sponsored seminar on respiratory disease and the National Institute of Nutrition in Kazakhstan by Dr Nevin Scrimshaw in January. A two−day RAP workshop was held at WHO regional office in Alexandria in September and the office has undertaken to provide an Arabic text of the RAP guidelines.

International Network of Food Data Systems (INFOODS)

The purpose of INFOODS is to improve the availability of food composition data worldwide particularly in developing countries and contribute to the quality of such data. Food composition data are needed for the assessment of nutrient intakes, nutrition education, epidemiological studies of diet and disease, and the determination of agricultural and food policy. The objective is the establishment of regional or subregional food composition data bases that contain all available food composition information for participating countries and the capacity to exchange information among them.

INFOODS is now at the stage when the original goal of coverage of all developing countries through a system of regional data bases can be implemented in two more years if the necessary resources are available.

The ASEANFOODS regional data base at INMU in Bangkok became fully operational in 1992. Programming of the computer to be installed in New Caledonia for OCEANIAFOODS was also completed. At the beginning of the year funds available from the International Development Research Centre (IDRC) of Canada have made possible the purchase of the necessary hardware and software licences for subregional data bases in INCAP and INTA. Following intensive consultant help by Dr John Klensin in November and Dr Klensin and Ms Barbara Burlingame in May, INCAP has proceeded with the installation of the subregional database. That database is expected to be fully operational by the end of the year with the INTA subregional data base to follow. Part of the INCAP effort includes development of additional software to permit interworking between regional databases in various world regions. The INCAP effort, with assistance from New Zealand, will also

produce interim revised Central American tables before the end of the year. Funds will also be available from IDRC for an AFROFOODS organizational meeting early in 1994.

The database installation activities have included improving the electronic mail capabilities and linkages of the institutions involved. As a result, INCAP and INMU staff now have improved communications with scientists working in similar areas around the world. The collaborations which have resulted, and the ability to easily ask questions, have permitted work at these institutions which otherwise would have been impossible or very time−consuming.

Representatives of UNU/INFOODS, EUROFOODS, USDA and FAO met at FAO headquarters in February 1993 to discuss collaboration in assisting developing countries to improve the quantity, quality, and accessibility of their food composition data. One outcome was the planning of an FAO financed workshop on this topic to be held in Tunis in February 1994. In addition FAO provided travel and per diem costs for Dr Besrat to visit five African countries in October in order to plan an AFROFOODS organizational workshop in Ghana immediately after the Tunis meeting.

Discussions were held during the year for completing the INFOODS network with regional groupings of the Arab countries and South Asian countries and funding is being sought for them. A separate INFOODS regional data base for Francophone Africa is also under consideration.

A companion project the International Food Intake Directory (INF'ID) is designed to assist developing countries in summarizing all dietary intake data for the past 30 years and to maintain hard copies available for photocopying by anyone who desires to use them. Duplicate summaries and copies of the data will be maintained by the UNU Programme coordinating office in Boston. These data have been difficult to locate even for nationals of a country and are essential for epidemiological studies of diet and disease, for understanding dietary trends, for long−range planning and for a variety of other purposes.

In the current year 50 data summaries have been received and coded from Mexico to complete the data for Mexico. We are still awaiting the remaining summaries from Argentina, the Caribbean and Oceania. Data sets have been promised or are under discussion with Bolivia, Brazil, Bulgaria, China, Cuba, Ecuador, Ghana, India, Japan, Kazakhstan, Kenya, Nepal, Pakistan, Saudi Arabia, Senegal, Tanzania, Tunisia, and Zimbabwe. The first volume of country summaries is being prepared for publication.

Institutions in countries thus far not involved in this activity interested in participating should contact Dr Nevin Scrimshaw, UNU Food and Nutrition Programme for Human and Social Development, Charles St. Sta., Box 500, Boston, MA 02114−0500, USA. Tel: (617) 227 8747 Fax: (617) 227 9405 E−Mail: UNUCPO@INF.UNU.EDU. Limited funds are available for facilitating data collection.

(Source and contact for further information: as above)

WFP

International Conference on Nutrition − Follow−Up Activities

The global Plan of Action for Nutrition adopted at the International Conference on Nutrition, in December 1992, stated that the governing bodies of the United Nations, including WFP, "should, in the course of 1993, decide on ways and means of giving appropriate priority to their nutrition−related programmes and activities aimed at ensuring, as soon as possible, the vigorous and coordinated implementation of activities recommended in the World Declaration and Plan of Action for Nutrition". The Plan of Action provided guidelines for a number of strategies grouped into nine action−oriented themes. The activities of WFP with regard to these themes are listed below:

1. Incorporating Nutritional Objectives, Considerations and Components into Development Policies and Programmes.

WFP's most relevant contribution to this is a series of nutrition awareness workshops with the following goals: i) to understand the importance of nutrition in the development process, with emphasis on human resource capacity building; (ii) to become familiar with the advantages and disadvantages of some important techniques of nutritional assessment; (iii) to acquire knowledge regarding significant nutritional problems of the country or region and potential means of combating them; and (iv) to discuss means of increasing the government's awareness of nutritional issues and ways of including nutritional considerations in government policy.

In addition to the above, in June 1993 WFP also organized and sponsored a regional workshop on school feeding targeted at Ministers of Education and others involved in improving the health of school children in the Central American region.

WFP recognizes that sustainable development needs to be addressed simultaneously with economic growth for nutritional well–being, and toward this end it has been assisting small–scale food processors in the production of nutrient–fortified blended foods in a number of countries in Africa, Asia and Latin America.

2. Improving Household Food Security.

All of WFP's activities improve household food security, either in the short term, as in situations of temporary food insecurity, or in the long term, as in situations of chronic food insecurity.

The first two measurable goals of the International Conference on Nutrition (ICN) are to eliminate famine and famine–related deaths and starvation and nutritional deficiency diseases as a result of natural disasters by the end of the decade. WFP is already at the forefront of endeavours to meet these challenges: in 1992 it delivered commodities valued at $742 million for victims of drought, flood, civil conflict, and other natural and man–made calamities. Due to an increased awareness of nutritional deficiency diseases, the commodities included in such programmes are more varied than they were in previous years.

In terms of chronic food insecurity, food aid transfers more resources to the poor than any other form of development assistance. WFP–assisted projects increase the food supply to the household through a number of pathways: i) direct distribution; ii) support to income–generating activities; and iii) supply of credit, considered an essential factor in achieving food security – usually derived from monetized food aid.

3. Protecting Consumers through Improved Food Quality and Safety

WFP assists governments in developing the human resources required for the safe handling of food in schools, hospitals and other institutions. It also ensures that the food commodities it delivers are of good quality and safe for human consumption.

4. Preventing and Dealing with Infectious Diseases

There are a number of ways in which WFP plays a role in this strategy. First, the malnutrition–infection cycle is well recognized; infections interfere with growth, development, work performance and general quality of life, and people who are undernourished are more likely to catch infectious diseases. The ability to fight infection is increased in all age groups as a result of improved nutrition. The WFP–provided food is often essential for the prevention and treatment of infectious conditions. Second, food aid is frequently an important incentive for mothers to take their children to health centres for immunization. Third, the efficient logistical system developed to get food even to remote places is also used to deliver parasite control agents. Fourth, WFP helps promote the use of safe and nutritionally–adequate, locally–produced, low–cost weaning foods. This type of food supplementation protects against the negative effects of diarrhoea. Fifth, in a number of countries WFP has assisted in AIDS prevention by providing support for the training of health workers and for alternative income–generation schemes for prostitutes.

5. Promoting Breastfeeding

WFP supports and encourages mothers to breastfeed and has issued a number of policy guidelines, such as: (i) food–aided supplementary feeding programmes should not interfere with exclusive breastfeeding; (ii) the distribution of milk powder is limited to those situations where it is known with certainty that it will not substitute for breastmilk; and (iii) weaning foods are not to be used for children under six months of age.

WFP–supported supplementary feeding programmes help women lactate more successfully. Food aid is used to train professional health workers and to motivate mothers to attend health facilities where they will be encouraged to breastfeed. Many women could not afford to forego income while nursing without economic support of food aid.

6. Caring for the Socio–Economically Deprived and Nutritionally Vulnerable

The issue of "caring capacity", or enabling women to have more time for "mothering", is very important for children's nutrition and health. Food aid assists in this by decreasing women's workload through providing an income transfer to enable mothers to have more time to care for young children, to prepare more nutritious

food for them and to feed them more often, to take them to health care centres and to receive some basic education.

Humanitarian relief operations provide for the nutritional needs of refugees and displaced persons and for civilians caught in zones of conflict and to ensure the safe passage of food. WFP projects also specifically target the destitute, elderly, handicapped/disabled, urban poor, indigenous people and street children.

7. Preventing and Controlling Specific Micronutrient Deficiencies.

WFP assists in overcoming micronutrient deficiencies in a number of ways. Foods rich in a specific micronutrient are distributed as food aid when necessary to prevent deficiency symptoms from developing, and vitamins and minerals are often used to fortify food aid commodities, either by donors before transport or after arrival at destination. In addition to donated commodities, locally−processed products such as biscuits and blended foods are also fortified.

Micronutrient problems are most likely to develop in situations of heavy dependence on externally−provided food, such as protracted feeding operations for refugees and displaced people. In these and other similar situations, WFP attempts to prevent deficiency symptoms from developing by including micronutrient fortified blended cereals (eg corn soya milk and wheat soya blend) in the ration, by adjusting the types of food or the quantities distributed, and by fortifying specific food items.

WFP has policy guidelines regarding vitamin A fortification of dried skim milk and iodine fortification of salt. It has been negotiating with donors for micronutrient fortification of commodities such as vitamin A fortification of edible oil.

8. Promoting Appropriate Diets and Healthy Lifestyles.

As WFP targets the poorest of the poor, most of the problems of appropriate lifestyle are not relevant to them. In order to encourage healthy diets, nutrition education both for parents and children is becoming an integral part of WFP−supported school feeding and health promotion projects.

9. Assessing, Analysing and Monitoring Nutrition Situations.

WFP is already a user of early warning and vulnerability mapping systems. In order to be able to plan development projects in advance and to respond quickly and appropriately to the needs of populations potentially at risk, it will be making even greater use of the information generated by such systems in the future.

WFP is also a partner with FAO in assessing food availability and food needs in countries with potentially vulnerable populations. The nutritional needs of refugees are assessed annually by WFP with the assistance of UNHCR. WFP support to the health sector promotes growth monitoring, often accomplished with the assistance of UNICEF. The rapid appraisal technique is currently in use for assessing the nutritional adequacy of households in protracted refugee and displaced person operations. In order to monitor better the nutritional situation of targeted refugee populations, an improved joint WFP/UNHCR information system, based on a Food Availability Status Report (FASREP), has been put into place.

During the preparations and following the ICN, WFP has been active in a number of ways. Communications with the field began early; field offices were informed about the ICN and their cooperation requested in the preparation of country papers. In addition, all WFP field offices and desk officers were provided with the ICN World Declaration and Plan of Action for Nutrition in the appropriate language. WFP is also an active participant in the Sub−Committee on Nutrition (ACC/SCN) of the United Nations Administrative Committee on Coordination, which facilitates coordination of the follow−up efforts and prepares reports for consideration by the ACC and submission, through ECOSOC, to the United Nations General Assembly.

A document prepared by WFP − "Issues in Food Aid and Nutrition" was made available to delegates at the Thirty−fifth Session of the CFA. The purpose of this document was to examine the potential of targeted food aid to improve nutrition in developing countries over the long term, to discuss some of the constraints on its effective use, and to identify ways in which the nutritional benefits from food aid can be strengthened. In addition to the ICN, this document was also distributed at the Sixth Annual Hunger Research Briefing and Exchange held at Brown University, Providence, Rhode Island in April 1993, and at the meeting of the International Union of Nutritional Sciences in Adelaide, Australia, in September 1993.

Promotional materials, such as a film "Building Blocks for Life" on nutrition and food aid, were displayed at the ICN and at a number of other gatherings where nutritional issues were discussed.

A special issue of the World Food Programme Journal (No. 23) on WFP activities regarding nutrition is also being widely distributed. WFP–sponsored radio programmes on nutrition were broadcast in many countries.

WFP is already at the forefront of efforts to meet the challenge of the first measurable goal of the ICN: to eliminate by the end of the century famine and famine–related deaths. It has, however, pledged to do even better by seeking further commitments, by improving the use of the resources it now commands, by increasing its capacity to respond quickly to new emergency situations, and by improving targeting.

(Source: Information Note on the Implementation of the World Declaration and Plan of Action for Nutrition of the International Conference on Nutrition. WFP CFA: 36/P/INF/1, 22 September 1993. Contact for further information: David French, Senior Programme Adviser, World Food Programme, 426 Via Cristoforo Colombo – 00145 Rome, Italy Tel: (6) 57971 Fax: (6) 5133537)

WHO

Infant and Young Child Nutrition

Report by the Director–General of WHO

The eighth since 1981 in a series of biennial reports by the Director–General on infant and young child nutrition (document EB93/17) is being presented to the ninety–third session of the WHO Executive Board and to the Forty–seventh World Health Assembly, in January and May 1994 respectively. Part I summarizes briefly the current global situation of malnutrition among children under five years of age, specifically protein–energy and micronutrient malnutrition. Part II covers infant and young child feeding, including encouragement of breastfeeding; the promotion of appropriate weaning practices with the use of local food resources; the strengthening of education, training and information on infant and young child feeding; the promotion of the health and social status of women; and the appropriate marketing and distribution of breastmilk substitutes.

The report is presented in the light of the outcome of the International Conference on Nutrition (Rome, 1992), the World Declaration and Plan of Action for Nutrition, which serve as a platform for WHO's continuing technical support to countries. In May 1993 the World Health Assembly called for a reinforcement of the Organization's capacity for food and nutrition action in all relevant programmes so that increased emphasis can be given as a priority to maternal and young–child nutrition including breastfeeding; micronutrient malnutrition; nutrition emergencies, particularly training in preparedness and management; monitoring of nutritional status; control of diet–related chronic disease; food safety control and the prevention of foodborne disease; and research and training in subjects related to food and nutrition.

Highlights of the progress and evaluation report by the Director–General include information on:

- the joint WHO/UNICEF Baby–friendly Hospital Initiative, including related training activities;

- action by WHO Member States, consumer groups, and professional and other technical bodies to encourage and support breastfeeding;

- exclusive breastfeeding as an infant–feeding ideal, and the need for a revised growth reference consistent with the growth patterns of infants who are fed in accordance with WHO recommendations;

- food safety issues in infant and young child feeding;

- monitoring trends in the prevalence and duration of breastfeeding, including the restructuring of the WHO global data bank in accordance with new indicators derived from households and for assessing health facility practices that affect breastfeeding;

- women, work and breastfeeding, including collaboration with ILO in the review and update of international labour standards dealing with maternity protection and their impact on breastfeeding;

• action taken in 50 countries and territories, and in the European Community, since 1991 giving effect to the International Code of Marketing of Breastmilk Substitutes.

Where giving effect to the International Code is concerned, the report also develops a number of themes under the heading "lessons from experience". These include a discussion of the combination of legislative and non−legislative means countries are using; the health implications of direct advertising of infant formula and the perception of infant formula as "just another processed food"; donations or low−price sales of infant formula; and charitable distribution of breastmilk substitutes through ad hoc or long−term feeding programmes.

(Source and contact for further information: Nutrition Unit, World Health Organization, 20, Avenue Appia, CH−1211 Geneva 27, Switzerland. Tel (022) 791 2111. Fax: (022) 791 0746)

WORLD BANK

Nutrition Lending Increasing

World Bank lending for nutrition is continuing to increase – total project resources for nutrition in the financial year 1993 were some four times those of the previous year at around $600 million of which $377 million were Bank loans or IDA credits. In addition to this were nutrition components in education and agriculture projects – amounting to another $100 million in total project resources – and nutrition portions of structural adjustment projects in which nutrition sometimes plays a large part. South Asia far exceeds other regions in quantity of resources invested in nutrition. Latin American Countries and East Asia & Pacific, with nearly equal amounts of lending for nutrition, are next, followed by East and Central Africa. The Middle East and North African region had no nutrition projects in 1993.

Projects approved in 1993 included: Madagascar – Food Security and Nutrition; India – ICDS II; and Honduras – Nutrition and Health. Other projects awaiting approval in 1993 and early 1994 were in Argentina (MCH and Nutrition), Peru (Health and Nutrition), Guinea (Health and Nutrition), Burkina Faso (Health and Nutrition), and Nicaragua (Health Sector Reform Project – includes emphasis on nutrition). Three nutrition projects are in preparation – for Ghana, Kenya, and Nepal. The Government of India, with three nutrition projects underway, has also requested further IDA support.

Work is well underway for a first Nutrition Project for Pakistan. In August, the head of nutrtion for the Pakistan Planning Commission, Dr Mushtaq Khan, told a World Bank seminar that the country's steady economic growth has not led to parallel nutrition improvements. Half of all children under five and more than a third of all pregnant and lactating women are underweight. Micronutrient deficiencies also are serious.

(Source: Alan Berg, The World Bank, 1818 H Street, N.W.. Washington. D.C. 20433.)

'The newsletter discovered that honey−bee cookies can be made more palatable by heating the bees for eight hours and that "with a little soy sauce and a dash of paprika, a fried grasshopper tastes something like a little soy sauce and a dash of paprika.'"

Quotation extracted from *The Food Insects Newsletter,* published by the Department of Entomology at the University of Madison, Wisconsin – as reported by the *International Herald Tribune,* June 19, 1992.

PUBLICATIONS

including reviews of:
Nutrition for Developing Countries
Poverty, Household Food Security and Nutrition in Rural Pakistan
The Challenge of Famine. Recent Experience, Lessons Learned
The Political Economy of Food and Nutrition Policies Toward Comprehensive Programs to Reduce Vitamin A Deficiency

plus new section containing selected announcements of new publications

Reviews

"Nutrition for Developing Countries"

(1992) by Felicity Savage King and Ann Burgess. Oxford University Press. 480 pages.

This book is essential for anybody working in nutrition in developing countries, especially at community level. Moreover, at the special ELBS edition price of £3.95 (about $6.50) it should be on the bookshelf in any office or health centre dealing with nutrition. Not only is it practically the only book of its kind, but it is a sound and reasonably up–to–date basic text on nutrition. While it focuses primarily on Africa, much of the basic biology in it is applicable globally – on the other hand, versions adapted to other parts of the world would indeed be useful. The book could also be a work of reference for those concerned with planning programmes in nutrition; it is however not addressed to those with this responsibility, and does not spend much time on this topic.

As the publishers say: "Nutrition for Developing Countries is both a textbook of nutrition – covering the essential facts about nutrients, nutrient needs, foods, and meals – and at the same time a practical guide for nutrition workers – be they health workers, agricultural workers, home economists, or school teachers, or their trainers. It explains in clear simple language, and practical detail, how nutrition workers can help families with nutrition problems, how to treat malnourished children, and how to work with families and communities. This information is not easily available elsewhere, and no other manual covers the subject so comprehensively. The manual is liberally illustrated, with many new drawings, as well as some from the previous edition of the book."

What do you think about the "Three Food Groups"?

Source: "Nutrition for Developing Countries", p.73

The illustrations and clear text, and considerable new thinking – see figure about three food groups below – make the book readable and pleasant to use. The conclusions drawn about what to do about problems

usefully addresses the issue: so what should we advise people to do differently? – but does not go into much detail concerning how to *communicate* such information. Occasionally, there is perhaps some wishful thinking if not set in the context of real constraints – for example while it's true that appropriate technology projects can develop ways to reduce women's workloads, and hence their energy needs, setting up for example childcare centres can be easier said than done. There is a need for a sequel to this book, which goes into more detail about "how to", built on the "what" that this book describes so well.

Oxford University Press supplies bookshops in many parts of the world, and can also provide copies by mail, so in case of difficulty contact Oxford University Press, Saxon Way West, Corby, Northants, NN18 9ES, or by fax: 44–536–746337.

JBM

"Poverty, Household Food Security and Nutrition in Rural Pakistan"

(1993) by Harold Alderman and Marito Garcia. IFPRI Research Report No. 96, IFPRI, Washington, D.C. 108 pages.

Designing government policies to reduce poverty and to improve household food security and nutrition is one of the most important challenges facing developing country policy makers. The successful design of such policies depends in large measure on understanding how households acquire and spend incomes, use savings to protect consumption, and cope with economic crises such as poor harvests. This research addresses such concerns by analyzing detailed three–year panel data (1986–89) for 800 households from five rural districts in rural Pakistan.

The study finds that incomes of the 800 households fluctuated considerably over the three years, largely as a result of bad weather, illness, and changes in remittances from abroad. Calorie intakes, however, did not fluctuate, not even seasonally. Savings, including storage of grains, helped to compensate for reduced production and higher food prices. Households apparently were able to save or borrow enough from family networks to even out fluctuations in income.

Diversification of income sources also played a role in reducing income fluctuations. Although all of the survey households were rural, their income sources were not strictly agricultural. Crop earnings represented less than 45 percent of all earnings, while non–farm wages and earnings accounted for 41 percent of all incomes.

These findings suggest that rural development is not synonymous with agricultural development, and that efforts to reduce rural poverty require more attention to the non–farm sector.

By South Asian standards, the calorie supply of the survey households was relatively high: 2,400 calories per person per day. However, 40 percent of the children under five years of age were underweight. The study finds that converting income into calories and calories into physical growth is hampered by the negative effects of childhood disease and infection.

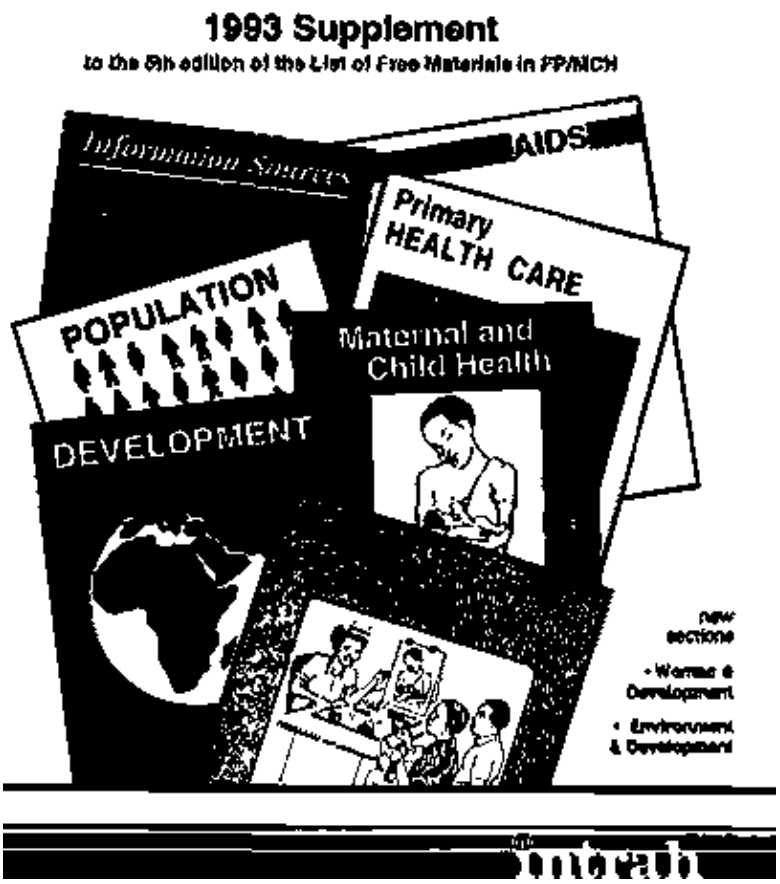
To stem the spread of infectious diseases, critical community services – such as primary health–care services, sanitation and village water supply – are needed. Public health programs that reduce illness, such as immunization or those encouraging prenatal care, are also important. However, mere physical presence of such services is not enough: quality of services is equally crucial.

A key finding is that education – particularly female education – is strongly correlated with better nutrition in children. In fact, the impact of education is much stronger than that of increasing incomes. Educating women to at least the primary level is nearly three times more effective in improving the nutritional status of children than increasing household incomes by 10 percent.

To obtain a copy of the above publication please contact: International Food Policy Research Institute, 1200 Seventeenth Street, N.W., Washington, D.C. 20036–3006, USA. Tel: (202) 862 5600 Fax: (202) 467 4439.

Richard H Adams, IFPRI

"List of Free Materials in Reproductive Health"



List of FREE MATERIALS in Reproductive Health 1993 Supplement

(1993) INTRAH. Supplement to the 5th Edition of the List of Free Materials in Family Planning and Maternal and Child Health. 90 pages.

Details of where to obtain over 200 free materials containing information on issues to do with Reproductive Health are listed in this 1993 supplement to the 5th edition of the INTRAH List of Free Materials in Family Planning and Maternal and Child Health.

Materials are listed under nine headings: Family Planning; Maternal and Child Health; Primary Health Care; AIDS; Population; Development; Environment and Development; Women and Development; and Information Sources. Each listed item is accompanied by a brief description of its content, the language(s) it is published in, and a contact address.

As stated in the introduction to this supplement, all listed materials are available either "free of charge to anyone who requests them, or free only to organizations or persons in developing countries. Any restrictions concerning availability are included in the description for each item".

This publication is an INTRAH Training Information Packet (TIP). According to INTRAH, "the aim of this TIP is to inform health care professionals, particularly in developing countries, of the large number and variety of materials available free of charge from organizations around the world."

Whilst INTRAH is unable to distribute the materials contained in the list itself, the list usefully contains an example of the type of letter that could be used to request an item from the address given with it.

For further information and to obtain a copy of the publication please contact Penelope Maglaque, Librarian, Program for International Training in Health (INTRAH), The University of North Carolina at Chapel Hill, School of Medicine, 208 North Columbia Street, CB#8100, Chapel Hill, North Carolina 27514, USA.

VE

"The Challenge of Famine. Recent Experience, Lessons Learned."

(1993) Edited by John Osgood Field. Kumarian Press, Connecticut, USA. 282 pages.

This book is a compilation of some of the papers presented at the "Workshop on Famine and Famine Policy" which was held at Tufts University (USA) from 1986 to 1989.

It begins with a description of famine, then goes on to describe the history of particular famines in Africa in the 1980s, highlighting both the effective and non−effective responses of the international community.

With this historical perspective, the book then goes on to discuss the positive role of development in reducing vulnerability to famine and finishes with some ways to improve both the early detection of famine and the response of the international community to famine.

The strength of this book lies in its historical approach. The use of recent cases of famine and responses to famine gives a framework necessary to interpret the assessments of famine situations and suggestions for improvement in early famine detection and rapid response which is the main message of the book.

To obtain a copy of this book, please contact Kumarian Press, Inc. 630 Oakwood Ave., Suite 119, West Hartford, CT 06110−1529, USA. Tel: 203 953 0214 Fax: 203 953 8579.

JMW

"The Political Economy of Food and Nutrition Policies"

(1993) edited by Per Pinstrup−Andersen. Published for the International Food Policy Research Institute by Johns Hopkins University Press. 278 pages.

One of the apparent strengths of the neoclassical paradigm has been its simplicity (abstracting from the rest of the world in order to explain a particular economic phenomenon). This strength, however, has proven to be a weakness at times. For example, focusing on the public sector as a single entity and ignoring the interaction among individuals who collude to form different interest groups has resulted in the formulation of the wrong strategies and/or the unsuccessful implementation of the right programs. The Political Economy of Food and Nutrition Policies edited by Per Pinstrup−Andersen aims to provide a structured documentation and analysis of political economy aspects of food and nutrition policies and how these may be considered in future policy design and execution. As stressed by Field in one of the essays in the book: "No one is against good nutrition, and no one favours malnutrition". However, the inability of various countries to ameliorate food insecurity and poor nutrition indicates that the problem is more complex, often involving decision makers who tend to have conflicting interests.

Parts One and Two of the book deal with these different sets of decision makers: Part One analyzes political economy aspects at the national level − discussing conceptual issues and empirical evidence based on case studies from Sri Lanka, Colombia, the United States, and Nicaragua.

Part Two focuses on political economy matters at the local and household level − emphasizing the need for policymakers to familiarize themselves with: (1) the local power structure in order to effectively influence it; and (2) the needs and various constraints faced by their intended recipients.

Part Three analyzes the extent to which public investment in improved nutrition can be justified by its impact on labour productivity. Part Four examines research needs and implications for incorporating and reconciling economic and political considerations in nutrition strategy formulation and management.

Part Five cites the book's main conclusions, one of which is the need for more and better information about a number of issues (e.g. the costs of alternative programs and policies to intended recipients, as well as to other key interest groups in society; macro and micro level constraints faced by different players) in order to effectively assist policymakers.

This book is a thorough, well−written, primarily qualitative study of various political economy issues in nutrition research, policy design and implementation. The challenge, however, comes in formulating an appropriate and fairly generalizable model that will incorporate its various suggestions. Theoretically, perhaps, one can resort to game theory (the identification of different key players and the creation of policies that would yield acceptable payoffs to all of them). Realistically, however, one may be confronted with an asymmetry of information problem since not everyone has an incentive to reveal one's true preferences (e.g. politicians often say what is deemed to be "politically correct" but they may pursue their own interests while the poor and powerless may be worried about the repercussions of expressing their discontent openly). Unfortunately, actions of agents are not costlessly observable. As stressed in the book, however, weighing the potential

costs and benefits of various policies to different economic agents, as well as being able to predict their reactions is essential in ensuring successful nutrition policies. Thus, research/analytical methodologies are needed that are neither too costly nor time−consuming and yet informative and dynamic enough to predict how people will react based on various policy stimuli.

Christine L. Pena, IFPRI

"Toward Comprehensive Programs to Reduce Vitamin A Deficiency."

(1993) Report of the XV International Vitamin A Consultative Group Meeting, Arusha, Tanzania, 8−12 March 1993. 161 pages.

This report provides a valuable summary of current research findings and important policy and programme issues for those involved in combating vitamin A deficiency. The report is divided into two main parts – an overview followed by the full abstracts from all the papers submitted. The overview focuses on what it takes to turn a project into a programme, and draws on experience from Tanzania, India, Brazil, and The Philippines, as well as international experience. Operational programmatic issues are also explored, including the synergism between the community and health providers and the means of integrating vitamin A activities within primary health care systems, immunization and growth monitoring. Dietary diversification strategies are considered along with the types of communication strategies that have potential.

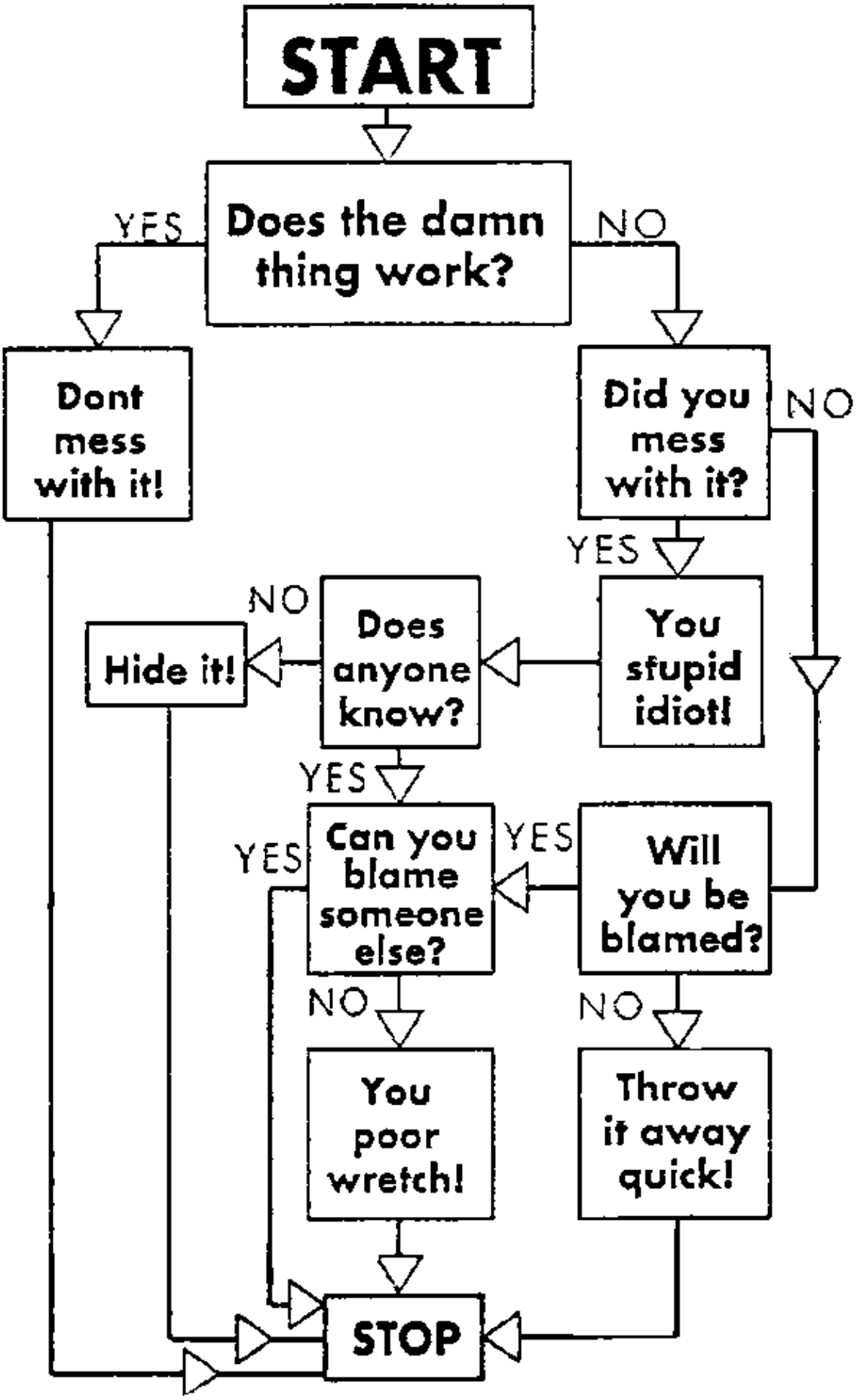
Additional sections cover methodologic issues in assessing vitamin A status, including clinical and histological methods of assessment, biochemical methods and the means of assessing dietary vitamin A intake. The findings of recent community trials of the relationship between vitamin A status and childhood morbidity and mortality, and a comprehensive meta−analysis are described. Recent possibilities that exploit the complementarity between vitamin A deficiency control and the control of other micronutrient deficiencies such as iron and iodine are also considered.

The overview section also includes reports from UN agencies and several NGOs on their commitments for the virtual elimination of vitamin A deficiency by the year 2000. The final section comprises 72 pages of abstracts that cover the whole spectrum of recent work on vitamin A control problems, from status assessment of populations to evaluation of programmes.

The report is thus an essential compendium of information on vitamin A deficiency control for individuals and institutions, from grassroots to international level. Comprehensive programmes clearly need to be in place and working effectively for the goal of virtual elimination of the problem to be realistically achieved six years from now.

For further information and to obtain a copy of the publication please contact: Laurie Lindsay Aomari, IVACG Secretariat, The Nutrition Foundation, Inc., 1126 Sixteenth Street, N.W., Washington, D.C. 20036, USA. Tel: (202) 659 9024 Fax: (202) 659 3617

SRG



Troubleshooting flow chart

Extracted from "UN Special"

In this section we include selected publishers' announcements of new publications; these are not independent reviews, but are included to draw attention to new relevant material.

"Real Markets: Social and Political Issues of Food Policy Reform"

(1993) UNRISD, the European Association of Development Research and Training Institutes (EADI), and Frank Cass and Company. Edited by Cynthia Hewitt de Alcantara. 131 pages.

If development policy in the 1980s was consistently shaped by an appeal to market **principles**, rather narrowly defined, the process of reform in the 1990s already shows signs of increasing concern with market **practice** – with what a growing number of people are calling the political economy of "real markets". This collection of essays on specific exchange environments in developing countries contributes valuable new material for rethinking experiments in market reform, from the bottom up, and shows why standard policy prescriptions are likely to have surprising consequences in different social settings.

Case studies in Africa, Asia and Latin America illustrate the enormous variety of "real" market settings in which food policy reform has been attempted, from the relatively incipient and partial market structures of eastern Zaire to the highly elaborate and monopolistic systems of Bangladesh and India. Authors trace the structure of social relations underlying different kinds of rural markets and explore the impact of market reforms on economic producers and consumers. At the same time, they highlight the dilemmas of food policy reform and provide case studies of how official marketing policy is challenged and moulded by the reactions of rural people to rapidly changing circumstances.

This volume lays the groundwork for a new effort to temper general calls for "market reform" with a deeper understanding of how market economies work. It is relevant not only for readers in developing countries and the industrialized West, but also for reformers in Eastern Europe and the ex–Soviet Union, where prevailing visions of the market may often be stylized and formalistic. The book should also contribute to bridging the gap between economists and other social scientists, as they deal with the "real world" of food markets in the 1990s.

Real Markets: Social and Political Issues of Food Policy Reform can be ordered from: Frank Cass and Company Ltd, Gainsborough House, 11 Gainsborough Rd, London E11 1RS, United Kingdom; or Frank Cass, c/o International Specialized Book Services, 5804 NE Hassalo St., Portland, Oregon 97213–3644, USA.

(Source: United Nations Research Institute for Social Development (UNRISD) Press Release, October 1993)

"A Manual for the Use of Focus Groups"

(1993) by Susan Dawson, Lenore Manderson and Veronica L Tallo.

This manual is a step–by–step practical guide for the use of focus groups, a research approach that has proved to be extremely useful in a wide variety of settings for providing, rapidly and economically, information on the range of opinions, knowledge, beliefs and practices of a population. It was written to help researchers in the social and health sciences use focus groups to learn more about social and cultural issues influencing health behaviour and the prevention and control of disease. Focus groups are organized interview sessions with specific goals, structures, time–frames, and procedures and have become recognized by the scientific community as a valuable tool for gaining information for a variety of purposes. Even those familiar with focus group research will find that it provides new insights and examples that may be adapted to different research questions and teaching contexts.

This book may be ordered from the International Nutrition Foundation (INFDC), Charles St. Sta., Box 500, Boston, MA 02114–0500, USA. Price: Industrialized country citizens and staff from international organizations – US$ 10 plus $2 postage and handling (add $0.50 for each additional copy). Developing country citizens –US$ 5 plus $3 postage and handling (surface) per book, $4 air mail.

(Source: UNU Food and Nutrition Programme for Human and Social Development Communication, 2 November 1993)

"Iron EDTA for Food Fortification"

(1993) International Nutritional Anaemia Consultative Group.

The International Nutritional Anaemia Consultative Group (INACG) has released a new publication on a novel iron compound that will help developing countries combat iron deficiency anaemia, the world's most common nutritional deficiency, affecting one out of every six people. The new monograph, entitled, *Iron EDTA for Food Fortification,* was produced by INACG will the support and encouragement of the US Agency for International Development (USAID), which has for many years been a leader in addressing the problem of iron deficiency anaemia.

People in developing countries now stand to benefit from an exciting iron fortification compound that can easily be added to their diets. A compound called iron EDTA (sodium iron ethylenediaminetetraacetic acid) was provisionally approved this year by the Joint FAO/WHO Expert Committee on Food Additives (JECFA) for food fortification programs and is the subject of a just–released publication designed to help developing countries use it.

Iron EDTA for Food Fortification provides governments, industry, donor agencies, nongovernmental organizations, and research institutions with the scientific and technical information on the safety and efficacy needed to establish iron EDTA food fortification programs. It was prepared by a distinguished group of experts under the auspices of INACG.

Iron EDTA "represents a major addition to the iron arsenal because this unique iron compound can be used in diets where conventional food iron compounds cannot – high cereal or legume diets," said Richard Seifman, director of the Office of Nutrition at USAID. Iron EDTA makes iron available for absorption from cereals and legumes, which form the basis of diets in many developing countries. It does so without altering the taste, smell, or colour of the fortified foods. (For many years USAID has been involved in supporting and encouraging interest in iron EDTA.)

Widespread fortification of cereals and legumes with iron EDTA could greatly reduce iron deficiency during early childhood, thus preventing permanent impairment of mental and motor development. Also standing to benefit are pregnant women. These vulnerable groups are particularly prone to iron deficiency anaemia and its consequences, such as greater risk of infection, premature delivery, increased maternal deaths, and low birth–weight babies. Not to mention the adverse effects on school achievement and worker productivity.

The economic and social impact of this preventable condition is enormous. Substantially reducing iron deficiency in women and children by the year 2000 is a goal adopted at the World Summit for Children in 1990, and the 1992 International Conference on Nutrition.

Iron EDTA can make a difference.

Single copies of *Iron EDTA for Food Fortification* are available free of charge to appropriate developing country professionals, and for US$3.50 for those in developed countries. Copies can be obtained from the INACG Secretariat, The Nutrition Foundation, Inc. 1126 Sixteenth Street, N.W., Washington, D.C. 20036, USA. The International Nutritional Anaemia Consultative Group was established in 1977 to guide international activities aimed at reducing iron deficiency anaemia in the world. INACG receives support through a cooperative agreement between The Nutrition Foundation, Inc. and the Office of Nutrition, Bureau for Research and Development, US Agency for International Development.

(Source: INACG Press Release, October 1993).

"A Brief Guide to Current Methods of Assessing Vitamin A Status"

(1993) International Vitamin A Consultative Group.

A Brief Guide to Current Methods of Assessing Vitamin A Status is the newest in a series of monographs published by the International Vitamin A Consultative Group (IVACG). This book is an introduction to various current dietary, physiological, biochemical, histological, and clinical procedures for the assessment of vitamin A deficiency. Investigators and program planners will find the text helpful in selecting assessment methodologies best suited to their specific situations and available resources.

Each chapter includes a brief description of a procedure, a discussion of its advantages and limitations, information about interpretation of the data obtained from the method, and an example of its application. Key recent references for each procedure aid the reader in gathering more detailed information. An IVACG task

force of scientists from several nations contributed to the development of this new monograph. Dr Barbara A Underwood and Dr James A Olson served as the book's editors.

Single copies of this and other IVACG publications are available free of charge to representatives in developing countries and for US$3.50 to those in other nations. Order copies from: IVACG Secretariat, The Nutrition Foundation, Inc., 1126 Sixteenth Street, N.W., Washington, D.C. 20036, USA.

A cooperative agreement between The Nutrition Foundation and the Office of Nutrition, Bureau for Research and Development, US Agency for International Development provided major support for this publication. The International Vitamin A Consultative Group was established in 1975 to guide international activities for reducing vitamin A deficiency in the world.

(Source: IVACG Press Release, undated)

"Effective Nutrition Communication for Behaviour Change"

Report of the Sixth International Nutrition Planners Forum. In *Spanish* and *French.* (1993)

As community–based nutrition interventions become more and more prevalent, learning the mechanisms of effective communication in promoting behaviour change has become a critical step in planning successful programmes. No longer the sole domain of professional nutritionists, nutrition interventions now require the collaboration of communications specialists, policy makers, and the health–care community. *Effective Nutrition Communication for Behaviour Change* provides the key principles necessary for successful planning of collaborative interventions. The International Nutrition Planners Forum (INPF) is pleased to announce the release of this report in Spanish and French.

This report summarizes the Sixth International Conference of the INPF held 4–6 September 1991 in Paris, France. Participants from 18 developing countries were organized into country teams comprising a technical nutrition specialist, a nutrition practitioner responsible for nutrition education programmes, and a media specialist. Each country team presented a case study of a nutrition communication programme from their country. The report provides a synthesis of the discussions generated at the conference and the content of the case studies. The conference provided a unique hands–on learning experience, offering participants the opportunity to incorporate what they learned from the presentations into plans for new communication projects for their countries.

Also available from the INPF Secretariat is *Crucial Elements of Successful Community Nutrition Programmes,* the report of the Fifth International INPF Conference, held in 1989 in Seoul, Korea. This report is also available in Spanish and French.

INPF is an informal organization of technical experts and professionals from developing countries with expertise and responsibility for nutrition and related policy and programmes. It was established in 1981 through the initiative of the US Agency for International Development to provide better opportunities and channels of discussion among developing country nutrition professionals.

Copies of both reports may be ordered from: INPF Secretariat, The Nutrition Foundation, Inc., 1126 Sixteenth Street, NW, Suite 700, Washington, D.C, USA.

(Source: INPF Press Release, undated)

UNITED NATIONS

ADMINISTRATIVE COMMITTEE ON COORDINATION – SUBCOMMITTEE 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.

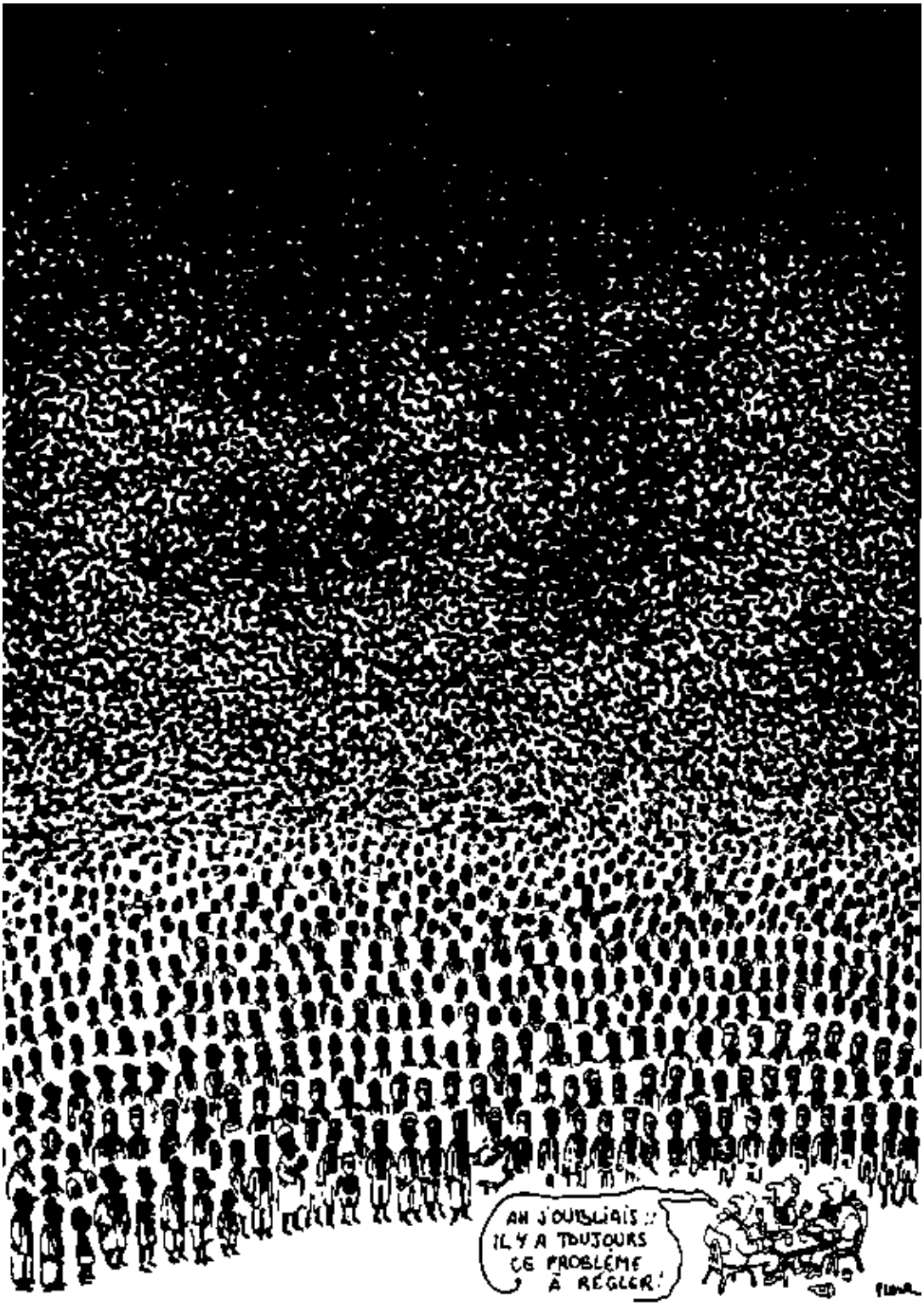


Illustration by *Plantu* published in *Le Monde* and reproduced as a greeting card for Action Internationale Centre la Faim (AICF) to help in its fight against hunger. Present in 19 countries, AICF works mainly in the areas of nutrition, water supply, medical service and agriculture, to come to the aid of victims of war, famine and natural disasters. Donations may be sent to: AICF, 9 rue Dareau, 75014 Paris, France. Tel: (1) 45 65 40 40 Fax: (1) 45 65 92 50 / CCP 2820 W Paris.

Action Internationale
Contre la Faim

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