

# Field Exchange

Emergency Nutrition Network



**Pellagra outbreak, Angola**  
**Kosovar refugees eat cake**  
**Relief evaluation, Wajir**  
**Currency devaluation, Congo**

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Dear Readers,

Over the past ten years large-scale outbreaks of pellagra have only occurred amongst populations dependent on emergency food aid. The most recent outbreak in Kuito, Angola highlighted in this edition of Field Exchange is the largest since the outbreak in Malawi among Mozambican refugees in the early nineties. Unfortunately Pellagra is not the only micronutrient deficiency disease to have been reported amongst food aid dependent populations in recent years. There have also been epidemics of scurvy, beri-beri, angular stomatitis and severe anaemia. The question is, why are these eminently preventable diseases allowed to develop amongst populations under international care and protection?

It is not as if we lack policies and strategies to prevent outbreaks or deal with them when they occur. Current humanitarian aid policy dictates that if an emergency affected population is entirely dependent on the emergency ration, fortified blended foods like Corn Soya Blend (CSB) should be added to the ration to remedy micronutrient shortfalls. In the longer term efforts are to be made to fortify one of the main ration commodities with micronutrients. So where do things go wrong?

In the Kuito case, it took several months to agree that fortified CSB should be added to the general ration after the outbreak of pellagra begun. It then took a further six months for the CSB to arrive. The fact that the outbreak in Kuito was not predicted - suggests that the assessment of the level of dependency on the general ration was flawed. The subsequent late provision of CSB may have been due to a variety of factors - cost, logistics or limited availability. Clearly we have not learnt sufficiently from past 'outbreak' experiences. The tragedy in Kuito now provides an opportunity to put that right.

The experience of Kuito in conjunction with past outbreaks highlight where efforts need to be focused to prevent future epidemics of micronutrient deficiency disease. First, the process and method of assessment of dependency on the general ration is often weak and insufficiently focussed upon micronutrient intake. Review and revision of both the process and method is therefore a matter of urgency. Second, there is a need for greater transparency about the difficulties of obtaining fortified blended foods for populations dependent on food aid. This is not the first time there have been problems in providing CSB. Potential impediments could be explored and identified at the start of any given emergency, and alternative strategies, e.g. fortification of cereals or oil, put in place and ready to implement should CSB provision prove problematic.

It is difficult to think of excuses for pellagra outbreaks amongst populations receiving food aid. The fact that the diversity and adequacy of emergency general rations supplied around the world seems to depend at least in part, on geo-political factors and cultural affinity between donor and beneficiary populations raises the issue of political commitment. Susanne Jaspas's article on food rations in Kosovo in this issue, 'Let them eat cake', demonstrates yet again the glaring inequities in global food aid. While no-one is seriously advocating the provision of chocolate bars and cake as part of the general ration, as

occurred in Kosovo, it is obvious that with enough political commitment the Kuito outbreak could prove to be an 'end-chapter' in a long history of preventable disasters.

This edition of Field Exchange also carries an evaluation by Oxfam of their emergency intervention in response to drought and flood between 1996-8 in Wajir district, Kenya. A key finding of the evaluation was that the most cost-effective component of the intervention, which included provision of general rations, livestock restocking and food for work, was the cash for work project. This finding is potentially very significant.

There has been a long, albeit largely theoretical, debate about whether the provision of cash rather than food in emergencies would be a more cost-effective form of intervention. Food aid still dominates in emergencies (80% in the current horn of Africa appeal). Cash could be provided as payment for work (cash for work) or simply in place of the general ration. Advantages of cash provision would be that large quantities of food do not have to be procured and moved long distances while the cash would allow recipients freedom to purchase other essential commodities apart from food e.g. fuel, shelter, water, livestock fodder and service crippling debt repayments. Shipping and other transactional costs amount to roughly 60% of food aid costs, while an estimated 50% of food aid is sold soon after delivery. Another potential advantage is that cash provision would inject effective demand into collapsing local markets. There are however certain unknowns with this type of intervention: the effect on security in conflict situations, the effect on gender resource control i.e. it may be easier for women to control donated food resources than cash. It is also unclear whether the injection of large quantities of cash into a food scarcity situation would lead to inflation. Equally, unclear is the extent to which donor governments would be happy to furnish humanitarian agencies with cash for distribution to individuals rather than cash which is tied to the purchase of food aid sometimes within the donor country. What is clear is that further studies are necessary and long overdue.

Finally, it is with a certain amount of regret that we publish Field Exchange's first anonymous article. To date agencies have been particularly open and transparent and have shown their commitment to learning through endorsing the publication in Field Exchange of articles written by their staff about field level experiences. These accounts have highlighted both positive and negative aspects of agency intervention. In this instance however the agency did not want to be recognised through this article in view of the sensitivity of the programme. The author has therefore edited the article in such a way so as the agency and country programme cannot be identified. The article contains valuable lessons, which should be documented and available to anyone establishing a Therapeutic Feeding Programme.

Editors,

Fiona O'Reilly  
Jeremy Shoham

# Effects of breastfeeding: Implications for Policies on HIV and Infant Feeding

Summary of published paper

The recognition that HIV is transmitted through breast-milk has raised important questions about strategies that promote breastfeeding in areas of high HIV prevalence. As this question is particularly relevant to emergency situations where levels of communicable diseases are often high, Field Exchange has continued to publish relevant findings on this subject (see Field Exchange 3, 8 and 9).

Theoretical models have been developed to assess the advantages and disadvantages of breastfeeding for HIV positive women as well as for women of unknown HIV status who live in areas of high HIV prevalence. These models have taken into account the risk of transmission through breastfeeding with regard to the age of the infant, the protection afforded by breast-milk against infectious disease mortality, the underlying HIV prevalence, and the rate of infant and child mortality. However, according to a recent WHO/UNAIDS<sup>1</sup> review an important limitation of these models was the poor quantification of the relative risks for mortality associated with lack of breastfeeding. Such models used relative risk estimates ranging from 1.3 to 7.9 and no model allowed for variable levels of protection within the first year of life.

**“Non-breastfed infants under 2 months were almost 6 times more likely to die”**

A recent study has addressed the protective effect of breastfeeding according to the age and sex of the infant, the cause of death and the education status of the mother.

Information on 1223 deaths of children

under two years of age was obtained from 8 studies conducted between 1980-98. It was found that protection from breast-milk declined steadily with age during infancy (5.8 for infants <2 months, 4.1 for 2-3 month olds, 2.6 for 4-5 month olds, 1.8 for 6-8



month olds and 1.4 for 9-11 month olds). In the first six months of life protection against diarrhoea was substantially greater than against deaths due to acute respiratory infection. For second year deaths, the pooled risk ratios from five of the studies ranged between 1.6-2.1. Protection was highest when maternal education was low.

**“Protection was highest when maternal education was low”**

changes as a result of the illness, and confounding. An attempt was therefore made in the study to avoid reverse causality by recording breast-feeding before the fatal illness episode. It was also recognised that the studies used did not employ a uniform protocol for defining causes of death. Furthermore, most of the studies did not provide sufficient information on breast-feeding patterns (exclusive, predominant, or partial) to allow a pooled analysis of this variable.

The researchers recognised that observational studies of breastfeeding and infant health may be affected by a number of methodological problems including self-selection, reverse causality, i.e. feeding

## Conclusions and recommendations

The authors of the study recommend that the findings on relative risk should be used in future simulations of the impact of withholding breastfeeding in HIV-positive mothers. The results will also help assess the risks and benefits associated with breastfeeding for children of different ages.

Particular attention is drawn to the higher levels of protection seen among less educated women, particularly for deaths between the ages of 6-11 months. The results are said to be consistent with the finding that infant-mortality differentials according to breastfeeding status are virtually non-existent in more developed countries where maternal education is high.

The authors suggest that the main policy issue arising out of the research is whether or not HIV positive mothers with low levels of schooling and income will be able to safely feed their infant with breast-milk substitutes.

<sup>1</sup> WHO (2000) Effect of breastfeeding on infant and child mortality due to infectious diseases in less developed countries: a pooled analysis. WHO collaborative study team on the role of breastfeeding on the prevention of infant mortality. The Lancet, vol 355. February 5th, 2000

# Is extrusion cooking of blended foods really advantageous?

Published Paper

Blended food used in a supplementary feeding programme, Pavarando Camp, Colombia. 1998 H. Timmermans (UNHCR)

**B**lended foods prepared by mixing a cereal flour, usually maize flour, with soy flour to get a high protein food with a good balance of amino acids are widely used in food aid programmes. These foods are included in emergency general rations for populations entirely dependent on food aid and also used in selective feeding programmes for malnourished individuals. Blended foods are usually pre-cooked by extrusion so that less cooking time is required and to improve shelf-life.

A study<sup>1</sup> funded by Nutriset and ANVAR (Agence Nationale de la Valorisation de la Recherche) compared the starch digestibility of a blended food prepared with and without extrusion cooking. Resistant starch along with soluble and insoluble dietary fibres were measured in vitro before and after extrusion. Starch digestibility was assessed in 8 volunteers who ate a test meal with either 100 gms of extruded blended flour (EF) or non-extruded (NEF) blended flour cooked for 15 minutes at 80 degrees Centigrade in 500 ml of water.

Starch digestibility was measured by C<sup>13</sup> (radio-active isotope of carbon) enrichment of breath samples for 8 hours. Concentrations of hydrogen in the breath were measured during 12 hours to assess bacterial fermentation in the colon.

## Results

In vitro (outside the body of a person or animal in conditions created artificially by scientific experiment), resistant starch and soluble and insoluble dietary fibres were higher in NEF. However, in vivo (inside the body of a person) C<sup>13</sup> excretion was no different for EF and NEF while hydrogen excretion was significantly higher for EF. Furthermore, feelings of satiety were marginally higher with EF. The authors of the study raised the following points:

i) The study was made on only one sample of blended food prepared from whole maize and soy grains with and without extrusion cooking. It is not known whether these results would be obtained with other types of blended flour especially with a lower fibre content.

ii) Cooking for 15 minutes as is commonly practised in food aid programmes was probably enough to gelatinise starches present in the NEF to be well digested in healthy adult subjects. However, the similar starch digestibility of EF and NEF found in the study may not be extrapolated to malnourished children who often have an impaired starch digestion.

iii) In malnourished children, excessive fermentation may lead to flatus, bloating or abdominal pain.

iv) The increased satiety following an EF meal was unexpected. But as the statistical significance of the difference was border-line, the result needs to be confirmed by other studies. Nevertheless, a reduction of appetite due to a change in fibre structure and increased colonic fermentation or a mechanical effect seems plausible.

In conclusion the authors state that “extrusion cooking of blended flours for porridge preparation does not seem to present a major advantage in terms of digestibility in healthy subjects. It also suggests that extrusion cooking of high fibre blended flour may increase bacterial fermentation in the colon which may also depress appetite. Further studies in malnourished children are needed to determine whether extrusion is warranted when taking into account its advantages and also its increased costs and potential disadvantages”.

<sup>1</sup> Meance.S, Achour.L and Briend.A (1999): Comparison of starch digestibility of a blended food prepared with and without extrusion cooking. European Journal of Clinical Nutrition (1999) 53, pp 844-848

## Editorial comment

i) These findings do not alter the fact that extruded blended foods have a longer shelf-life than non extruded blended flour (NEF) and:

ii) The lower resistant starch and fibres found in vitro in extruded blended flour (EF) may indicate that these flours require less than 15 minutes cooking time to achieve comparable digestibility with NEF after 15 minutes cooking of the latter. This may have implications for fuel saving.

# Currency devaluation impact on nutritional status in Brazzaville, Congo

## Summary of Published paper

Currency devaluations can have a dramatic impact on peoples entitlement and in extreme cases contribute to nutritional crises. Devaluations are often carried out as part of economic structural adjustment programmes promoted by international organisations like the World Bank and IMF. International financial assistance in the form of grants or loans from these organisations may be contingent upon recipient countries undertaking economic reforms like devaluation or reducing expenditure in social sectors. These macro-economic 'adjustments' may be implemented overnight hitting the poorest members of society really hard. Yet, the impact of these initiatives on food security and resulting nutritional status are rarely measured. Recent events in Brazzaville, Congo underline the potentially rapid adverse impact devaluations can have upon nutritional security in developing countries.

The African Financial Community (CFA) franc was devalued by 50% on the 12th, January of 1994 in 14 sub-saharan African countries.

## “young children had undergone a substantial deterioration in their nutritional status”

A survey<sup>1</sup> was conducted in 1996 to evaluate changes in feeding practices for infants, the quality of complementary foods, and the nutritional status of children and their mothers compared to a survey undertaken in 1993 prior to devaluation. The 1996

survey was in two districts of Brazzaville where the earlier survey had been conducted and involved a representative sample of 4206 households with a child aged 4-23 months.

## Results

Daily food expenditure increased considerably between 1993-6 with numerous households declaring that they had entirely abandoned certain food that had become too expensive, e.g. chicken, bush meat and fresh-water fish. Although breastfeeding and complementary feeding rates had remained stable the complementary foods given to infants had declined in quality, e.g. gruels were being made from local ingredients rather than imported flours as occurred previously and therefore had half the energy density.

The anthropometric indicators showed that young children had undergone a substantial deterioration in their nutritional status. Between 1993-6 the prevalence of stunting increased from 12.1% to 15.5% which was highly significant. There was also a statistically significant increase in the prevalence of wasting from 6.0% to 8.8%. The mean body mass index of mothers decreased by 1.28 kg/m<sup>2</sup>. This is significant and corresponds to a weight loss of nearly 3.3 kg in three years for a woman of average height. As a consequence the number of women exhibiting thinness (body mass index < 18.5kg/m<sup>2</sup>) increased very significantly from 11.3% to 15.6%.

The authors of the study acknowledge that the impact of the devaluation on nutritional status would not only have resulted from less access to food, but also poorer health care and general caring practices as women became increasingly engaged in income generation activities to offset reduced spending power. The authors also concluded that a more accurate assessment of the specific effects of the devaluation on the nutritional status of urban populations would be provided by comparing the results obtained here with those in another large capital in the CFA zone.

<sup>1</sup> Martin-Prevel, Y et al (2000). Deterioration in the nutritional status of young children and their mothers in Brazzaville, Congo, following the 1994 devaluation of the CFA franc. Bulletin of the World Health Organisation, 2000, vol 78, pp 108-116.

# Infant Feeding in Emergencies: Recurring Challenges

By Marie McGrath

## Published Report

The importance of infant feeding in emergencies has been highlighted during recent emergencies in countries such as Iraq and Bosnia, where breastmilk substitutes are commonly used. Anecdotal evidence suggests that, in these situations, infant feeding practices have had a negative impact on child health. The 1999 Kosovo crisis presented an opportunity to investigate the policy and practice of agencies involved in the humanitarian response with regard to infant feeding.

Field research was carried out in Macedonia between 15 June and 31 July 1999 and gathered data on the following:

1. The availability, awareness and implementation of existing policy instruments and guidelines on infant feeding in emergencies;
2. The flow of relief items used for infant feeding and any accompanying violations of the International Code of Marketing of Breastmilk Substitutes;
3. The quality of infant feeding interventions;
4. The infant feeding practices of the emergency-affected population.

The methodology included a literature search of guidelines and policies relating to infant feeding in emergencies, questionnaires for field and headquarters personnel on infant feeding issues and structured interviews with key field personnel. In two camps, an infant feeding practice survey (including 24 hour recall) of children 2 years and under was conducted. The response rates were affected by the sudden mass return of refugees to Kosovo in June, 1999.

The research found that there was poor awareness, use and implementation of guidelines and policy instruments among emergency personnel operating in Macedonia. UN agencies, International and local NGOs were all affected. Where guidelines were observed, this was often as a result of individual rather than organisational learning. The International Code was contravened in a number of ways including the general distribution of infant formula, complementary foods, bottles and teats and the donation of such products to facilities in the health care system. A number of factors constrained effective implementation of and adherence to MOUs, guidelines and the Code and these included poor levels of interagency co-ordination and gaps in the applicability of the instruments themselves.

Infant feeding items reached the emergency-affected population through a wide range of channels. Large proportions of the items were unsolicited donations that passed through a number of agencies before reaching the affected population. Lack of co-ordination and monitoring of these items meant that it was very difficult to trace these flows. This situation resulted in a range of infant feeding interventions with the affected population which varied substantially in quality. Mother and Baby Tents were the focus of infant feeding interventions in camps and the quality of



support given was very variable. Breastfeeding support was rarely adequate though MBTs often provided infant formula, bottles, and complementary foods to mothers and infants. Other interventions included postnatal support in maternity facilities which was in some cases undermined by the donation of breastmilk substitutes to these facilities.

The camp surveys of infant feeding practice showed that 88% of the 242 children surveyed had initiated

breastfeeding. Among infants under 6 months of age, 60% were exclusively breastfed and 24% predominately breastfed. The main supplementary items in infants under six months were water, tea and cow's milk. Breastfeeding was continued in 50% of children aged 12 - 15 months and 22% of children aged 20 - 23 months. The use of liquid or powdered (non-formula) milk was high. Among infants aged 6 - 12 months who were being breastfed (60%), 74% were receiving liquid or powdered milk. Among the remaining infants aged 6 - 12 months not being breastfed, all were receiving liquid or milk powder and none were receiving infant formula. In Stankovec I camp, the timely complementary feeding rate for infants aged 6 - 9 months was 33%. Among children receiving non-milk foods, biscuits were the main complementary infant food introduced (67%). In Neprostino camp, 47% of all children 2 years and under had fed on a bottle in the previous 24 hours.

A negative impact of the crisis on rates of initiation of breastfeeding was not identified. However the cohort effect was observed. Among infants no longer breastfeeding, a significantly higher proportion (81%) aged 6 - <12 months stopped breastfeeding before the age of 4 months than among children aged 12 - 24 months (32%) (p=0.001, risk ratio 2.53). Perceived inadequacy of breastmilk was the main reason given for cessation in all age groups. The long-term consequences of a reduction in the duration of breastfeeding are unknown but could be detrimental if access to cow's milk or water and sanitation conditions decline. The prevalence of diarrhoea in children 2 years and under was high (54%). More recent data from Kosovo indicate an increased prevalence of childhood diarrhoea and ARI in the returnee population. For a more vulnerable population in less sanitary camp conditions and with fewer international resources available, the negative consequences on infant morbidity and mortality of the aid operation may have been much greater.

Based on the research findings a number of recommendations for policy makers and practitioners are made. The research report and recommendations are available in the document referenced below.

## Reference

Meeting the nutritional needs of infants during emergencies: recent experiences and dilemmas – Report of an International Workshop, Institute of Child Health, London, November 1999. For more information contact Anna Taylor, Save the Children, UK, email: a.taylor@scfuk.org.uk

<sup>1</sup> Kosovar Albanian Health Survey Report, IRC, Institute of Public Health, Pristina, WHO, CDC, September 1999

# China's great famine 40 years later A need for historical closure

Published Review

Forty years ago China was in the middle of the world's largest famine where some 30 million people starved to death (see Field Exchange 8). A review<sup>1</sup> article in the British Medical Journal discusses how this man-made famine was at the time largely covered up within China and that even today China has not undertaken an open, critical examination of this unprecedented tragedy.

The review traces the origins of the famine to the leadership's decision to launch the 'Great Leap Forward' whereby economic development was to be promoted through promoting heavy industry. Based on Stalinist ideology tens of millions of rural peasants were ordered to mine local deposits of iron ore and limestone, to cut trees for charcoal and to build simple clay furnaces to smelt metal. Peasants were forced to abandon all private food production.

At the same time fabricated reports of record grain harvests were issued to demonstrate the superiority of communal farming. These gross exaggerations were then used to justify the expropriation of higher shares of grain for cities and the establishment of wasteful communal mess halls serving free meals. In reality by the spring of 1959 there was a famine in a third of China's provinces.

The famine showed clear marks of 'omission', 'commission' and 'provision'. These three processes recur in all modern

## "The famine showed clear marks of omission, commission & provision"

man-made famines. The greatest omission was the failure of China's rulers to acknowledge the famine promptly and to secure foreign food aid. The Chinese government took nearly three years to act. Taking away all means of private food production, forcing peasants into mismanaged communes and continuing food exports were the worst acts of commission. Preferential supply of food to cities and to the ruling elite was the deliberate act of provision.

The true extent of the famine was not revealed to the world until the publication of age distribution data from the country's first reliable population census in 1982. These data made it possible to estimate the total number of excess deaths between 1959 and 1961, and the first calculations by American demographers put the toll at between 16.6 and 23 million. More detailed later studies came up with 23 to 30 million excess deaths and unpublished Chinese materials hint at totals closer to 40 million.

The lack of accuracy is as expected. All death tolls cited for major famines have large margins of error. This is true even for

events unfolding amid unprecedented publicity. An attempt to discern a coherent picture of morbidity, mortality and nutritional status during the 1991-2 famine in Somalia, an effort based on 23 separate field studies, ended in failure. Similar controversies surround the recent estimates of the excess deaths in Iraq attributable to economic sanctions after the Gulf war.

## "The review also points to western indifference to the great famine"

The author highlights the need for open discussion, moral examination and historical closure and cautions that if accounting does not happen soon, the direct memories of survivors will be

lost and many facts will never be known. The review also points to Western indifference to the great famine. Eyewitness stories of refugees who fled to Hong Kong were widely dismissed and rarely reported during the famine years. Incredibly, the 1997 edition of the New Encyclopaedia Britannica does not even list the catastrophe in its tabulations of famines in the past 200 years.

<sup>1</sup> Smil.V (1999): China's great famine: 40 years later. BMJ Volume 319, 18-25th December, pp 1619-1621

## Compliance problems with vitamin pill distributions

Unpublished report

A pellagra outbreak hit war affected Kuito town, the capital of Bie Province in Angola in the second half of 1999 (see article in this issue of Field Exchange, page 12). MSF Belgium organised a 'vitamin B complex' distribution to all women over the age of 15 years. The response was seen as an emergency measure as other sources of niacin, e.g. ground nuts, CSB and dry fish were not available in the emergency general ration. Women over 15 years were targeted due to lack of resources to organise a distribution to the entire population. MSF Belgium were however aware that although pellagra was diagnosed most frequently in this demographic group, the entire population was also probably equally affected. Thirty tablets were distributed to all women.

MSF Belgium and ICRC conducted a nutrition survey<sup>1</sup> shortly after the distribution. Part of the survey was designed to assess compliance with the vitamin distribution. Consumption of the vitamin was recorded by counting the number of

tablets left in the distributed tablet bags. A woman was categorised as compliant when the number of tablets corresponded to the 30 tablets distributed less the number of days spent since the distribution allowing for three tablets either way. The survey was conducted 6-11 days after the distribution. Nine hundred and fifty women were assessed.

### Results

Forty four percent were compliant in the town and 42% in the camps for IDPs. Compliance was judged to be poor. Several explanations were offered for this:

- There was confusion between vitamins and contraceptive tablets which were only to be taken once monthly
- The vitamin tablet appeared to increase feelings of hunger
- There was a lack of understanding of the concept of prevention of micro-nutrient deficiency amongst beneficiaries

- Twenty percent of women had less tablets than expected as they shared tablets with other family members or because they took more tablets than recommended. (B vitamins are not stored by the body so that excess intake does not afford protection)

The authors of the survey report concluded that:

- A vitamin B tablet distribution does not appear to be the most effective solution to control a pellagra outbreak.
- Targeting women was an emergency measure but not satisfactory as all strata of the population were probably deficient or at risk.
- Distribution of additional foods rich in vitamin B remains the best strategy to control a pellagra outbreak.

<sup>1</sup> MSF/ICRC (1999) Rapid Nutritional Assessment, Kuito, Province of Bie, Angola, December 1999. Unpublished Field Report. For more information contact: Sophie Baquet MSF Belgium. Email: sophie.baquet@msf.be

# Don't let them eat cake

By Susanne Jaspers

Susanne Jaspers is a Nutritionist specialising in emergency nutrition, food aid and food security. This article is based on her experiences in Albania and Macedonia where she found Kosovar refugees suffering from obesity not malnutrition.



KUKES/ALBANIA - © P. PIETERSE (CONCERN)

This time last year, I was cooking spaghetti for 300 new arrivals at a camp for Kosovar refugees in Albania. The camp itself, on the Adriatic coast, was like any overcrowded European camp site: rows of tents, car parks, vendors' stalls and ice cream vans. I looked at the people I was about to feed, and saw plump-cheeked children, heavy men and heavier women. They did not look like the refugees I was used to, the victims of African crises whose skeletal limbs and emaciated figures haunt television viewers the world over.

I worked as an emergency nutritionist, first in Albania and later in Macedonia. By July 1999, it became clear that the main nutritional problem amongst Kosovars was not undernutrition but obesity. This was confirmed by a nutritional survey in January 2000 in Kosovo, which found that whilst only 5.3% of adult women were undernourished, 23.6% were overweight, and 10.4% were obese. Amongst the elderly (both sexes), 32% were overweight and 16% were obese. Nor is obesity restricted to the Kosovars: a Bosnian doctor working in Sarajevo recently confirmed that obesity is a growing problem in Bosnia, too - and that it is more prevalent now than before the war.

Obesity is associated with hypertension, diabetes and heart disease. Although, the condition has increased in all European countries in the past ten years, it is particularly affecting people in the Balkans and Eastern Europe. This is probably due to the high intakes of animal products in their traditional diet. Since the war - during which there seems to have been a temporary reduction in obesity, these countries have witnessed an upward trend.

The international community responds to any disaster with food aid, and the Kosovo crisis was no exception. However, the quantity and types of food provided to some Kosovars, whilst they were refugees, was exceptional. The UN used the same procedures to work out food aid needs as elsewhere, but numerous agencies decided to use private funds to purchase food. Meanwhile, many donor countries provided funding direct to NGOs to buy additional foods; and donations - ranging from Mars bars, Italian cakes, pain au chocolat, Turkish delight, as well as healthier alternatives such as milk, cheese, fruit juice, fresh fruit and vegetables.

Not all refugees received these foods. Some refugees in Macedonia lived off bread, tinned fish and vegetables for months, and others received almost nothing (for example refugees living with Albanian hosts). Some clearly inappropriate and potentially harmful foods found their way to the camps - infant formula and baby foods, for instance, were distributed there, despite the international codes

against the promotion of such products.

As a nutritionist, my job was to ensure that potentially harmful foods were not distributed, and a fair distribution of the rest of the food. Given the number of agencies involved in the operation, this proved an almost impossible task.

Nutritional surveys show no significant increase in the prevalence of undernutrition in Kosovars from December 1998 to January 2000. This could be interpreted as a successful relief operation, or alternatively, that people had sufficient fat stores to deal with a period of shortage.

Two key questions that emerge from the food response to the Kosovo crisis. First: why was such an emphasis placed on food aid? And second: how can we justify the provision of high cost food items to Europeans who were not undernourished when in most African crises we cannot even provide undernourished populations with a basic survival ration.

Food aid forms part of the basic package of relief interventions to any emergency affected population. Handing out food to hungry people also provides good images for the media. The problem is, when the public is kept in the dark about the real needs of the refugees, as it was during the Kosovo crisis, well-meaning people end up sending often inappropriate gifts.

It is true that Kosovar refugees were cut off from their normal sources of food supply and needed food aid. Nutritionists usually recommend food rations that are culturally acceptable. This alone would have justified a different food ration for Kosovars than for Ethiopians. But did it justify chocolate and cake? The issue is one of equity and impartiality. As humanitarians, we claim to provide assistance on the basis of need. The aid community did not do this in 1999, when the need was clearly greater in places such as Somalia, Sudan and Angola.

It is difficult to be truly impartial in responding to emergencies. It is not surprising that western individuals feel greater compassion for victims of a crisis that is closer to home. Governments and NGOs, however, have a responsibility to respond according to need if they claim to be "humanitarian". As for famine victims elsewhere, I am sure they heard about the response to the Kosovo crisis, and I hope that they will demand their Mars bars, Turkish delight and cake. I doubt they will get it.

This article first appeared in the New Statesman, on 15 May 2000. For subscriptions, phone 00-44-207-592-3626 (or freephone in the UK: 0800-731-8496).



REFUGEE CAMP/KRUME - © P. PIETERSE (CONCERN)

# Feeding without fear

Anonymous

This is a story to illustrate that however experienced you are, there is always the chance that you will find yourself in a situation that you are not prepared for, and that you do not feel qualified to deal with. Unfortunately, this is the nature of disasters, and the humanitarian system in which we work. It is also a story which shows that with the right support, determination, energy and common sense, you can probably do it. Moreover, you may have to, because there will be no one else. In my case, I ended up re-organising a therapeutic feeding programme for adults, when I thought I was going to do a food security assessment. I had no recent experience of therapeutic feeding, certainly not of adults, and have no medical background. Whilst obviously it would have been better to have someone qualified and experienced in therapeutic feeding, I think that in the end, we did a fairly good job.

Last year, I went to Central Africa to do a food security assessment of people recently displaced by fighting in a nearby region. At least that is what I thought I was going to do. I had also been asked to take a quick look at the therapeutic feeding programme. The nutritionists at the agency's headquarters wanted to be re-assured that the correct procedures were being followed. Before my departure, however, there were no major concerns.

In my 15 years experience of working as an emergency nutritionist, I have often advised on and co-ordinated feeding programmes. On occasion, I also had to teach the basics of therapeutic feeding, so I was aware of the recent developments and new guidelines for the treatment of severe malnutrition. I therefore felt I could review the programme, but not manage the feeding of severely malnourished individuals. The last time I had any direct involvement in therapeutic feeding was in 1987, when we used to give mothers of severely malnourished children a take home ration of DSM, oil, and sugar to feed their children in the afternoons.

When I visited the feeding programme, I knew just about enough to realise that there were several problems with the procedures used in the programme. Problems ranged from the actual treatment of severe malnutrition, to ones related to the organisation and management of the programme. The programme was implemented by highly motivated national staff, who had received some training in feeding programmes during earlier conflict related displacement in 1997. The situation in 1999 was very different however. The majority of the severely malnourished had oedematous malnutrition, something that was not seen before in the area concerned. Also, the prevalence of severe acute malnutrition was much higher in 1999 than in 1997.

So we were in a serious situation, with very high levels of severe, oedematous, malnutrition in adults, and no agency field staff who knew how to deal with it. After one week of frantic phone calls to headquarters, I was finally told there was no one with experience of therapeutic feeding

**“Without doubt, the other agencies and the WHO guidelines were the most crucial in helping us re-organise the programme”**

who could come to assist, and “if you have to save lives, you save lives.”

This is what saved us (and them):

- The presence of other agencies who were running therapeutic feeding programmes.
- Very supportive headquarters staff.
- Availability of the new WHO guidelines on the treatment of severe malnutrition
- Knowledge of related public health issues, e.g. the need for immunisation, adequate water supply, sanitation, etc., as well as the necessity of adequate general rations for the family.
- Dedicated international and national nurses within the organisation.
- My previous experience in the management and organisation of feeding programmes, e.g. issues of crowd control, number of beneficiaries per centre, record keeping, weight monitoring, follow-up, etc.
- The realisation that as long as your centre is well organised enough to monitor people individually, you can try things out, and adjust feeding regimes accordingly.
- The realisation that no one will die from one bowl of porridge.
- The realisation that you can talk to malnourished adults. They can tell you how they feel and if their condition is getting better or worse.

Without doubt, the other agencies and the WHO guidelines were the most crucial in helping us re-organise the programme. However, some innovation was necessary. We did not have the modified ORS for malnourished people (ReSoMal), nor did we have the F-75 therapeutic milk for phase 1 of therapeutic feeding. We modified normal ORS immediately for oedematous cases, by

adding 2 litres of water instead of 1 litre, and adding 50 g of sugar. The headquarters nutritionist suggested a modification of F-100 therapeutic milk. By adding more water, as well as oil and sugar, we lowered the protein content whilst keeping the energy content at 100 kcals/100 ml. This became known by everyone as “special milk.” Immunisation of children was another immediate priority, as was the recruitment of health staff specifically for the feeding programme.

All feeding beneficiaries were screened, to determine whether they should be in therapeutic or supplementary feeding. These were then separated in different shelters for feeding, and given different coloured bracelets. On the first day of the new therapeutic feeding, every adult was asked on entry, whether their oedema had got better or worse in the last few days. People with very severe oedema, or whose oedema got worse, were put in phase 1, and received “special milk” for at least three days according to their body weight.

Arrangements were made to weigh people on “special milk” on a daily basis. If their oedema was going down over these days, they were allowed to eat solid meals as well the following day, but were closely monitored. We knew this was not strictly according to protocols, but it was difficult to keep adults on a milk only diet for more than 3 days. Not only did they find this very boring, but also, they had really looked forward to eating their traditional food upon coming home.

Amazingly, our re-organisation and new feeding regime worked. It was one of the most satisfying experiences in my professional life to have people tell me their oedema was going down after a couple of days on “special milk.” It seems strange now, but when we started, I honestly thought we would kill someone with a bowl of porridge that was too high in protein for a severely malnourished person. I later realised, that even if someone should not have received porridge yet, and their condition deteriorated, we would soon know about it, and could adjust their feeding regime.

This brief description cannot possibly reflect the often chaotic and hectic first week of re-organisation. Of course there were many more things to do than written here; new registers, attendance sheets, organising regular weighing, follow-up people who did not lose their oedema or did not gain weight later, follow-up of defaulters, medical examination and treatment of sick people, screening of new arrivals, registration of new arrivals for general rations, etc., etc. It wasn't perfect, but I think I can honestly say we improved some people's lives, and perhaps even their chances of living, at least for a little while.

## Nutritionists, food specialists and food logisticians wanted

NutritionWorks and International Health Exchange are setting up a specialist register for food and nutrition specialists. The register will support recruitment to food and nutrition posts for the following agencies as well as for IHE's wider client base:

- The World Food Programme,
- Action Against Hunger,
- Concern Worldwide,
- Oxfam,
- Save the Children Fund.

If you have expertise in any of the following areas, and are available for either long or short-term postings or consultancies we would like to hear from you: public nutrition, nurse/nutrition, food security, food aid, food logistics.

Both emergency and development expertise is required. Jobs may include the management or implementation of food distribution and feeding programmes (therapeutic and supplementary), food security assessments, nutritional surveys, project planning and evaluations.

For further information and an application form, please contact Patrick Brooke, International Health Exchange, London SE1 7AE, UK. Tel: 00-44-207-620-3333 Email: pat@ihe.org.uk

## New publication

### Children's Health in Emergencies: practical guidelines for health workers

Produced as a special supplement to Healthlink Worldwide's popular international newsletter *Child Health Dialogue*, this publication will provide a unique audience of mainly indigenous health and development workers with up-to-date, practical information on appropriate policies and procedures to follow in the event of an emergency occurring in their area. Written in clear, easy to understand language, it explains what health workers can do in the early stages of an emergency. It describes how management and prevention of childhood illnesses such as diarrhoea and malaria differs in emergency situations, the basics about malnutrition in emergencies and how to work with communities and other organisations.

Single copies are free to indigenous organisations in developing countries. For others the cost is £2.50/US\$5 and includes postage. Bulk copies are also available free to organisations that are able to distribute the publication through their own channels.

For further information contact Coral Jepson, Healthlink Worldwide, Cityside, 40 Adler Street, London E1 1EE. Telephone: 0207 539 1570; Fax: 0207 539 1580 or visit our web site; <http://www.healthlink.org.uk>

## The management of nutrition in major emergencies

The newly published WHO manual 'Management of nutrition in major emergencies'<sup>1</sup> replaces the 1978 edition, and reflects scientific and conceptual advances in understanding the prevention, causes and treatment of malnutrition in emergencies. It reflects the input of a wide range of individuals and agencies.

One of the major conceptual advances incorporated in the manual is that emergency management is viewed as a multi-sectoral venture; ministries and departments of local government need to plan and work together for emergency prevention, preparedness, response and rehabilitation. Safeguarding the nutritional status of the population also requires a holistic and proactive approach, which implies more than food distribution and health protection. Action is called for in the areas of environment, population, economic and human development, land and water management, production and trade, services, human rights, governance, empowerment and growth of civil society.

The book covers the concepts, principles, and precise measures needed to ensure adequate nutrition in both the relief phase and the subsequent rehabilitation and development phases.

There are seven chapters. The first, on meeting nutritional requirements, explains the importance of nutritional assessment as a fundamental tool for calculating food needs, monitoring the adequacy of food access and intake, and ensuring adequate procurements. The chapter also sets out recommendations for mean daily per capita intakes of energy and protein and for micronutrients and other specific nutrients. The major nutritional deficiencies are covered in chapter two, which includes detailed information on the signs, symptoms, prevention, and treatment of protein-energy malnutrition, iron-deficiency anaemia, vitamin A deficiency, iodine deficiency disorders, beriberi, pellagra, and scurvy. Chapter three describes the methodology for measuring malnutrition. Information includes target audiences for assessment, advice on body measurements and clinical indicators

of malnutrition, and precise instructions for conducting rapid nutritional surveys, individual screening, and nutritional surveillance.

Chapter four provides a detailed guide to the planning, organisation, and delivery of general feeding programmes. Topics covered include basic requirements for suitable food commodities, principles of good organisation and co-ordination, and the composition of a general ration calculated to meet the populations' minimum requirements for energy, protein, fat, and micronutrients. Guidelines for selective feeding programmes are presented in chapter five, which covers both the supplementary feeding of vulnerable groups and the therapeutic feeding of individuals suffering from deficiency diseases.

In view of the close link between infectious diseases and malnutrition, chapter six offers advice on the organisation of services to ensure priority immunisations and to monitor and treat each of twelve infectious diseases commonly seen in developing countries. The book concludes with advice on the planning, administration, and logistics of emergency preparedness and response programmes, emphasising the need to detect vulnerability to nutritional deficiencies and monitor early warning indicators.

The essential purpose of this manual is to help build national capacities and human resource development within the country. Thus, the manual could be used as a framework for developing teaching modules and training programmes.

<sup>1</sup> 'Management of Nutrition in Major Emergencies' is available on request from Marketing and Dissemination, World Health Organisation, 1211 Geneva 27, Switzerland. The price of the book is Sw.fr. 72 (US \$64.80), in developing countries Sw.fr. 50.40.

<sup>2</sup> Management of Nutrition in Major Emergencies, Geneva, World Health Organisation (in collaboration with UNHCR, International Federation of Red Cross and Red Crescent Societies, and World Food Programme), 2000.

# ACC/SCN Working Group on Nutrition in Emergencies

Excerpts from Working Group Report

The ACC/SCN held its 27th Session at the World Bank in Washington DC last April. About 60 participants from NGOs, bilateral and UN agency were present for the afternoon meeting of the Working Group in Emergencies. The agenda included, among other topics, an update on research work among malnourished adults and nutritional problems faced by infants in emergencies.

## Update on Adult Malnutrition programmes and research in Brazzaville and Burundi

Carlos Navarro, ACF-F Action Contre La Faim

Dr. Navarro presented a broad overview of some of the problems encountered when trying to treat severely malnourished adults in Burundi and Congo-Brazzaville, where ACF is undertaking an analysis of its operational (nutritional) programmes. The project in Burundi has been operating since 1994 and at least 1,000 persons per month (including 700 adults) have been treated in 5 Therapeutic Feeding Centres (TFCs) in two provinces. The programme in Brazzaville began in July 1999, and has treated approximately 600 patients per month, including 400 adults, in 3 TFCs. The objective of the presentation was to present some of the operational dilemmas that arise.

Emergency nutrition interventions aiming to address adult malnutrition, are becoming increasingly common practice in emergencies and there continues to be an enormous demand for information on diagnostic criteria, and protocol specifications.

In summary, the following issues were highlighted as operational problems in ACF programmes:

### Criteria for assessment of acute adult malnutrition

- The inappropriateness of Body Mass Index (BMI) for assessing acute malnutrition ("a progressive loss") in emergencies, as opposed to chronic malnutrition (a "steady state" of malnutrition), is increasingly recognised. Despite ongoing ambiguities regarding cut-offs, MUAC and clinical outcomes are used more frequently as assessment tools for admission criteria in current operations.
- The inability to stand has been identified as a very good prognostic tool to predict mortality in malnourished adults. Ways to identify this functional deterioration by measuring strength are currently being explored.
- Preliminary findings have shown severely malnourished individuals recover well in supplementary feeding interventions. Those admitted with BMI < 16 have recovery rates of at least 50% and those admitted with BMI between 16 and 17 have recovery rates greater than 90%. Current research is focusing on the follow-up and outcomes of the remaining 50%.

### Medical management of patients in TFCs

The high prevalence of both acute and chronic disease among malnourished adults poses a serious challenge in the management of adult malnutrition. The design of therapeutic feeding for adults

must take into consideration some important medical issues. These include:

- In adults, severe malnutrition beyond a certain threshold is almost always accompanied by medical complications;
- Acute diseases such as diarrhoea do not necessarily contribute to malnutrition in adults to the same extent as in children, instead malnutrition is often associated with, or is the consequence of, a chronic and debilitating disease such as chronic hepatic and cardiac complications, which are more prevalent in adults. Case by case diagnosis is essential and either referral services or hospital facilities should be provided. It is important to recognise that medical and nutritional problems both need addressing.
- Staff working in therapeutic nutrition centres may not have sufficient medical skills, or may not be appropriately trained to address severe adult malnutrition.

An agency that wants to assist severely malnourished adults may therefore need to consider a complete revision of the strategy, objectives, training, and other means (including human) it usually puts in place to cope with severe malnutrition in emergencies.

### Oedema and refeeding oedema

- The differential diagnosis of famine oedema in adults is complicated by the high prevalence of other diseases (cardiac insufficiency, cirrhosis, etc.). Further training and guidelines, adapted for staff in emergency TFCs need to be developed.
- Large numbers of patients have been identified with re-feeding oedema or have failed to reduce levels of oedema despite appropriate diagnosis and treatment. This is most likely due to inappropriate foods being consumed e.g. those with high salt or low protein content or both.

### Treatment considerations

- Treatment with the same protocols proposed for children (with changes in the quantities per kilo) have been found to be very satisfactory. Weight gains, duration of stay and success rates may be as high as those for children.
- Acceptability and adherence to a therapeutic diet is more challenging for adults, in particular the refusal of a pure milk based diet remains a constraint. Alternatives to milk (with the same nutritional properties) are currently being explored.

### HIV/AIDS

- In both Brazzaville and Burundi, ACF has reported that a high prevalence of the patients admitted to the TFCs are HIV positive. Despite this, recovery rates and other indicators (weight gain, duration of stay) do not seem to be affected, suggesting that HIV positive malnourished adults do recover as well as HIV negative adults.
- The impact of the high prevalence of HIV related malnutrition in adults and its therapeutic management is not well understood. Research into HIV and malnutrition in emergencies is urgently required, however the complexity of the topic, and the ethical and operational problems presented make it extremely

difficult for any agency to conduct such research.

### Social considerations

- Adults have a caring role in the family, are the source for food and revenues, and the actors of reconstruction, social representation, etc. Separating them from their social environment may have deleterious consequences for their livelihoods and their ability to cope with, or recover from their current situation. Shorter-term treatment and ambulatory treatment may be appropriate strategies for addressing these issues.
- In locations where malnutrition related mortality is high among adults indirect social problems may also arise. In Burundi, many children have become orphans. ACF and its partners in Burundi are actively involved in taking care of orphans, and also in reuniting them with their surviving relatives.

### Nutritional problems faced by infants in emergencies

Prof. Michael Golden, University of Aberdeen

Prof. Golden outlined a number of important problems/issues regarding infant nutrition. Issues about the inclusion of infants in nutritional surveys were covered in an article post-script written by Prof Golden in Field Exchange 9\* and so will only be cursorily dealt with here. The main points about infants in nutritional surveys made in the presentation were that:

- Infants are not systematically surveyed.
  - Current selection criteria for surveys often only include children above 6 months and longer than 65 cm so that there is a selection bias.
  - There are no established cut-off points or criteria for infants less than six months to define severe malnutrition (and admission into TFCs).
  - The weighing scales and length boards currently provided by UNICEF are insufficiently accurate to screen and manage high-risk infants.
- Additional points raised by Golden about infant nutrition in emergencies included the following:
- Currently F100, diluted to lower the renal solute load and osmolarity, is used empirically to re-feed infants. There have been no studies on alternative diets for the severely malnourished infant.
  - Rehabilitating the severely malnourished infant whilst maintaining lactation raises a number of serious difficulties. Severely malnourished infants:
    - do not cry and, because they do not complain or show hunger, are neglected (this is not abuse),
    - lack strength and therefore are not able to suck effectively or stimulate milk production,
    - have a very high mortality risk.
  - A technique to support lactation, known as supplemental suckling, has been developed (see Field Exchange 9).

### Mother's diet

- Breastfeeding mothers need a nutrient-dense balanced diet. Mothers with type 1 deficiencies (not associated with maternal anthropometric change) can have breast-

\* Comment on: Including infants in nutrition surveys, experiences in Kabul city', Field Exchange 9, March 2000, pp16-17

- milk which can lead to death or severe and irreversible defects in their infants.
- Clinical deficiencies of Vitamin K and D, iodine, thiamine, cobalamine, pyridoxine appear in breast-fed infants before their mothers. Deficiencies of selenium, Vitamin E and A and folate can appear in both child and mother at the same time, although data are inconclusive. Type 2 nutrients are preferentially preserved in breastmilk, while Type 1 levels will fluctuate in breastmilk.
  - In order to have a healthy infant (and mother) the breastfeeding mother's diet must contain all 40 essential nutrients.

### Recommendations of the Working Group to the ACC/SCN for action

#### *Adult malnutrition*

Clarify issues relating to adult malnutrition including its definition, and operational intervention guidelines. Disseminate this information as widely as possible to agencies in need of support and guidance.

#### *Infant feeding issues*

Liaise with the Breastfeeding and Complementary Feeding Working Group in taking responsibility for further development of the operational guidance, management of the consultative process and coordination of dissemination. Improve the training of humanitarian staff on infant feeding practice. Advocate for the need of experts on infant feeding issues to be present at all emergencies from the outset.

For further information or full report contact the ACC/SCN c/o World Health Organisation, 20 Avenue Appia 1211 Geneva 27 Switzerland. phone: + 41-22-791 04 56 fax: + 41-22-798 88 91. EMail: accscn@who.int <http://www.unsystem.org/scn/>

## UNICEF builds capacity for emergencies

**D**ue to the increased frequency with which countries find themselves thrust into a situation of instability, UNICEF has decided to mainstream its emergency response capacity into its regular country programming process. Whether due to civil strife, insurgencies, warfare, or natural disasters such as drought, earthquakes and floods, UNICEF country offices across the globe increasingly find themselves having to respond to emergency situations.

In keeping with the roles and responsibilities outlined in the memorandum of understanding developed with WFP, UNICEF need to undertake a number of activities following the declaration of an emergency. Instead of reacting after the fact, UNICEF offices are now expected to be able to proactively respond in emergency situations.

Amongst the responses from UNICEF offices expected in an emergency situation, the nutrition related ones are now considered a priority. UNICEF expects its offices to be able to lead a process of assessment and monitoring of the nutrition situation. In addition UNICEF should be able to source and deliver emergency supplies, including special foods for therapeutic feeding of severely malnourished children and micronutrient supplements as appropriate.

In order for UNICEF to meet these expectations a series of training sessions are being planned to create the required capacity. Initial emphasis will be given to the Sub-Saharan Africa region. Capacity building efforts will be carried out in coordination with those of WFP.

For further information contact Ludmilla Lhotska, UNICEF Nutrition section New York, e-mail: [llhotska@unicef.org](mailto:llhotska@unicef.org)

## Letters

Dear Field Exchange,

Where have we gone wrong? Why is it that when food supplies get stretched, NGO and international staff still think of infant formula rather than supplementing the diets of the lactating mothers affected.

I am currently in Mongolia, following the "dzud", (a serious snow emergency) that has claimed the lives of some 2.4 million animals to date. The "mass starvation" predicted by the UN in March, has thankfully not happened but there are a number of families that have seen their vulnerability increase as their only means of survival has gone.

In a recent co-ordination meeting, where I believe I was the only nutritionist in attendance (in fact I think I am probably the only nutritionist involved in the emergency response here) one INGO, reported back from their recent trip to an affected area about the poor water quality, lack of fuel, and the loss of livestock. The INGO announced that due to the loss of livestock they would be purchasing infant formula to feed the vulnerable children. Another INGO is currently shipping in containers full of infant milk and other commodities.

There is no evidence of lactation failure, and no evidence that malnutrition rates in young infants are being affected by the dzud. What is actually happening is that mothers are spending long hours chasing animals across the steppe and are therefore tired.

SCF UK carried out a nutritional assessment in one of the 6 most affected provinces, the only NGO to actually carry out a formal assessment. We found that the incidence of acute malnutrition was very low, less than 2 % while the incidence of chronic malnutrition was almost the same as that found in the 1999 national nutrition survey (about 12.5% underweight and 24.6% stunted).

It seems that once again the easy option is in danger of being chosen. This opens up a whole new issue for those of us that work in nutrition. We have raised awareness for emergency organisations, but in a place like Mongolia, where emergencies rarely happen, most staff are development orientated working in long term projects but have had to respond to sporadic emergencies as the only people on the ground with resources at the time. The majority of staff are often nationals with health qualifications; nutritionists are few and far between and the ones that are, certainly here, are involved in research only. The "Infant Feeding in Emergencies" document<sup>1</sup> certainly had not reached here although it has now been linked to the UN DMT web site so that interested parties can gain access to it.

We have a whole new audience that we need to inform and as disasters inevitably occur in 'new' areas we need to make haste. To give them credit, once the dangers of infant formula had been explained to this particular NGO, plans were rapidly altered. I hope that in other situations there are informed nutritionists on hand to spread the word.

Emma Roberts

SCF Nutritionist.

Mongolia

<sup>1</sup> 'Infant Feeding in Emergencies: Policy Strategy and Practice' A report by the IFEG. Produced by and available from the ENN at a cost of £3 per copy.

## Nestlé and the Code

**A** former employee of Nestle has publicised internal company documents that he says provide evidence that the company has breached the international code on marketing breast milk substitutes. The documents are reproduced in a report published by an NGO which campaigns for the "rational use of medication in Pakistan". The report highlights Nestle's donation of gifts to doctors as a reward for promoting its products, a practice outlawed by the code. Other alleged violations include direct marketing of products to mothers and the provision of free supplies of breast milk substitutes.

Mr Francois-Xavier Perroud, vice president of Nestle, denied allegations of mal-practices stating that "As anywhere in the world, Nestles marketing of breast milk substitutes in Pakistan is in line with the WHO code and if errors occur then they are promptly corrected"

BMJ Volume 320, 19th February 2000, pp 468

# A Pellagra epidemic in Kuito, Angola

By Sophie Baquet and Michelle van Herp



Sophie Baquet is the headquarter nutritionist in MSF Belgium and Michel van Herp, Headquarters epidemiologist in MSF

Belgium. This article is based on field visits to Kuito between August 1999 and March 2000 and from field reports. There is also a contribution from Jeremy Shoham based on a recent review of pellagra in emergencies carried out on behalf of WHO.

Angola has been at war for more than 20 years. A second peace process, initiated at the end of 1994 lasted until 1998 when conflict resumed. Since late 98, more than one hundred thousand people living in Bié province (in the central high plateau of Angola) have fled conflict and sought asylum around Kuito town (the provincial capital of Bié). The population of Kuito town and surrounding area has been estimated at 155,000, with about 110,000 Internally displaced people (IDPs) currently sheltered in various sites around the town. Kuito is effectively now an enclave due to the high level of military activity in the area and is known to be one of the heaviest mined cities in the world.

With little potential for food production by the local population and the numerous displaced people living in Kuito, most of this population are completely dependent on WFP (World Food Programme) rations. Small agricultural fields and seeds have been allocated to the displaced population but harvests are generally poor and insufficient. The purchasing power of the resident population has rapidly decreased due to inflation and the activities of most traders had been reduced due to the war.

MSF Belgium has been present in Bié province since the end of 1989. MSF's work has included operating feeding centres and supporting Kuito general hospital. At the end of July 1999 the first cases of pellagra were diagnosed in Kuito. This marked the beginning of the largest pellagra outbreak documented in the world for displaced or refugee populations since the outbreak in Malawi in 1990 when more than 18,000 cases of pellagra were reported among Mozambican refugees.

## Case definition

The case definition for diagnosis of pellagra used in Kuito was dermatitis on two different and symmetrical sites exposed to sunlight or what is known as a cassal's necklace (see photo).

These classical skin lesions only seem to occur more often in older persons. Furthermore, individuals that do not go outdoors, i.e. are not exposed to sunlight, do not get the skin lesions either. Although the triad of dermatitis, diarrhoea, and dementia is distinctive, these symptoms do not occur in every patient. The earliest manifestations do not include dermatitis and in one third of florid cases dermatitis is the only sign.

## The outbreak and the response

Local health professionals in Kuito know about pellagra, but only a few cases a year are seen. From July 1999, a marked



Classical skin lesions - Cassal's necklace. © P. Delchevalerie

increase in cases was seen and the phenomena rapidly became epidemic.

Between August 99 and January 2000, 898 cases of clinically diagnosed pellagra were seen in the hospital (see graph). Once the diagnosis was confirmed patients were referred to the supplementary feeding centre where they received a standard protocol of nicotinamide 50 mg (adults = 3 x 2 tablets/day for 15 days; children = 3 x 1 tablet/day over 15 days), vitamin B complex tablets, and a supplementary ration of CSB and dry fish.

The data showed that 83% of pellagra cases were female and that 85% of cases were over 15 years of age. Sixty six percent of cases were IDPs (Table 1a). The attack rates at the end of November were 2.6/1,000 inhabitants. Attack rates by age and sex are given in Table 1b.

It should be noted that the attack rate only reflects dermatitis cases reported at the treatment centres by passive detection and therefore probably underestimates the true attack rate.

## Reminder about pellagra



The pellagra case definition was dermatitis on two different and symmetrical sites exposed to sunlight.  
© P. Delchevalerie

Pellagra is caused by Niacin (Nicotinic acid) deficiency. The condition can be fatal and is often associated with other vitamin B deficiencies. Niacin (vitamin B3) is a water-soluble vitamin widely distributed in plant and animal food but in very small amounts.

Rich sources of niacin include groundnuts, fish, meat and pulses. The body can synthesise niacin from the amino acid tryptophan.

The recommended daily requirements range from 13 to 15 mg nicotinic acid equivalent for women and 16 to 19 mg for men. During pregnancy and lactation an additional 2 and 5 mg nicotinic acid respectively are required. For infants and children, 6 and 11 mg daily are recommended, respectively.

The initial clinical features of pellagra are non-specific and include anorexia, prostration, weight loss, headache and a burning sensation in the mouth. The fully developed syndrome, described by the “three D’s” consists of dermatitis, gastrointestinal symptoms (diarrhoea), and finally mental impairment (dementia). Eventually the fourth ‘D’ can occur - death.

Niacin deficiency was endemic and often epidemic among poor population in Europe and USA until the middle of the 20th Century. It was first reported 250 years ago and followed the introduction of maize (low in niacin compared to other cereals) to Europe from the Americas.

Niacin deficiency is now endemic at very low levels amongst the rural poor in Africa where maize is the principal cereal. Examination of rural health centre records may show a few cases – especially during the ‘hungry season’. However, outbreaks of pellagra have only occurred in recent years amongst emergency affected populations. The limited epidemiological data available from these emergencies indicate that it affects principally adults, particularly women. When a niacin and/or tryptophan – deficient diet is consumed, the lead-time for developing signs of pellagra is about 2 to 3 months.

The general ration provided by humanitarian agencies was meant to ensure an intake of 1800 kilocalories per person. The commodities were maize flour, pulses, oil and salt. The logistical constraints to supplying the food ration regularly in Kuito were considerable as almost everything had to come in by air. The target groups for the general ration were IDPs and others identified as vulnerable in the resident population (under five, pregnant and lactating, and disabled persons). From November 1999, families with malnourished children were also included as vulnerable, as well as families with pellagra cases.

Between April and December 99 general food rations provided an average of 8 mg niacin per person per day. From November dried fish (a niacin rich food) was distributed to pellagra cases and their families as well as to individuals attending feeding centres and their families. This was seen as a preventive measure.

In view of the fact that the general food distribution did not provide enough niacin, and other sources like CSB were not yet available in the ration until June 2000, a distribution of vitamin B complex tablets to all women aged 15 and over was organised as an emergency response by MSF and other humanitarian agencies in December 1999. The target group was chosen only because of lack of resources to organise a distribution to the entire population. Thirty tablets were distributed to all women.

A nutritional survey conducted in December 1999 assessed compliance with intake of vitamin B

complex tablets by counting the number of tablets left in the distributed bag after a set number of days. The survey found low compliance.

It was concluded that a vitamin B tablet distribution campaign did not seem to be the most effective solution to control a pellagra outbreak. Furthermore, targeting women with tablets was an emergency measure, but not a satisfactory option, as all strata of the population were probably deficient in niacin.

At a multi-agency meeting held in January 2000 it was agreed that the general ration should be supplemented with CSB (rather than groundnuts as the latter lacks riboflavin and pyridoxine both of which are necessary for the conversion of tryptophan into niacin) and that the priority group for receiving the expanded ration should be the displaced. Consensus was also reached that the possibility of including vulnerable residents should also be investigated.

### Discussion

By January 2000 a number of important issues and lessons about the outbreak and response had been identified at multi-agency meetings and through discussion with knowledgeable experts.

i) Although an average intake of 15-20 mg of niacin per person per day prevents pellagra for all age groups, this applies to healthy individuals. However, as people had been subsisting on the deficient for many months body stores would have been depleted

in response to infection and other metabolic stresses so that it was critical to increase body stores to stave off overt deficiency. Also, the majority of the population in Kuito were exposed to malaria, diarrhoea and an increased risk of other infections and therefore may have had a greater requirement.

ii) The fact that the general ration was deficient in many nutrients including all those implicated in pellagra led to the conclusion that CSB would be the best food supplement to improve the intakes of a wide range of nutrients. Groundnuts and beans, although rich in niacin, have relatively low levels of riboflavin and pyridoxine which are both required to convert tryptophan to niacin.

iii) There was uncertainty about the amount of niacin in maize - food composition tables show much variability. It is therefore important to advocate for ‘nutrient content’ labelling of maize so that it is possible to determine more accurately the amount of supplement to include in the ration to make up for any niacin shortfall.

iv) Although the case definitions used ensured that the diagnosis was not in doubt, the actual numbers with niacin deficiency in the population were grossly underestimated. Children would be eating the same diet as adults and have the same proportionate requirements for niacin, but would not necessarily show the skin lesions of pellagra - they may get diarrhoea. Classical signs are much less common in young children than in adults.

### PELLAGRA OUTBREAK IN KUITO FROM 07/1999 TO 05/2000

#### Weekly evolution of new cases in hospital consultation

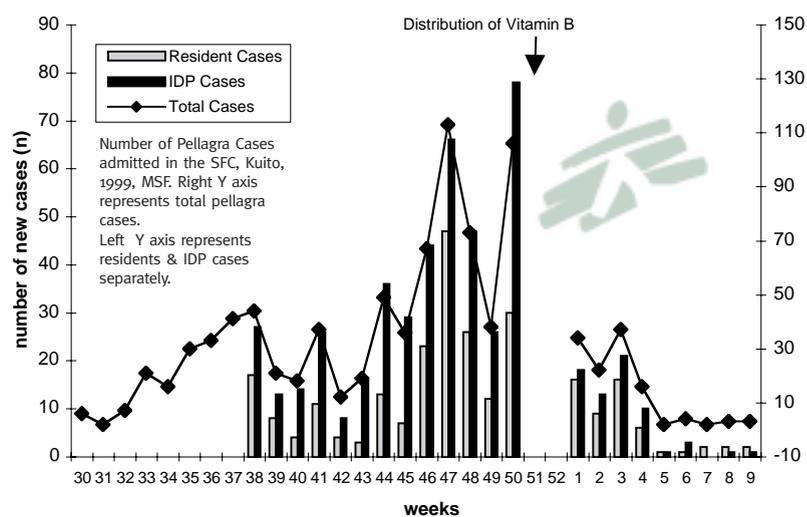


Table 1a: Distribution of pellagra cases per main demographic characteristic, 1999, n = 571 cases, MSF.

Distribution by sex	male: .....	98	(17%)
	female: .....	473	(83%)
Distribution by age	< 15 years: .....	86	(15%)
	≥ 15 years: .....	485	(85%)
Distribution by residential status	resident: .....	196	(34%)
	displaced: .....	372	(66%)

Table 1b: Attack rates per main demographic groups, n = 571 cases, 1999, MSF

		IDPs n = 110,000 IDPs	Resident n = 130,000 inhab.	Total pop. n = 240,000 pop.
Male	< 15 y	0.8 / 1,000	0.5 / 1,000	0.65 / 1,000
	≥ 15 y	1.4 / 1,000	0.6 / 1,000	1.0 / 1,000
Female	< 15 y	1.2 / 1,000	0.4 / 1,000	0.8 / 1,000
	≥ 15 y	10.2 / 1,000	4.5 / 1,000	7.1 / 1,000
Total		3.4 / 1,000	1.5 / 1,000	2.4 / 1,000

Note: first cases of the epidemic have not been included as data are not available.

There were many possible explanations for the high prevalence of pellagra amongst females over 15 years of age; demographic profile, different health seeking behaviour, different sunlight exposure (men go bare chested so will not get cassals necklace in sunlight), real dietary differences, different clinical expression of illness and hormonal differences.

v) In the longer term a more appropriate solution should be found than supplementing the general ration with fortified CSB. Strategies used in similar situations have included fortification of the maize in local mills and commercial fortification of maize in country or in the country of origin.

### Update on situation

A second vitamin B distribution was carried out at the end of February/March 2000. This was targeted to everyone in Kuito and implemented as CSB had as yet to be included in the general ration. As can be seen from the graph, the number of cases of pellagra began to decline markedly in February and March. This was probably due to a combination of factors, i.e. the vitamin tablets distribution, a diversified WFP ration (including groundnuts), less sunshine and a small harvest. However, as can also be seen from the graph, pellagra cases were beginning to reappear again by the end of April. Although WFP had been promising the delivery and addition of CSB to the general ration since early in 2000 none had been distributed in the general ration by the end of May 2000.

### Conclusions and recommendations

This epidemic underscores once more the vulnerability of food aid dependent population to micro-nutrients deficiency diseases such as pellagra (an easily preventable nutritional deficiency).

Despite international nutrition official recommendations, relief programmes failed to provide the minimum recommended daily allowances (RDA) of essential micronutrients to Kuito's vulnerable population.

Although it was recognised that niacin rich foods needed to be urgently added to the general ration, this proved not to be possible. In the event niacin rich foods (dried fish and CSB) were only targeted through feeding centres. It was unclear whether this occurred as a result of logistical difficulties, or due to inadequate provisioning of, or access to CSB. In any event given the current policy of ensuring adequate micro-nutrient intake for populations totally dependent on food aid through the provision of fortified blended foods, established in the most recent WFP/UNHCR MOU, questions need to be asked about why this was not possible during the Kuito emergency. There is also an issue (which may well relate to the lack of supply or access to CSB) about only targeting niacin rich supplements to pellagra cases and malnourished children and their respective families. This curative strategy is arguably unethical. In a situation where there is a clear public health emergency of large proportion it should surely be incumbent upon the international community to prevent further cases of this disease occurring and provide niacin rich food to the whole population.

Many observers and experts believe that there needs to be a review of the diagnostic criteria for pellagra. In this case relying on narrow dermatologically based diagnostic criteria may have obscured a high prevalence in other demographic groups (i.e. it wasn't just women over 15 years of age who were suffering). In the event due to lack of resources, this led to an initial vitamin tablet distribution to adult females only.

# Evaluation of the Wajir Relief programme 1996-98

## Published Evaluation

OXFAM (UK and Ireland) were engaged in relief work in Wajir District of Kenya from September 1996 until October 1998. The interventions were a response to the droughts of 1996/7 and the El Niño floods of 1998. OXFAM published the findings of an external evaluation<sup>1</sup> of their response in April 1999. This evaluation drew on the experiences of their staff, other agency and government staff and on the views of beneficiaries.

Wajir district is populated by a largely pastoralist population. Successive droughts had led to depletion of livestock herds and increasing destitution. Available data on child malnutrition demonstrated a severe crisis. OXFAM responded by organising one of the largest relief operations ever mounted in Wajir District. Over the two year period OXFAM spent £4,612,029 on relief components. It delivered over 21,000 tons of maize 16,000 tonnes of beans and 500 tonnes of oil.

Although the programme was continuous, it can be broken down into two distinct phases:

- i) The response to the drought starting with a three month drought mitigation project in the south and parts of the west extending to the whole district except a 15 km radius around Wajir town (where the Kenyan government were providing relief) and winding down by October 1997;
- ii) The response to the El Niño floods with a relief programme from December 1997 to August 1998 which became a recovery programme ending in October 1998.

Overall the evaluation demonstrated the timeliness and high quality of the relief response delivered by OXFAM to the rural population of Wajir during the drought and floods of 1996-8. However, there were problems:

- i) there was a tendency to plan and submit proposals for only 3 months. This appears to have been due to a reluctance by DfID to commit to longer term food purchase as their preferred option was to encourage WFP to provide relief food;
- ii) the planning phase consistently underestimated the number of beneficiaries eligible for relief food. As a result the ration had to be cut and the food shared more thinly.

### Main findings of the evaluation

OXFAM used a system of relief food distribution whereby the district was divided into five livelihood zones, each with a different recovery package. This approach was appropriate and worked well.

OXFAM registered women as beneficiaries of relief resources. Although more management intensive than other distribution approaches, it was a price worth paying for a more efficient and equitable means of distribution.

The relief food became a critical component of the diet and the dramatic fall in malnutrition rates during 1997 over a period of about five months was probably due to the combined results of the relief operation and of good rains in April/May 1997.

The food distribution also stabilised food prices helping pastoralist purchasing power. This benefit

was especially critical for Wajir town which was less well served by the relief operations due to smaller distributions of maize by the GoK. This presented a dilemma for OXFAM as many of the poorest and most vulnerable lived in the town but it would not have been appropriate to shoulder the governments responsibility and replace their relief operations with an NGO one.

The coverage of 90% of households reported in July 1997 was exceptional and the operation was consistently rated by beneficiaries as one of the most successful the district had experienced. The impact of the floods was sudden and extreme. During the first few months of 1998 when the road network was severely disrupted, the food distribution was life-saving. OXFAM supplemented the meagre government relief ration in Wajir town with Unimix and high energy biscuits.

As Wajir district began to recover from drought and flood OXFAM altered their approach and instigated a series of recovery interventions to assist vulnerable households as food relief was withdrawn. A financial analysis of the four types of intervention demonstrated the costs and benefits associated with each. It cost Ksh 525 to deliver one ration of food relief. In order to provide similar benefits, i.e. the equivalent of one monthly ration, restocking with goats cost Ksh 712, restocking with oxen Ksh 480 and cash for work Ksh 450.

The cash for work scheme made the most impact, allowing households to clear their debts, buy essential items and invest in small-scale income generating activities.

Restocking interventions also provided benefits to recipients but sheep and goats did not achieve the levels of production anticipated. The result was that this became an expensive means of transferring assets to poor households. Restocking with oxen and provision of seeds would have made a significant impact if the short rains of 1998 had not failed.

The on-going development programme undoubtedly suffered from the legacy of the large-scale relief programme. It dramatically changed the perception of OXFAM in the district, which now tends to be seen as a 'free hand out resource rich' relief agency. OXFAM's ability to turn the image around and re-establish itself as a development agency will depend partly on the time lag before another emergency operation.

OXFAM exploited its comparative advantage as an international NGO with strong field based operations by identifying and responding early to localised food stress and mobilising fast as the emergency developed and changed. However, the success of its response was highly dependent on funding provided by one bilateral donor -DfID. The lengthy procedures that WFP must follow to launch an appeal and deliver food to Kenya meant that the first WFP deliveries to Wajir arrived 9 months after OXFAM had started the relief operation and four months after the GoKs emergency declaration.

<sup>1</sup> Buchanan-Smith, M and Barton, D (1999); Evaluation of the Wajir Relief Programme (1996-98). Oxfam, Oxford OX2 7DZ, England.



# Evaluation of the Response to the Montserrat Volcano

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## Published Evaluation

The UK Department for International Disasters (DfID) commissioned an evaluation<sup>1</sup> of the British government response to the Montserrat volcanic emergency between July 1995 and November 1998. The island of Montserrat is a British Government Overseas Territory. The volcanic eruption which began in July 1995 devastated Montserrat. By the 26th of December 1997, when the most extreme explosive event took place approximately 90% of the resident population (over 10,000) had to relocate at least once with over two thirds of the population leaving the island. Virtually all the important infrastructure of the island was destroyed or put out of use for the short to medium term. The private sector collapsed and the economy became largely dependent on British Aid.

### Evaluation Findings

Overall, the disaster response by British government was considered a success with only 19 confirmed fatalities and hardly any measurable increase in communicable disease and physical ill health. Throughout the emergency, which involved four major evacuations at little notice, everyone had a roof over their head and no one went hungry. However, the success has to be qualified by less satisfactory aspects of the response and its consequences.

Following evacuations in December 1995 and again in April 1996 relief food was distributed to support those relocated to the north whether resident in shelters or private housing. Rations were intended to supply one main meal a day. They consisted primarily of long-life tinned foods and where locally donated supplies allowed, fresh fruit and vegetables. The

approximate numbers receiving food rations ranged between 3,500 and 4,600. Overall the ration distribution appears to have been well organised. However, people also needed income support for other essential expenditures. Also, the administrative costs of direct distribution were extremely high.

Plans were put forward to refocus the form of assistance from June 1996 within three months of the final evacuations of the South. The Government of Montserrat elected for a Food Voucher Scheme, broadened to include all foods and basic toiletries and exchangeable in local shops. The scheme reduced the burden of organising supply and delivery. It also provided a way of supporting the fragile private retail sector. It offered an opportunity to broaden the eligible population beyond evacuees in shelters to include other evacuees outside the shelters as well as safe zone residents who had lost their jobs because of the evacuation.

The assistance scheme was further adapted when vouchers were replaced in December 1997 by cheques to the same value that could be cashed at banks and supermarkets. This change appeared to be a pragmatic response to pressures from beneficiaries wanting freedom to use the assistance in a more flexible way to meet general expenditure, including rents. It was also a response to the heavy administrative burden of the voucher system on staff involved in the programme. Pre-registration was undertaken with a view to rationalising beneficiary lists as in September 1997 it was estimated that nearly all of the on-island population were in receipt of the voucher. During 1997, it had been decided that there would be a social welfare review to move towards more targeted forms of benefits for

more narrowly defined groups based on means testing. This process had still not been completed by September 1999.

### Evaluation Conclusions

The evaluation authors concluded that the provision of relief during the initial evacuations was appropriate and timely in providing a rudimentary safety net. The switch to a voucher scheme was a practical, and probably appropriate, development when it became clear that people would be remaining in the north of the island indefinitely and that large numbers were still in need of some form of assistance. Substantial savings in transaction costs were made in the move from rations to vouchers. However, the introduction of an exchangeable voucher was partly based on the desire to extend the categories receiving support. In view of the subsequent problems of targeting, a more rapid move to some form of income support might have been appropriate. Generally, unless there are specific reasons in favour of more restricted food assistance, purely monetary transfers are preferable on grounds of flexibility and minimising transaction costs for all involved.

Senior Montserratian officials suggested informally that had there been a needs assessment, up to 20% of the beneficiaries in late 1998 would have been removed from the lists. Potentially the most serious criticism of the voucher scheme and its successor was that they fostered a dependency culture amongst those remaining on the island

<sup>1</sup> Clay, E et al (1999) An Evaluation of HMG's Response to the Montserrat Volcanic Emergency. Evaluation Report EV635, December 1999. DfID, 94 Victoria St, London SW1 5JL. Email: enquiry@dfid.gov.uk

# Action Contre la Faim (ACF)

Interview by Jeremy Shoham

Name	Action Contre la Faim
Address	rue Niepce, 75014 Paris, France
Telephone	+33 (1) 43 35 88 88
Fax	+33 (1) 43 35 88 55
Email	acf@acf.imaginet.fr
Internet	http://www.acf-fr.org
Year formed	1979
Director	Jean Luc Bodin
Overseas staff	194 expat / over 4,000 local
HQ staff	63
Annual Budget	263 Million FFranco



ACF personnel discussing a crop production at harvest (West Africa)

During my efforts to fix up a meeting with ACF's D.G in Paris, I had been asked to be very clear about how much time I would need as he would be squeezing me in between urgent meetings. In a way I expected nothing less from the busy head of a large international NGO and was therefore pleasantly surprised when Jean Luc introduced me into his office in a relaxed manner and proceeded to give me a couple of hours of his afternoon to answer my questions before getting back to work at 5pm!

Jean Luc Bodin began his professional career working for MDM and IFRC in Karamoja between 1979-82. He subsequently went to work for AICF<sup>1</sup> in Chad in 1982 and then moved into a field post with MSF France in Ethiopia. He returned to France in 1987 having spent 8 years in the field. AICF then proposed that he work as a volunteer in Paris. "At the time there were only 5 staff at HQ covering four country missions," Jean Luc remembered having to share one phone between 3 people.

AICF were founded by a group of French 'intellectuals', authors and other public figures in 1979 whose concept for the agency was a sort of 'Amnesty International' for combating hunger. The main aim of AICF was to sensitise the French public to the need to fight global hunger and starvation and to engender a belief that the problem could be tackled with their help and work. AICF committees were set up in many cities in France. Their role was to fund-raise and sensitise the local community. However, following the experience in Ethiopia in 1984 it became obvious that AICF lacked operational capacity for this type of emergency and needed to 'scale-up' in terms of resources and staff. During this period (1987-91) AICF expanded rapidly but also began to work more in the development sector, e.g. seed programmes in Kordofan, income generating projects in Pakistan and Madagascar and land transfer programmes in the Philippines.

Jean Luc was made director of operations in 1991 and soon after AICF's Board decided the organisation urgently needed to rationalise its work and specialise in one or two emergency sectors only. This was partly as AICF was spreading itself too thinly and also as there was no real coherence between the organisation's name and what it was doing. It was also hoped that this strategy would make it easier to raise funds. It was decided to focus on the emergency nutrition and water sectors.

Two technical specialists were taken on to help with this transformation and AICF began to develop expertise in selective feeding programme interventions. During this period (1992) links with INSERM (a government advisory centre) led to the formation of the International Consultative Scientific Committee whose role was to advise AICF on technical matters in the nutrition domain and also to initiate research through AICF emergency programme infrastructure. Field trials of F100 in AICF projects came about through this linkage. AICF also developed a water and sanitation expertise at about the same time. Subsequently, AICF have strengthened their institutional capacity to deal with medical aspects of therapeutic feeding programmes and more recently developed a food security capacity.

Since taking up the DG post three years ago Jean Luc has put a lot of effort into improving the marketing of ACF to the French public. The proportion of ACF funding that comes from the public purse is very low (just under 25%) – especially compared to larger NGOs like MSF or OXFAM. It was felt dependence on a few large donor organisations for funding could compromise autonomy. ACF hopes eventually to get to a position where 50% of revenue comes directly from the French public. Jean Luc's view is that "MSF's success in getting public donations is due to their greater involvement in advocacy work which in turn makes them more publicly visible."

When asked whether ACF had ever found themselves in a difficult political or ethical position, Jean Luc replied that this had indeed happened on a number of occasions. For example, ACF had pulled out of DPRK at the beginning of this year because their food aid appeared to be siphoned off by government and was not reaching the children it was intended for. Then there was the experience in South Sudan, where AICF had been concerned about the consistently high levels of wasting (13-18%) recorded in Labone camp and wanted to do a socio-economic survey to establish whether food aid was being diverted from intended beneficiaries. Not surprisingly, the authorities asked them to leave.

Jean Luc gave an example of the type of conflict that can arise between humanitarian ideals and the need to satisfy potential funders but where ACF managed to hold fast. This occurred in Afghanistan where the UN/OCHA had developed a strategic framework for influencing Taliban policies - especially with regard to women. ACF's view was that this translated into sacrificing short-term

<sup>1</sup> AICF changed their name to ACF in 1996 as it was realised that AICF did not convey the organisation's intentions or purpose very readily to the French public and nor was it very consistent with the names of the other partners, Action Against Hunger in the US and UK and Accion Contra el Hambre in Spain. Thus the 'I' for international was dropped.

# Reflections on food and nutrition interventions in Huambo

By Lola Goselow



This article is based on a field trip made by Lola Goselow (SCF HQ emergency advisor) to the SCF programme in Huambo province, Angola in November 1999. The aim of the visit was to review activities and future plans as well as work with the team on technical aspects of the food and nutrition programme. The article provides a snapshot description of SCF's emergency food and Nutrition intervention at the time. It also shows how mid-term programme reviews can strengthen interventions.

humanitarian ideals for longer-term political ones and struck a deal with the Taliban in 1998 to open up selective feeding programmes in Kabul. They were only the second agency to sign an agreement with the Taliban. This did however, make it very difficult for ACF to get funds for the programme, strengthening Jean Luc's resolve to increase agency financial autonomy from major donors. In Jean Luc's words 'its OK for development programmes to be influenced by political or foreign policy purposes, but not humanitarian aid'.

Apart from ACF Paris, there is also an ACF in the UK and one in the US since 1985 (both called Action Against Hunger) and an ACF Spain (ACH) in Madrid. The four offices have a co-operation agreement but are all legally independent. However, only ACF in Paris is so far financially self-supporting although ACF - UK (AAH) expects to be this year.

There were three main reasons for setting up international offices:

- i) to improve capacity to lobby or influence other donor governments, e.g. the capacity for advocacy in Spain and the US are now considered to be good given strong linkages with the Spanish government and US senate;
- ii) to improve access to human and technical resources and expertise that may exist in other countries;
- iii) to increase access to financial resource in other donor countries.

At the end of our meeting Jean Luc re-iterated that his main wishes for the future were for greater independence financially and less political constraints in ACF's work.

I met Chris Daniel's (the recently appointed ACF Technical Co-ordinator) prior to leaving the organisation. We chatted a bit and Chris told me how recently revised EU funding arrangements (the EU provides about 50% of ACF's funding) were making some people in ACF cautious about ACF moving back into rehabilitation and development programmes even though this makes sense from a food security perspective. Apparently ECHO now generally provides funds for only the first 12 months of an emergency and then DG VIII takes over responsibility. However, DG VIII may well take a year and a half to consider a funding request, and funding is rarely allowed to be used for funds spent before a proposal is approved with the result that ACF needs to provide interim funding after 12 months for longer lasting emergencies and particularly for programmes that involve rehabilitation.

I left the ACF offices in Paris thinking about the balancing act key decision makers in humanitarian NGOs have to perform in order to survive while at the same time maintaining the political and professional integrity of their agency. Institutional flexibility and adaptation seem to be the name of the game.



ACF - Nurse feeding a malnourished infant in a TFC in Sierra Leone

Angola has been at war for almost 3 decades. This has had a profound influence at all levels of the country's infrastructure: economic, social, public, commercial, political and military. There had been massive inflation of consumer prices, averaging over 1000% in the period 1994-98.<sup>1</sup> Almost half the country's 11 million population live in urban centres, partly to avoid insecurity in rural areas.

Fighting had resumed in December 1998, and was concentrated in the central Planalto region of the country, in and around Huambo Province. The resulting displacement, together with the economic impact of the unrest led to the current emergency programme.

The scale of SCF's emergency operation in Huambo had increased markedly since December 1998, mostly as a result of concerns about the food and nutritional situation of the town's inhabitants - displaced and latterly residents. The IDPs fell into two broad groups: camp residents (about 30,000) and those dispersed in the local bairros (about 100,000).

SCF's emergency operations included:

- i) a General Food Distribution Programme, and
- ii) a Supplementary Feeding Programme

## General Ration Programme

SCF were an implementing partner of WFP for the general ration programme. At the time of my visit the programme was undergoing several changes linked to servicing the expanded case-load of residents and non-camp IDPs. WFP had finally acceded to repeated SCF requests to expand food aid support.

In the period June 1999 to January 2000 the total distribution by ICRC and WFP/SCF amounted to 14% of estimated food requirements.<sup>2</sup> The November nutrition survey in Huambo had indicated a global malnutrition rate of 13.8%.

On arrival it appeared that coordination of the food aid programme had been weak. One manifestation of this was the discrepancy between ICRC and WFP approaches. ICRC gave a ration of 6kg of maize per person whereas WFP provided anything up to a full ration of 12kg maize, 1.8kg beans, 0.75

Kg oil and 0.15kg salt. In contrast to WFP, ICRC did not employ targeting criteria in the belief that everybody had been equally affected by the conflict. This served to confuse relations with Government authorities, through whom all agencies worked to ensure a co-ordinated, planned response to the population's food needs. Although geographical areas of responsibility were clearly demarcated between ICRC and SCF, the rationale for ration variations was not clear.

WFP planned a monthly food distribution of 1,500MT of food aid involving food for work, general ration distributions and supplementary feeding programmes in Huambo Municipality. In contrast ICRC had a monthly programme of 3,000MT food, distributed entirely through general rations, for people living outside Huambo Municipality, plus 3 bairros in Huambo (Aviacao, Fatima and San Luis).

One serious limitation of WFP's operation in Huambo had been the lack of forward planning; all activities were carved out in one-month chunks, with little analysis of needs/responses beyond that. Undoubtedly, this was partly a result of pipeline constraints, but more transparency as to these constraints would have eased rapport with the other agencies. It meant that SCF could not guarantee beneficiaries rations beyond a month or inform them in sufficient time about what their ration entitlement was going to be. But perhaps even worse was the fact that this lack of information undermined relations with the secretaries and communities of the various bairros.

At the time of my visit WFP appeared to be revising their activities largely sparked by a mission from Rome which revealed problems in the food distribution programme.

## Targeting rations when the need for food aid support is ubiquitous

SCF's registration procedure for the general ration programme in October employed two broad criteria for exclusion from non-camp distributions: salaried employment (including army, police, civil security forces, government workers etc.) and evidence of commercial activity (business people rather than petty traders). As some households were therefore

not eligible, disputes emerged and grievances were often directed at SCF. At the time of my visit the decision had been taken to postpone future distributions until the Government had formally agreed to the criteria proposed and communicated this agreement to all bairo administrators.

WFP Huambo subsequently criticised these criteria as too broad. A meeting was convened in November to review the criteria used and plan for a re-registration exercise. WFP tabled a list, on which criteria could be based. The list included:

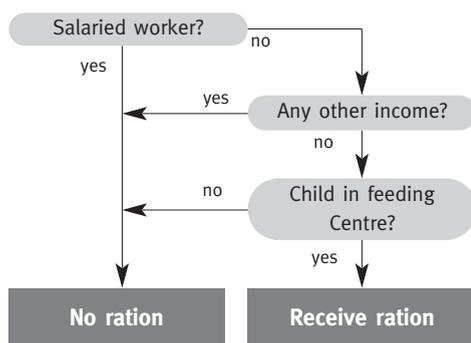
- elderly (>55 years) head of households
- disabled head of households
- salaried workers
- family income (the idea of a 45 million Kwz poverty line was discussed)
- nutritional status
- agricultural activity and farm income

Lengthy discussions ensued amongst the agencies, during which it was agreed that there was a need for realism about the sorts of information that it would be possible to collect with some confidence, or which could be verified independently of interviews. The final outcome of the meeting was that three sets of criteria for exclusion from non-camp distributions were to be considered in making a decision about eligibility for a food ration and that background information on the beneficiaries should also be collected (see table).

Criteria for exclusion from non-camp distributions	Background Information
	Residence status; arrival date and place of origin for IDPs
Salaried workers	Family demography (including any disabled members)
Households with any income	Source of income (formal or informal sector, type of trade etc)
Households with no children at feeding centres	Number of children in feeding centres and name of centre(s)
	Farming activities

It was anticipated that the background information would be useful for the general monitoring of the situation in Huambo and for getting a basic profile of the population for use in future non-emergency programme planning.

Thus, the decisions making process regarding receipt of a food ration would be as follows:



There was a great deal of discussion and unease about these criteria, not least because it could be expected that the vast majority of households would have some 'other income' apart from a salary. Indeed, those with no other income would arguably have died by now, since the general ration would not have met all nutritional needs. However, there was quite a lot of pressure from WFP to 'tighten' the criteria used, as they felt it was unacceptable to see well-dressed people arrive for food at a distribution; they wanted to exclude the 'obvious' cases of inappropriate registration. The point was made that while the

revised criteria might reduce inappropriate registrations, it would also markedly increase the likelihood of missing people who truly needed support. WFP maintained that we should progress with these 'new' criteria, and review the programme in January 2000.

In January another SCF advisor visited Huambo to conduct a brief appraisal of food security in Huambo. He concluded that the total food supply to the city was less, probably very substantially less, than was required by the population for adequate subsistence (the November nutrition survey in Huambo had indicated a global malnutrition rate of 13.8%). In addition there was no evidence for any easily identified household characteristic, other than possession of an affluent residence in the concrete city, which allowed discrimination between those who were in need of food distribution and those who were not. In other words the proportion of the general population who were able to meet their food needs from their own economic activities was so small as to negate any advantage from targeting. Following these recommendations WFP reinstated a general untargeted food distribution which was finally running smoothly in April 2000. The general food distribution ceased for all non-IDPs in May as a result of the WFP/FAO Crop assessment which concluded that the recent harvest would meet people's food needs for two months. Preliminary results from the May survey showed global levels of malnutrition to be 10%.

The discussions, disagreements and arrival at consensus over targeting, registration and management of the distribution system took almost 6 months. We have to ask ourselves at what cost?

### The Supplementary feeding programme

There were a total of 13 supplementary (8 SCF, 2 Concern, 3 ADDRA) and 6 therapeutic feeding centres. Entry criteria for all SFCs were similar: children up to 12 years of age, below minus two standard deviations (equivalent to approximately 80%) of the median weight-for-height (WFH). SCF centres had used low MUAC as an alternative entry criterion to admit cases who were not below the WFH cut off but looked malnourished. It was however agreed that this practice would be stopped. This would help more rigorous monitoring as only WFH is used after admission to evaluate progress and decide on discharge.

### Supplementary feeding in the context of the overall general ration.

Registration records in some centres showed that those attending were coming from nearby bairros rather than the immediate vicinity: For example, approximately 65% of the caseload in the Aviacao centre come from Kalamanda, where SCF had only made one general distribution in the past. The ration given at the centres was 1,400kcal per child or carer per day (two porridge meals were provided at around 9.30am and 1.30pm). This was quite generous and reflected the concern about the lack of general ration at the time the programme was established. It was decided that the ration could be reduced for children aged below three years. Thus, instead of the 200ml porridge, the under three year olds would receive 150ml, or approximately 1050 kcal per day. Also, no second helpings would be given to older children. In this way, it was hoped that the 'supplementary' aspect of the feeding programme could be strengthened so that children would realise that they also needed to eat outside the feeding centre.

In addition, out of the 4,000 or so registered in the SCF feeding programme, about one third were carers accompanying children below 2 years of age that were travelling long distances to come to the centre. The carers received the same ration as the children. We discussed the possibility of reducing their allocation to one meal.

The feeding programme team were planning a rapid assessment to examine the proportion of children attending the feeding centres whose families had received a general ration in the last two months. This enquiry was intended to help guide any future decisions about the size of the ration for children and carers. It was also hoped that it would shed light on whether those children who had been attending for several months came from families who received no other food aid.

### Attendance Issues

Data from feeding centres were showing a clear pattern of non-attendance for about two weeks following a food distribution. But, once the food at home ran out, children would return for feeding. A corollary was that there were a significant number of children who had been attending the programme for several months but who had yet to recover. Two additional staff were recruited in each of the centres in order to trace children. With these additional staff, it was hoped that families could be encouraged/supported to continue sending their children for feeding in order to ensure full and speedy recovery. It was also hoped that such contact would help provide information about some of the constraints that families were facing with regard to participating in the feeding programme and the decision-making processes they go through.

There were regular weighing days (2 per week per centre) with the bulk of admissions and discharges occurring on these days. It was therefore of little surprise that attendance on weighing days had been dropping as children sought to avoid discharge! Consequently, it was agreed that the weighing days would be varied, and any children who missed the weighing day would be monitored on their first day of return.

### Improving Psychological Care

Another new cadre of staff employed were play organisers (two per centre), to promote mental stimulation and developmental activities with the children as a complement to the physical care they were receiving. Such activities are an important aspect of the success of a feeding programme, and there is evidence that length of stay is reduced when play and other activities are combined with the feeding. These new staff were about to be trained by a church group on techniques to care for children who had been psychologically injured.

### Lessons Learnt

Although not explored in detail during my visit, a key issue which emerged and that would hopefully be taken forward by the team, was the need to improve the quality of documentation of our programmes. With this in mind, it was recommended that all teams compile key documentation relevant to their programme: lessons learned, monitoring formats, staffing issues, guidelines on approaches or protocols, rationale for any major decisions made, etc. These needed to be compiled on paper and disk, and stored in a clear, accessible location (in Huambo, Luanda and London).

For example:

- In the general ration programme, there were important experiences of targeting, ration selection, timing, distribution methodologies, monitoring etc. which needed to be captured for future reference.
- In the nutrition programme, lessons about information for registration, the need for individual record cards for each child, formats for reporting the monitoring statistics, the final protocols etc. constituted important experiences which would help inform the implementation of any future feeding interventions.

It was vital that we should not have to begin again from scratch (as was the case for this programme).



# Industry: unlikely players in emergency food distribution

By Peter Silverman

Peter Guy Silverman is the ombudsman for CityTV, Toronto. He has recorded the needs and relief efforts for a variety of organisations. These documentaries have been aired on CityTV. This article is based on a mission Peter undertook with the Canadian Disaster, Assistance and Response Team (DART) at La Ceiba. Their mission was to provide immediate medical, engineering assistance and drinking water. Dole (a commercial fruit company) provided the DART with a base of operations at its facility at Sonaguara as well as first hand knowledge of the area.

The destruction brought by the violence of Hurricane Mitch from October 26-27th of 1998 has been well documented. No country was harder hit than Honduras, a nation of 5.8 million. Eighteen thousand people died, 1.4 million were made homeless, 600,000 displaced. It was the worst natural disaster to hit Central America in 200 years. By the time the 180-MPH winds had subsided three quarters of the Honduran agriculture sector was in ruins and 80% of its infrastructure destroyed. Mitch was not only wind, it was rain. Rain of almost biblical proportions. Deforestation, leading to wholesale erosion. There was nothing to stop the torrents of water as they roared down the mountains into the valleys. Rivers rose 14 feet in hours sweeping away all before them.

Honduras, like most third world nations was singularly ill equipped to cope with this wrath of nature. Corruption, a lack of resources, a military that was then a law unto itself meant that anything resembling a disaster or crisis plan was non-existent. There were no standby reserves of food or drinking water and no caches of medical supplies. There was just a hope that the storm would pass. It didn't and an inefficient and overwhelmed civil authority found that it could not cope.

The problem of organising any form of a relief effort was further hampered by terrain. Honduras is mainly mountains sliced by a series of rivers. With the majority of bridges down and many roads washed out, getting food, medical supplies and water to the affected population became a logistical nightmare.

However, as I found out there were some unlikely administrative and logistical structures that were able to fill the vacuum and provide the foundation for a relief effort. I say unlikely, as these were the huge

agricultural companies of United Fruit (Chicita Bananas) and Standard Fruit (Dole).

Dole's major operational and administrative hub is the third largest city in Honduras, La Ceiba on the northern coast of Honduras. From there it controls its huge plantations that stretch along the coastal plane and down the rich fertile land of Aquan valley. Nature determined where the plantations and villages would be, it also determined that it was those plantations and villages that would take the brunt of the storm. The rivers like the Aquan, The Cangrejil (which bisected La Ceiba) and the Bonita became terrible water bulldozers, smashing all that were in their path. As the water receded, little remained. Those towns and villages that survived were buried in four to six feet of mud. Drinking water was a stinking cocktail of drowned animals, sewage and rotting food. The usual conveyors of disease, flies and mosquitoes added to the misery. Some villages that survived the worst had to be evacuated because of the fears of a malaria or dengue fever outbreak. People flooded into the town seeking shelter, straining already meagre resources.

Faced with this catastrophe, the civil administration allocated some municipal buildings as temporary shelter. However the immediate problem was food and water, not only supplies but also a distribution mechanism. The central government had little to offer. Politics demanded that the capitol Tegucigalpa got first call on resources. The area also benefited from the presence of the large American Base at Palmerola. This meant that the Southern part of Honduras was an American sphere in terms of aid after Mitch, leaving little for the rest of the country. Overall the area around La Ceiba was not faring well. The 4th Infantry regiment of the Honduran Army



## “food relief after a major disaster is a complex business and not one for amateurs”

HONDURAS – L. DEMATTERS (WFP)

seemed unable to respond, unlike the units in the capital that did take part in rescue and relief. The Airforce with its usual elan deployed three helicopters to haul food and water over the mountains to now isolated villages. It was a band aid operation. I can attest that rains and cloud made the missions ‘seat of the pants.’ Canadian helicopter crews thought we were mad to fly with the Hondurans citing a lack of maintenance. In the end all three machines were grounded or crashed.

However bleak the picture an unlikely source of help did emerge, Standard Fruit, Dole. More aware than the civil authorities, Dole had started preparations in anticipation of the Hurricane, though like everyone else they did not suspect its magnitude. Dole, through its local administration, started buying up - in the words of one of its managers - “every bean and kernel of rice we could get our hands on.” The reason was, to avoid prices rocketing as a result of shortages and speculation. Once the storm ended, Dole shifted to aiding the relief effort. It was well equipped to do so. The company established a distribution centre at its concentrate plant in La Ceiba at Pinanta. The first priority was to sort and distribute food that was arriving by air from Canada, Mexico and the US. The first people to get help through the system were the displaced living in temporary shelters in La Ceiba. Kids from the Marzapan private school (on Dole property) initially helped with the distribution, later local volunteers joined in. However, the unfortunate lack of community and the fault line between rich and poor meant that this reservoir of good deeds soon dried up. Dole ended up having to do most of the work. Dole did have certain assets, An integrated logistical system and the resources to make it work i.e. ships’ containers (which it allocated to any organisation which needed to transport relief supplies), a port facility at Cortez, trucks, a

warehouse, forklifts, labour, computers and an administrative structure. Its staff knew the area and spoke Spanish and usually English. And it had contacts. Contacts that persuaded a US National Guard Air Force unit to fly C-130s loaded with food into La Ceiba.

The system as it evolved insured that the distribution was transparent and the food got to those who needed it. At the warehouse, large numbers of men and women, most getting paid ‘food for work’ would sort and bag the different food items. Each family would receive a large bag, usually weighing 50lbs of basic necessities, and if available some ‘luxury items.’ The basics were rice, flour, cooking oil, powdered milk and bottled water. The luxury items were canned foods, like tuna or coffee. Sometimes clothing would be included. Once bagged, the food was then donated to a vetted organisation that had to prove its legitimacy, and the need of its constituency. Most of the recipients were church groups who were running the food for work programmes. I was at the warehouse and watched as trucks and pick-ups arrived for the bags. Each was carefully scrutinised by Maria San Martin, a Dole manager assigned to supervise the programme. She did not hesitate to deny anyone who could not produce the required documentation. Dole also demanded proof of delivery to the legitimate recipients. Each person receiving a bag, usually for a family, had to produce their national ID, (picture and fingerprint) and sign for the bag. In one of the poor Barrios I watched as hundreds of mainly women, many clutching children, would wait patiently for their name to be called to receive a bag. There seemed to be an almost desperate intensity to ensure honesty and equality in the distribution process. But it was also accepted that people would barter or sell certain items. A tacit realisation that individuals and families have different needs.

The other element of Dole’s relief programme was supplying food for field kitchens in villages where basic cooking equipment had been destroyed. Again it was a local functioning organisation, usually a church one, that ran the kitchen and controlled the distribution. I recall in one village near Boca a line of women and children clutching tin plates and mugs waiting with stoic endurance to obtain a meagre ration, and plastic bags of water from the Canadian Army Disaster Assistance and Response Team (DART)

There were some hiccups. A large donation from Texas of flour was shunned. It was wheat, not corn and unsuitable for making tortillas, or at least Honduran tortillas. This was solved by a Dole cook who worked out a recipe that could utilise the flour. A large donation of vacuum packed coffee in Christmas designed packaging was not greeted with enthusiasm. Not because of the Santa Claus but the Hondurans simply felt the coffee wasn’t that good.

My own impression of the Dole effort based on three lengthy trips to Honduras (and watching similar operations in other parts of the world) is that regardless of the organisation, food relief after a major disaster is a complex business and not one for amateurs.

Regardless of Dole’s motives which were not all altruistic (public image played a part) it had the machinery to do the job. A separate computer driven command centre was set up with a staff of 8 to keep track of the containers with relief supplies. Dole also had an international radio communications network and cell phones. Private industry in this incident showed that it not only had the logistical resources and equipment to do the job but also the business acumen to ensure it was done efficiently and effectively.

# Revised MSF Nutrition Guidelines

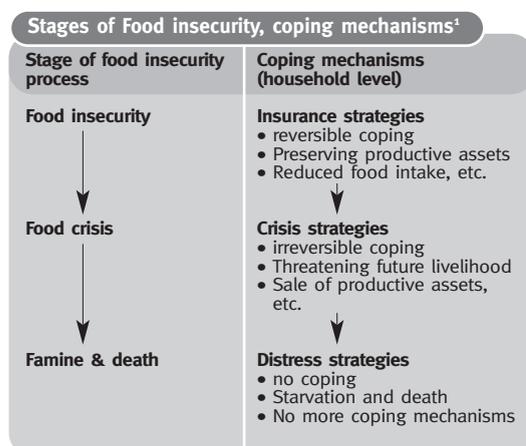
by Saskia van der Kam, MSF Holland, Senior Nutritionist

The MSF nutrition guidelines for use in emergencies have recently been revised. The new guideline will be available in January 2001. The main changes to the guidelines occur in the sections on i) analysis of food insecurity situations, ii) the relation between assessment of food insecurity and nutritional interventions, and iii) the treatment of severe malnutrition. Field exchange will highlight these revisions in three consecutive articles. This first article summarises key points in the new section on:

## Analysis of a food insecure situation

The new nutrition guidelines adopt an interdisciplinary approach to assessment and advocates using the UNICEF conceptual framework for analysis so that the assessment focuses on food security, health and care.

The new guidelines define three sequential stages in the transition from food security to famine. These are elaborated below. Every situation is different. The speed with which the stages progress from one to another can vary greatly depending on the nature (or the origin) of the crisis, its context, the range of coping strategies that are adopted, and the aid that is delivered.



People adopt a range of strategies (coping mechanisms) to cope with reduced access to food. In the latter stages of the process, coping mechanisms become exhausted so that the priorities of the individual and community shift towards survival.

## Stage 1 – Food insecurity: ‘insurance strategies’

During this first stage, the responses developed by the population are reversible and in principle do not damage future productive capacity.

People anticipate problems and adopt insurance strategies planned in advance to minimise the effects of food shortages, enhance productive capacity and preserve their productive assets. People’s responses are characterised by diversification of activities, longer work hours and focussing on increasing income and limiting expenditures. The caring capacity for the non-productive members of the community (elderly, children, sick) will be reduced. For example when men migrate to the city for temporary work, women become the head of the household and have more work and therefore less time to care for children. People also reduce their food intake, without this immediately being a threat to health. Therefore an increased level of moderate malnutrition may be seen.

## Examples of insurance strategies

### Increase resources:

- crop diversification for farmers
- livestock diversification for pastoral populations, sale of excess livestock, long distance grazing
- sale of non productive assets (utensils, jewellery, charcoal, furniture)
- labour migration (search for temporary employment in towns)
- diversification of informal economic activities
- loans
- prostitution

### Decrease expenditures:

- reduction of food intake (reduced meal frequencies and smaller quantities eaten)
- change in diet (consumption of wild foods, cheaper foods etc.)
- reduction of expenditures on health care (and water purchase)
- reduction of social support to the community, (relatives and neighbours)
- reduction of time available for care

## Stage 2: Food crisis: ‘crisis strategies’

The responses in the next stage ‘food crisis’ are less reversible as households are forced to use strategies that reduce their productive assets and threaten their future livelihoods.

At this stage, the households or individuals are obliged to develop new strategies to meet their food needs. All surpluses have been sold and all potential for increasing resources by diversification of activities have been exhausted. People have to sell goods that are essential for their future livelihoods. Additionally, economising on health and water resources results in a poor health environment which can be made worse by gradual migration of the skilled and educated of the community (nurses, teachers etc.)

In a food crisis, the prevalence of acute global and severe malnutrition as well as mortality rates associated with them, is elevated. An increased risk of mortality in moderately malnourished individuals can be attributed to a deterioration of the health environment, which increases the risk of infections.

## Example of crisis strategies for a settled population

### Increase resources:

- sale of productive assets (tools, seeds, livestock)
- massive slaughtering of livestock
- mortgaging of farmland or house
- sale of farmland, house, sale of land rights, harvest rights,
- exchange of livestock for staple food

### Breakdown in social structures:

- prolonged migration, men do not return from seasonal migration or are enrolled in armies.
- further cuts in use of water, firewood and health services
- community structures (mutual help systems) collapse
- Skilled and educated people (health staff) migrate
- decrease of community funds for funerals and weddings
- reduction of support to the non-productive members of households (small children, elderly, disabled)
- marginalisation of non-productive individuals, (orphans, beggars, etc.)

## Stage 3: Famine: distress strategies

Famine is the last stage of this process. In nearly all cases, it is linked to war and conflict. It is characterised by excess mortality and high malnutrition in all the age groups of the population, complete destitution, social breakdown and distress

migration as people abandon their homes in search of food. All coping mechanisms have been completely exhausted. The people are dependent on food aid for immediate survival.

Famine situations can result from inadequate relief assistance during the food crisis stage. Relief assistance has been too little, too late, not well targeted, not well organised or co-ordinated and often diverted. This is frequently linked to serious constraints such as high levels of insecurity or lack of political commitment (at international, national or local level).

The combined effects of insufficient food intake and poor health environment are important factors leading to famine and death among moderately and severely malnourished people. In fact, the majority of deaths (in absolute number) occur amongst individuals who are not severely malnourished. One of the main underlying causes of famine mortality is deterioration in the health environment. In addition to an adequate provision of food, access to curative health care, environmental sanitation and shelter can avert many deaths.

## Analysis

An assessment should try to locate a deteriorating food and nutrition situation on the continuum of moving from food security to famine.

The table below helps to determine the stage of the process of moving from food insecurity to famine. Each stage will not necessarily show all characteristics, but the table helps to illustrate which stage a situation has reached and in what direction the situation is likely to develop.

## Interventions

Locating a situation on the food security/famine continuum helps identify the most appropriate type of intervention.

In a food insecurity situation the focus of interventions should be on preservation of livelihoods to prevent people sliding into food crisis and famine, e.g. food for work. Early warning systems are crucial at this stage. Support can be given to existing health structures to shore up treatment of individual cases of severe malnutrition.

In a food crisis situation it is crucial to prevent further movement along the continuum by ensuring enough food. E.g. general food distribution. As the social caring systems comes under pressure provisions should be made to support special vulnerable groups, e.g. elderly, orphans, under five’s in general. Selective feeding programmes like therapeutic feeding centres and supplementary feeding centres can be installed. Health care systems and water resources may also require support.

In a famine situation, the primary goal is to ensure survival, to reduce mortality. The major focus is on general food distributions, supplementary feeding programmes, blanket feeding, and therapeutic feeding and mortality surveillance.

In the next issue Field Exchange there will be a further article based on revisions to the MSF guidelines. This article will elaborate further on choice of nutritional strategies and programme designs in relation to context.

## Specific characteristics of food insecurity, food crisis and famine

	Food insecurity	Food crisis	Famine
<b>Mortality rate</b>	Normal	Increased or high	Extremely high
<b>Population movements</b>	Seasonal migration	Population displacement +/-	Distress migration
<b>Global malnutrition rate</b>	could be increased	Increased	Extremely high
<b>Mortality related to moderate malnutrition</b>	Low	Elevated	High
<b>Severe malnutrition rate</b>	Low	Moderate or high	High
<b>severe malnutrition in adults</b>	Low	Low/moderate	High
<b>Livelihood changes</b>	Temporary	irreversible	Complete destitution
<b>Selling of capital assets</b>	none or very limited	Important	Exhausted or very limited
<b>Activity diversification</b>	Normal or slightly increased	Increased +++	Exhausted or limited
<b>Reduction of expenditures</b>	Reduced	Reduced +++	No more possibility to reduce
<b>Food availability</b>	Normal or slightly decreased	Reduced	Rare or none
<b>Food accessibility</b>	Slightly reduced	Reduced	Severely reduced or none
<b>Dependence on food aid</b>	Low	High or moderate	Complete
<b>Reduction in caring practices</b>	Low	Moderate or high	High

<sup>1</sup> inspired by H.Young, S. Jaspars. Nutrition Matters. Intermediate Technology publication, London. 1995.



**Top from left**

**Left:** Andrew Tomkins (UCL, UK), Rita Bhatia (UNHCR Geneva) and Andrew Seal (UCL, UK).

**Right:** Milla McLachlan (World Bank Washington DC), Rita Bhatia, Richard Jolly (Outgoing Chair ACC/SCN, New York), Sonya Rabeneck (ACC/SCN Geneva), Mike Golden (Aberdeen University) and Namanga Ngongi (Chair ACC/SCN).

**Second row from left**

**Left:** Chris Daniell (ACF, France) and Carlos Navarro-Colorado (ACF, France)

**Right:** Namanga Ngongi, Milla McLachlan and Richard Jolly.

**On the left, from left**

Sonya Rabeneck and Arabella Duffield. Annalies Borrel.



From Left: Yvonne Grellety (Consultant), Anne Ralte (FANTA, Washington DC), Mike Golden (Aberdeen University) and Anne-Sophie Fournier (AAH New York)



From Left: Pieter Dijkhuizen (WFP, Rome) and Brad Woodruff (CDC, Atlanta)



From Left: Mary Lung'aho (CRS/Linkages, Washington) and Rebecca Norton (IBFAM, Geneva)

# people in aid

The ACC/SCN held its 27th session at the World Bank in Washington DC last April. The session report is available at: <http://acc.unsystem.org/scn/> or email: [accscn@who.int](mailto:accscn@who.int)

Cartoon Corner by Jon Berkeley



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As always thanks for the Cartoon to:

Jon Berkeley, who can be contacted through [www.holytrousers.com](http://www.holytrousers.com)

Special thanks to Professor John Kevany, Jean Long and Deirdre Handy from Trinity College for assistance and support for the ENN.

The ENN supported by:



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The Emergency Nutrition Network (ENN) grew out of a series of interagency meetings focusing on food and nutritional aspects of emergencies. The meetings were hosted by UNHCR and attended by a number of UN agencies, NGOs, donors and academics. The Network is the result of a shared commitment to improve knowledge, stimulate learning and provide vital support and encouragement to food and nutrition workers involved in emergencies. The ENN officially began operations in November 1996 and has widespread support from UN agencies, NGOs, and donor governments. The network aims to improve emergency food and nutrition programme effectiveness by:

- providing a forum for the exchange of field level experiences
- strengthening humanitarian agency institutional memory
- keeping field staff up to date with current research and evaluation findings
- helping to identify subjects in the emergency food and nutrition sector which need more research

The main output of the ENN is a quarterly newsletter, Field Exchange, which is devoted primarily to publishing field level articles and current research and evaluation findings relevant to the emergency food and nutrition sector.

The main target audience of the Newsletter are food and nutrition workers involved in emergencies and those researching this area. The reporting and exchange of field level experiences is central to ENN activities.

The ENN is located in the Department of Community Health and General Practice, Trinity College, Dublin, Ireland.

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