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# **New & Noteworthy in Nutrition**

Issue 38 September 13, 2002



As the long hot summer of the global summit draws to a close, and against a backdrop of famine in southern Africa, NNN reflects on the highlights and lowlights. First, in June, we had the World Food Summit: five years later (WFS:fyl) in Rome, then a month later the XIV International Conference on AIDS in Barcelona, followed by the World Summit on Sustainable Development (WSSD) which concluded 4 September in Johannesburg. As the southern African situation worsens, NNN looks at what has happened since the May issue. Other sections focus on HIV/AIDS, hunger, obesity, child growth and development, and micronutrients, concluding with the back page announcements.

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## **F**AMINE

In late August, with Southern Africa facing its worst food crisis in a decade, WFP launched a massive regional appeal to feed millions of hungry people in six countries. US\$507 million is needed to feed some 10.2 million people at risk of starvation in Lesotho, Malawi, Mozambique, Swaziland, Zambia and Zimbabwe until the main harvest in March 2003. The operation will target the most vulnerable families: HIV/AIDS victims and families headed by women, children and the elderly. It is estimated that seven million people require food immediately with this figure rising to just over 11 million from September to November and peaking at 12.8 million from December to March 2003. To date, WFP has been feeding 4.6 million in southern Africa (www.wfp.org/).

Malawi. The May issue of NNN focused on the particularly severe situation in Malawi and its immediate causes: political mismanagement of grain stocks, localized flooding, transport bottlenecks, and rising food prices. Since then a revealing report, commissioned by UK Action Aid and written by Stephen Devereux of the Institute of Development Studies, has emerged following a mission to Malawi. Devereux states that, though the production shortfall was less severe than ten years ago, the impacts have been much worse for the following reasons: the growing impacts of HIV/AIDS, intensifying pressure on land due to rapid population growth, difficult transition between state-run and liberalized markets, declining soil fertility, limited non-agricultural income opportunities and an urban bias in government policy (www.actionaid.org/).

IFPRI has published a policy brief, "Fighting Famine in Southern Africa: Steps out of the Crisis", which draws on the lessons learned from past research on causes and mitigation options for addressing the immediate and long-term causes of famine, and highlights options along a continuum from relief to sustained development (www.ifpri.org/pubs/ib/ib8.pdf)

**GM food aid.** For the month of August, more than 17,000 metric tons of US-donated whole maize was sitting in the hold of a ship docked in the South African port of Durban because of a standoff between the Zimbabwean government and international aid agencies. At issue was whether Zimbabwe, which strictly limits importation of genetically modified seeds, would accept the load of American maize -a mixture of conventional and GM kernels that bear extra genes for hardiness. Zimbabwe was worried about the safety of GM maize and contended that if seeds were planted instead of eaten, their pollen would "pollute" surrounding crops rendering them unexportable to European and other nations that restrict GM crop imports. Mugabe's government said it would mill the kernels and distribute the maize as meal to ensure that none of the seed is planted. But that wasn't acceptable to donors who felt that food distribution could have been politically targeted.

The UN meanwhile released a statement on 23 August saying the maize was entirely safe for human consumption. An unusual agreement was finally reached that allowed the

New and Noteworthy in Nutrition (NNN) aims to highlight new research, new programs, initiatives and innovations, indeed anything that's new, noteworthy and relevant to nutrition. NNN is written and edited by Stuart Gillespie (s.gillespie@ifpri.org), produced by Bonnie McClafferty and Nik Harvey of IFPRI, and distributed three times per year (in January, May and September) via print, email and web-postings. We are very grateful to the United Nations Children's Fund, the Micronutrient Initiative, the Food and Agriculture Organization of the United Nations, the World Health Organization, the World Food Programme and the World Bank for providing funds to support NNN. The material contained herein is the responsibility of the editor, and should not be attributed in any manner to any institution.

WFP to deliver the part-GM consignment to the Zimbabwean government, which in turn would give the agency an equal amount of domestic maize from its own reserves to be distributed via NGOs to those in need. One outstanding question being asked when the dust settled was what was the government planning to do with this reserve?

In contrast, the following from Zambian President Levy Mwanawasa: "We have made a decision...We have rejected GM food. It is not a slight on donors. There is no conclusive evidence that it is safe. We wish not to use our people as guinea pigs in this experiment. Our decision is final." The US Secretary of State, Colin Powell, publicly criticized Mr. Mwanawasa's decision at the WSSD. The UN expects some 2.5 million Zambians will need outside food aid by the end of 2002.

**DPRK.** Despite improved harvests this year, the Democratic People's Republic of Korea also urgently needs fresh pledges of external assistance to help plug a food gap threatening millions ahead of the main harvests in September/October, according to a late July report from FAO and WFP. Because DPRK's domestic production remains well below minimum consumption requirements, its capacity to import commercially is limited and pledges of aid by the international community have been slow this year, the country faces an uncovered food deficit of 382,000 tonnes (www.wfp.org).

McTasteless. McDonald's has been accused of extreme insensitivity after releasing a new sandwich called the "McAfrika" in Norway, one of the world's richest countries. The \$4 concoction of beef, cheese, tomatoes and salad in a pitta-style sandwich is said to be based upon an authentic African recipe. "We acknowledge that we have chosen an unfortunate time to launch this new product," said McDonalds, without apparently doing anything more about it.

Smart work. An inter-agency initiative to improve the monitoring, reporting and evaluation of humanitarian assistance interventions has been launched. The Standardized Monitoring and Assessment of Relief and Transitions (SMART) program will pilot an approach to routinely collect, analyze and disseminate information on the nutrition and mortality experience of populations served by humanitarian interventions. The program advocates the interpretation of health and nutrition data in the context of food security and vulnerability analysis. It will provide implementing partners and the broader humanitarian community with a range of tools to support humanitarian program assessment, monitoring and evaluation. A specific

website has been established to serve as an organized workspace and knowledge repository to be used by participating organizations (payson.tulane.edu/haresults/).

#### **S**UMMIT SUM-UP

It's June, this must be Rome. At the World Food Summit in 1996, representatives of 185 countries and the European Community set a goal of halving the number of hungry people by the year 2015 – from the then 841 million to 420 million. Over five years later, the number is 815 million. The rate of improvement needs to be quadrupled if there is to be any chance of reaching the goal. Even more worrying, most of this reduction has taken place in one country: China, which reduced the number of food insecure by about 76 million during the 1990s. Most African nations however are worse off today than they were ten years ago.

Just will it. Generating the political will to end hunger was a major talking point in the 2002 World Food Summit: Five Years Later at FAO in Rome. 10-13 June. But when it came to the crunch - and true to recent form -- the right to food was reduced to a voluntary code of conduct, rather than anything that might have legal teeth. The UN Secretary General, Kofi Annan and Jacques Diouf, FAO's Director General had earlier spoken of their impatience with unfulfilled past promises and the need for action to reflect words. The agreed words this time exhorted governments, international organizations, civil society and the private sector to "reinforce their efforts so as to act as an international alliance against hunger". Turnout by world leaders was low, though Robert Mugabe did show up to congratulate himself on his land reform program's role as a "firm launching pad for our fight against poverty and food insecurity."

Other participants at WFS:fyl: "Let us therefore make sure that this time, our resolutions are backed by specifics on time, resources and political will." (J.A. Kufuor, President of Ghana). "We have the knowledge....from this summit I hear that we have the will." (Gro Harlem Brundtland, Director General, World Health Organisation). "The Oxfam International delegation announces the failure of the World Food Summit: five years later, due to the clear absence of political will....there has been more interest in scoring a goal at the football World Cup than achieving the goal of food security for all." (Oxfam International).

"More than nothing; less than something" was one delegate's summing up of the 26 August – 4 September UN World Summit for Sustainable Development (WSSD) final declaration in Johannesburg. Overall, western governments, the UN and big business hailed WSSD as a qualified success,

while many developing countries and civil society in general saw it, by and large, as a failed opportunity. After the horse-trading (or "consensus-building"), the agreed declaration contained much of the usual summit-speak, a series of exhortations to do certain things "with a sense of urgency." Much "greenwashing", but few concrete targets. One important nutrition-relevant success though was the fixing of a time-bound target for improving access to water and sanitation.

Yet, despite Thabo Mbeki's opening statement that "we do not accept that human society should be constructed on the basis of a savage principle of the survival of the fittest," the status quo was never under any threat. Despite pressure from the EU, no targets were set for the use of renewable energy and the EU and US did not agree to phase out their massive agricultural subsidies (see below). Many criticized the vast and disparate agenda, and argued for narrowly focused and concretely implementable multilateral initiatives. Just how such a massive, wide-ranging conference with some 65,000 delegates could ever commit to the fine print was never clear from the outset. Is this the beginning of the end of the megaconference?

Reduce aid. Both the WFS and the WSSD called inevitably for more aid. But, while the issue towered over delegates like an elephant at a tea party, neither summit concretely addressed the glaring need for less aid. OECD countries transfer more than \$300 billion to their own agricultural sectors (roughly equivalent to the combined GDP of all of sub-Saharan Africa), and around \$8 billion to those of the developing world. That breaks down as \$12,000 compared to \$6 per farmer per year (no typo). In addition, access to developed country markets is constrained by customs tariffs that average roughly 60% for primary agricultural products, and even more for processed agricultural goods.

# HIV/AIDS

The last two issues of NNN have devoted considerable column space to HIV/AIDS. This is because the pandemic is one of the major nutritional problems the world is currently facing. There is now considerable evidence of how AIDS precipitates and exacerbates other determinants of malnutrition. As Peter Piot, UNAIDS Director, said at the XIV International AIDS Conference in Barcelona "The only effective treatment at present is antiretrovirals. However, inadequate media attention has been given to the importance of good nutrition. Other treatments and prophylaxis especially, have been neglected. It doesn't make a headline, it is not a sexy story."

Barcelona. There was some good news, some bad, a lot more words, a lot more promises. With its massive media coverage, global awareness and commitment to act is apparently increasing and AIDS is slowly coming out of the public health closet. The numbers however are the bad news: both the large numbers of people affected (40 million, with 15,000 new infections and 8,000 deaths per day now), and the small number of dollars that are being promised. Then there's the even smaller number actually being spent. The Global Fund is still alarmingly underfunded, but most of these pledged funds either have not been received by the Fund or disbursed. Discussions over delivery mechanisms (whether existing or new) continue.

**J'accuse!** The UN Special Envoy on HIV/AIDS in Africa, Stephen Lewis, at a late June pre-G8 meeting in Canada, claimed the G8 was "guilty of a profound moral default" in not meeting its earlier aid commitments, pledged as far back as 1970 when the famous 0.7% GDP figure for aid quotas was agreed for wealthy nations. The particularly drastic underfunding of AIDS globally is, Lewis asserted, one of the main reasons the Millennium Development Goals can never be achieved.

**Scaling down.** While much international discussion focuses on scaling up, the story of Malawi, highlighted in a 9 August issue of *Science*, is an interesting case study of scaling down. HIV has infected 1 million Malawians to date, 16% of the adult population. In October 2000, local and international experts put together a treatment and prevention plan targeting 300,000 people for \$1.6 billion over 7 years. In early 2001 the idea of the Global Fund was borne. By September 2001, with only a small proportion of the nearly \$10 billion annual global target having been pledged, and following the 9/11 attacks, Malawi was advised by WHO to scale back to \$500 million over 5 years, targeting 100,000 people. In early 2002, donors suggested cutting back to \$306 million.

The final version, which was favorably received by the Global Fund, amounts to \$200 million; enough to treat just 25,000 Malawians, less than 3% of those infected. Justin Malawezi, Malawi's Vice President, spoke in Barcelona of how such limited support would likely exacerbate political tensions, "raising the stakes for those left out" But Malawi was one of the "lucky" 58 proposals out of 322 submitted for the first round of awards (Science 297 (5583), 927-9). Another example of political tension was highlighted by the South African Health Minister Manto Tshabalala-Msimang accusing the Global Fund of undercutting the government's authority in making a \$70 million grant to KwaZulu-Natal state.

Scaling up. The findings of two keys studies of the potential impact and costs of scaled up HIV prevention were released in Barcelona. The Global HIV Prevention Working Group, convened earlier this year by the Bill and Melinda Gates Foundation and the Henry J Kaiser Family Foundation and comprising nearly 40 of the world's leading HIV prevention experts, released its blueprint designed to help prevent millions of new HIV infections by the end of the decade. The report was released in conjunction with a new HIV study conducted by a group that includes UNAIDS, WHO and the US Census Bureau. It is estimated that 29 million new HIV infections could be avoided by 2010 through the implementation of a focused package of key preventive interventions and the expanded use of existing tools and strategies. Nearly a third of the benefits would accrue to just two countries, India and China, with an additional 40% in sub-Saharan Africa (www.gatesfoundation.org/globalhealth/hivaidstb/hivaids)

MTCT and micronutrients. A recent review by Michele Dreyfuss and Wafaie Fawzi of the Harvard School of Public Health in Boston has focused on the relationship between micronutrients and vertical transmission of HIV-1. Vertical transmission of HIV from mother to infant can occur during pregnancy, at the time of delivery, or post-natally through breastfeeding and is a major factor in the continuing spread of HIV infection. Inadequate nutritional status may increase the risk of vertical HIV transmission by influencing maternal and child factors for transmission. Numerous studies have also reported that micronutrient deficiencies impair immune responses, weaken epithelial integrity, and are associated with accelerated HIV disease progression. In this review, although low serum vitamin A concentrations were shown to be associated with an increased risk of vertical HIV transmission in prospective cohort studies, randomized, placebo-controlled trials have reported that vitamin A and other vitamin supplements do not appear to have an effect on HIV transmission during pregnancy or the intrapartum period. However, the ability of prenatal and postpartum micronutrient supplements to reduce transmission during the breast-feeding period is still unknown (Am J Clin Nutr 2002;75:959-70).

These findings are further corroborated by a subsequent Cochrane Library (Issue 3 2002) review by Shey Wiysonge and others, who summed the evidence for vitamin A supplementation and MTCT. Five trials were found to be eligible, only two of which included an estimate of the effect of vitamin A supplementation on at least one of the prespecified outcomes. Based on the two trials, with a total of 1813 participants, these authors also found no evidence that vitamin A supplementation has an effect on MTCT of HIV.

More on A and AIDS. A recent controlled clinical trial carried out by Newton Kumwenda and colleagues from Johns Hopkins, National Institute of Allergy and Infectious Disease and the University of Malawi found that antenatal vitamin A supplementation increases birth weight and decreases anemia among infants born to HIV-infected women in Malawi, but it did not affect perinatal HIV transmission (Clinical Infectious Diseases Issue 35, (www.journals.uchicago.edu/CID)

RENEWAL. The Regional Network on AIDS, Rural Livelihoods and Food Security (RENEWAL) is an eastern African capacity development/action research initiative that aims in particular to foster proactive linkages between national agricultural and public health organizations – two sectors that normally do not 'talk' to each other -- and between academia and policymakers. Currently underway in Uganda and Malawi the process involves a preparatory phase involving national multi-sectoral stakeholder workshops that in turn generate priorities for action and for targeted research. Action research studies, focused on at least one of the priority areas and directly involving local partners are selected and funded out of an Action Research Fund (ARF), the findings of which will be discussed in subsequent policy workshops. RENEWAL is facilitated by the ISNAR and IFPRI. See the project website for more details (www.isnar.org/renewal), and IFPRI's website for two linked essays on AIDS and food security (www.ifpri.org/).

AIDS in Asia. Another excellent publication has emerged from the keyboards of Preble and Piwoz. The book "Prevention of Mother to Child Transmission of HIV in Asia: Practical Guidance for Programs" focuses on the five most affected countries in the region—Cambodia, China, India, Myanmar, and Thailand—though the technical background presented and lessons learned from these five countries are relevant for the rest of the region. The paper is intended for use as a technical resource, a programmatic guide, and a basis for policy dialogue and coordination (www.aed.org/publications/AsiaPMTCT.pdf)

**Useful weblinks** on HIV/AIDS, food and nutrition: www.who.int/nut/documents/refhiv.htm www.iaen.org/papers/archives.healthdev.net/intaids/www.uea.ac.uk/dev/publink/barnett/aidindex.shtml www.aidsalliance.org/ngosupport/

#### HUNGER

Hunger poll. A recent US poll by the Alliance to End Hunger, which includes religious bodies, businesses, universities, civil rights groups and labor unions, reveals a surprising depth of US public concern about hunger, both nationally and internationally. An astonishing 93% said "fighting the hunger problem" was important to them (almost as much as "declining moral values"). Since September 11th, 70% of voters say they have become more interested in helping reduce hunger. A message that combines program reform with aid wins out over status quo messages of more or less aid.

Interestingly the *Washington Post* ran another poll of 1,400 randomly selected adult phone respondents in early July to elicit public views of AIDS funding. This poll showed that access to clean water and reduction of hunger were considered greater priorities for US funding than AIDS prevention and treatment (mainly because of the perceived view that unsafe sexual practices and uncommitted national governments were the major problems, not lack of resources). See Back Page announcement of the forthcoming Martin J Forman Lecture on changing the politics of hunger.

Hunger is illegal. "No carpenter would attempt to build a wooden house without a hammer. Yet, in the half century since the right to be free from hunger was established in the Universal Declaration of Human Rights, the world has struggled to end hunger without the similarly crucial tool of strong law. The valiant aid and development programs we've relied on instead have proven insufficient to eliminate malnutrition..." So starts the website for the Campaign for an International Food Security Treaty (IFST). Based on existing international covenants, the IFST aims to establish enforceable international law guaranteeing the right to be free from hunger, and to oblige countries to establish their own related national laws. It only focuses on the elimination of starvation and malnutrition – specifying actions that must be prohibited such as the use of starvation as a weapon (e.g. Bosnia and Somalia in 1992, Sudan 2002), as well as proactive measures such as the establishment of a world food reserve and resource center, complaint procedures and regular national reporting to the UN. The inaugural issue of the campaign newsletter "Great Leap" (as in Neil Armstrong's first moon step) is available online (www.treatv.org/)

## **OBESITY**

**Accelerated 'evolution'.** The human species is currently facing one of its greatest evolutionary challenges. So claimed Andrew Prentice of the Center for Human Nutrition at the London School of Hygiene and Tropical Medicine at the British Association's Science Festival held in Leicester, UK, on 9 September. People are now undergoing changes similar to those that occurred two centuries ago when Europeans shot up in height by 30 centimetres or more. But this time the changes are damaging and they're happening very, very rapidly. In 1980, the average man weighed 73.7 kg and a woman 62.2. By 2000, that had increased to 81.6 and 68.8 kg respectively. "What's happening now is that we've changed the environment that we live in in an incredibly short time one generation or perhaps two generations at most, and this has challenged our ancient metabolism, which for thousands of generations has been geared to fighting famine." said Prentice

Obesity and Poverty: A New Public Health Challenge is an essential source for understanding the new face of poverty in the Americas. This up-to-date examination of the prevalence of overweight and obesity in the region's countries looks at these conditions' medium- and long-term harmful consequences and explores their implications for planning public health interventions (www.paho.org/).

Diet, nutrition and chronic disease. WHO has released the draft report of the Joint WHO/FAO Expert Consultation on Diet, Nutrition and the Prevention of Chronic Diseases, held in Geneva, 28 January - 1 February 2002. In line with WHO's global strategy for prevention and control of noncommunicable diseases (which emphasizes integrated prevention by targeting three main risk factors: tobacco, unhealthy diet and physical inactivity). WHO and FAO are working towards updating the existing recommendations on diet, nutrition and the prevention of chronic diseases. New scientific evidence and the lessons learned from implementing national intervention strategies to reduce the burden of noncommunicable diseases are being evaluated. The report includes updated recommendations on population nutrient intake goals as well as on physical activity (www.who.int/hpr/nutrition/ExpertConsultationGE.htm).

**Get moving.** New dietary guidelines were released by the US National Academy of Sciences (NAS) in early September. For the first time, the need for more physical activity was headlined – reminding us all of that calorie can be burnt and not just consumed. One hour activity per day was recommended, which is twice the recommendation of six years ago (www.nap.edu/)

#### CHILD GROWTH AND DEVELOPMENT

**Life cycles.** In a recent study in West Java, Indonesia, Marjanka Schmidt of Wageningen University and colleagues from University of Indonesia and UNICEF investigated the relative contribution of prenatal and postnatal factors to growth and nutritional status of Indonesian infants. Newborn infants, from women recruited at around 18 weeks of pregnancy from 9 rural villages, were followed until 12–15 mo of age, with weight, length, morbidity, breast-feeding and food intake assessed monthly. Neonatal weight and especially length, reflecting the prenatal environment, were found to be the most important predictors of infant nutritional status (*J Nutr 132 (8), 2202-2207*)

**Breast is even better.** In addition to those listed in NNN 37, more benefits of breastfeeding have come to light from new studies: one by Rao and co-workers on the association between breastfeeding and intelligence (Acta Paediatr. 2002;91(3):267-74.) concluding: "duration of exclusive breastfeeding has a significant impact on cognitive development without compromising growth among children born small for gestational age." Similarly, Mortensen et al. (JAMA 2002;287:2365-71) found slightly higher intelligence scores in adults who had been breast-fed longer, with many confounders controlled for.

And in a landmark study, breastfeeding has also been linked to reduced breast cancer risk. A British research group, the Collaborative Group on Hormonal Factors in Breast Cancer, collected and reanalyzed data from 47 epidemiological studies of breast cancer in 30 countries. "If you look back to the 17th century or even earlier, people knew . . . that nuns had high rates of breast cancer", Valerie Beral, an Oxford University epidemiologist who led the project said. "People have thought for centuries that childbearing and breastfeeding were important." The impact of breast-feeding on breast cancer risk was found to be far greater than the effects of hormone use and diet, and the relatively high breast cancer rates found in developed countries are largely explained by the fact that women in those countries have chosen to have few children and to breast-feed them briefly or not at all. Altogether, the studies contained information on over 50,000 women with breast cancer and nearly 97,000 women without cancer who served as controls (Lancet, 358 (9291) 1389)

**Fetal origins.** A Guatemalan study by Aryeh Stein and collaborators from INCAP and Emory University has shown that cardiovascular disease (CVD) risk factors are related to adult adiposity but not birth weight in young Guatemalan adults – a finding that runs counter to the hypothesis that fetal undernutrition programs inappropriate metabolic responses to nutritional abundance in later life. Most studies

investigating the hypothesized fetal origins of disease have been conducted in industrialized countries. This one on the other hand was based on data from 187 men and 198 women aged 20–29 years who had participated in a longitudinal study conducted in Guatemala between 1969 and 1977. Though adult BMI was, as expected, associated with increased prevalence of CVD risk factors in both men and women, there was only a weak link between low birth weight and adult BMI among women, and none among men (*J Nutr* 132 (8), 2208-2214)

#### **MICRONUTRIENTS**

Infant anemia. The high prevalence of low hemoglobin (Hb) concentration among breastfed Indonesian infants aged 3-5 months is related to maternal anemia, according to a study by Saskia de Pee and colleagues from Helen Keller International, UNICEF and the National Institute for Health Research and Development in Jakarta. They analyzed crosssectional data from the HKI/GOI Nutrition and Health Surveillance System in rural Java from September 1999 to February 2001. The prevalence of Hb below 110g/l was a very high 71%. Comparing with infants of nonanemic mothers with a normal birth weight, normal birth weight infants of anemic mothers were 1.8 times as likely to have a low Hb; infants of nonanemic mothers but with low birth weight: 1.15 times as likely, with the highest risk for low Hb predictably being those with low birth weight and anemic mothers (3.68 times). Other risk factors included maternal stunting, a young mother, and lower maternal education (J Nutr 132 (8), 2215-2221)

Supplement to prevent. In a review of country level experiences of iron supplementation and lessons learned, Ray Yip of UNICEF emphasizes the need to consider iron supplementation as part of a comprehensive strategy for the prevention of iron deficiency, and not just as a treatment for anemia that is stopped as soon as clinical improvement is noted. Experience in developing countries indicates that often the poorest women with the most deficient intakes are the least likely to receive iron supplements during pregnancy. Providing supplements to women during antenatal care visits is useful but often inadequate, so other delivery channels must also be explored, including private sector markets and community networks. Communication efforts must be expanded to increase understanding of the importance of taking supplements and to address any fears or misconceptions relating to supplementation. Overall, there is a major need to increase the capacity of individuals and communities to define, analyze and act to address their own health needs (J Nutr 2002 Apr; 132(4 Suppl): 859S-61S).

Animal source foods. A small amount of animal source foods (ASF) added to the diet of school-age children can lead to a statistically significant improvement in cognitive function, physical activity, positive behaviors, classroom attention, physical growth and biochemical micronutrient status. This was one key finding of research undertaken in the Global Livestock Collaborative Research Support Program (GL-CRSP) Child Nutrition Project in Kenya, and discussed at a June 2002 international conference on "Animal Source Foods and Nutrition in Developing Countries" held in Washington DC. The conference, organized by Montague Demment (GL-CRSP Director) and Lindsay Allen (UC Davis) aimed to review what is known about the importance of ASF for the nutrition, function and economic status of populations in developing countries; to review programs aimed at increasing ASF production and/or consumption, and to develop a policy and research agenda.

Advocating iron. In 1999 The Manoff Group was commissioned by The Micronutrient Initiative to conduct a study of perceptions, attitudes, and knowledge about iron deficiency and iron programs. Research was done with 130 individuals around the world, involved in iron programs or with the ability to influence program efforts. Linked to a strategic advocacy and communications plan aimed at increasing awareness and programming to prevent and treat iron deficiency, Manoff has published two advocacy booklets: "Unlock Every Child's Potential", targeted to early child development and child health specialists, and "Iron Improves Life" aimed at policymakers and donors (www.manoffgroup.com/)

How to be good. Can micronutrients also calm troubled minds? To test whether physiologically adequate intakes of vitamins, minerals and essential fatty acids cause a reduction in antisocial behavior, Bernard Gesch of Oxford University and others undertook a randomized double-blind, placebocontrolled trial of nutritional supplements on 231 young adult prisoners, comparing disciplinary offences before and during supplementation. Compared with placebos, those receiving the active capsules committed an average of 26% fewer offences (P=0.03, two-tailed). Compared to baseline, the effect on those taking active supplements for a minimum of 2 weeks was an average 35% reduction of offences (P<0.001, two-tailed), whereas placebos remained within standard error. Antisocial behavior in prisons, including violence, are reduced by vitamins, minerals and essential fatty acids with similar implications, the authors claim, for those eating poor diets in the community. Omega-3 fatty acids -- which have been linked to reductions in depression and irritability, and have been shown in animals to raise brain levels of serotonin -- are the prime suspects (The British Journal of Psychiatry (2002) 181: 22-28).

**Meta-zinc.** Multiple studies have been carried out to assess the effect of zinc supplementation on child growth. The results of these studies are inconsistent, and the factors responsible for these varied outcomes are unknown. With the aim of resolving these uncertainties, a meta-analysis of 33 randomized controlled intervention trials was recently conducted by Ken Brown of UC Davis and colleagues, to assess the effect of zinc supplementation on the physical growth and serum zinc concentrations of prepubertal children. Zinc supplementation produced highly significant, positive responses in height and weight increments, and a large increase in child serum zinc concentrations, with growth responses greater in children with low initial weightfor-age Z scores and in those aged over 6 months with low initial height-for-age Z scores (American Journal of Clinical Nutrition, Vol. 75, No. 6, 1062-1071, June 2002).

In an editorial for the same issue of AJCN, Rev Martorell of Emory University highlights the policy and program implications of this important conclusion. He states that the findings underscore that young children should be the priority of zinc improvement programs, even if the effect of zinc supplementation on growth is independent of age. Daily supplementation with zinc, even in combination with other nutrients, is too complicated and expensive for poor countries. Improving complementary feeding through nutrition education has potential but is not easy to do. The foods richest in zinc are from animal sources, but these are not often included in toddlers' diets because of entrenched custom, religion, or cost. The use of fortified complementary foods appears promising and several experiences in Latin America with industrially prepared foods are being evaluated cost-effectiveness. Home-level fortification complementary foods by mothers is a cheaper approach that was shown to be efficacious for treating anemia (in the Zlotkin et al study described in NNN 37) and that needs to be tested for zinc and other deficiencies.

MICAH. The MICronutrient And Health (MICAH) program -- funded by CIDA, managed by World Vision Canada and implemented by partners in Ethiopia, Ghana, Malawi, Senegal and Tanzania -- has shown significant results in reducing micronutrient malnutrition through integrated health and nutrition interventions, over a four year period (1996-2000). Improvements in child and maternal health and nutritional status were also achieved. Interventions included diet diversity/modification, supplementation, small-scale fortification, water/sanitation, malaria prevention, parasitic treatment and nutrition education. A second phase of implementation is anticipated (2002-2005). For a copy of the first phase results, please email: nut team@worldvision.ca.

#### THE BACK PAGE

**Human Development Report.** This year's report by UNDP focuses on political participation as an important, and often forgotten, part of the agenda for human development. "Having the means and the freedom to fight for one's rights, to shape decisions about the future of one's own community, to gain access to crucial information and markets -- in short, having a choice in life, is at the core of human empowerment. And it is what we mean by human development in its true sense." said Sakiko Fukuda-Parr, lead author of the report, speaking at this week's formal launch ceremony in Manila, Philippines. As it does every year, the report also ranks countries on an overall development index, which is premised on a combination of economic and social indicators including life expectancy, GDP and adult literacy. Coming out on top for the second year in a row is Norway, with Sweden and Canada close behind. Sierra Leone brings up the rear (www.undp.org/)

World Development Report. The latest World Development Report (WDR 2003) focuses on sustainable development, describing various promising innovations around the world poverty-reducing, environmentally-friendly aimed participatory development. "In the next 50 years, the world's population will begin to stabilize, and the majority of people will live in cities for the first time in history," said Zmarak Shalizi, lead author of the WDR 2003. The WDR 2003 suggests that sustainable development will require: achieving substantial income growth in developing countries, managing the social, economic, and environmental transitions to a predominantly urban world, attending to the needs of hundreds of millions of people living on environmentally fragile lands, reaping the "demographic dividends" seen in declining dependency rates and slowing population growth, and avoiding the social and environmental stresses, at local and global levels, likely to emerge on the path to a \$140 trillion world economy (www.worldbank.org/)

Community Nutrition. LINKAGES/AED, Makerere University in Uganda and UNICEF have released "Successful Community Nutrition Programming: Lessons Learned from Kenya, Tanzania, and Uganda" by Lora Iannotti and Stuart Gillespie. This report brings together the main findings of a series of assessments of successful community nutrition programming carried out in Kenya, Tanzania, and Uganda between 1999 and 2000. (www.linkagesproject.org/commnut.htm)

**2020.** IFPRI's 2020 Vision program held a major international conference on food security last September in Bonn, Germany. More than 900 people from the public and private sectors and civil society came together for three days to discuss goals, solutions, and the actions necessary to end hunger in the next two decades. The proceedings: "Sustainable Food Security for All by 2020" which compiles the presentations made by more than 70 speakers, summaries of the discussions that followed, results of polls taken during the conference, and other highlights, are now available online (www.ifpri.org/pubs/books/2020conpro.htm).

**Sight and Life.** An interesting compendium of articles by vitamin A experts comprises the 107 pages of the latest Sight and Life newsletter (3/2002), with the theme "Many Ways, One Goal" (www.sightandlife.org/)

**ECA nutrition.** Newly published by the World Bank: "Prospects for Improving Nutrition in Eastern Europe and Central Asia" by Claudia Rokx, Lynn Brown and Rae Galloway, presents an overview of critical nutrition issues in this diverse region, and suggests strategies for improvement. One main finding is that, along with poverty, a lack of knowledge about basic nutrition is a key determinant of malnutrition (purchase online at www.worldbank.org/).

**New at IFPRI.** As of 1 September 2002, Joachim von Braun is the new Director General of IFPRI, taking over from Per Pinstrup-Andersen. Dr von Braun's previous position was Director of the Center for Development Research in Germany.

Martin J Forman Lecture. David Beckmann, President of Bread for the World will give the 2002 lecture, to be held at IFPRI, Washington DC, 15 October, 6pm on "Changing the Politics of Hunger". (contact: s.gillespie@ifpri.org)