





Hopes Fulfilled or Dreams Shattered? From resettlement to settlement Conference November 23rd- 28th, 2005

Background Paper

Issues in Nutrition for Refugee Children

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This background paper has been prepared to inform discussion at this conference and does not necessarily represent the views of the Centre for Refugee Research.

ISSUES IN NUTRITION FOR REFUGEE CHILDREN

1. INTRODUCTION

While the United Nations High Commissioner for Refugees (UNHCR) and the World Food Programme (WFP) share primary responsibility for meeting the food and nutritional needs of refugees (UNHCR 2000, p.152), approximately 21.5 million refugees and displaced people across the world experienced some form of malnutrition in 1999 (WHO 2003a). According to the World Health Organization (WHO), malnutrition occurs when the intake and utilisation of energy and nutrients are not adequate to maintain well-being, health and productivity. Malnutrition can include micronutrient deficiencies, as well as generalised malnutrition, which is discernible by stunted growth and low weight (WHO et. al 1999, p.2). While the causes and manifestations of malnutrition and micronutrient deficiencies in refugee camps are complex and vary between countries, regions, cultures, ages and situations, children, because they are a vulnerable population, are at particular risk of malnutrition (SCN 2004).

According to the *Rome Declaration on World Food Security* (1996), food security exists "when all people, at all times, have physical and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life" (FAO 1996a). In refugee populations, both prior to arrival in camps and during protracted refugee experiences, refugees are exposed to food deprivation and prolonged periods with a suboptimal diet that can cause serious illness and death (RPH 2003). Ensuring food security for refugees is, therefore, of great concern because of the uncertainty and instability caused by displacement, as well as the dependency on international aid and humanitarian assistance.

Given these concerns, a series of international conventions have pledged to improve child nutrition, addressing the issues of micronutrient deficiencies and generalised malnutrition. Yet in spite of these internationally recognised and agreed upon human rights standards and principles, including key documents relevant to refugee nutrition (see Appendix 2), the international community has failed to deliver on its promises to children. Globally, children, but most commonly refugee children, suffer from a lack of proper nutrition and food insecurity, despite the intentions of world leaders and the actions of the UNHCR and WHO to promote children's rights.

2. BACKGROUND

2.1 Malnutrition in Refugee Camps

Although refugee populations are provided food aid during emergencies and protracted refugee situations, widespread malnutrition and health problems have been evidenced in refugee camps. Various circumstances, including funding shortages, natural disasters, civil conflicts, environmental degradation, incorrect donor and government policies, under-funding of programs, inadequate assessment and delivery systems and the unequal distribution of wealth and resources have created and perpetuated malnutrition in camps (WHO 2003a; Marchione 2002). In addition, high rates of HIV/AIDS, malaria and tuberculosis in refugee populations negatively impact health and interact with nutrition status (WHO et. al 1999, p.16). Furthermore, due to limited water supply and availability of traditional foods, as well as the psychological trauma and the disruption of typical family and cultural associations with food, refugees are often unable to obtain adequate micronutrients and the energy requirements needed for proper functioning and healthy development (Burns et al. 2000, p.231).

2.2 Malnutrition in Children

Changes to a child's environment caused by displacement expose children to a heightened risk of malnutrition. During the refugee experience, the abrupt and significant reduction in the quantity and quality of available food, as well as limited access to food (i.e., family unit does not have money to purchase food or there are inequities in food distribution), weakens food security (MSF-UAE 2002). A combination of factors, including whether children are separated or unaccompanied, their developmental stage, level of dependency on food aid, access to health care, unique nutritional needs and living conditions determine their vulnerability and the extent of malnutrition.

Malnutrition is of particular concern for infants and children for two reasons: their dependency on adults and their susceptibility to disease. If children are not breastfed appropriately or are recovering from illness, they are at high risk of under-nourishment (WHO et al. 1999, p.16). Severe malnutrition, for example, is considered the greatest threat to children aged six to 24 months as they transition from exclusive breastfeeding to solid foods (WHO 2002, p.50). Furthermore, when children are exposed to extreme and prolonged malnutrition, they are at greater risk for contracting diseases (i.e., tuberculosis, malaria, HIV/AIDS, pneumonia and measles) and impaired physical and mental development (Thaxton 2004; WHO et. al 1999, p.16). Many children with severe malnutrition experience life-threatening complications,

including infections, hypothermia, hypo-glycemia or dehydration (WHO et. al 1999, p.16). Whether a refugee child has been exposed to a short-term emergency situation or a protracted refugee situation will impact the extent and form of malnutrition.

2.3 Emergency and Protracted Refugee Situations

In most emergencies, as nutrition issues are secondary to the immediate dangers of serious illness and death for children (Longhurst 1995), most nutrition assessments tend to focus on morbidity and mortality data to guide food provision (FAO 1996b). Various agencies, such as UNHCR and WFP, primarily address food availability and the system of feeding in refugee camps to reduce the short-term health risks (UNHCR 2000). Often issues of resource availability and physical access to camps, as well as the phase of the emergency (i.e., newness of displacement and level of dependency on food aid) help to determine the priorities of service providers (Longhurst 1995).

When emergencies develop into protracted refugee situations, food aid is typically reduced under the assumption that food is available from other sources (WFP & UNHCR 1999). Normally, partial food assistance is provided to ensure the minimum energy requirement of 2,100 kilocalories per person per day recommended by the Committee on International Nutrition (CIN) (WFP & UNHCR 1999). Yet while WFP and UNHCR calculate initial reference values for emergency feeding, including ration levels throughout protracted refugee situations (WFP & UNHCR 1999), studies show that children in long-term refugee situations frequently suffer from malnutrition and are not getting the nutrients they need for healthy development. While assessments may miscalculate children's nutrition needs, it is more likely that complex power dynamics in refugee camps and the politics of food aid prevent children are to realise their human rights.

2.4 Existing Services in Refugee Camps

To promote adequate nutrition for children, a variety of interventions and services have been designed and implemented in refugee camps. The UNHCR and WHO assess demographic characteristics, activity levels, environmental temperatures, nutritional and physiological status, health and household food security as a means to select interventions that will promote adequate nutrition (WFP & UNHCR 1999). As part of the analysis, food habits, means of food processing, non-food requirements, quality control issues and the availability of substitutable

commodities are considered (WFP & UNHCR 1999). Based on the results of the nutrition assessment, as well as the local conditions, a selective feeding program may be implemented to target the most vulnerable groups (typically children). Additional interventions include supplementary, therapeutic or school feeding programs, incentive payments and ration cards (MSF-UAE 2002). Furthermore, specialised programs may be introduced to promote breast-feeding of infants, provide extra food rations and drinking water for pregnant and lactating women, supply iodised salt and distribute high-energy micronutrient-rich foods to children over six months of age (WHO 2003b).

2.5 Inadequacy of Food Aid

Despite the efforts of the international community, programs to promote child health and nutrition in refugee camps have not prevented malnutrition. The politics involved in food donation, inconsistent assessment methods (i.e., whether nutrition is measured by arm circumference or Body Mass Index), as well as the economic situation of the host country, influence the effectiveness of food aid in refugee camps (Tomczyk et al. 2004; Marchione 2002). Food aid effectiveness is further limited by the quantity of rations provided by donors, the quality and diversity of those rations (i.e., micronutrient content and cultural appropriateness) and the challenges of coordinating food delivery (Marchione 2002). In complex emergencies, refugee populations dependent on food aid have exhibited protein-energy malnutrition, anaemia, vitamin A deficiency, and iodine deficiency disorders, as well as disorders such as beriberi (thiamine deficiency), scurvy (vitamin C deficiency) and pellagra (niacin deficiency) (WHO 2003c). Protein-energy malnutrition (PEM) has been linked with death in refugee populations, largely because this type of malnutrition increases vulnerability to disease (ENNO 2005).

2.6 Malnutrition in Refugee Camps Sub-Saharan Africa

In refugee camps in Sub-Saharan Africa children are at significant risk of malnutrition and micronutrient deficiencies. A 1996 study by the Food and Agricultural Organization of the United Nations (FAO) found that nutritional status of children prior to exposure to armed conflict had a significant protective effect on their status during the conflict. In many African countries, the nutritional status of children is deplorable even in non-emergency times, and worsened during times of conflict (FAO 1996b).

Malnutrition rates in refugee camps in Sub-Saharan Africa are among the highest in the world. In Somalia (1980), Ethiopia (1988-89) and Kenya (1991), malnutrition rates of higher than 20% have been reported in refugee populations (ENNO 2005). In the Kakuma Refugee Camp in Kenya, a study by Gregory (2002) revealed unacceptably high levels of acute global malnutrition (17.2%) and chronic malnutrition (12.6%) in children six to 59 months of age (Gregory 2002). In addition, vitamin A deficiency was noted in 47.2% of children; anaemia was present in 61.3% of children and severe anaemia in 6.2% (Gregory 2002). According to a study of Chadian refugee camps by the United States Center for Disease Control and Prevention in 2004, four out of every 10 Sudanese refugee children experienced acute malnutrition (Tomczyk et al. 2004). A similar study (2005) of protracted refugee situations in Africa found high levels of iron deficiency (ranging from 23% to 75%) and anaemia (greater than 60% in three of five camps) in children (Seal et al. 2005, p.808). Clearly, the extreme vulnerability of refugee children arriving from countries in Sub-Saharan Africa indicates a critical need for specialised nutrition services for these families.

3. RESETTLEMENT SERVICES IN AUSTRALIA

3.1 Immigration to Australia

Each year, the Australian Department of Immigration and Multicultural and Indigenous Affairs (DIMIA) determines the number of visas provided to refugees based on international and community consultations, as well as the country's capacity to provide effective resettlement services (DIMIA 2005a). In 2004-2005, the Australian Government increased the number of visas in the refugee category from 4,000 to 6,000 (DFAT 2005). In line with regional priorities recommended by the UNHCR, arrivals from Africa were 70.2 % of the 6,000 total number of visas issued during that time period (DIMIA 2005a). Based on statistics from Australia's Humanitarian Program Grants Category, children comprise approximately 40% of refugee populations arriving in Australia each year (DIMIA 2005a). Because a large number of these children come from Africa, bringing with them diverse pre-arrival experiences and unique vulnerabilities, it is essential that resettlement services address nutrition issues within a culturally appropriate context.

3.2 Limited Nutrition Services for Newly Arrived Refugees

In many cases, malnutrition and micronutrient deficiencies are exacerbated by confusion surrounding health entitlements and a lack of specialised services (Davidson et al. 2004, p.569). For refugees who have entered Australia under the "off-shore Humanitarian Program" and who

have been in Australia for less than 12 months, DIMIA funds the Early Health Assessment and Intervention (EHAI) program. While this program provides short-term interventions for refugees with physical and psychological health problems, it does not typically include nutrition-related services (DIMIA 2005b). Although all refugees granted visas are eligible for Medicare from the date of their arrival, the infrequency of post-arrival medical screenings and the barriers to access make it difficult for newly arrived refugees to navigate the health care system and address nutritional issues (VFST 2000, p.8). Many health providers that focus on children, such as the Children's Hospital at Westmead, do not retain a Dietician on staff but instead provide nutritional assessments and nutrition advice for refugee children and their families through a referral system (Warren M, 2005, pers. comm., 8 October).

The limited focus on health and nutrition issues upon arrival and during resettlement, along with existing cultural, language and economic barriers, contributes to ongoing malnourishment and inadequate nutrition for refugee children settled in Australia. Refugee families frequently experience several challenges, including difficulties in finding inexpensive supplies of culturally appropriate foods, dislike of typical "Australian" foods and unfamiliarity with foods available locally (RPH 2003). Moreover, a lack of knowledge of food preparation and changes to eating and shopping habits can perpetuate nutrition issues for the family (RPH 2003). Detailed information regarding nutrition issues in refugee children, adapted from *Good Food for New Arrivals* (RPH 2003), is compiled in Appendix 3.

3.3 Policy Documents

In Australia, a common policy and framework for early childhood services, which comprehensively addresses the special needs of refugee children, does not exist. Several policy documents address issues of nutrition, but the needs of refugee families and children are not adequately addressed. For example, *Eat Well Australia: An Agenda for Action for Public Health Nutrition 2000–2010* provides government and non-government organisations (NGOs) with a strategic framework and an agenda for action on public health nutrition, yet refugee children are not specifically mentioned (NPHP 2001). Moreover, the *National Public Health Strategic Framework for Children 2005–2008*, designed by the Australian government to strengthen the nation's capacity to promote good health amongst children, does not address the unique needs of refugee children (NPHP 2005). Similarly, while the Australia *National Food and Nutrition Policy* acknowledges the special needs of "migrant groups," it does not address the special needs of migrant children (DHHCS 1994, p.5). Despite obvious shortcomings,

these policy documents do provide a basis to justify further cooperation and action among service providers. Several recommended strategies (i.e., improved educational curriculum in schools and increased training for primary health care workers) have the potential to address nutrition issues for refugee children if strategically implemented (DHHCS 1994, p. 15).

3.4 Resources for Service Providers

Although there is an overall scarcity of information on nutrition issues facing refugee children in Australia, a few innovative organisations have produced resource materials in the field of refugee nutrition. The Victorian Foundation for Survivors of Torture Inc. (VFST) has developed several detailed pamphlets on refugee nutrition, including *Healthy Eating and* Living in Australia [http://www.survivorsvic.org.au/Multilingual.htm] and a resource guide for health and settlement workers supporting refugees in Australia to maintain a healthy diet and lifestyle [http://www.survivorsvic.org.au/Transition.htm]. In Western Australia, the Association for Services to Torture and Trauma Survivors (ASeTTS) and the East Metropolitan Population Health Unit (EMPHU) collaborated to improve knowledge, attitudes and skills related to health and nutrition amongst refugee parents and children. Funded by the National Child Nutrition Program, Commonwealth Department of Health and Ageing, this project produced a range of outstanding resources available on the Internet at the following website: [http://www.rph.wa.gov.au/hpnetwork/GFNA/Goodfood.htm]. In New South Wales (NSW), the Refugee Health Nutrition Project, a collaborative effort between NSW Refugee Health Service, Western Sydney Multicultural Health, Western Sydney Area Health Promotion and Auburn Community Health, is currently developing locally relevant nutrition resources for refugee families based on the materials developed by VFST (RHS 2005).

4. CONCLUSION

In Australia, past experience has indicated that refugee children, particularly children arriving from Sub-Saharan Africa, require special attention and nutrition services if they are to realise their rights to health and well-being during resettlement. Unfortunately, current government and immigration policies do not specifically address the issue of nutrition for refugee children. Thus, there is significant need to develop policy guidelines on nutrition that provide a framework for service providers assisting newly arrived refugee communities. Pre-arrival experiences, along with the particular characteristics of each child and family, must be considered to determine appropriate nutrition interventions. It is recommended that state and federal standards be developed to incorporate nutrition assessments, as well as treatments for

nutrition-related illnesses and diseases, into health and wellness programs available for all refugees. Detailed and specific recommendations for this are included in Appendix 1. It is hoped that, building on the excellent resources already developed, continuing work and awareness can be directed to the issue of nutrition for newly arrived refugee children.

5. NOTES

In 1990, at the World Summit for Children, the largest gathering of world leaders in history pledged to improve maternal and child nutrition and reduce or eliminate vitamin A, iodine and iron deficiencies (UN 1997). Then, in 1991, at the Ending Hidden Hunger Conference, global representatives vowed to reduce micronutrient malnutrition (World Bank 1993). By 1992, at the International Conference on Nutrition, representatives from 159 countries and the European Community, 15 United Nations organisations and 144 non-governmental organisations (NGOs) set goals for a worldwide reduction in malnutrition (FAO 1992). At the World Food Summit in 1996, 186 countries committed to adequate food and freedom from hunger for all people (FAO 1996c). Then, in 1997, more than 190 countries ratified the *Convention on the Rights of the Child*, which guarantees children's right to the "highest attainable standard" of health, including adequate nutritional care (OHCHR 2003).

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APPENDIX 1 – Recommendations

The following recommendations will help to expand and improve critical nutrition services for refugee children:

- 1. Resettlement services for refugee children should be approached holistically, with the provision of immunisations, treatments for illnesses and diseases and assessments of nutritional and mental health status incorporated into general health and wellness programs for all refugees.
- 2. In order to address issues of malnutrition, the UN Convention relating to the Status of Refugees should be applied in Australia to all newly arrived children and their families having experienced refugee-like backgrounds, regardless of their immigration status, including asylum seekers or those on other bridging visas.
- 3. All Australian states and territories should develop, implement and enforce standards (as proposed in this document) regarding ongoing provision and access to quality health care and nutrition services for all refugees, particularly children.
- 4. Australian government policy should incorporate new federal standards that ensure a refugee medical screening, including a nutrition assessment, occurs within 90 days after arrival in Australia. As part of this assessment, each refugee child should be provided with appropriate nutritional and vitamin supplements as needed.
- 5. State and federal governments should be encouraged to provide training to health care professionals in refugee nutrition issues, including providing culturally competent care.
- 6. State governments and local health services should endorse improved language services, including interpreters and bilingual health staff.
- 7. Refugee families should be encouraged to use interpreter services during nutrition assessments to prevent language barriers that can result in miscommunication, misdiagnosis and lack of appropriate follow-up for nutrition-related problems.
- 8. Background information about a refugee's experience, in conjunction with various cultural, language and financial issues, should be carefully considered by service providers to ensure appropriate services are provided.
- 9. Additional research should examine the unique health care and nutrition needs of refugee children to develop health education and outreach activities for resettlement caseworkers, health care providers and other refugee assistance agencies.
- 10. Health care professionals should be trained to diagnose and appropriately treat malnutrition and micronutrient deficiencies. Service providers should become familiar with the causes, effects and recommendations for the unique nutrition issues facing refugee children in Australia, especially iron deficiency (anaemia), vitamin D deficiency, food insecurity, poor appetite, school lunches and changing food habits (RPH 2003). Detailed information adapted from Good Food for New Arrivals (RPH 2003) is compiled in Appendix 3.

- 11. Service providers should implement creative approaches to promote independence in food purchasing and preparation for newly arrived refugees. Some suggestions, many of which are recommended by the Royal Perth Hospital (2003), include:
 - developing handouts with diet and lifestyle information depicted in pictorial format for refugees without basic English skills;
 - creating food cards and a food pyramid poster;
 - providing listings of multilingual food and nutrition information; and
 - creating recipe books and other key nutrition resources (RPH 2003).

APPENDIX 2 – Key Documents Relevant to Refugee Nutrition

The World Declaration and Plan of Action for Nutrition (1992)

The International Conference on Nutrition in Rome recognised refugees, particularly women and children, among the most nutritionally vulnerable groups in the world. This document outlines an agenda to eliminate hunger, reduce malnutrition and eliminate micronutrient deficiencies associated with high rates of mortality in refugee contexts (WHO 1992).

Guidelines for Estimating Food and Nutritional Needs in Emergencies (1999)

WFP and UNHCR, operating under a revised Memorandum of Understanding (March 1997), outline their policies in the document entitled *Guidelines for Estimating Food and Nutritional Needs in Emergencies*. Following the WHO guidelines, they use 2,100 kilocalories as the initial reference value for calculating energy requirements and designing food aid rations for refugee populations in emergency situations. This document outlines their basic principles of food aid, including assessment, establishing ration levels, management considerations and distribution of rations (WFP & UNHCR 1999).

UNHCR Handbook for Emergencies (1999)

The UNHCR Handbook for Emergencies, designed to improve effectiveness of emergency preparedness and response, includes objectives, principles of response and actions to promote adequate nutrition (UNHCR 2000).

WHO Management of Nutrition in Major Emergencies (2000)

Management of Nutrition in Major Emergencies is designed to assist professionals to ensure adequate nutrition for affected populations in emergency situations. Topics include: nutritional assessments, identifying various forms of malnutrition, calculating food needs, preventing nutritional deficiencies, treating malnutrition, monitoring nutritional status and food availability, and preventing and controlling nutrition-related diseases (WHO 2000).

Food and Nutrition Needs for Emergencies (2002)

Food and Nutrition Needs for Emergencies, developed jointly by UNHCR, UNICEF, WFP and WHO, is a practical tool for assessing, estimating and monitoring food and nutrition needs in emergencies. In particular, the guidelines can be used to direct planning and delivery of a basic food ration for emergency-affected populations (UNHCR et al. 2002).

International Federation of the Red Cross and Red Crescent Societies Food Security and Nutrition Policy (2003)

The *Food Security and Nutrition Policy* of the Red Cross and Red Crescent Societies establishes the basis for action in food security. It outlines roles and responsibilities, highlights the importance of food security and nutrition assessment/analysis, supports primary production and income generation and stresses the need for monitoring and evaluation (IFRC 2003).

Sphere Handbook: Humanitarian Charter and Minimum Standards (2004)

In the *Sphere Handbook: Humanitarian Charter and Minimum Standards*, chapter 3 outlines minimum standards in food security, nutrition and food aid. The Handbook addresses the issues of food security and nutrition assessment and analysis standards, food security standards, nutrition standards and food aid standards. Each section contains minimum standards, key indicators and guidance notes to consider when applying the standards (The Sphere Project 2004).

ISSUE	CAUSES	EFFECTS	RECOMMENDATIONS
Iron Deficiency (Anaemia)	 Prolonged periods of food deprivation Blood diseases (i.e., sickle cell and thalassaemia) Malaria, tuberculosis and parasitic worms Bleeding from gums due to gum disease Internal bleeding Late introduction of solids in infants Irregular meal patterns for children 	 Tiredness, lethargy and dizziness Negative affect on cognitive and psychomotor development Behavioural changes Poor immune function resulting in recurrent infections and/or poor wound healing Loss of appetite 	 Testing for refugee children of full blood count and serum ferritin Intake of foods high in iron and Vitamin C Iron supplements
Vitamin D Deficiency	 Inadequate exposure to sunlight Long-term poor access to foods with Vitamin D Vitamin D deficiency in mother passed on to infant 	 Decreased bone development and growth Rickets Visual impairment and blindness 	 Screening for refugee children with dark skin, and those who have been confined to the indoors Sun exposure to obtain Vitamin D Foods rich in calcium and Vitamin D
Iodine Deficiency	Inadequate amounts of iodine in mother's diet during pregnancyIodine intake falls below recommended levels	 Congenital abnormalities at birth Brain damage, goitre and hypothyroidism Retarded mental and physical development 	 Iodised salt
Food Insecurity	 Inadequate money, skills or resources Limited physical access to shops and healthy food Social, cultural and language barriers Unfamiliarity with new foods and cooking methods Shame associated with accessing emergency relief Psychological and physical consequences of the refugee experience 	 Reduced physical, mental, spiritual, social health and well-being Reduced short-term and long-term health status 	 Identify evidence of food insecurity (i.e., arriving at school without breakfast and lunch, nutritional deficiencies, poor concentration or attention span) Provide vouchers for culturally appropriate foods Increase knowledge of processed/packaged foods Financial counselling Free and reduced price school breakfasts/lunches
Poor Appetite	 Intestinal worms, iron deficiency anaemia, malaria, inherited blood disorders or poor oral health Mental health issues Reduced physical activity or changes in meal patterns Increased access to high fat and/or high sugar food 	 Listlessness and constant tiredness Decrease in physical activity Chronic sickness Limited growth compared to other children of the same age 	 Monitor fluid intake Encourage small servings of food at meal and snack times, but not outside of these times Increase levels of physical activity
School Lunches	 Difficulty of packing traditional foods for lunch Food insecurity Lack of knowledge or skills regarding readily available foods and how to keep foods at a safe temperature 	 Children do not bring a healthy lunch to school 	 Provide information for parents on packing lunch Provide interactive sessions for children on how to prepare a lunchbox Schools may consider a school lunch program
Changing Food Habits	 Unavailability and lack of access to familiar foods Increase in foods high in fat, sugar and salt Limited language skills Introduction of larger than normal quantities of food 	 Imbalanced diet Negative effects can include obesity, diabetes, cardiovascular disease 	 Improve access to familiar foods Ensure adequate transportation to food suppliers Provide information regarding unfamiliar foods with and how they can be used

APPENDIX 3 – Nutrition Issues for Refugee Children During Resettlement