Refugee Diet in a context of Urban Displacement
Part One

Some notes on the food consumption of Southern Sudanese Refugees living in Cairo.

Peroline Ainsworth
FMRS Working Paper N0.8
October 2007
The Forced Migration and Refugee Studies Program (FMRS) at the American University in Cairo (AUC) offers a multi-disciplinary graduate diploma. Central to the program is an effort to incorporate the experience of displacement and exile from the viewpoint of refugees and other forced migrants. FMRS supports teaching, research, and service activities that promote a growing appreciation of the social, economic, cultural and political relevance of forced migration to academics, the wide range of practitioners involved, and the general public. While maintaining a global and comparative perspective, FMRS focuses on the particular issues and circumstances facing African, Middle Eastern and Mediterranean peoples.

The Forced Migration and Refugee Studies Working Paper Series is a forum for sharing information and research on refugee and forced migration issues in Egypt and the Middle East at large. The Working Papers are available in hard copies as well as in electronic version from the FMRS website.
## CONTENTS

**ACKNOWLEDGEMENTS** .............................................................. 4

**INTRODUCTION AND BACKGROUND** ............................................ 5
Health and nutritional status of refugees in Cairo ................................ 5
Background to study ...................................................................... 5
Overview of findings ..................................................................... 6
Research questions ...................................................................... 7
Research objectives ..................................................................... 7

**THE PARTICIPANTS** ................................................................ 8
Background Information: from where are they coming? .................... 8
Living in Cairo .......................................................................... 8
Identifying Research Participants: defining who is a ‘refugee’ .......... 9

**METHODS AND ANALYSIS** ...................................................... 11
The Participants ......................................................................... 11
The Researchers ......................................................................... 11
Sampling methods: challenges of the urban environment ............ 11
Survey methods: Food Frequency Questionnaire ..................... 12
Survey methods: Follow-up interviews .................................... 13
Limitations .................................................................................. 13

**FINDINGS: CHANGES IN TYPES OF FOOD CONSUMED OVER PLACE AND TIME** .......................................................... 14
Change over place ..................................................................... 14
Khartoum as place of transition ................................................. 16
Loss of staples from diet ............................................................. 17
  *Loss of staple cereal* ............................................................ 17
  *Loss of other staples* ........................................................... 17
Shifting in Cuisine .................................................................... 18
Consumption of Egyptian Food ................................................... 19
Replacing missing ingredients ..................................................... 20
Change over time ...................................................................... 21
Comparing Variables .................................................................. 21
  *Age* ..................................................................................... 21
  *Marital status and gender* ..................................................... 22
  *Work status and UNHCR status* ......................................... 22
Quantities Consumed .................................................................. 23

**COMMENTS AND CONCLUDING REMARKS** .............................. 24
The most vulnerable ................................................................... 24
Reported Illness ........................................................................ 24
For the Researcher ..................................................................... 25
For the Policy Maker ................................................................... 25

**APPENDIX 1: DEMOGRAPHICS OF SAMPLE** ................................ 27

**REFERENCES & OTHER SOURCES** ............................................ 28
ACKNOWLEDGEMENTS

This study was conceived and supervised by Professor Jeya Henry, head of the Food Science and Nutrition Department at Oxford Brookes University in the UK. It was given seed funding from the DFID project on Globalization, Migration and Poverty and received a small grant from the Nuffield Foundation for Social Science. Thanks to the Forced Migration and Refugee Studies program at the American University in Cairo for hosting the study, and to Dr Hania Sholkamy for additional supervision and advice on methodologies and analysis in Cairo. Many thanks to the research team Tongun Sebit Faragalla, Regina Jiggi Augustino, Rafa Omar Abdil Godo, and Saturnino Olaa without whom the study would not have been possible, also to Michael Dada and Joseph Bol for translations into Dinka and Juba Arabic languages and to Elizabeth Bandasi and all the staff at Western Equatoria Community Development and Building Association for hosting and assisting at follow-up workshops. Thanks to Claudette Turnbull, Dr Nabil Morcos, Dr Eman Kamal and all the staff at Refugee Egypt for hosting the fieldwork, and giving us invaluable support and input. Thanks also to Laura Maxwell and Olivia Mosely for comments and to Emily Speers Mears for editing. Finally special thanks to all those refugees who participated in our surveys and discussions.
1. **Introduction and Background**

The changes in food consumption practices experienced after displacement can have serious implications for the health of refugees. These changes can also reflect and express cultural loss and shifts in social structures and habits. Altering and reconstructing food consumption habits and feeding practices is integral to people’s adjustment to and experience of displacement. However, research on the nature and impacts of changing food consumption practices among displaced populations, particularly those living in urban areas in the developing world, is scarce.

The following report describes the findings of a 12-month exploratory study that aimed to document changes in food consumption among a group of self-settled southern Sudanese refugees living in Cairo. The study used a combination of traditional nutrition science data collection methods and qualitative anthropological interview techniques in order to explore different aspects of changing food intake and reconstruction of diet.

**Health and nutritional status of refugees in Cairo**

There is little official data on the nutrition status of Sudanese refugees in Cairo. However, doctors and health workers working with the community have observed a high prevalence of malnutrition-related complaints, many of which would be easily preventable if addressed in the early stages.\(^1\) Cases of rickets have been noted by health workers and several research participants described children showing symptoms of the condition.\(^2\) The medical clinic at local charitable organization *Refuge Egypt* has been monitoring the weight and supplementing the feeding of several severely underweight infants, but is unable to access or assist them all. Vitamin A and iron deficiencies are prevalent, according to doctors’ comments. Unfortunately no survey or testing has been undertaken to look at the full extent of these deficiencies.

In 2004, nutritionist Claudette Turnbull, working in collaboration with *Refuge Egypt*, conducted an exploratory study of the baseline nutrition status of refugee (mainly Sudanese) infants (aged 0-2 years) who were born in Cairo. Her research revealed worrying trends. She found overall that 13% of the infants in her sample showed signs of moderate or severe stunting and that a number of older siblings showed signs of wasting. The stunting among the infants born in Cairo and the wasting amongst the older siblings suggest that nutrition-related problems are originating or being exacerbated after the move to Cairo (Turnbull 2005).

It is likely that the poor diets of refugees living in Cairo contributes to the nutrition-related problems.

**Background to study**

At the outset, the purpose of the study was to document and describe changes in the types of foods consumed by participants over place and time, as they move

---

\(^1\) One doctor, formerly at the UNHCR implementing partner CARITAS, commented that if only he could prescribe milk to infants, many of the problems encountered in older children would not occur.

\(^2\) Rickets has also been observed among Sudanese who have been resettled from Cairo to Australia.
from South Sudan, to Khartoum and finally to Cairo. Additional qualitative fieldwork explored how these consumption changes—and the decision-making processes that lead to these consumption changes—relate to participants’ experience and negotiation of the risks and changes engendered by forced displacement. These findings will be discussed in a second paper.\(^3\)

The study aims to contribute to the fields of urban displacement and health, and also to draw attention to the high prevalence of nutrition related health problems observed among refugees in Cairo. It also aims to offer constructive comments to local initiatives seeking to address these problems. Better knowledge of what people are eating and why will benefit local initiatives attempting to address health—and other—problems encountered by southern Sudanese refugees in Cairo.

Isolating refugees from the host population, who share the same buildings, use the same markets and struggle with comparable poverty can be problematic. Lack of money afflicts poor Egyptians as well as poor Sudanese and Egyptian migrants from rural areas also face marginalization and exclusion; poor housing, polluted air, insecurity on the streets and frustrated ambitions are problems faced by many people in Cairo. It is important to note, therefore, that in addition to the general hardships of urban poverty, southern Sudanese refugees face obstacles and difficulties specific to their status as foreigners, outsiders and refugees. As foreigners they often, for instance, pay higher rent than Egyptians and are ineligible for food ration cards, which would enable them to purchase subsidized foodstuffs. As religious and sometimes linguistic outsiders, who look physically different and can be easily identified as foreigners, they frequently experience cultural and social alienation—even hostility—vis-à-vis their hosts, including verbal and at times physical abuse. As refugees, they cannot always access local services and at the same time have recourse to a different set of solutions from which Egyptians are barred, such as refugee-serving NGOs and the UNHCR. Many participants distance themselves from their host society, either because they feel wary, or because they hope to be resettled to the West and therefore see no point in integrating into Cairean society. This study aimed to identify and explore the changes arising from displacement to a new country rather than the problems arising from urban poverty.\(^4\)

**Overview of findings**

There is significant change in the types of foods reportedly consumed by Sudanese refugees as they move from South Sudan to Khartoum to Cairo. This change includes a loss of certain foods, which had been staples in South Sudan

---


\(^4\) Because of limitations of time and resources and difficulties in obtaining research permission, we were unable to gather comparable data about the consumption practices of Egyptians living in the same areas as the refugees who participated in this research. It would be an excellent undertaking for a researcher to follow the dietary intake and patterns of a sample of Egyptians and Sudanese living in similar conditions in the same area, and compare findings.
and an increase in consumption of other foods. For the most part, these new foods first become a significant part of respondents’ diets in Khartoum.5

Our findings suggest that overall, many respondents are consuming a very restricted diet in Cairo, some with a worryingly low consumption of meat and dairy products; some 13 of 131 respondents reported that they do not consume any kind of meat or dairy product (including eggs) more than one time in a month. It is likely, therefore, that diet is a significant contributory factor to poor health among respondents. Respondents described a number of negative physiological symptoms which they had experienced and which they attributed to the food they were eating in Cairo.

Research questions

The questions posed at the outset of this study were:

- Has—and if so how has—the diet of South Sudanese refugees changed and evolved after displacement?
- Does diet continue to change and evolve over time spent in Cairo?

Research objectives

The main objectives of the study were to:

- Contribute knowledge to the fields of health and migration, food selection behaviour and urban forced migration.
- Encourage further follow up research on this issue.
- Inform those offering assistance to refugees in Cairo (and elsewhere) by signposting possible areas of concern related to food consumption practices.

---

5 Most refugees had fled southern Sudan for Khartoum where they lived for significant periods of time before fleeing to Egypt.
2. **THE PARTICIPANTS**

**Background Information: from where are they coming?**

The conflicts and civil wars that have continued for 37 of the Sudan’s 48 years of independence have killed around 2 million, caused massive internal and cross border displacement and led to serious human rights abuses including forced military recruitment, slavery, purposive bombing of civilian sites, excessive use of force, rape, torture and the practice of cutting off food supplies or destroying livestock in the strategic use of famine and starvation to coerce, displace and kill people (Majak 2000, Grabska 2005). A Comprehensive Peace Agreement was signed by the Sudanese Government and the Sudan People’s Liberation Movement/Army in January 2005. The peace process has been marred, however, by escalating conflict in the Darfur region in the West of the country, which began in February 2003 and which has led to hundreds of thousands of deaths and the internal displacement of some one million people.

Most participants first experienced urban poverty when they moved to Khartoum to pursue studies, find work or escape conflict in their home areas. Some of these migrants end up residing in the four official government IDP camps; others live in makeshift shantytowns or ‘squatter areas’ and half-finished buildings in the city. Living conditions for IDPs are dire; one observer notes that in the camp she visited most of the women ‘spent almost half of their day’s earnings on transportation to and from work, and the remainder on food. They told me that they often were not even able to provide one meal (which normally consists of a sandwich) for their families’ (Bekker 2002).

**Living in Cairo**

The refugees who participated in our study had come to Cairo for a mix of reasons: fleeing persecution, discrimination, harassment, and/or deteriorating economic and social conditions, as well as seek to avoid forced military recruitment (Grabska 2005:29). One important pull factor is the possibility of being resettled to the West from Cairo. Some countries (mainly the US, Canada, Australia and Finland) run resettlement programs either through the UNHCR or through their own embassies: these programs resettle a small minority of refugees.

According to the UNHCR Regional Office Cairo, by the end of 2005 there were just under 19,000 (non-Palestinian) refugees in Egypt recognized by UNHCR under its mandate. Sudanese are the largest group followed by Somalis (UNHCR 2007). These figures only include refugees that have been granted official refugee status by the UNHCR. There are considerable numbers of unrecognized refugees in Cairo who have either not approached or been rejected by the UNHCR office. The Egyptian authorities make no special provision for refugees and have devolved responsibility for meeting their basic needs to UNHCR, who are unable to attend to the growing numbers. In June 2004, the UNHCR decided to suspend individual refugee status determination (RSD) proceedings for Sudanese asylum-seekers,

---

* For more details of the peace negotiation process see Grabska (2005:14-15).
instead granting them 6 months temporary protection in the form of ‘yellow cards’ that offer little beyond the right not to be deported.7

**Identifying Research Participants: defining who is a ‘refugee’?**

All research participants were originally from the three provinces of Western Equatoria, Bahr al Ghazal and Upper Nile in South Sudan, with the exception of one person from Darfur and three who had been born in Khartoum. The majority of participants had experienced several phases of displacement during their lifetime both within the South, and to the capital Khartoum as a result of war, conflicts between groups in the South, food shortages, or to search for work or further education. All research participants were over 18 and had applied for asylum to the Regional Office of the UN High Commissioner (UNHCR) Cairo. We purposely sampled for age, gender and area of residence (see Appendix 1).

All those who participated in our survey and discussion groups described themselves as refugees. The scope, meanings and connotations of the term ‘refugee’ has been much debated. Defining exactly who is a refugee is often a priority for governments and international organisations, perhaps because the term entails certain duties and responsibilities on the part of states that have ratified international agreements relating to the treatment of refugees, and international organizations.8 In addition, officially recognized refugees may have access to certain types of assistance, but be denied access to other services or opportunities.

In defining who is ‘of concern’ to their organization, UNHCR follows the legal definitions set out in the 1951 Convention relating to the Status of Refugees and the 1969 OAU Convention Governing the Specific Aspects of Refugee Problems in Africa. Under the 1951 Convention and its 1967 Protocol, a refugee is a person who is outside his or her country of origin, and cannot return due to a ‘well-founded fear’ of being persecuted ‘for reasons of race, religion, nationality, membership of a particular social group or political opinion,’ (Art. 1).

Many scholars, activists and assistance providers, however, adopt a broader definition of the term refugee.9 They view the label as denoting a person who has lived through certain kinds of experiences including uprootedness, flight, and associated violations of human rights. ‘Refugee’ is more than a legal category, it is a historical process ‘of becoming’ that continues after flight and encompasses the whole experience of displacement (Malkki 1995, Al-Sharmani 2003, see also Grabska 2005). Those who consider themselves refugees may frequently construct or circumscribe their behaviour in their host society according to this self-perception of themselves as refugees.

---

7 Frustration at this decision and at the poor living conditions and mistreatment suffered by many led to a 3-month peaceful protest sit-in close to the UNHCR offices, involving around 3000 Sudanese. The protest ended tragically when police violently ‘cleared’ the area on December 30th 2005 (Azzam et al. 2006).

8 The UNHCR Regional Office in Cairo has in the last 20 years devoted much of its annual budget to its ‘refugee status determination’ program (Grabska 2005). For further reading about processes of identifying and counting the most genuine or ‘deserving’ refugees in a camp context see Harrell-Bond et al. 1992.

9 James Hathaway (1991), for instance, suggests that ‘refugee status could become the entitlement of all persons whose basic human rights are at risk’ (quoted in Mehta 2003: 28).
We included in our sample participants who had been denied refugee status ('closed file') by the UNHCR, as well as those who had been granted status, and those who were awaiting the decision on their status. We did not include respondents who had personally rejected the label of refugee and the opportunities it provides, even though they may have legitimate claims for asylum, or even have been granted refugee status from the UNHCR. The 'closed file' participants continue to live in refugee communities and consider themselves refugees.

---

10 It was frequently stated during research discussions that certain foods are rejected ‘because they are not refugee foods’. This variously meant that they were not foods which refugees could afford, they were not to the taste of refugees and they were not good for the bodies of refugees. The experience of being refugee was at times articulated in terms of being ‘out of place’ and therefore unwell and without appetite ('Of course I cannot eat here, when I am not doing what I should be doing...'). These and other selection decisions are discussed in Part Two.
3. METHODS AND ANALYSIS

The study was multidisciplinary and used qualitative field methods to analyse the results of a more quantitative survey. Phase 1 of research involved a survey of food intake and food acquisition behaviour conducted with 131 respondents. Phase 2 collected qualitative data on food selection and people’s own concerns about consuming food in Cairo through semi-structured discussions with 62 people, most of whom had also filled in survey questionnaires.

The Researchers

In addition to the author, the research team consisted of three field researchers (2 women and 1 man) from South Sudan, who between them speak 6 languages. These researchers had experience working for NGOs in Sudan, conducting social science research during their degrees or working as assistants for other research projects. All had come to Cairo to seek asylum. The team were fully involved in the development of the survey and discussion topics. Most survey interviews were conducted by the field researchers who also led discussion groups and follow-up workshops, and acted as interpreters when necessary. Analysis of data collected in interviews was discussed with the research team throughout the fieldwork phase and their comments have been incorporated into this report.

The team underwent four weeks’ preparatory training that focused on qualitative methodologies, interview techniques and discussions of key readings on different aspects of food consumption.

Sampling methods: challenges of the urban environment

Conducting fieldwork among a vulnerable and marginalized group in a large urban centre in the developing world is challenging.\(^{11}\) People can be difficult to locate and access, particularly if one is seeking to conduct a series of interviews over a period of time. Refugees in Cairo often change domiciles at short notice—either by choice or because of evictions.

Collaboration with the church-based organisation Refuge Egypt, which offers some assistance and medical services to refugees in the city, was crucial.\(^{12}\) The organization is widely known and respected by southern Sudanese in Cairo and we were able to access respondents on the premises of All Saints Cathedral, where Refuge Egypt is based. In our survey of 131 people, 49 were interviewed there. Field researchers identified other possible respondents who then suggested friends or acquaintances that were willing to answer our questions (the snowball method). A community-run organisation which helps mothers and children living in the popular market district Hadayek el Maadi was also approached. All the people who took part in the follow up interviews and discussion groups lived in Hadayek el Maadi, which accommodates a substantial southern Sudanese population.

---

\(^{11}\) In April 2003 FMRS held a workshop on challenges of conducting fieldwork in an urban environment. A report on the issues discussed during this workshop is available on the FMRS website at [http://www.aucegypt.edu/fmrs/Outreach/Workshops/Urbanworkshop.pdf](http://www.aucegypt.edu/fmrs/Outreach/Workshops/Urbanworkshop.pdf)

\(^{12}\) For more information on the organization see [www.refuge-egypt.org](http://www.refuge-egypt.org)
Among participants, capacity to acquire food varied considerably. The field researchers are all relatively highly educated and speak fluent English; hence they and their families and friends are possibly more likely to successfully find livelihoods in Cairo, or perhaps have better prospects for resettlement to the West. All those respondents identified at Refuge Egypt had already some access to assistance and advice. Our sample may perhaps therefore be skewed towards the more affluent—or at least the better informed—members of the population. We tried to redress this balance by approaching mothers in Hadayek el Maadi who were unable to afford to travel to the Refuge Egypt clinic and had very little access to assistance. We also conducted questionnaires with a group of respondents living in the shanty town area of Arba Wa Nuus on the outskirts of Cairo and in the poor, densely populated area of Ain Shams, both of which are long distances from the main assistance providers.

Choosing to draw our sample from the broad category ‘southern Sudanese’ also created several difficulties. South Sudan is home to over a hundred different tribes with many distinct eating habits. Certain staples such as sorghum grain and peanuts are common to all. However there are significant differences between the diets of farmers, fishermen and cattle keepers. We had to take these differences into account when considering the data on types of foods consumed in Sudan as recalled by our respondents. However, we felt our decision to take the broad pool of southern Sudanese as our sample base was justified because our study is primarily concerned with narratives of food consumption in Cairo, where reports showed much consistency.

Survey methods: Food Frequency Questionnaire

A modified version of the Food Frequency Questionnaire (FFQ) was administered to 131 respondents. The food tables used for the FFQ were assembled with a team of 5 southern Sudanese research assistants and health workers. Tables listed over 100 food items and aimed to cover as far as possible all the major food groups and foods regularly consumed in both Sudan and Cairo, leaving an option for including additional food items which individual respondents may have regularly consumed. An additional table listed commonly consumed Egyptian foods cheaply available from street stalls and markets in Cairo. The FFQ was tested and adjusted during a feasibility trial with 30 respondents conducted in early 2003.

Respondents were asked to estimate how often they used to consume the foods listed when they were living in South Sudan. They were then requested to estimate how often they used to consume the same foods in Khartoum (as noted, most had spent a period of their lives in camps for internally displaced persons [IDPs] there), and finally in Cairo. In addition to the food tables, the survey asked a number of supplementary questions including estimates of quantities

---

13 A variety of livelihood strategies are employed by Sudanese in Cairo with varying degrees of success (see Grabska 2005).
14 Adapted from the model in Cameron & Van Staveren (1988).
15 All respondents were given a clear explanation verbally and in writing of research methods and objectives and were given a choice as to whether or not they participate. Each signed a consent form before participating. In order to insure correct completion of the survey, field researchers sat with respondents, and went through each section with them.
consumed in each location, foods tried for the first time in Cairo and additional descriptions of the kinds of foods consumed.

The principal aim of the FFQ survey was to identify the qualitative changes in diet experienced by southern Sudanese refugees after displacement. Our secondary objective was to identify whether dietary patterns changed over the time spent in Cairo. Because of limitations in time and difficulties in accessing and keeping track of participants we chose a cross-sectional rather than a longitudinal approach. The number of months each respondent had spent in Cairo at the time of participating in the survey was recorded to enable comparison between newer arrivals and longer-term residents.

Survey data on reported food intake was examined using SPSS and excel databases. The databases were used to identify and display those foods that a majority of respondents consume ‘regularly’—defined as twice weekly or more—and to compare how variables of time and location affect which foods were most widely regularly consumed. The software was also used to display and compare responses to supplementary questions on food acquisition, preparation, illnesses suffered and so on.

**Survey methods: Follow-up interviews**

Additional data was collected during open-ended, semi-structured individual interviews and group discussions involving 62 southern Sudanese men and women aged between 18–55 years. Discussions were guided by topics developed from past observations and focused on concerns about consuming food in Cairo and perceived risks and dangers. Notes were recorded by hand after the interview (see part 2). Observational notes collected over the 18 month research period also contributed to this report.

**Limitations**

It was beyond the scope of this study to gather anthropometric or technical data on medical status of participants. Our data is based on recall and reports and must therefore be viewed as qualitative and descriptive. It is not possible to draw conclusions about nutrient intake from this kind of data, nor to speculate about the comparative physiological nutritional health status participants may have enjoyed in the different locations. The survey also presented difficulties; people do not explain their lives and habits in ways that fit a survey format and we had to interpret answers such as 'plenty' and 'when there is money' as best we could. However, overall we have been able to identify important trends and patterns which are likely to reflect the food consumption behaviour of the wider southern Sudanese population in Cairo.

---

16 These findings are discussed in FMRS Working Paper No 8, Part Two (2007).
4. **Findings: Changes in Types of Food Consumed Over Place and Time**

**Change over place**

It was found that the foods respondents reported consuming regularly (two times in a week or more) had changed significantly with displacement. In the move from South Sudan to Cairo certain key foods, often those used as staples and the bases for traditional cuisine in South Sudan, are almost entirely lost from the diet. Findings suggest a reduction in the variety of foods consumed and an increase in consumption of certain foods which had become staples in Khartoum. This may indicate either a narrowing in the variety of the diet consumed by individuals, or a homogenization of diet across the sample, or both.

**Figures 1-3** show the foods that over 60% of respondents reported eating regularly in the three different locations. The data suggests a change in the types and a reduction in the variety of foods consumed in Cairo compared to in Sudan. The increased consumption of onion, garlic and tomato suggests that these have now become the principle base for cooked food. No meat or dairy product item is consumed 2 times in a week or more by over 60% of respondents in Cairo.

According to the reports of respondents displayed in **Figure 1**, a greater variety of foods were consumed in South Sudan. However, in South Sudan, respondents consumed different staples according to their tribal group and area of residence. Respondents originally from cattle-breeding tribes, for example, consumed larger quantities of milk and yoghurt than other groups, those originally from Nile islands consumed more fresh fish and so on. Therefore variety across the sample and between respondents was greater. Members of our sample consumed a wide variety of fruit and vegetables in Sudan—however this is not the same as each individual consuming a wide variety of vegetables. Some 69 of the 131 respondents said that they regularly eat only 3 or less of the vegetables on the list. Only 12 claim to regularly consume more than 6 on the list. In addition food security in South Sudan was (and is) unreliable, unstable and seasonal. Survey respondents were requested to recall food consumption during times of relative stability and plenty.
Figure 4 (below) shows the foods from each food group that respondents reported most frequently consuming in South Sudan. The blue bar shows the number of respondents who reported consuming the item regularly in South Sudan. The red bar represents reported regular consumption in Khartoum and the white bar represents reported regular consumption in Cairo. The graph clearly shows that consumption of many of the important staples eaten in South Sudan decreases dramatically in Cairo. Consumption of sorghum flour, used as a base for traditional breads and porridges, and of ground nut (peanut) oil and peanuts, again the base of many traditional dishes, has almost disappeared. Less than 20 respondents reported regularly consuming mangoes and corn on the cob in Cairo compared to over 100 reporting regular consumption previously in South Sudan. These high consumption levels refer to periods when these products were in season. However it is significant that people ceased buying them in Cairo, despite both items being widely and relatively cheaply available.

Consumption of beef is halved in Cairo compared to South Sudan and Khartoum, and consumption of fish has also dropped significantly. Reports also suggest a dramatic reduction in consumption of fresh milk. The graph shows that according to respondents’ reports reduction in consumption of all these foods had already occurred in Khartoum, with the exception of beef and groundnut (peanut) oil.

Figure 5 shows those foods from each food group most commonly consumed by respondents in Cairo, and the comparative regular consumption levels reported in Khartoum and South Sudan. Rice, wheat and bread bought from the bakery replace sorghum as staple grains and increasing consumption of powdered milk and chicken meat go perhaps some way towards replacing the loss of fresh milk, beef and fresh fish from people’s diets. Reported consumption levels of chicken in particular sees a significant increase; while only 29 and 23 respondents recalled consuming chicken regularly in South Sudan and Khartoum respectively, 65 eat it regularly in Cairo. Levels of regular consumption of tomatoes and onions increased in Khartoum and are maintained in Cairo. These foods have become the base for most home-cooking among participants, instead of peanut paste. Sunflower oil replaces groundnut oil as the most often used oil. Egyptian broad bean (fuul bean) is the most commonly consumed staple; other legumes and
pulses, such as lentils and fasoulia (white) beans are also regularly consumed. Increased consumption of Irish potatoes replaces sweet potatoes.

**Figure 4: Comparative Graph of key staples in Southern Sudan**

**Figure 5: Comparative graphs of key staples in Cairo**

**Khartoum as point of transition**

Figure 5 suggests that the food consumption in Cairo is based on foods that have already become familiar in Khartoum, namely rice, bakery bread and dried beans or pulses. These foods are the cheapest available on the markets and the most convenient to store and prepare. The shift from preparing the traditional porridge aseedah as the main starchy staple—a long and labour intensive procedure—to buying bread from the bakery had already begun in Khartoum. The scarcity of the staple sorghum grain and of certain cooking equipment in Cairo is likely to have reinforced this tendency.
Loss of staples from diet

*Figures 6-8* (below) show the dramatic extent to which the consumption of certain food items central to many participants’ diets in South Sudan and Khartoum, falls in Cairo.

**Loss of staple cereal**

The sorghum grain, known by Sudanese as *dura*, is an important and frequently consumed grain in South Sudan. *Dura* is used (alone or mixed with other types of flour) to make staple breads and porridges including *aseedah* (flour cooked in boiling water into a thick doughy paste), *kisra* (very thin layers of bread made from fermented sorghum), *guraza* (bread with a thick pancake-like consistency mainly consumed in Khartoum and the North) and *madida* porridge.

The loss of sorghum, and the consequent reduction in consumption of traditional starchy foods, in particular *aseedah*, was sorely felt by many participants; several complained that they could not feel satisfied and full if they had not eaten *aseedah*. In Cairo, Sorghum is expensive and difficult to find in flour form. Only 39 (around 30%) of participants continue to make *aseedah* regularly using corn or wheat flour.

**Loss of other staples**

Peanuts are also an important staple in South Sudan eaten fresh, dried, as a paste (*dakwa*) or else used to make oil. *Dakwa* is an important base for much traditional southern Sudanese cuisine, either in hot stews, usually combined with meat or dried fish and a green leafy vegetable, or as a relish with salad. Peanuts and flour are combined and sweetened with sugar, honey and other flavours to make a porridge called *madida*, which is often given to children and invalids. Unlike *dura*, peanuts are widely available in Cairo and relatively inexpensive. Respondents reported a number of reasons why they choose not to eat peanuts in Cairo including cost, unappetizing taste, and the fact that they do not have access to grinding machines to turn peanuts into the powder used for making paste.

Fresh cow’s milk is staple for the traditionally cattle-breeding tribes (such as Dinka, Shilluk or Nuer) for whom it was the main form of sustenance in Sudan. These groups also use milk to make *rob* (yoghurt) and butter, which is consumed with *aseedah* or other porridges. Again the cost of fresh milk and concerns about the safety of drinking it were cited as reasons for not consuming it in Egypt. Fresh and dried fish are staples of the Nilotic tribes. Those participants who reported consuming dried fish in Cairo would often buy it from traders who bring food items and other wares from Sudan and sell them outside the churches serving Sudanese in Cairo. Despite being reasonably cheaply and widely available in Cairo throughout the summer season, mangoes and other tropical fruit such as papaya are seldom consumed by participants. They were generally described as tasteless and watery and were unfavourably compared to fruit in Sudan.

---

*Tombet*, 22, ...people do not feel like they have eaten until they have eaten *aseedah*. There has to be *aseedah*, it gives you appetite and makes you want to eat – it gives you good interest.

*Names of participants have been changed.*
Sesame paste and *kombo* (a type of carbonate made from ashes of, for example, burnt pumpkin leaves) are very important ingredients in southern Sudanese cuisine. *Kombo*, in particular, is considered to have important healing properties and to burn out unwanted entities in the food. It can be bought from Sudanese traders.

**Shifts in Cuisine**

The loss of these individual items from the diet should not be viewed in isolation. People do not eat individual foods but rather combinations of foods, prepared in various ways according to certain rules and conventions. Respondents explained that certain kinds of foods were eaten together and others were not: green vegetables are eaten with *aseedah* and lentils and *fasoulia* are eaten with bread. The loss of peanuts and *dura* from the diet indicates a wider shift from peanut and green leaf based stews eaten with *aseedah* to onion or tomato based pulse dishes which are eaten with bread.

![Figure 6: Consumption of certain key items (Southern Sudan)](image)

![Figure 7: Consumption of certain key items (Khartoum)](image)

![Figure 8: Consumption of certain key items (Cairo)](image)
Consumption of Egyptian Foods

Given that participants stopped consuming foods that had been staple in South Sudan once they arrived in Cairo, we wanted to see whether they were introducing new foods into their diets instead. Twenty seven participants (14 men and 13 women) said that they had not tried any new foods in Cairo. Table 1 lists some of the new foods that the rest of participants reported having tried for the first time since arriving in Cairo.

*Koshari* is an Egyptian dish that mixes rice and pasta with lentils, fried onions, a few chickpeas and tomato sauce. It can be bought all over Cairo and prices range from 1 to 4EGP depending on the size of the portion. It is commonly consumed by Caireans and is popular because it is filling, high in carbohydrate and cheap. Although many participants said that they have tried *koshari* since arriving in Egypt, few reported eating it regularly. Only 12 of 131 respondents said that they eat *koshari* regularly. Forty-nine respondents said that they had never tried *koshari*. People complained that they do not like the taste of *koshari* and that the stalls that sell it are not clean. *Fuul* sandwiches from street stalls, an Egyptian staple, were also considered risky.

Spinach, however, was reported to be regularly consumed by many participants who used it as a replacement for green leafy vegetables, such as the leaves of pumpkin or *lubia* bean plants, traditionally used in southern Sudanese stews. The use of spinach as a replacement ingredient is encouraging, as spinach is rich in many essential vitamins and minerals. *Tahena* (a thick sauce made of sesame seeds) is also used by some (usually women) to replace the peanut and sesame pastes used in Sudan.

We included in the survey a table listing foods which are widely available in Egypt (often from street stalls) and which are commonly consumed by Egyptians (Figure 9), and asked respondents to indicate how often they consumed these foods.

<table>
<thead>
<tr>
<th>New Foods</th>
<th>No. Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Koshari</td>
<td>50</td>
</tr>
<tr>
<td>Spinach</td>
<td>47</td>
</tr>
<tr>
<td>Tahena</td>
<td>6</td>
</tr>
<tr>
<td>Fried Chicken</td>
<td>8</td>
</tr>
<tr>
<td>Pork</td>
<td>3</td>
</tr>
</tbody>
</table>

Table 1

**Figure 9: No. Respondents regularly consuming a selection of common Egyptian products**
Figure 9 suggests that consumption of foods popular with lower income Egyptians remains low among respondents. With the exception of the ready-made breads (a’ish baladi and a’ish fina) none of the foods listed on our tables were regularly consumed by more than 25 respondents.

Our reported food intake data found that many important foods regularly consumed in South Sudan and Khartoum are no longer consumed in Cairo. Consumption of rice, wheat, potatoes, powdered milk and chicken increases in Cairo. Findings suggest that either individual respondents experience a narrowing of the variety of foods in their diet upon arrival in Cairo or diet becomes homogenized across the sample base in Cairo. It is likely that both these statements partly explain the situation.

Replacing missing ingredients

Eighty-four respondents said that they replace missing ingredients with foods available in Cairo. Missing staples were mainly replaced by increased consumption of other similar foods but there was some evidence of respondents replacing missing ingredients with alternatives available on the Egyptian market (most significantly spinach and tahena – see Table 1). Some discussion participants, however, reported giving increased amounts of crisps, biscuits and soft drinks to children in the absence of more traditional porridges. 17 Many participants buy ingredients from Sudanese traders in order to replicate as closely as possible their traditional cooked ‘village’ food. Ingredients bought from traders include dried or salted fish and meat, powdered okra, peanut paste, sesame oil, mud from the Nile in Sudan (very popular among pregnant women) and a variety of spices (Table 2).

| Table 2 |
|---|---|
| **Selected items bought from Sudanese Trader** | **No. Respondents** |
| Kombo | 88 |
| Peanut paste (dakwa) | 94 |
| Powdered okra (weika) | 75 |
| Dried Fish | 91 |
| Dried meat (sharmoot) | 26 |
| Perfume | 37 |
| Incense | 32 |
| Music Cassettes | 52 |
| Skin Whitening Creams | 31 |
| African Clothes | 70 |
| Hair accessories | 48 |

17 Participants’ understanding of the nutritional value of foods varied considerably. One mother expressed concern that fathers tended to give their children high-sugar snacks instead of preparing cooked food. Another, however, was worried that her child did not like to eat snack foods, and was therefore not fat.
Change over time

When we compared the responses of participants who had lived less than 2 years with those who had lived 2-4 years and more than 4 years in Cairo we found no significant differences in the types of foods consumed.

![Figure 10: Consumption of certain food items comparing respondents who had stayed varying lengths of time in Cairo](image)

There are slight increases in consumption of peanuts and peas and possibly an overall increase in consumption of fruit in Cairo but these are not significant. There is an increase in reported consumption of chicken and pork the longer respondents have resided in Cairo (Figure 10). Pork was described by some participants as the best kind of meat available, however it is only sold in Coptic Christian butchers, which are not always easy to locate. Among respondents who have been in Cairo less than 2 years, 31% regularly consume beef and 35% regularly consume chicken. Of those who have been more than 4 years in Cairo 26% regularly consume beef and 61% regularly consume chicken. There is little evidence of increased consumption of Egyptian street foods with the exception of koshari, which sees an increase in reported regular consumption. Aside from these minor differences, our findings suggest that on the whole dietary patterns are maintained over time.

Comparing Variables

In each Food Frequency Questionnaire we recorded a number of demographic variables for each respondent, including age, gender, marital status, work status and status with the UNHCR. Overall we found that among our sample these variables had little impact on the kinds of foods people were consuming, or the frequency with which people were consuming them. Our sample was too small to draw conclusions or make effective comparisons of the effects of variables. However we outline some observations below.

Age

During discussions, several people suggested that younger people—particularly young men—ate more Egyptian street foods. However, our food intake data does not reveal significant differences between older and younger people, or between men and women. Older respondents consume more aseedah and traditional Sudanese ingredients such as combo and peanuts, which suggests that they prefer consuming more traditional ‘village’ dishes.
Marital Status and gender
Eighty-six participants were living with their spouses and 45 were living without spouses (either unmarried, divorced or with spouses in Sudan). Traditionally women would prepare foods such as aseedah and we expected that consumption of these traditional foods would be greater among those who are married. However, although some individual respondents commented during discussion that their eating patterns had changed significantly after marriage, reported food consumption of these two groups revealed little difference in consumption patterns. One reason for this may be that most respondents were living with at least one female relative. One observable difference was that respondents living with their spouses reported slightly higher levels of consumption of beef, chicken and dairy products. This may be linked to higher earning power. In Cairo, it is easier for women then for men to find work, usually in the informal domestic sector (Ahmed 2003), and the majority of our single participants were young men.

Work Status and UNHCR Status
The impact of work status and UNHCR status on reported food consumption in our sample was again minimal overall. However in cases where neither the participant nor their partner was working there is evidence of reduced consumption of expensive products, in particular meat and dairy products. This is to be expected as it is likely that income is less.
During discussions, attention was also drawn to the fact that many people are working extremely long hours and are not given food or time to eat, or else feel too exhausted to prepare food. Being employed and therefore out of the home may in fact put people at greater risk of malnutrition. This is further discussed in Part Two.

**Quantities consumed**

The data we have on quantities consumed is limited to rough estimates of relative quantities in different locations. Sixty respondents said that they consumed similar quantities in all three locations. Thirty-eight respondents said they found they were eating less in Cairo than they had in Khartoum – only 17 found that they were eating more. The majority of our respondents ate two meals a day in Cairo. Some 29 respondents ate 3 meals a day or more and 9 ate only one. Most respondents shared their meals with between 4 and 6 people (Table 3). Table 4 shows the number of people reporting going without food for more than 24 hours. The main reason given for going without food was lack of money, though one participant fasted only for religious reasons.

<table>
<thead>
<tr>
<th>No. of people sharing meals</th>
<th>No. Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-3 people</td>
<td>21</td>
</tr>
<tr>
<td>4-6 people</td>
<td>72</td>
</tr>
<tr>
<td>7-9 people</td>
<td>30</td>
</tr>
<tr>
<td>Over 9 people</td>
<td>8</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Reported Frequency of going without food for 24 hours</th>
<th>No. Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never or very rarely</td>
<td>82</td>
</tr>
<tr>
<td>Once a month</td>
<td>15</td>
</tr>
<tr>
<td>2-3 times a month</td>
<td>23</td>
</tr>
<tr>
<td>4 times in a month or more</td>
<td>9</td>
</tr>
</tbody>
</table>

Table 3

Table 4
5. **COMMENTS AND CONCLUDING REMARKS**

The findings of this research signpost trends and patterns which are likely to be indicative of what is happening among the wider community. The majority of participants reported experiencing a significant change in the foods they regularly consumed during the move from South Sudan to Khartoum, and then to Cairo. Certain foods that had been an important part of participants’ diets in South Sudan are lost from the diet and there is evidence of increased consumption of other foods, many of which had been introduced to participants’ diets in Khartoum. Very few foods were added to people’s diets in Cairo; exceptions are spinach and *tahena*. Comparison of data on short and longer-term residents suggested that dietary patterns adopted upon arrival tend to be maintained. It is likely that these dietary patterns reflect those of the wider community and could be a contributory factor to poor nutritional health among Sudanese communities in Cairo.

**The most vulnerable**

The small number of participants who reported eating only one meal a day, sharing their meals with many people or regularly going without food for 24 hours because of lack of money are likely to be at high risk of nutrition-related health problems. Our survey revealed that a significant minority of respondents are consuming inadequate diets. One worrying trend is the low consumption of meat and dairy products. Those respondents reporting frequent consumption of chicken tended to be the same ones reporting high consumption of other kinds of meat and of milk. At the other end of the scale were respondents who ate almost no meat or dairy products at all. Thirteen of our 131 respondents eat no type of meat or dairy product more than once in a month. This represents almost 10% of those surveyed. It should be noted that people commonly buy cheap chicken bones, skin and head (*afsha*) rather than the meat.

**Reported illnesses**

This change in diet, and in some cases the decrease in food consumption has implications for refugees’ health. However participants themselves identified a number of physical ailments which they felt was caused by the food they were consuming, as opposed to that which was lacking from their diets. Over a third of participants said that they felt that their bodies were negatively affected by food in Cairo. Table 4 shows the sicknesses described:

<table>
<thead>
<tr>
<th>Description of feeling</th>
<th>No. Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Burning</td>
<td>2</td>
</tr>
<tr>
<td>Constipation</td>
<td>2</td>
</tr>
<tr>
<td>Hunger</td>
<td>1</td>
</tr>
<tr>
<td>Itchiness</td>
<td>11</td>
</tr>
<tr>
<td>Pain</td>
<td>3</td>
</tr>
<tr>
<td>Digestive problems</td>
<td>5</td>
</tr>
<tr>
<td>Psychological Problems*</td>
<td>1</td>
</tr>
<tr>
<td>Stomach problems</td>
<td>12</td>
</tr>
<tr>
<td>Condition</td>
<td>Frequency</td>
</tr>
<tr>
<td>--------------------</td>
<td>-----------</td>
</tr>
<tr>
<td>Vomiting</td>
<td>4</td>
</tr>
<tr>
<td>Weakness</td>
<td>3</td>
</tr>
<tr>
<td>Weight Gain</td>
<td>4</td>
</tr>
<tr>
<td>Weight Loss</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total No. Respondents</strong></td>
<td><strong>49</strong></td>
</tr>
</tbody>
</table>

*The notion of ‘psychological problems’ is discussed in Part Two.*

These conditions may not be, or may only partly be linked to consumption of food. Constipation and vomiting are also linked to feelings of stress and depression, for instance, and the itchiness of which many (mainly) women complained and which is thought to be indicative of food allergies, may be caused or exacerbated by other factors (such as air pollution, or stress). The risks considered by refugees in shaping their diets are discussed at length in Part Two of this research. However, it is important to briefly note that through various processes of self or community diagnosis our participants associate these feelings and ill effects with the food they are eating and therefore organise their diet in response to these feelings. Many of the food selection decisions made by participants are made in response to these complaints. These are the discomforts that people are experiencing and with which they are concerned. It is important that any intervention or educative program begin by understanding these complaints.

**For the researcher**

Several issues and questions arose during this exploratory research which merit further study by nutritionists and social scientists. More specific questions which might be of interest to researchers include:

- *Comparisons with host society:* Comparing nutritional status and food consumption patterns of refugees with those of the host population.
- *Comparison of other groups within the Sudanese refugee population:* Our study focused only on adults and it would be interesting to document the nutritional status and food consumption patterns of, for instance, children and younger people.
- *Further studies on nutritional health:* A number of nutrition-related complaints were raised; these may be due to inadequate or changed diets, and should be documented and addressed.

**For the policy maker**

In urban contexts where displaced people are mobile, self-reliant and poorly visible and the relief camp model of food distribution is not a viable option, the importance of engaging with the decisions and actions of people is paramount. Gittelsohn et al have emphasized that ‘it is crucial to know the most salient systems of food classifications, food proscriptions and prescriptions, the system of valuation of people and how this is implemented in a given setting ...it is important also to understand that these rules are part of a dynamic process. We need to learn how to take this process into account in our planning.’ (2003). It may be a waste of time and resources to plan programs which do not address the problems, or take into account the fears of the people themselves. The challenges of the urban environment, the limited resources of international agencies and the Egyptian authorities’ prioritization of their own citizens can
seem insurmountable and, perhaps as a result, very little has been instigated to address the food needs and nutrition problems of urban refugees in Cairo.

One effective and inexpensive way in which to intervene would be to offer a forum in which information about health and feeding is exchanged. Information and educational sessions and workshops that are grounded in the questions that participants themselves raise and take place in the areas in which people live would be a useful endeavour, which may have a positive impact on health. Wider issues regarding the relation between stress, depression, fertility, energy levels and feeding should also be discussed. Four follow-up workshops we carried out in Hadayek el Maadi attempted to do this, and were well-received.

Of paramount importance is the recognition that Sudanese refugees are receiving inadequate nutrition in Cairo, and that children are particularly vulnerable to the health implications of this lack of nutrition. Further research is required to quantify these health implications; in the meantime it is essential that policymakers start to consider how refugees’ nutritional concerns can better be addressed.
## Appendix 1: Demographics of Sample

### 1. Age of Respondents

<table>
<thead>
<tr>
<th>Age Range</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>18-25 years</td>
<td>19</td>
</tr>
<tr>
<td>26-30 years</td>
<td>28</td>
</tr>
<tr>
<td>31-35 years</td>
<td>31</td>
</tr>
<tr>
<td>36-40 years</td>
<td>30</td>
</tr>
<tr>
<td>41-45 years</td>
<td>14</td>
</tr>
<tr>
<td>46-55 years</td>
<td>8</td>
</tr>
<tr>
<td>Over 55 years</td>
<td>1</td>
</tr>
</tbody>
</table>

### 2. Sex of Respondents

<table>
<thead>
<tr>
<th>Gender</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>66</td>
</tr>
<tr>
<td>Male</td>
<td>65</td>
</tr>
</tbody>
</table>

### 3. Religion of Respondents

<table>
<thead>
<tr>
<th>Religion</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Christian</td>
<td>126</td>
</tr>
<tr>
<td>Muslim</td>
<td>5</td>
</tr>
</tbody>
</table>

### 4. Marital Status of Respondents

<table>
<thead>
<tr>
<th>Status</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single</td>
<td>27</td>
</tr>
<tr>
<td>Married – partner in Cairo</td>
<td>86</td>
</tr>
<tr>
<td>Married – partner not in Cairo</td>
<td>13</td>
</tr>
<tr>
<td>Divorced</td>
<td>3</td>
</tr>
<tr>
<td>Widowed</td>
<td>2</td>
</tr>
</tbody>
</table>

### 5. Occupation in Sudan

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tradesman (carpenters, electricians, drillers)</td>
<td>9</td>
</tr>
<tr>
<td>Commercial enterprise (traders, services)</td>
<td>5</td>
</tr>
<tr>
<td>Public Sector/government administrative workers</td>
<td>14</td>
</tr>
<tr>
<td>Police/ army</td>
<td>3</td>
</tr>
<tr>
<td>Teacher</td>
<td>10</td>
</tr>
<tr>
<td>Professional (Accountant, doctor etc.)</td>
<td>6</td>
</tr>
<tr>
<td>Housewife</td>
<td>5</td>
</tr>
<tr>
<td>Student</td>
<td>51</td>
</tr>
<tr>
<td>Nursing or relief work</td>
<td>5</td>
</tr>
<tr>
<td>Unskilled Labour</td>
<td>2</td>
</tr>
<tr>
<td>Agricultural</td>
<td>4</td>
</tr>
<tr>
<td>Unemployed</td>
<td>3</td>
</tr>
<tr>
<td>High Level Official</td>
<td>2</td>
</tr>
<tr>
<td>(No Answer)</td>
<td>11</td>
</tr>
</tbody>
</table>
REFERENCES AND OTHER SOURCES


United Nations Economic and Social Council (1999). E/C.12/1999/5. (General Comments), The right to adequate food (Art.11).

