



**Formative Research on Complementary Feeding
Practices in Uganda**

24 February 1998

Dorothy C Foote

**Academy for Educational Development
Cooperative Agreement HRN-A-00-97-00007-00
Breastfeeding and Related Complementary Feeding and Maternal Nutrition**

Formative Research on Complementary Feeding Practices in Uganda

28 February 1998

Dorothy C Foote

This focus group research was a joint activity of the LINKAGES project and the Delivery of Improved Services for Health (DISH) project

This publication was made possible through support provided by the G/PHN/HN Global U S Agency for International Development under the terms of Grant No HRN-A-00-97-00007 00 The opinions expressed herein are those of the author(s) and do not necessarily reflect the views of the U S Agency for International Development

For more information contact

The LINKAGES Project
Academy for Educational Development
1255 23rd Street, NW
Washington, DC 20037

Tel (202) 884-8700
Fax (202) 884-8977
E-mail linkages@aed.org

May, 1998

C

Table of Contents

EXECUTIVE SUMMARY	1
LIST OF TERMS	3
BACKGROUND	3
RESEARCH OBJECTIVES AND METHODS	4
SUMMARY AND ANALYSIS OF FINDINGS	6
Introduction of Solid Foods	6
Frequency of Feeding	7
Growth Related to Feeding	9
Responses to Feeding Recommendations	11
Advice Seeking Behaviors	14
CRHWs and Nutrition Promotion	15
DISCUSSION AND RECOMMENDATIONS	15
Feeding Recommendations	16
Message Concepts for IEC Strategy	17
CRHW TOT and Training	18
APPENDIX 1 TOPIC GUIDES	20

LIST OF TERMS

AED	Academy for Educational Development
Akalo	millet paste (thick staple)
CRHW	Community Reproductive Health Worker
DISH	Delivery of Improved Services for Health
Doodo	dark green leafy vegetable
FLEP	Family Life Education Program (Busoga Diocese)
IEC	information, education, and communication
LAM	Lactational Amenorrhea Method
Matooke	cooked plantain banana
Mukene	variety of small dried fish
Nkejje	variety of small dried fish
Posho	ground, cooked maize (thick staple), eaten with sauce
Simsim	sesame seed paste
TOT	Training of Trainers



EXECUTIVE SUMMARY

In 1998, the Delivery of Improved Services for Health (DISH) project will begin promoting improved complementary feeding practices through IEC activities and training of community health workers. These activities in complementary feeding will be developed based on three pieces of research: (1) concepts developed through formative research, (2) specific information on traditional staple foods used for child feeding, from a food values study (led by LINKAGES consultant Ming Hung), and (3) household trials of improved practices (led by Dr. Jesca Nsungwa-Sabiti).

The formative research component of this strategy was conducted in three DISH districts: Jinja, Mbarara, and Rakai. Teams of two researchers conducted three focus groups in each district with various groups of women.

	Jinja	Rakai	Mbarara
1	Mothers of 6-12 mo olds	Mothers of 6-12 mo olds	Mothers of 6-12 mo olds
2	Mothers of 1-3 year olds	Mothers of 1-3 year olds	Mothers of 1-3 year olds
3	Community Health Workers (FLEP)	Grandmothers of 6 mo - 3 yr olds	Grandmothers of 6 mo - 3 yr olds

Topics covered in focus group discussions and preliminary findings include:

Introduction of solid foods—Introduction of porridge and other “drinks” is distinguished from introduction of “solid” foods. Women generally agree that 3–4 months is an appropriate time to introduce porridge, but add that circumstances may require earlier introduction (perceived inadequacy of breastmilk, death/illness of mother or caretaker other than the mother). Issues related to breastfeeding arose in discussions but were not fully explored. Six to eight months is considered appropriate for “solid” foods, such as posho, akalo, matooke, or cassava.

Frequency of feeding—The general consensus of women is that feeding their children of these ages 2–3 times day is enough. Porridge, breastmilk, tea, and other “drinks” are given to younger children between meals, while older children are considered capable of finding food whenever they are hungry from neighborhood fruits or neighbors’ homes.



Perceptions of “good feeding” and good growth—Good growth is attributable to adequate “care” and good feeding. Awareness of good foods is high, but availability and affordability are not. Children who grow well are described as being strong and playing well, and having good appetites, dark hair, and healthy skin. They are also considered to be wise, and to do well in school.

Acceptability of improved feeding practices—Mothers are willing to mix groundnut sauce/paste and/or beans with children’s staple food. Many report doing this already. There is mixed willingness to feed solid staple (posho, matooke, rice, potatoes, akalo) *instead of* porridge for younger children, though some mothers acknowledge the higher nutritive value of the denser staples.

Barriers to improved feeding practices—The main barriers to feeding vegetables or undiluted milk daily, or nkejje or liver weekly is affordability. Green vegetables seem more affordable than milk on a daily basis, and nkejje seems more affordable than liver on a weekly basis (though the recommendation was misrepresented as “daily”). But women agree that it is good to give these foods if they are available. The recommendation to feed “solid staple” *instead of* “porridge,” was generally not well received, as porridge is considered an important part of child feeding. Acceptable recommendations to improve the quality of the infant diet after six months might include (1) *replacing* porridge with foods and giving other drinks in addition, or (2) focus on giving the recommended food three times daily regardless of what else is given to eat or drink.

Advice seeking behaviors re child feeding—Health workers are a credible source of advice on child feeding, as are elder mothers. Instances of erroneous advice currently given by health workers indicate that health worker training is needed.

Ways that nutrition promotion can become part of their work (for CRHWs)—CRHWs report that they do nutrition counseling already, even though there’s no way of reporting this. “Nutrition is part of our work plan. You cannot teach family planning when the present child is malnourished.” CRHWs enquired about resources to support nutrition activities, especially demonstrations.



BACKGROUND

In Uganda, multiple interrelated factors contribute to high rates of child malnutrition. Initiation of breastfeeding is high (98–99 percent) and exclusive breastfeeding in the first few months protects most children from malnutrition and infection. However, malnutrition rates begin to rise around the age of three months, suggesting sub-optimal breastfeeding practices. Early introduction of liquids and foods, poor quality diets, and infectious diseases contribute to increasing rates of malnutrition in the first three years of life. At one year of age, one-third of Ugandan children are stunted, and at two years of age, one-half are stunted. High rates of stunting persist into the third and fourth years. More detailed information on infant feeding in Uganda is presented in a Literature Review of Infant Feeding in Uganda, by Carol Baume of the Academy for Educational Development (AED). This report summarizes relevant qualitative and quantitative research on breastfeeding, complementary feeding, micronutrient malnutrition, and indicators of general child nutrition.

Breastfeeding and infant nutrition promotion are part of the DISH project's child health interventions. DISH also promotes antenatal care, safe delivery and postnatal care, growth monitoring, immunizations, and family planning as child health interventions. In August 1998 a team from the LINKAGES project assessed the programming possibilities for maternal nutrition, LAM, infant feeding, and other related nutritional practices within the context of the DISH project. As a result of this assessment, recommendations for activities in two DISH program areas are being carried out: (1) training of community health workers in child nutrition education and counseling, and (2) IEC activities to promote improved infant feeding practices.



RESEARCH OBJECTIVES AND METHODS

Objectives

- 1 To investigate perceptions of women regarding introduction of solid foods to the infant diet (timing and types of foods), frequency of feeding, and growth related to feeding for young children
- 2 To understand mothers' willingness to try improved feeding practices and identify barriers

Methods

The five main regions in the area served by the DISH project are characterized by distinct cultural, ecological, and language differences. The largest of these three regions were selected for the purposes of this research, with the resulting districts being Jinja, Rakai, and Mbarara.

Topic guides were developed to investigate the topics of timing of introduction of foods, frequency of feeding, amount of feeding, growth related to feeding, feeding recommendations, and for one focus group with community health workers, ideas about how infant nutrition could be incorporated into their current work in reproductive health.

Interviewers were selected from a pool of skilled moderators, representing various institutions including Makerere Institute of Social Research and the Busoga Diocese Family Life Education Program (FLEP). Selection was based on proven ability to conduct qualitative research and appropriate language skill. Topic guides were modified for four audiences: mothers of 6–12 month-olds, mothers of 1–3 year olds, grandmothers of 6 month–3 year olds, and Community Reproductive Health Workers. The topic guides were then translated into three languages for the corresponding districts: Rusoga for Jinja district, Luganda for Rakai district, and Runyankole for Mbarara district.

Community mobilizers in each district were given screening criteria and asked to mobilize groups of mothers and grandmothers according to the following criteria:

- Must have a child or grandchild in the appropriate age range,
- Must not be a nurse or community health worker,
- Must not have been involved in any of the previous or concurrent DISH research related to complementary feeding (household trials or food measures study)



The screening criteria for community health workers included

- Must not have been involved in any of the previous or concurrent DISH research related to complementary feeding (household trials or food measures study),
- Must not be a CRHW supervisor or association representative,
- Should preferably not be CRHWs from the same working zone

A two-day training was held on 24–25 January. Dorothy Foote (LINKAGES consultant) and Nankunda Allen (DISH IEC Coordinator) led the training. Moderators were introduced to the basics of complementary feeding, the infant feeding situation in Uganda, and the background and components of the current project. The group reviewed skills of qualitative research, were introduced to the topic guide, and participated in an exercise to familiarize themselves with the topic guide. The guides themselves were pre-tested in the afternoon with two groups of mothers in the Ntinda area of Kampala. Both pre-test focus groups were conducted in Luganda. After pretesting, moderators discussed appropriate changes to the topic guides, and these changes were made consistently in the translated versions of all three languages.

From January 26–29, moderators traveled to the districts and conducted the focus groups. Each discussion was transcribed and translated back into English. A summary of transcripts was prepared by Nankunda Allen and Dorothy Foote.



SUMMARY AND ANALYSIS OF FINDINGS

Introduction of Solid Foods

Introduction of porridge is distinguished from introduction of solid staple foods. Mothers, grandmothers, and health workers generally believe that in usual circumstances, 3–4 months is the appropriate age to introduce porridge, although earlier introduction is sometimes necessary if the child's mother is sick, if the mother perceives that her breastmilk is inadequate, or if the mother has to leave the child with a grandmother so that she can go work in the field. This general pattern holds even in the focus groups, conducted in Mbarara, where late introduction of foods has been documented in previous studies

- *At this time (three months) the child is changing in weight and needs a stronger food (than breastmilk) to support the weight*
- *(Porridge should be given) after three months of age. That's when the intestines are firm and can digest foods other than breastmilk*
- *Three to four months is the suitable time for a child to take porridge because milk lasts in the stomach for a very short time, so the child keeps on demanding to be fed. But porridge is thick. It can hold in the stomach for some good time until the child is big enough to eat solids*
- *(Mbarara) For us when we used to breastfeed children, a child would go up to one year or even one and a half without eating or drinking porridge, but these days it (feeding) begins at four months*

Issues related to breastfeeding in the first six months of life arose in these discussions but were not fully explored. Most of these emerged during the discussion on appropriate timing of introduction of foods complementary to breastmilk. Mothers agreed that some circumstances necessitate early introduction of porridge or milk—mothers work and leave children with a caretaker, perceived inadequacy of breastmilk, or mother's death or illness

- *For example, if you are my daughter, you may have a child and maybe you are always busy working. You may decide to bring that child to me. So from the time you bring the child to me I have to think and decide on what to feed the child*
- *The child could have lost her mother and so is not breastfeeding. You may then be forced to give food at an early stage*
- *The mother of the child may be too sick to breastfeed her baby as required. The breastmilk may be insufficient because of the sickness*



- *Breastmilk can prove insufficient Like my case, I had little breastmilk, and by one month my child would never get enough and I decided to put him on cow's milk*

Six months is generally accepted as an appropriate time to introduce solid foods, including matooke, cassava, sweet potatoes, posho, akalo, etc. Most responses ranged from 5–8 months, (although grandmothers in Mbarara suggested anywhere from 1–3 years). However, most participants agree that around six months is an appropriate age because the child begins to reach for things like foods, dirt, and toys and put them in his mouth.

- *when you are eating the kid also stretches to get some food*
- *By six months the child can take interest in the adult's food and grab it. So the mother smashes some as she eats and gives the child too*

There is also the belief that at this age the child requires a more substantial food to maintain growth.

- *The child has put on weight by this time and fluids are too light to match the weight. So the child should have solid food*
- *At six months is when a child begins to feed (on solid foods). That is when the child begins growing rapidly*

It is agreed that the mother or main caretaker makes the decision on when to begin porridge and solid foods, though many base the decision on cues from the child.

Frequency of Feeding

6-12 month olds

Women believe that children 6–12 months of age should be fed 2–3 times daily with liquids given between meals (breastmilk, milk, porridge, tea, juice). One woman suggested that simple foods like Irish potatoes should be prepared and given between meals.

- *It is good that after meals the child should have some drinks, like porridge mixed with milk or passion juice and boiled water (Moderator: What about giving foods?) It is better to give drinks*
- *A child should eat three times. They are OK. Besides she has to drink in between*
- *Two times but a child should have porridge in between these*
- *They should eat three times a day and be given fluids in between*



1-3 year olds

Similar to 6–12 month olds, the general consensus for frequency of feeding for 1–3 years olds is 2-4 times daily. There is some indication that children of this age should take only drinks between meals (porridge, juice, breastmilk, tea, milk). Other women suggested that foods like avocados, pawpaw, sweet bananas, or roasted corn should be given between meals. One group of women in a peri-urban area suggested that children should be given biscuits, sweets, bread, or mandazi (donuts).

- *three times are enough because a child drinks many times, unlike eating. They like tea and passion fruit juice.*
- *They don't care much about food if there are drinks like tea. They prefer drinking to eating.*
- *If a child eats lunch and supper, then drinks can be given in between, especially passion fruit juice if available.*
- *I think it is OK to give foods. In between (three main meals) you can give them ripe bananas, maize cobs, or any other available bite.*

Another concept that emerged was that of older children being responsible for finding their own food between meals. One group suggested that children of this age are capable of finding food for themselves between meals, such as neighborhood fruits or leftover foods at neighbors' homes. In this situation, however, a mother cannot be sure that the child is getting enough food or good quality food.

- *Children of this age move around eating from neighborhoods. Then whenever they find a fruit like sugarcane, jack fruit, bananas, pawpaws, and food kept after meals, they eat.*
- *Things like sweet bananas and leftovers (amawolu) are usually available and the child can pick for himself.*
- *Children always carry something as they play about, so I think they are always eating. (but this) is very wrong, because they end up eating dirty food after playing with it.*



Growth Related to Feeding

Reasons for good growth

There is an overall consensus that good care and good feeding contribute to good growth. Good care is described as keeping the child clean, providing clean clothes for the child, and giving the child a comfortable, clean and warm place to sleep.

Mod *What makes children grow well?*

Res *Giving the children attention*

Mod *What exactly do you mean by attention?*

Res *Whereby a mother will wash the child, put him to sleep in a comfortable bed, and where the mother will ensure that the child has meals of good food*

“Good foods”

Giving “good foods” is considered an essential factor in good growth. “Good foods” that were thought to constitute “good feeding” included most foods available, and varied according to location. One peri-urban group of mothers in Jinja included Cerelac and BabySoya among “good foods” for 6–12 month olds. Other “good foods” for 6–12 month olds included a wide range of vegetables, staples, and protein sources.

small fish (nkejje and mukene)

eggs

groundnuts

beans (after removing outer cover)

milk

breastmilk

rice

Irish potatoes

posho (ground and cooked maize)

sweet potatoes

matooke (plantain bananas)

millet porridge

pawpaw

fried doodo (dark green leafy vegetable)

cabbage

juice

soups

tea



In general, mothers of 1–3 year olds regarded the same general categories of food as “good,” and provided similar specific examples

Specific effects of “good feeding”

“Good foods” in general were thought to add to specific growth processes, such as strengthening of bones, adding to blood, and development of the mind. Women also agreed that good foods help a child avoid falling sick, and give energy and strength

- *They (good foods) help to build the body’s defense mechanism, so that the child doesn’t fall sick so often*
- *This food gives children strength. Children of this age play a lot and they need strength which they can only gain from good food*
- *When a child is fed well, that food enables him to get energy. With that energy, the child can play well and do other things with ease*
- *When a child eats well, his brain builds well and he attains wisdom*
- *Every food we eat has a role to play in our lives. Some foods help build the body, others make it grow, there are some that contribute fats, there are some foods that add water to the body. So whatever food eaten brings about good health. But if you decide to feed him only one food, he still won’t grow up well*

Throughout this section of the discussions, women referred to certain foods which they believed to have specific values. These beliefs were expressed from individuals, and were not necessarily recurrent or collectively agreed upon. Some of these included

- fruits, greens, and liver for growth and high levels of blood
- nkejje (small fish) for a child who is “sickly and sleepy”
- beans, avocados, milk, groundnuts, eggs for intestinal worms
- milk for malaria
- ghee to avoid stomach worms
- meat to harden bones, salt for strong, firm bones
- greens to cure eye diseases
- Irish potatoes with porridge and sugar to increase blood and help with growth

Outcomes of good growth and good feeding

Children who “grow well” were described as being strong, happy and playing well, and having good appetites, dark hair, and healthy skin. They are also considered to be wise, and to do well in school

- *The child has weight, with good dark hair and is always happy and cheerful*



- *such a child grows up and starts going to school He can learn fast without sleeping in class*
- *They are agile and like playing*
- *You can tell from her hair If it is brown, thin, and scanty A child with such hair is not growing well*

Responses to Feeding Recommendations

Add groundnut sauce/paste or beans to staple foods for 6–12 month olds

The concept of mixing these foods is very acceptable, and commonly practiced The term for such a mixed food is “ekitobero ” However, there is some concern that beans can cause diarrhea Beans with “covers” are particularly unpopular as it’s believed the covers are hard to digest or can cause stomach problems or diarrhea

- *When you add them (nuts, beans) to the food there is something it adds to the body Groundnuts have fats which are energy giving, if you feed them on such foods they build the body But there are some people that you feed and it effects their stomachs and they get diarrhea*
- *If it’s the posho and beans that you prepared, then you get a piece of posho, mix it with the beans, mash them and then give the child*
- *We give one type of sauce to children every meal, depending on what is prepared (another participant) If it’s groundnuts, it’s the groundnut sauce plus the food (another) If you mix them a child can manage to eat (another) Those foods are good especially to a healthy child who likes eating*

Add groundnut sauce/paste, beans, or oil/ghee to staple food for 1–3 year olds

Mothers of older children responded similarly to this recommendation They commented on the increased nutrient value of mixing different foods in the same dish, and agreed that it is a regular practice Similar beliefs about beans and bean covers were expressed

- *If you add groundnuts to the food, the nutrients in the food increase that’s what we call ekitobero You can mix more than one food For example, beans and groundnuts and nkejje*
- *When you give beans groundnuts and ghee to a child the child has improved growth and cannot suffer from kwashiorkor He can become fat and have a lot of blood*
- *The oils make the food soft enough for the child to enjoy*



- *If a child is given beans that have covers on he can eat them but may later get problems like diarrhea*

Give solid staple instead of porridge

Although most mothers recognized that porridge alone has little nutritive value, they also seemed reluctant to leave porridge out of the child's diet. The practice of mixing milk or soya with porridge was mentioned as a means of improving the nutrient content of the porridge

- *But the porridge has to be mixed with milk because porridge alone can never bring up a child*
- *However, they say plain porridge is not good, that it has less nutrients so milk should be added*
- *Millet porridge is very good for children, especially that porridge mixed with soya*

Mothers and community health workers in particular discussed the higher nutritive value of solids over porridge

- *Food has more value to the child's health*
- *Porridge is watery and so the child feels hungry very often but staple foods are heavy. This helps the child stand for long until the next meal*
- *Staple food has a higher nutrient content than the watery porridge so food is best*

Regardless of the general knowledge that porridge is less nutritive than solids, porridge remains an important part of Ugandan infant feeding. The perception of porridge as a drink may have contributed to some confusion in this part of the discussions, as mothers may have interpreted the suggestion as "give only food and not drink". In general, it seems that food without drink is not acceptable

- *You do not have to stop porridge especially if the child is young. You give her food and also give her drinks, such as porridge*
- *A child must take porridge. He needs to drink even if he is eating*
- *Food alone cannot be enough for the child. A child can eat food and then be given tea or any other drink*
- *It is good to give food. A child cannot grow on drinks alone*
- *If a child is given only food that child remains lacking something*
- *A child cannot be healthy without eating and digestion cannot be easy without drinking. As the child's digestive system is weak, drinking makes digestion easy*



- (Moderator) *If you give a child food and beans or groundnuts and don't give him porridge is that enough?*
- (All respond) *It's not enough*

The perceived benefit of porridge is that it is easy to digest for young children, while the perceived benefit of “solid staple” is that it is more filling and more nutritious

Give fruit/foods between three main meals (for 1–3 year olds)

As discussed earlier (see Frequency of Feeding), the general practice of “feeding” between meals seems to be to give drinks and porridge between meals instead of foods. Older children are thought to find foods for themselves within their neighborhoods between meals. One potential barrier to giving food or fruit between meals was the concern that it would reduce the child's appetite for food at mealtime

- *If a child eats mangoes or maize before the meals, he eats less food. A child may eat less food because he has eaten other things and got satisfied*
- *It is not good (to give foods between meals). The children should be given drinks like porridge or milk if it is available in between*

Give greens and undiluted milk every day (for 1–3 year olds)

Both of these foods are generally regarded as good for children. In general, women regard greens as a nutritious and highly available food which builds blood. Some potential barriers to giving greens every day include children not liking greens and the belief that greens can cause diarrhea if given too often. The availability and affordability of milk on a daily basis seems problematic for many families

- *Many children are choosy and they reject things that color the food like tomatoes, greens, and onions. (Consensus of one group of 1-3 year old mothers)*
- *A child may like eating those greens, but after may get a problem in the stomach. doodo shouldn't be given very often*
- *As much as it would be very good, other foods are expensive like liver, eggs, milk, and oils are expensive. That would hinder the possibility to feed them to kids daily*
- *In most cases foods like liver, eggs, and milk are costly and many people cannot afford feeding children on them daily. But the idea is good*

Give nkejje and liver every week (for 1–3 year olds)

There was a general consensus that liver and nkejje are good for children, but nkejje was much more likely to be given since it is much more affordable for most families. Unfortunately, the



way this recommendation was presented in the focus groups was to give these foods daily instead of once a week. The barrier of affordability could perhaps be lessened if once a week was the understood recommendation.

- *Nkejje is very good. You can give it to the child every day because they don't have any problem.*
- *If my child looks healthy I give him enough of the foods I can afford. I don't care about the liver.*
- *Liver is not easily available because we cannot afford it, but it is quite good. You can afford to buy it once in a year. But for nkejje, those are not expensive. We buy them.*

(In another discussion two women disagreed over the ability to buy liver.)

- *Participant 1: A child can spend a full year without having eaten liver.*
- *Participant 2: No, that's not possible. If you work for a liver, you cannot spend a year without buying it. If you see that your child wants to eat the liver, you can weave a mat, sell it, and then buy the liver.*

Advice Seeking Behaviors

Health workers are considered a credible source of information on proper child care and feeding. Women overwhelmingly agreed that they would consult a health worker or an elder mother on decisions related to feeding children. Immunizations visits and community education classes were identified as times when women are likely to ask questions or receive advice about infant feeding.

- *There are so many community educators. They teach us how well you can feed a child.*
- *I would enquire from the nurse because she is learned. She would know what foods are good for my child.*
- *Even older moms. Like I have one child, I can consult that one who has eleven, and she tells me what she does.*
- *When we take the children for immunization they first teach us on family planning and how to feed the children.*

With health workers as credible authorities on infant feeding and care decisions, it's important that they are giving correct information. Some instances of misinformation from health workers emerged in the findings, which further emphasize the need for training in this area. The primary



area of misinformation related to duration of exclusive breastfeeding and timing of complementary food introduction

- *Every child I had had to be vaccinated against polio, and so I have learned everything from hospitals, how I should feed the child, how you should start at 3–4 months to drink, food at 6–7 months, how you should start him on soft foods and at one year three months give him food and drink often*
- *When we took our babies for immunization the clinicians instructed that we should give our babies porridge and milk at three months So, in this case it's the medical personnel that decided it for me (when to introduce solid foods, including porridge)*

CRHWs and Nutrition Promotion

Community Reproductive Health Workers were asked to discuss nutrition promotion in their communities They agreed that they are already involved in nutrition promotion alongside family planning, HIV/AIDS, maternal care, and immunizations They expressed interest in beginning feeding programs or demonstrations, promoting the growth of high protein foods, and financing such activities They expressed concern that although nutrition is a regular part of their work, there is no place to report it on the current monthly activity report forms

- *Nutrition is already in our work plans You cannot teach family planning when the present child is malnourished*

DISCUSSION AND RECOMMENDATIONS

Findings related to feeding recommendations were based on both direct responses to the recommendations themselves, and also on other relevant segments of the discussion Some of the recommendations were not fully developed at the time of topic guide development, so they were asked in general terms As a result, mothers “reactions” to these recommendations were also at times general (i.e. “What do you think of giving foods like liver, green vegetables, nkejje, eggs and milk every day?” “It is very good and these are some of the foods that build the body and protect the child”) Moderators reported that the focus groups with grandmothers were difficult in terms of discussing specific recommendations Since the grandchildren were from both age categories (6–12 months and 1–3 years), discussing recommendations for these two groups separately was confusing



Further investigation on two of the recommendations would help to clarify their acceptability among Ugandan mothers. The development and pretesting of specific messages will provide an opportunity to investigate these issues.

Give solid staple instead of porridge—The messages related to giving solid staple foods instead of porridge could go in either of two directions: (1) *replacing* porridge with the recommended foods, and offering other drinks in addition, such as breastmilk, undiluted milk, juice, boiled water, etc. or, (2) give the recommended food three times daily regardless of what else is given to eat or drink. In this case the snacks which are recommended for 1–3 year olds between meals do not include porridge.

Give a small piece of liver once a week—Since this recommendation was misrepresented as “give liver daily” in the focus groups, further investigation might reveal that giving a small piece of liver once a week is actually feasible for mothers.

Feeding Recommendations

The aim of the formative research was to identify simple and achievable ways that Ugandan mothers can improve the diet of their children six months to three years with the foods most available to them. Of the feeding recommendations that were discussed in focus groups (excluding whatever may be learned from the further investigation recommended above), the following are prioritized in order of feasibility for mothers and likelihood of acceptance.

Children 6–12 months

- 1 Start feeding solids (starchy staples) at six months
- 2 *(Depending on area and foods available)* Instead of porridge, give solids with sauce, beans or groundnuts
 - 2a Instead of porridge, give posho (cooked ground maize)/akalo (cooked ground millet) softened with some sauce three times a day
 - 2b Instead of porridge, give matooke (mashed plantain)/mashed sweet potato/cassava/yam with two tablespoons of mashed beans three times a day
 - 2c Instead of porridge, give matooke/mashed sweet potato/cassava/yam with a tablespoon of groundnut paste or groundnut sauce three times a day



Children 1–3 years

- 1 *(Depending on area and foods available)* Instead of porridge, give solids with groundnuts, beans, or oil/ghee three times a day
 - 1a Instead of porridge, give posho/akalo mixed with ½ tablespoon of groundnut paste or groundnut sauce three times a day
 - 1b Instead of porridge, give matooke/mashed sweet potato/cassava/yam with two tablespoons of beans three times a day
 - 1c Instead of porridge, give matooke/mashed sweet potato/cassava/yam with one tablespoon of groundnut paste or groundnut sauce three times a day
 - 1d Instead of porridge, give posho/akalo mixed with ½ tablespoon of oil or ghee three times a day
- 2 Give a fruit and another food to the child in between the three main meals everyday
- 3 Give a handful of nkejje (small dried fish) every week
- 4 Add a big spoon of green leaves to the child's food everyday
- 5 Give a tumpeco (mug) of undiluted milk to drink everyday
- 6 Give a small piece of liver once a week

Message Concepts for IEC Strategy

The two indicators to evaluate the infant nutrition component of the DISH IEC activities are (1) to increase the number of women exclusively breastfeeding under six months, and (2) to increase the number of women who think that exclusive breastfeeding under six months is important. Messages for complementary feeding will be designed to address appropriate complementary feeding from six months until breastfeeding stops around 20 months, and then feeding up to three years, when the rate of malnutrition is highest. Messages will be based on agreed upon recommendations and will put forth the simple, strong benefits of these “good feeding” practices.



Based on the findings of these focus groups, a few message concepts correspond with the prioritized feeding recommendations. Specific media will be identified and messages based on these concepts will be developed and pretested.

- 1 Concept** Breastmilk is the perfect food and drink for babies under six months. Give your baby only breastmilk for the first six months of life.
- 2 Concept** Strong kids need strong foods. Even young children need “adult foods” to grow well. Give your child solid foods in addition to breastmilk starting at six months.
- 3 Concept** Promotion of “well fed” children who are strong and active and play well. They are wise and attentive and happy. They have a pleasant look, with black hair and good skin. They have good appetites and eat well.
- 4 Concept** Small stomachs need to be filled often to maintain good growth. For the first six months give only breastmilk. For 6–12 month olds, give solid foods three times daily and continue breastfeeding.
- 5 Concept** Healthy active children should eat often for energy and growth. For children over one year, give three meals a day, and give fruits or other foods between meals in addition to drinks.

CRHW TOT and Training

The feeding recommendations as prioritized above suggest what we believe to be the simplest, most feasible practices for mothers to improve feeding for 6 month to 3 year olds. These messages will form the basis for the complementary feeding component of the CRHW training.

Furthermore, the findings of this research offer practical examples of real situations which CRHWs face while promoting improved nutrition practices. CRHWs will receive training on several aspects of community nutrition promotion, including communication skills in IEC. Selected situations from these focus group findings should be used to develop realistic case studies and practical examples for the communication skills segment of the training. For example, in a training, CRHWs could role play on the following situations (from the formative research) to practice their counseling skills.



- Children “forage” in a neighborhood to find fruits and foods to eat between meals
How could mothers be encouraged to take more responsibility for feeding good foods between meals?
- A woman says that she must first consult with the father of her child in making decisions about feeding because he is the one with the money The other women in the group frown in disapproval
- A group of grandmothers agrees that the appropriate age to start feeding a child solid foods is at two years of age
- A group of mothers agree that breastmilk alone is inadequate for feeding four month old babies, and porridge with cow’s milk should be given as a supplement

There are *many* situations such as these in the focus group transcripts which could be reviewed during the Training of Trainers and effectively incorporated into the CRHW trainings Copies of focus group transcripts can be obtained from Nankunda Allen, DISH IEC Coordinator, or Dorothy Foote, LINKAGES consultant



Improving nutrition and reproductive health

APPENDIX 1: TOPIC GUIDES



Topic guide for Community Reproductive Health Workers

Introduction

Good morning/afternoon Thank you all for coming My name is _____ and this is _____ We are here today because we are interested in the health of children in the community and we would like to know what you think about feeding young children There are no right or wrong answers to these questions, every answer and opinion is valuable I would like to know each of your names- please tell me your name and something about yourself For example, my name is _____ and I come from _____ (*name of town*) (*Have each participant introduce herself*) You were invited to this discussion because you are a CRHW, and you have an important role in helping mothers learn about caring for their families and children

We would like to record our discussion today so that we do not miss anything you say Is it OK with everyone if we record our discussion? If you like, we can listen to the recording after we have finished the discussion (*Start recorder*)

Introduce topic

What types of foods do young children between the ages of 6 months and 3 years like to eat?

Timing

Who decides that it's time for a young child to start eating solid foods, including porridge?

What makes them/you decide that it's time to start eating/feeding solid foods, including porridge? (*Probe*)

When is the best time to start feeding porridge? (*e g At what age?*) Why? (*Probe*)

What is the best time to start feeding posho/akalo/matooke/cassava ("*solid*" staple foods)? (*e g At what age?*) Why? (*Probe*)

Frequency

How many times a day should children between 6-12 months old eat?

Is that enough?

(*If no*)

Do children between 6-12 months of age need any other foods between meals?



What kinds of foods do children eat between meals?

(If yes) What do you think about giving other foods between meals?

How many times a day should children between 1-3 years old eat?

Is that enough?

(If no) Do children between 1-3 years of age need any other foods between meals?

What kinds of foods do children eat between meals?

(If yes) What do you think about giving other foods between meals?

Amount

Who decided whether a child has had enough to eat?

How do they know that the child has had enough to eat?

Do mothers try to get the child to eat more when he/she stops eating?

Growth related to feeding

Tell me about children who grow well What are they like? (*Probe FULLY*)

What makes children grow well?

(If "good food" is mentioned)

What are the good foods that make children grow well?

Apart from making children grow well, what other value do these foods have?

Feeding recommendations

(For younger kids If nuts/beans not mentioned)

What do you think about adding beans or groundnut sauce or paste to the staple food for 6-12 month olds?

(For older kids If liver/dark green vegetables/Nkejje/egg/milk not mentioned)



What do you think about adding oil or ghee to the staple food for 1-3 year olds?

What do you think about giving liver/green vegetables/Nkejje/egg/milk to children?

What do you think about giving these foods to children every day?

What do you think about giving staple food instead of porridge to children?

Feeding behaviors

Are there certain foods which mothers like to add to the staple for small children?

Are there certain foods which mothers do not like to prepare for small children?

Closure

We are almost finished now, but before we close, I'd like to go over the main points of our discussion and make sure that I understand what you've said

Summarize main points of discussion Ask group if they agree with summary and pause for comments and confirmation Clarify any disagreements or additional points raised by participants Answer any questions that the participants raise to the best of your knowledge If you're not sure, say "I'm sorry, I don't know "



Topic Guide for grandmothers of children 6 months to 3 years of age

Introduction

Good morning/afternoon Thank you all for coming My name is _____ and this is _____ We are here today because we are interested in the health of children in the community and we would like to know what you think about feeding young children There are no right or wrong answers to these questions, every answer and opinion is valuable I would like to know each of your names- please tell me your name and something about yourself For example, my name is _____ and I come from _____ (*name of town*) (*Have each participant introduce herself*) You were invited to this discussion because you have a grandchild who is 6 months-3 years old, so you have the experience that we would like to know more about Does everyone here have a grandchild who is 6 months- 3 years old?

We would like to record our discussion today so that we do not miss anything you say Is it OK with everyone if we record our discussion? If you like, we can listen to the recording after we have finished the discussion (*Start recorder*)

Introduce topic

What types of food does your young grandchild like to eat?

Timing

Who decides that the child will start eating solid foods, including porridge? (*Probe*)

What makes them decide that it's time to start eating/feeding solid foods, including porridge? (*Probe*)

When is the best time to start feeding porridge? (*e g At what age?*) Why? (*Probe*)

When is the best time to start feeding posho/akalo/matooke/cassava ("*solid*" staple foods)? (*e g At what age?*) Why? (*Probe*)

Frequency

How many times a day should a child the same age as your grandchild eat?

Is that enough?

(*If no*) Do children the same age as your grandchild need any other foods between meals?



What kinds of foods do children eat between meals?

(If yes) What do you think about giving other foods between meals?

Amount

Who decided whether a child has had enough to eat?

How do they know that the child has had enough to eat?

Do you try to get your grandchild to eat more when he/she stops eating?

Growth related to feeding

Tell me about children who grow well What are they like? (Probe FULLY)

What makes children grow well?

(If “good food” is mentioned)

What are some “good foods” that make children grow well?

Apart from making children grow well, what other value do these foods have?

Feeding recommendations

(For younger kids, if nuts/beans not mentioned)

What do you think about adding beans or ground nut sauce or paste to the staple food for 6-12 month olds?

(For older kids, if liver/dark green vegetables/Nkejje/egg/milk not mentioned)

What do you think about giving liver/dark green vegetables/Nkejje/egg/milk to children?

What do you think about adding these things to children’s staple food?

What do you think about giving these foods to children every day?

What do you think about giving staple food instead of porridge to children?

Closure

We are almost finished now, but before we close, I’d like to go over the main points of our discussion and make sure that I understand what you’ve said



Improving nutrition and reproductive health

Summarize main points of discussion Ask group if they agree with summary and pause for comments and confirmation Clarify any disagreements or additional points raised by participants Answer any questions that the participants raise to the best of your knowledge If you're not sure, say "I'm sorry, I don't know "



Topic Guide for mothers of 6-12 month old children

Introduction

Good morning/afternoon Thank you all for coming My name is _____ and this is _____ We are here today because we are interested in the health of children in the community and we would like to know what you think about feeding young children There are no right or wrong answers to these questions, every answer and opinion is valuable I would like to know each of your names- please tell me your name and something about yourself For example, my name is _____ and I come from _____ (*name of town*) (*Have each participant introduce herself*) You were invited to this discussion because you have a baby who is 6-12 months old, so you have the experience that we would like to know more about Does everyone here have a baby who is 6-12 months old?

We would like to record our discussion today so that we do not miss anything you say Is it OK with everyone if we record our discussion? If you like, we can listen to the recording after we have finished the discussion (*Start recorder*)

Introduce topic

If your child is eating foods, what types of foods does he/she like to eat?

Timing

Who decides that it's time for the child to start eating solid foods, including porridge? (*Probe*)

What makes them/you decide that it's time to start eating solid foods, including porridge? (*Probe*)

When is the best time to start feeding porridge? (*e g At what age?*) Why? (*Probe*)

When is the best time to start feeding posho/akalo/matooke/cassava ("*solid*" staple foods)? (*e g At what age?*) Why? (*Probe*)

Frequency

How many times a day should a child the same age as your child eat?

Is that enough?



(If no) Do children the same age as your child need any other foods between meals?

What kinds of foods do children eat between meals?

(If yes) What do you think about giving other foods between meals?

Amount

Who decides whether your child has had enough to eat?

How do you know that he/she has had enough to eat?

Do you try to get your child to eat more when he/she stops eating?

Growth related to feeding

Tell me about children who grow well What are they like? *(Probe FULLY)*

What makes children grow well?

(If good food is mentioned)

What are the good foods that make children grow well?

Apart from making children grow well, what other value do these foods have?

Feeding recommendations

(If nuts/beans not mentioned)

What do you think about adding beans or groundnut sauce or paste to the staple food for 6-12 month old children?

What do you think about adding beans or groundnut sauce/paste to the child's staple food every day?

What do you think about giving 6-12 month olds staple food instead of porridge?

Advice seeking behavior

Who do you get advice from on decisions about feeding your child?

Closure



We are almost finished now, but before we close, I'd like to go over the main points of our discussion and make sure that I understand what you've said

Summarize main points of discussion Ask group if they agree with summary and pause for comments and confirmation Clarify any disagreements or additional points raised by participants Answer any questions that the participants raise to the best of your knowledge If you're not sure, say "I'm sorry, I don't know "



Topic guide for mothers of children 1-3 years old

Introduction

Good morning/afternoon Thank you all for coming My name is _____ and this is _____ We are here today because we are interested in the health of children in the community and we would like to know what you think about feeding young children There are no right or wrong answers to these questions, every answer and opinion is valuable I would like to know each of your names- please tell me your name and something about yourself For example, my name is _____ and I come from _____ (*name of town*) (*Have each participant introduce herself*) You were invited to this discussion because you have a child who is 1-3 years old, so you have the experience that we would like to know more about Does everyone here have a child who is 1-3 years old?

We would like to record our discussion today so that we do not miss anything you say Is it OK with everyone if we record our discussion? If you like, we can listen to the recording after we have finished the discussion (*Start recorder*)

Introduce topic

What types of food does your child like to eat?

Frequency

How many times a day should a child the same age as your child eat?

Is that enough?

(*If no*) Do children the same age as your child need any other foods between meals?

What kinds of foods do children eat between meals?

(*If yes*) What do you think about giving other foods between meals?

Amount

Who decides whether your child has had enough to eat?

How do they/you decide that the child has had enough?

Would you encourage him/her to eat more when he/she stops eating?



Growth related to feeding

Tell me about children who grow well What are they like? (*Probe FULLY*)

What makes children grow well?

(*If "good food" is mentioned*)

What are the good foods that make children grow well?

Apart from making children grow well, what other value do these foods have?

Feeding recommendations

(*If oil/nuts/beans not mentioned*)

What do you think about adding oil or ghee, beans, or groundnut sauce or paste to the staple food for 1-3 year olds?

(*If liver/dark green vegetables/Nkeje/egg/milk not mentioned*)

What do you think about giving liver/dark green vegetables/Nkeje/egg/milk/fruit to children?

What do you think of giving these foods to children every day?

What do you think about giving 1-3 year olds staple food instead of porridge?

Advice seeking behavior

Who do you get advice from on decisions about feeding your child?

Closure

We are almost finished now, but before we close, I'd like to go over the main points of our discussion and make sure that I understand what you've said

Summarize main points of discussion Ask group if they agree with summary and pause for comments and confirmation Clarify any disagreements or additional points raised by participants Answer any questions that the participants raise to the best of your knowledge If you're not sure, say "I'm sorry I don't know "