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Report on Brakwa-Breman Rural Bank Field Agent Training Using the Designing by Dialogue Manual Consultative Research for Improving Young Child Feeding

Brakwa, Ghana: July-August 1996

Ellen Vor der Bruegge
Freedom from Hunger/Ghana
Brakwa-Breman Rural Bank



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Background and Objectives

The Brakwa-Breman Rural Bank formed a partnership with Freedom from Hunger in 1994 to implement the *Credit with Education* program in the towns and rural communities in the service area of the bank. At the present time, there are 36 Credit Associations with 1,083 members. The credit, savings, and education services are delivered by a team of five field agents supervised by a coordinator. The amount lent project-to-date is over U.S.\$215,000, with a 100 percent repayment rate maintained since the start of the program. Learning sessions that cover all of the health, nutrition, and family planning topics recommended by Freedom from Hunger have been, and continue to be, offered.

Like many partners of the *Credit with Education* program, the field agents have completed, or are near completion of, the full generic series of learning sessions with the Credit Association members. The field agents need a method to continue the behavior change process that will help members identify the obstacles and constraints that impede the use of practices recommended in the education sessions, and to encourage and motivate members to apply the information they have learned. Recognizing this situation, the following training and research objectives were developed with input from the field agents.

Field Agent Training Objectives

1. Introduce participants to consultative research.
2. Give participants skills and/or tools to be able to implement the consultative research.
3. Increase the confidence and expertise of participants as field agents.

Research Objectives

1. Improve feeding practices for children.
2. Know more fully the current feeding practices for children in the area.
3. Find out obstacles to practicing the ideal behaviors.
4. Test (negotiate) whether the recommendations are realistic.
5. Increase field agent awareness of mothers' constraints to implementation.
6. Gain experience in consultative research on child feeding so the method can be applied to other topics.

Training/Implementation Plan

Training/Implementation Plan

The following is the calendar of events that formed the implementation plan:

Date	Activity
July 8	Prepare for Training
July 9–15	Five-Day Training for Field Agents
July 16–19	Recruitment during Credit Association Meetings and Decisions about Classification
July 22–26	TIPs Initial Visits; Each Field Agent does five
July 27	Debriefing and Analysis of Feeding Problems, Preparation of Recommendations
July 29–Aug 2	TIPs Counseling Visits (five each), Debriefings, Tabulation of Forms
Aug 5–9	TIPs Follow-Up Visits, Debriefings, Tabulation
Aug 12–14	Completion of Field Work
Aug 15–19	Analysis of Data
Aug 20–22	Meeting with Field Agents to Present Findings, Community Presentations, and Next Steps
Aug 26–28	Report Preparation

In addition to the implementation calendar, a training plan was developed for the five-day training sessions offered to the field agents to review the research methods and practice the skills needed for the TIPs negotiations. Four of the five field agents who work for the *Credit with Education* program of the Brakwa-Breman Rural Bank went through the training. One field agent was on leave. A day-by-day outline of the training is offered as Appendix A.

Overview of the Methods Used

Trials of Improved Practices (TIPs)

The training was influenced by the *Designing by Dialogue* manual prepared by Kate Dickin and Marcia Griffiths of the Manoff Group and by Ellen Piwoz of the Support for Analysis and Research in Africa (SARA) Project at the Academy for Educational Development. The manual provides a systematic approach of consultative research for identifying household child feeding and caring practices that affect child nutrition. Preparation of the manual was managed by SARA, with support from the Health and Human Resources Analysis (HHRAA) Project.

Overview of the Methods Used

The Trials of Improved Practices (TIPs) is the core method of the consultative research approach. The manual provides clear guidelines for every step of the process and problem solving. An overview of the steps to conduct the consultative research includes the following:

1. Training for TIPs
2. Recruitment of Participants for the Study
3. Initial Visit
 - ♦ 24-Hour Recall
 - ♦ Food Frequency
4. Debriefing
 - ♦ Dietary Analysis and Problem Identification
 - ♦ Planning of Recommendations
5. Counseling Visit
 - ♦ Notation of Reactions
 - ♦ Negotiate Trials
 - ♦ Motivate Commitment to Try to Improve Child Feeding Practices
6. Debriefing (and some Tabulation)
7. Follow-Up Visit on Results of Trials
8. Analysis of Results and Application

The Initial Visit is to gather information through the dietary assessment based on the 24-hour recall and food frequency matrix. This visit results in qualitative information on feeding practices, background information on the household, and available foods not being consumed by young children and why. This step could be related to the Observation Step of the ORPA (Observe, Reflect, Personalize, Act) process used by *Credit with Education* practitioners.

The Initial Visit is followed by an analysis of the diet to identify the specific feeding problems and to prepare for the counseling visit by identifying possible recommendations to suggest. This step could be related to the Reflection Step of the ORPA process used by the program.

The second visit, or Counseling Visit, is to offer tailored recommendations to the mother. During this visit, the field agent has the opportunity to observe and record

Overview of the Methods Used

reactions of the mothers to the recommendations; to observe and record which recommendations the mother chooses from among those offered by the field agent; to negotiate agreement on use of the recommendations; and to record motivations expressed by the mother. This step could be related to the Personalize Step of ORPA.

The third and final visit with the mother is to find out what recommendations she tried, and why or why not. Did she like the recommendation and why? Did the child accept the recommendation? Why or why not will the mother continue with the recommendation? Is it feasible and how often? This step could be related to the Action Step of ORPA.

Sampling

The decision was made to use the Credit Associations that had been through the Infant and Child Feeding Learning Sessions. The generic lesson plans facilitate the journey on “The Road to Behavior Change.” (See Appendix B: “The Road to Behavior Change.”) However, the generic sessions (which have had the content adapted to the local situation) only carry the process to the “foot of the mountains” or to the point where obstacles that impede implementation are confronted. The study intentionally focused on mothers of children between six and twenty-four months of age who had the benefit of the Infant and Child Feeding learning sessions information. The program wants to learn how to help caregivers get beyond the “mountains” or obstacles to successful implementation of ideal behaviors.

The study also selected participants for the study in a way that allowed the field agents to continue with their work responsibilities while carrying out the research. Each field agent selected one Credit Association each day to identify a mother with a child among the defined age groups who was willing to commit the time needed for the study. Thus, twenty of the current thirty-six Credit Associations were represented.

An additional decision was made to sample mothers from the “town” setting (there are three rural “towns” in the Brakwa-Breman Rural Bank catchment area) as well as from the rural communities. Also, the sampling noted if the mother worked predominately in and around her home or if a significant amount of her time was spent outside the home. It was thought that these two factors (town vs. rural and home-based vs. outside) might influence the feeding patterns for children. As it turned out, neither of these factors seemed to impact the practices selected by the mothers.

Table 1 below, “Summary of Selected Sample Characteristics,” is an overview of the participants who were interviewed in the study. The table summarizes the location

Overview of the Methods Used

of participants' homes and workplaces, and the ages of the children involved. The capital letters are the initials of the field agents involved in the study.

TABLE 1: SUMMARY OF SELECTED SAMPLE CHARACTERISTICS

AGE IN MONTHS (MOS)	TOWN		VILLAGE	
	OUTSIDE	HOME	OUTSIDE	HOME
6-7.9	VAB-1 (7 mos)	-	KFI-1 (6 mos)	BKG-1 (6 mos) AAB-1 (6 mos)
8-11.9	VAB-2 (10 mos) BKG-2 (10 mos) BKG-3 (11 mos) AAB-2 (9 mos)	AAB-3 (8 mos)	VAB-3 (8 mos) IKF-3 (8 mos)	IKF-2 (8 mos)
12-24	VAB-5 (12 mos) IKF-5 (23 mos) AAB-5 (14 mos)	BKG-4 (17 mos)	IKF-4 (12 mos) AAB-4 (12 mos)	VAB-4 (15 mos) BKG-5 (17 mos)
Total	8	2	5	5

Tools for Diet Analysis, Problem Identification, and Recommendations

In preparation for the training of the field agents in Brakwa, extensive work was done to review existing information and to design the research. One result was the development of the Assessment and Counseling Guide. (See Appendix C: "Assessment and Counseling Guide.") The worksheets used to define the dietary problems and develop recommendations are also included in Appendix C. This guide was used extensively by the team to assess the current feeding practices relative to the ideal practices recommended by the program. (See Appendix D: "Freedom from Hunger Infant and Child Feeding Ideal Behavior Chart.") The Assessment and

Results of Household Trials

Counseling Guide was also the basis of the recommendations negotiated with the study participants.

Another tool was developed to help the field agents, who are not trained in nutrition, to assess the quality and amount of the food offered to the infants and young children in the study. It was an attempt to relate frequently served quantities of common foods, mentioned in the 24-hour dietary recall, to their caloric value. The field agents were then able to calculate a rough estimate of the adequacy of the quality and amount of foods offered in each meal and over the period of the day. (See Appendix E: "Approximate Energy Estimates for Given Quantities of Food.")

Results of Household Trials

The Initial Visit, which included the 24-hour dietary recall and food frequency data collection, offered insight into the feeding practices for the age groups in the study. A report of information is Appendix F: "A Summary of the Dietary Patterns of Children Participating in the TIPs in Brakwa." This information formed the basis for the recommendations that were selected for negotiation with the participants in the study.

Unfortunately, because of a misunderstanding of the TIPs methodology, the participants in the study were not offered the full range of possible recommendations. Instead, the field agents determined, in advance, which recommendations responded "best" to the gaps diagnosed in the feeding practices used by the mother and focused the negotiations on those recommendations. If the mothers had been given the opportunity, as intended in the TIPs method, to choose from among all of the various recommendations, the study would have the additional insight of which options mothers found most appealing.

Another unfortunate result of the pre-selected, focused recommendations offered by the field agents was the emphasis of giving bananas (mashed or whole) as the improved practice. Lack of eating fruit was an almost universal phenomenon. Offering four to five feedings each day, especially snacks, was also a practice rarely seen. The practice that most easily addressed the problems of low frequency and no fruit was to recommend bananas. Bananas are a common and affordable fruit. Most mothers indicated that they were not aware that bananas are good food for their children. The mothers quickly and easily agreed to try offering bananas to their children. Almost half of the recommendations tested in the study were the addition of bananas to the diet.

Table 2 below, "Results of Household Trials," provides a summary of the recommendations made for each age group, the number who agreed to try the practice,

Results of Household Trials

the number who reported that they succeeded in implementation of the practice, and the number who indicated willingness to continue the practice.

TABLE 2: RESULTS OF HOUSEHOLD TRIALS

RECOMMENDATIONS	AGREED	TRIED	CONTINUE
Age 6 months up to 8 months			
1. Variety of snacks (banana, doughnut)	3	3	2
2. Increase size of serving	1	1	1
3. 1-2 extra meals/snacks a day	1	1	1
4. Thick, enriched koko (groundnut paste)	2	2	2
5. Introduce foods gradually, take time	1	1	(missing)
Age 8 months up to 12 months			
1. Variety of snacks	6	6	5 (1 ill)
2. Introduce foods gradually	3	3	3
3. 1-2 extra meals/snacks a day	1	1	1
4. Increase serving size, encourage to eat	1	1	(incomplete)
5. Enrich koko (groundnut paste)	1	1	1
Age 12 months up to 24 months			
1. Try different foods, encourage to eat	1	1	1
2. Variety of snacks (banana!)	6	6	6
3. Introduce variety of family foods	2	2	2
4. Try different foods to entice child	1	1	0

Modifications of the Recommendations

As a result of the negotiation, or as a result of the effort to implement the recommendations, a number of mothers made modifications to the recommendations. By far, the most frequent recommendation was to offer a banana snack to the child each day. Therefore, the bulk of modifications noted focused on adjustments to the banana snack recommendations. The following is a list of the modifications made by the mothers.

Modifications to Recommendations

Banana

- ♦ adding milk
- ♦ alternating with pawpaw

Results of Household Trials

- ♦ giving pineapple, oranges, avocado
- ♦ substituting pineapple juice when child is ill
- ♦ adding groundnut or groundnut paste
- ♦ giving snacks to other children in the family, too

Other Foods

- ♦ rice plus kontomire stew instead of oto (mashed cassava and oil)
- ♦ doughnuts instead of bread
- ♦ mpotompoto with yam instead of cocoyam
- ♦ kenkey or banku with kontomire stew instead of enriched koko
- ♦ rice and margarine instead of palm nut soup or stew

Implications of the Modifications

The modifications made by the mothers are based on constraints or conditions that exist in their home situation. Many mothers made modifications to overcome cost constraints or limitations of access to certain foods. Others made modifications in favor of the personal diet preferences of their children in the study. In other words, they selected the favorite foods of the child so that he or she would take the food. It is interesting to note that overall (with the exception of one case) the mothers made decisions which, in general, improved the diets of their children, especially by adding variety to the diets.

Motivations

The following is a list of the motivations offered by the mothers in the discussions that took place as part of the study. This is what the mothers said encouraged them to participate, and to use the recommendations or to be willing to continue the practices.

General Motivations Mentioned by the Mothers

1. Improve my child's health, growth, strength.
 2. Protect from illness.
 3. Want to try the practice and see if there is any improvement in my child.
 4. Child is satisfied.
-

Results of Household Trials

5. Less demand for breastmilk.
6. Mother has peace, time for household duties.
7. Recommended practice was not time consuming.
8. Child ate well; child ate more than usual.
9. Child liked it; cries or asks for the food (when he sees it on the fire).
10. Child plays well after eating.

Motivations Mentioned by the Mothers in Relation to Specific Recommendations

Bananas

1. Husband encouraged her.
2. Available and cheap.
3. Child liked it, even though not used to fruit.
4. Ate and ready to have more.

Enriched Koko

1. Was not time consuming.
2. Liked new way of preparing (mother was taught a new recipe by the field agent).
3. Sister also wanted to try.
4. Child plays well, does not disturb the mother.

Other Foods

1. At first, the child would not take adult food but finally accepted the new food.
2. Child able to increase intake.
3. Plantain and kontomire are cheap and available.

Implications of Motivations

It is interesting to note that only the first three motivations listed previously in the General Motivations were offered as reasons to “try” the recommendations. All of the other motivations were offered as a reason to “continue” the recommendations. It seems that the experience of trying the recommendations negotiated with the mothers by the field agents leads to a positive experience and many more reasons or motivations to continue the new practice.

Results of Household Trials

Constraints

While there were many positive responses to the recommendations, there were a number of constraints noted either before the trials or as a result of the trials. The following is a list of the constraints mentioned by the mothers. It includes aspects of the trials that the mothers did not like, were discouraging, or realities that had to be overcome or reckoned with.

Constraints Mentioned by the Mothers

1. Takes time and patience (to feed child).
2. Cannot prepare every day.
3. Child did not take much (stew), needed encouragement.
4. Stew ingredients expensive (if child wastes it).
5. Previous bad experience, child got diarrhea (from eating banana).
6. Lack of knowledge on how to prepare enriched koko properly.
7. Child was ill.
8. Child did not respond well at first, had to keep trying.
9. Child refused completely.
10. Do not value bananas, surprised that it is a good food.
11. Ripe bananas not available, had to get from next community.
12. Child preference (whole banana vs. mashed banana, doughnut vs. bread).

Implications of Constraints

Some constraints were noted before the trials, and were overcome by the modifications or persistence of the mothers. There were other constraints that the mothers were not able to overcome, such as their children becoming ill during the trials. In some cases, the obstacles or constraints become a motivation (did not know bananas were a good food, how to prepare enriched koko, etc.)

It may seem that there are as many or more constraints listed than motivations. However, most constraints or indications of lack of success were only reported by one or perhaps two mothers. In contrast, the motivations and indications of success were cited by many mothers. The positive experiences far outnumbered the negative comments reported by the mothers.

Conclusions and Next Steps

The training exercise with the Brakwa field agents demonstrated the applicability of the key principles of TIPs for use with the mothers in the Credit Associations. It is a ten-step process:

1. Look at the current feeding practices (24-hour recall).
2. Look at the ideal practice recommended (Freedom from Hunger Feeding Chart) and compare.
3. Praise the mother of positive feeding practices she is using.
4. Identify the gaps that exist between the current and ideal.
5. Identify “options” specific to the feeding problem.
6. Negotiate with mother to choose one or more recommendation.
7. Mother tries the option.
8. Mother re-tries the option, or a modification, until she succeeds.
9. Discuss the outcome (modification).
10. Determine what next, such as additional small steps to continue toward ideal behavior or new feeding practices now that the child is older.

This is the process that will need to be repeated again and again to help program participants get over the obstacles that impede the journey to ideal health and nutrition behavior practices.

Other Conclusions or Lessons Learned—Simple Methods of Dietary Assessment

In addition to a clarification of the negotiation process, there were other conclusions to be drawn from the study:

“Amount” is a difficult concept to deal with for the mothers and for the field agents. Instead of attempting to assess the caloric value of the amount consumed by the child, it might be better for the mother and field agents to be trained to look for the following as indicators of *sufficient* amount:

1. Does the child finish all the food? Is the child offered more?
2. Does the child eat to “satisfaction” or does the child appear to want more food?
3. Is the child served separately and supervised?
4. Is the amount of food increasing as the child gets older?

Conclusions and Next Steps

5. Does the child focus on eating for an adequate period of time at each meal?
6. Compared to other children, does the child eat comparable amounts?
7. Is the child growing well?

Appendix E: "Approximate Energy Estimates for Given Quantities of Common Foods" was an important tool developed to assist the field agents in determining "sufficient" portions or servings of common foods. It helped the field agents translate the serving sizes, as described by the mothers, into approximate nutritional value to assess the quality of the diets being offered to children. Without the help of a trained nutritionist, this tool could not have been developed. Without the tool, it is hard to imagine how a reasonable assessment of diets could have been done by the field agents.

"**Frequency**" might best be discussed as the "Interval or Length of Time Between Meals."

"**Meals**" might best be considered as containing something from all the food groups and with an energy source that is not too bulky.

"**Snacks**" might best be considered as an additional feeding to provide energy and should fill in gaps not covered in the meal, like fruit. They may only include one or two food groups.

"**Variety**" in the daily diet means that all the food groups need to be eaten and that there needs to be different foods from within each food group eaten. For example, in the protective group, a variety of fruits need to be eaten and not the same one all the time. This is illustrated in below in Table 3.

NOT ALL FRUITS ARE CREATED EQUAL

TABLE 3: APPROXIMATE NUTRITIONAL VALUE OF COMMON FRUITS

FRUIT	ENERGY (Kcal)	VIT A (mg)	VIT C (mg)
Banana	100	30	10
Avocado	140	60	15
Orange	50	50	50
Pawpaw	40	160	50
Mango	60	180	30
Pineapple	50	0	35

Conclusions and Next Steps

“**Quality of Food**” covers a variety of characteristics. First, the quality of the **energy** source is one important characteristic. Energy density is increased by oil and sugar. Mothers should be advised to stay away from “watery” or “bulky” (hard for the child to eat much) foods. Thick usually means richer.

Second, the quality of the **protein** source is also important. Mothers should also be advised that children need animal protein several times each week (meat, fish, eggs, etc.) and some protein every day. (Beans and groundnuts are also sources of protein.) It might be worthwhile to do a little study to determine the “best buy” on various protein sources for the money spent. It could be that what appears to be more expensive might actually be the better value because it takes relatively less quantity to satisfy the dietary needs. The seasonal changes in prices would influence the dietary value for the money of the purchase as well.

And third, the quality of the **micronutrient** source is important. As illustrated in Table 3, the banana recommendation used frequently in the study would deny the child good sources of vitamin A and C. Here, variety is the key.

“**Breastfeeding**” needs to be assessed in terms of frequency, duration of feeding, use of both breasts, and on demand.

Comments from the Field Agents as a Result of the Study

In a debriefing meeting with the field implementation team, the field agents shared their comments and feedback as a result of participation in the process. *Overall*, the field agents indicated that the process was “okay,” convenient to implement in conjunction with the weekly meetings, a “suitable” design, and received a good response.

Recruitment—The field agents had fears that the mothers would be too embarrassed if they were not doing a good job, and that they would not want to expose their failures. They thought it would be “impossible” to get the mothers to talk, but in fact they discovered it was “easy,” probably because they were members of the Credit Associations.

Response of Women—The women were willing to answer questions but there were not many questions or comments coming from the women. The women were constantly having to deal with family responsibilities during the interviews so it was difficult to have a smooth conversation. The field agents said the women were like “students” willing to respond to the questions of the “teacher.” Also, the field agents said that it helped the women because they learned how to feed their children and were happy to learn.

Conclusions and Next Steps

Diet Analysis and Recommendations—Measuring the amount of food portions was difficult. It was hard to understand quantities. Finally, the field agents said they were gaining confidence to judge if portions of servings are adequate.

Recommendations—The field agents were delighted by an unexpected consequence of the study. Some mothers modified the recommendations and *replaced* koko (not just enriched the koko as agreed) with a richer food which resulted in dealing with the additional problem of needing more variety. Now the field agents feel more confident to make the recommendations.

Process of Negotiation—The field agents found that the women modified the recommendations and came up with even better ideas. The field agents discussed the problem-solving and creative counseling they did during the study. They found that the women wanted to do what was good for their children. An example was their surprising discovery that bananas are good food. The women were happy to try to give them to their children.

Follow-up Visits—These visits took more time than the other steps.

Validity of Information Gathered—The field agents thought that some mothers said that they tried something better than what they actually did. The field agents are confident that the mothers told the truth about their experiences with the trials.

How Would You Do It Differently—The field agents said they might go to see how the mothers are doing during the week of the trials. They also considered giving something tangible to “motivate” the mothers. It was decided that in the long run this would be a poor idea and may set the wrong expectation about the program.

Next Steps

1. During the final days of the study, the team met at a meeting of one of the Credit Associations involved in the TIPs. The mother who had participated was asked to share her experience in the research study, her conclusions about the feeding practice recommendations, and her plans for the continued use of the practice. It was decided to repeat this “debriefing” process in all of the other Credit Associations that had been represented in the study. Where possible, a participant might be invited to share her story with members of a Credit Association that did not have a representative in the study.
2. There is a plan to develop additional learning sessions for the field agents to use to guide members of the Credit Associations that have children (either their own or belonging to relatives or friends) that need help to overcome the obstacles that prevent them from moving toward the ideal practices recommended by the program.

Conclusions and Next Steps

These sessions will be shared with other *Credit with Education* practitioners and study participants as they are developed.

3. There is a plan to find a way to apply the methods and lessons learned in the TIPs process to the health and other topics covered in the *Credit with Education* program.

Lessons Learned About the Implementation Process

1. *Wanted: Nutritionist*—The complexity of dietary assessment and the development of recommendations make it imperative that a nutritionist be available to advise the TIPs process. An advisor to the process would also need an appreciation of the obstacles and constraints that confront caregivers in poor environments with limited resources and the need for practical solutions.

2. *Daily Debriefing*—As in all types of research and training, it is important to try to schedule time for daily, or as regular as possible, debriefing sessions with the field team. When regular meetings are not employed, the process can get off track (for example, not offering the mother the opportunity to choose the recommendations she wanted to try) or may not be implemented correctly (for example, half of the recommendations being to feed bananas).

3. *Give Choices*—One of the most desirable features of the TIPs process is the offering of *choices* to the mothers. The next time the process is employed, the mother should be allowed to choose which recommendation she would like to try.

4. *Tell It All*—Field staff in any study need to feel comfortable to report *all* of the results, even the negative comments and reactions. It was only in conversations with the field agents that some of the negative reactions and problems with implementation of the practices came out. The value of all data—positive and negative—needs to be emphasized and full reporting encouraged.

Appendix A: Five-Day Training Agenda

Five-Day Training Agenda to Prepare for Consultative Research

Day One

1. Introduction to Training
2. Objectives of the Training
3. Description of Training
4. Overview of the Research
 - ♦ What is TIPs
 - ♦ General Schedule and Logistics
 - ♦ General Characteristics of Field Researcher
5. Sharing of Information Review
6. Objectives of the Research
7. Sample Framework and Assignments
8. Recruitment
 - ♦ Coding
 - ♦ Role Play
 - ♦ Confidentiality

Day Two

1. Interview Techniques
 - ♦ Open Question
 - ♦ Note Taking
 2. Initial Visit Form/Methods
 - ♦ Coding and Filling in the Forms
 - ♦ Role Play
 3. Diet Analysis
 4. Buy and Measure Local Food
 5. Prepare for Pre-Test
-

Appendix A: Five-Day Training Agenda

Day Three

1. Initial Counseling Pre-Test
2. Debriefing
 - ♦ Feedback
 - ♦ Results of the Interview
 - ♦ Issues/Problems
3. Review Recommendations
 - ♦ Nutrition Background
 - ♦ Tailor Recommendations to Feasibility
 - ♦ Ensure Recommendation Will Have a Positive Result
 - ♦ Motivation
 - ♦ Constraints
4. Counseling Visit Forms/Method
 - ♦ Role Play

Day Four

1. Counseling Pre-Test
 2. Debriefing
 - ♦ On the Process
 - ♦ On the Materials
 - ♦ On the Counseling Visit Form
 3. Follow-up Visit Form/Method
 - ♦ Coding
 - ♦ Role Play
 4. Brief Discussion and Tabulation of Results
-

Appendix A: Five-Day Training Agenda

Day Five

1. Follow-Up Pre-Test
2. Debriefing
 - ♦ Make Sure Counseling is on the Same Topic
 - ♦ Record Reaction/Commitment
 - ♦ Comment on Validity of Commitment
3. Discuss Logistics of Next Steps in the Study

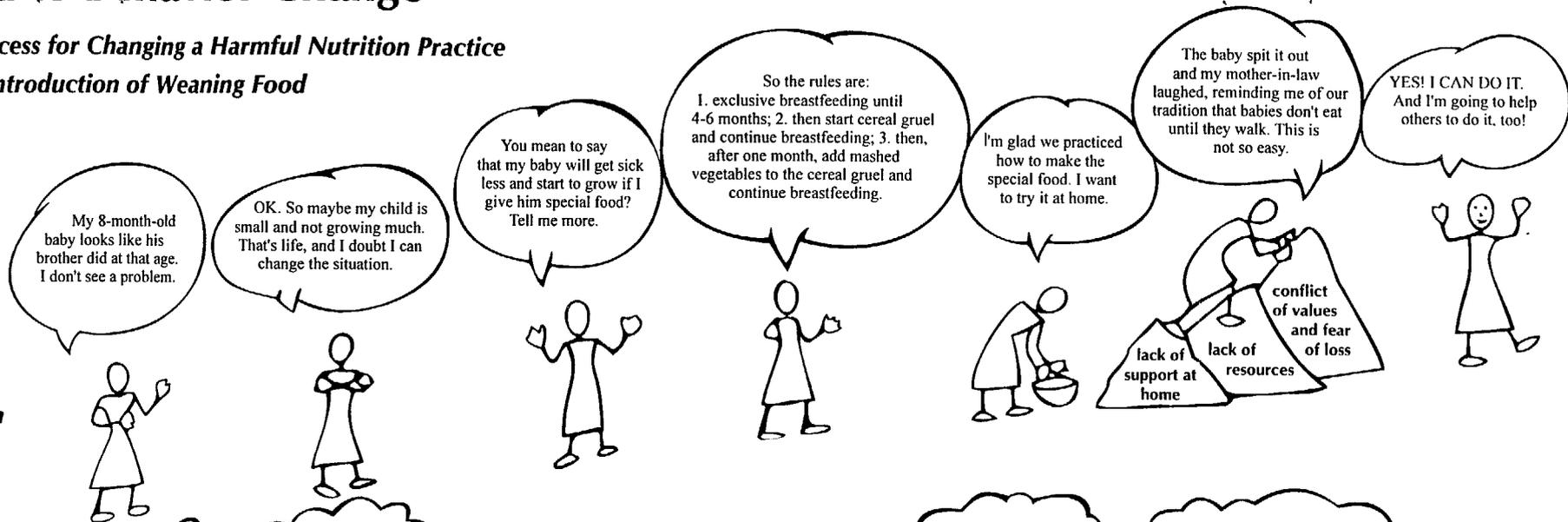
Appendix B: The Road to Behavior Change

The Road to Behavior Change

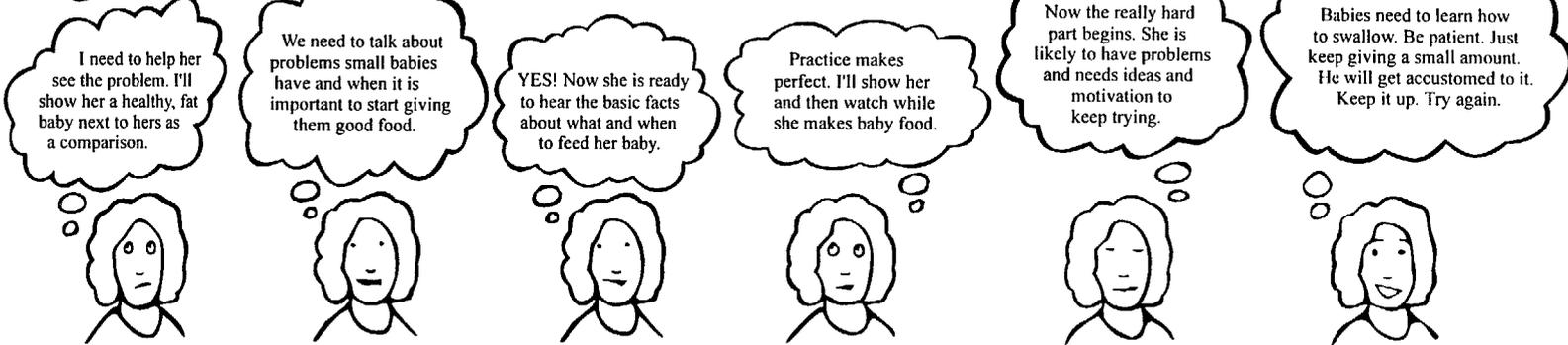
Educational Process for Changing a Harmful Nutrition Practice

Example: Late Introduction of Weaning Food

Program participants often begin their journey here:



The Freedom from Hunger facilitator guides the journey



Facilitation Process:

- Awareness of the Problem**
- Looking at the Problem**
- Acquiring Information**
- Acquiring Skill**
- Trial of New Practice**
- Adoption of New Practice**

The Freedom from Hunger field agent can:

- Facilitate learning exercises to help people identify the problem.*
- Facilitate discussion to help participants identify why it's a problem.*
- Facilitate discussion to find alternatives; what do villages already know? Provide information, when necessary.*
- Demonstrate the skill and give a chance to practice it, with supervision.*
- Offer follow-up discussion and problem-solving by the whole group.*
- Facilitate follow-up discussion and recognition and support from the whole group.*

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Assessment and Counseling Guide:

Common Feeding Problems and Recommendations For Trials Of Improved Practices in Ghana

Age Group: 6 up to 8 months

Ideal feeding pattern: Frequent breastfeeding complemented by nutritious soft foods.

Problem 1: Watery cereal-based porridge is given that is not nutrient-dense enough (sometimes bought from hawkers).

Recommendations:

- 1a. Enrich koko with groundnut paste, fish powder, egg, palm oil, etc.
- 1b. Make koko or Weanimix thicker (using more dough) and feed using a cup and spoon; stop over-dilution with water.

Potential motivations:

Watery porridge does not satisfy, and child will be hungry again soon.

With nutritious food, child will be satisfied, grow well and be healthy.

Child will be stronger and able to recover quickly from illness.

It costs a little more, but will enhance child's growth and health.

Problem 2: Complementary feeds have not been started.

Recommendations:

- 2a. Give mashed fruits or vegetables (banana, paw-paw, avocado, green leaves, etc.).
- 2b. Give child locally available, affordable, nutritious foods such as mpotompoto, mashed beans, mashed yam, rice, enriched koko or Weanimix.
- 2c. Introduce foods gradually, taking time to feed child slowly, and trying every day for a week.

Potential Motivations:

As above, plus...

Child is now old enough and needs foods in addition to breastmilk.

Appendix C: Assessment and Counseling Guide

Child is now old enough and needs foods in addition to breastmilk.

Child needs to start becoming accustomed to foods. It may take some time to learn to accept the foods.

Baby will sleep well at night.

Problem 3: Child's total daily food intake is too little because child is fed less than four times per day (in addition to breastfeeding on demand) or given too small amounts (less than $\frac{1}{2}$ cup of mashed foods or less than $\frac{3}{4}$ cup of enriched koko per serving).

Recommendations:

- 3a. Feed one or two extra meals or snacks every day.
- 3b. Increase serving by two spoonfuls at each meal (or more if child will take more), supervise feeding and encourage child to eat the whole serving.

Potential Motivations:

The child's stomach is small, so need to fill it more often.

Snacks increase frequency of feeding without taking a lot of extra time to cook.

The amount the child eats needs to increase, because the child is growing bigger and needs more food to be healthy.

Problem 4: Breastfeeding is being reduced or replaced too quickly.

Recommendations:

- 4a. Breastfeed more frequently, and on demand (two or more extra times).
- 4b. Breastfeed first, before offering other foods.
- 4c. Breastfeed on demand at night.

Potential Motivations:

Breastmilk is still a very important food for your baby.

If the child suckles often, you will have plenty of milk.

Other foods should add to the breastmilk, not replace it.

Breastfeeding helps to protect your child from illness.

Appendix C: Assessment and Counseling Guide

Age Group: 8 up to 12 months

Ideal feeding pattern: Continued breastfeeding with nutritious soft foods and introduction of mashed family foods.

Problem 5: Family foods have not been introduced.

Recommendations:

- 5a. Gradually introduce family foods such as banku, kenkey, rice, ripe plantain, yam, and cocoyam, with plenty of sauce/stew with beans, vegetables, groundnut, palm nut, fish, egushi, palm oil, etc.
- 5b. Mash family foods and mix with sauce/stew or alter preparation to make them suitable for feeding infants (less pepper, etc.)
- 5c. Prepare sauce or stew separately for the child, using little or no spice, and enriching with ingredients like fish powder, groundnut paste, beans, etc.
- 5d. Give thick, enriched koko or Weanimix, or mashed fruits and vegetables, if unwilling to begin feeding family foods.

Problem 6: Family foods have been introduced but without enough nutrient-density or variety.

Recommendations:

- 6a. Make sure child is receiving plenty of stew or sauce and ingredients such as vegetables, beans, and fish, with the staple.
- 6b. Introduce different types of family foods that provide a variety of nutrients: groundnut soup, palm nut soup, vegetable and egushi stew.
- 6c. Give a variety of nutritious snacks such as fruits (banana, orange, papaw, pineapple, avocado), boiled eggs, fried yam, roasted plantain, doughnuts, etc.

Potential Motivations:

Child is ready to take these foods and they will make the child strong.

The child needs the ingredients in the stew to grow well and stay healthy. Too much pepper makes it hard for the baby to eat enough.

Different foods help child's growth and development in different ways.

Appendix C: Assessment and Counseling Guide

Problem 7: Child's total daily food intake is too little because child is fed less than five times per day or eating too small amounts (less than 3/4 cup per meal, due to serving size or child's refusal).

Recommendations:

- 7a. Feed one or two extra meals or nutritious snacks every day (see types of food and snacks listed above).
- 7b. Increase serving by two spoonfuls each meal (or more if child will take more), supervise and encourage child to eat whole serving.
- 7c. If child eats from same dish with others, give a separate serving, supervise feeding, and encourage/help child eat the whole serving.
- 7d. Try different foods or combinations to improve flavor and entice the child to eat more.

Potential Motivations:

At this age, a child needs to start taking more different kinds of food to ensure proper growth and development.

Every child needs energy, protective and body-building foods.

A well-fed child is active, happy, strong, healthy, etc.

A good meal or snack will satisfy the child so child won't cry or trouble the mother.

Age Group: *12 months up to 2 years*

Ideal feeding pattern: *Eating family diet plus extra feeds, with continued frequent breastfeeding.*

Problem 8: Child not yet eating meals with the family.

Recommendations:

- 8a. Start feeding child the usual family foods at mealtimes, mashing or softening the staple with sauce or stew.
 - 8b. Avoid pepper or other condiments that might put the child off. When preparing sauce/stew, take out child's portion before adding pepper, or cook separately for the child.
 - 8c. If still giving koko, enrich the koko and only give as extra meals/snacks between family mealtimes.
-

Appendix C: Assessment and Counseling Guide

- 8d. Give the child meals/foods including meat, egg, fish, groundnut, beans, egushi, etc.

Problem 9: Child eats family meals but without enough nutrient-density or variety.

Recommendations:

- 9a. Add nutritious ingredients such as fish powder, groundnut paste, palm oil, etc., to the child's serving.
- 9b. Make stews with beans, egg, green leaves, egushi, fish, bush meat, etc., and mix more stew with the child's staple.
- 9c. Make sure child gets some of all the foods in the meal, including fish or meat and other nutritious ingredients.
- 9d. Give nutritious snacks such as fruit (banana, orange, papaw, pineapple, avocado), egg, groundnut, coconut, fried yam, roasted plantain, daakoa, doughnuts, etc.

Problem 10: Child's total daily food intake is too little because child is fed less than five times per day or eats too small amounts (less than 1 cup per meal).

Recommendations:

- 10a. Feed one or two extra meal(s) or nutritious snack(s) every day (see types of food and snacks listed above).
- 10b. Increase serving by 2 spoonfuls each meal (or more), supervise feeding and encourage child to eat the whole serving.
- 10c. If child eats from same dish with others, give a separate serving, supervise feeding, and encourage child to eat whole serving.
- 10d. Try different foods to encourage child to eat more.

Potential Motivations:

Even though the child is taking meals with the family, still needs extra feeds and special attention to make sure child gets enough.

Child needs many different kinds of food to ensure proper growth and development.

Every child needs energy, protective and body-building foods.

A well-fed child is active, happy, and a joy to the parents.

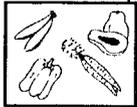
A well-fed child is strong, healthy, and learns well in school.

*Appendix D: Freedom from Hunger Infant and
Child Feeding Ideal Behavior Chart*

Timing, Kinds, and Amounts of Food for Feeding Mothers, Infants, and Young Children in Ghana

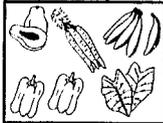
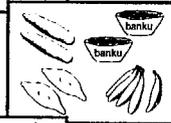
Mothers

Before Pregnancy



All women should eat a variety of nutritious foods.

Pregnancy or Breastfeeding



A mother needs extra food of good quality and extra liquids during pregnancy and breastfeeding.

Infants

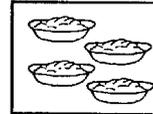
Exclusively breastfeed from birth to about 6 months



Exclusive breastfeeding (breastmilk only—no water, juices, teas, soups, etc.) beginning immediately after birth, and continuing whenever the baby wants it.

Young Children

At about 6 months complement breastfeeding with thick enriched food

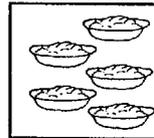


At least 3 times a day feed the baby thick enriched porridge after breastfeeding. Also give baby at least 1 soft, nutritious snack.

- Wean mix enriched with fish powder.
- Thicken traditional porridges like koko by cooking with less water and enrich basic porridge by adding at least one of these each time:
- ground peanuts, ground beans, fish powder, egg, milk.
- Mpotompoto (yam or cocoyam) enriched with fish powder and palm oil.
- Nutritious snacks like mashed fruits and mashed vegetables.

- Increase quality of foods given.

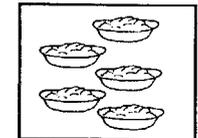
Between 8–12 months complement breastfeeding with a variety of mashed adult foods



At least 3 times a day feed thick enriched porridge or a variety of mashed adult foods after breastfeeding. Also give baby at least 2 soft, nutritious snacks (such as vegetables or fruit).

- Increase frequency of feedings.

Between 12–24 months complement breastfeeding with a variety of adult foods



Feed a variety of nutritious family foods at least 5 times a day. Also, breastfeed several times a day. Give the child's food in a separate bowl.

- Increase quantity at each meal.



Freedom from Hunger
May 1995

*Appendix E: Approximate Energy Estimates
for Given Quantities of Food*

Approximate Energy Estimates for Given Quantities of Food

Recommendations of Foods and Serving Sizes for Infants - 6 up to 8 months

Priority Issue: **QUALITY** of food. Needs about 800 calories.

Full Breastfeeding (8 or more real feedings) gives about 400 calories PLUS

Three meals and one snack (each about 100 calories) give about 400 calories

COMMON FOODS	Portion Information	Amount Providing 100 kcal
Thin koko with sugar		1 Cup
Thickened koko with sugar or Mashed rice or Mashed Kenkey PLUS Oil or Groundnut Paste or Fish Powder or Mashed Beans	About ½ Cup before water	½ Cup
Weanimix	Made thick according to directions	½ Cup
Mashed Banana	1 large or 2 small	1 or 2
Orange	Medium to large	2
Pineapple	½" to ½" slice	1
Coconut	Mature - meat Green - meat	1 cube (2" x 2") 4-5 dessert spoons
Mashed Yam	3" diameter and ½" thick	1 slice
Mashed Plantain	4" to 5" finger	1 finger
Mashed Yam or Mashed Plantain PLUS Oil-Based Stew	3" diameter and ½" thick 4" to 5" finger 1 medium ladle	½ to ½ slice 1 small finger PLUS 2-3 dessert spoons

Appendix E: Approximate Energy Estimates for Given Quantities of Food

Recommendations of Foods and Serving Sizes for Infants—9 up to 11 months

Priority Issue: **QUALITY** of food AND **FREQUENCY** of feeding

Needs about 900 calories

Full Breastfeeding (8 or more real feedings) gives about 400 calories PLUS

Three meals and two snacks (each about 100 calories) give about 500 calories

COMMON FOODS	Portion Information	Amount Providing 100 kcal
Rice and Beans		½ Cup
Beans		½ Cup
Rice and Beans PLUS Palm Oil and Tomato		⅓ Cup plus 1-2 dessert spoons
Fufu with Light Soup*	About ½ fist	⅓ Cup
Banku with Light Soup*	About ½ fist	⅓ Cup
Yam or Cocoyam	4" diameter, ½" thick	1 slice
Cassava	Fresh	½ Cup
Gari	Dry	½ Cup or 3 heaping dessert spoons
Plantain	Boiled	1 finger
Plantain	Fried in Oil	2-3 slices (3" long)
Kontomie Soup	No Oil	½ Cup = 2 med ladles
Kontomie Stew	With Oil	2-3 dessert spoons
Mpotompoto	No Oil	½ Cup
	With Oil and/or Fish or Groundnut Paste	½ Cup
Fried Fish		1" cube
Fresh Fish*	Not fried	5" piece
Dried Fish*	1 tilapia about 5" by 2" - no tail	1 fish
Groundnuts Roasted		2 heaping dessert spoons or 2 small handfuls
Boiled		4 heaping dessert spoons or 4 small handfuls
Groundnut Paste		1 heaping dessert spoon
Doughnut		1 doughnut 2-3" of diameter or 2-3 small balls
Bread		1 slice
Corn	Roasted or boiled	½ cob

*Appendix E: Approximate Energy Estimates
for Given Quantities of Food*

Banana	1 large or 2 small	1 or 2
Orange	Medium to large	2
Pineapple	½" to ½" slice	1
Coconut	Mature - meat	1 cube (2" x 2")
	Green - meat	⅓ cup or 4-5 dessert spoons

* Light soup has little (almost no) caloric value.

*Note: It is not likely that infants and small children would be given such a large quantity of fresh or dried fish. However, it is important that mothers be encouraged to give at least small pieces of fish to their children to give protein (body-building food) that the child needs. The calories that the child needs should be coming from other foods.

Recommendations of Foods and Serving Sizes for Children—12 months up to 2 years

Priority Issue: **QUALITY** of food, **FREQUENCY** of feeding, AND **QUANTITY** of servings.

Needs about 1200 calories

Frequent Breastfeeding on demand gives about 300 calories PLUS

Three meals and two snacks (each about 200 calories) give about 1000 calories

COMMON FOODS	Portion Information	Amount Providing 200 kcal
Rice and Beans		1 Cup
Beans		1½ Cups
Rice and Beans PLUS		⅔ Cup
Palm Oil and Tomato		2-3 dessert spoons
Fufu with Light Soup	About 1 fist	⅔ Cup
Banku with Light Soup	About 1 fist	⅔ Cup
Yam or Cocoyam	4" diameter, ½" thick with 1-2 dessert spoons Oil or 2-3 dessert spoons of oil-based stew	2 slices 1-1 ½ slices
Cassava	Fresh	½ Cup
Gari	Dry	½ Cup
Plantain	Boiled	2 fingers
Plantain	Fried in Oil	1 finger (4-6 slices)
Kontomie Soup	No Oil	1 Cup = 4 med ladles
Stew	With Oil	4-6 dessert spoons
Mpotompoto	No Oil	1 Cup
	With Oil and Fish or Groundnut Paste	½ Cup

***Appendix E: Approximate Energy Estimates
for Given Quantities of Food***

Fried Fish		2" cube
Fresh Fish	Not fried	8" piece
Dried Fish	1 tilapia about 5" by 2" - no tail	2 fish
Groundnuts Roasted		4 heaping dessert spoons or 4 small handfuls
Boiled		8 heaping dessert spoons or 8 small handfuls
Groundnut Paste		2 heaping dessert spoon
Doughnut		1 doughnut 2-3" of diameter or 2-3 small balls
Bread		2 slices
Corn	Roasted or boiled	1 cob
Banana		2 large
Orange		3 or 4
Pineapple	¼" or ½" slice	2 slices
Avocado		1 medium
Coconut	Mature - meat	2 cubes (2" x 2")
	Green - meat	⅔ cups or 10 dessert spoons

***Note:** It is not likely that infants and small children would be given such a large quantity of fresh or dried fish. However, it is important that mothers be encouraged to give at least small pieces of fish to their children to give protein (body building food) that the child needs. The calories that the child needs should be coming from other foods.

Equivalents

1 Local Cup	=	1½ American Cup
½ Local Cup	=	¾ American Cup
⅓ Local Cup	=	1 American Cup
¼ Local Cup	=	slightly more than ⅓ American Cup
⅓ Local Cup	=	½ American Cup
1/6 Local Cup	=	¼ American Cup

Local aluminum spoons:

1. Oval shape like a tablespoon but deeper than a dessert spoon = 10 grams
 2. Round and deep, but smaller and flatter than a ladle = 20 grams
-

*Appendix F: Summary of Dietary Patterns of
Children Participating in the TIPs in Brakwa*

**Summary of Dietary Patterns of Children Participating in the TIPs
in Brakwa**

The following information is a summary of the 24-hour recall and food frequency data collected during the initial visits of the Trials of Improved Practices (TIPs) conducted with twenty mothers of young children in Credit and Savings Associations (CSA) in Brakwa area of Central Region, Ghana. The other results of the TIPs are presented elsewhere.

This summary is meant to provide an overview of the feeding patterns of children in the area, aged six to twenty-four months, and to help identify the key feeding problems. Analysis of problems was not quantitative but compared reported diets to the feeding practices recommended by Freedom from Hunger in the learning materials and infant and child feeding. Identification of problems was based on three main factors: feeding frequency, quality/variety (energy-density, consumption of quality protein foods and sources of micronutrients such as vitamin A and C, foods from all three food groups), and amount of food (adequate meal size and overall intake).

Results should not be generalized since no attempt was made to select a random sample, and the method of analysis was inexact. Also, the mothers were involved in ongoing nutrition education sessions within the Freedom from Hunger program, and the interviewers acknowledged that in some cases the reported diets appeared to reflect what mothers thought they were expected to be feeding their children, rather than actual consumption.

Children aged from six up to eight months:

All four children were breastfed on demand, and apparently with adequate frequency and duration. Other foods fed to these children included koko (corn porridge), fried bean cakes, biscuits, and staple foods such as banku, fufu, and mashed rice served with groundnut soup, palm nut soup, and kontomire stew (made with green leaves, oil, and sometimes fish powder or egg).

The most important feeding problem identified was related to the low nutritional quality and variety of foods given. There was a tendency to give only koko in addition to breast milk, and the koko was not often enriched. Koko is a relatively diluted food with low energy-density, and contains little protein or micronutrients. The children who were receiving "family foods" tended to eat more sauce than staple, which improved the nutrient-density and variety in their diets. None of the children received fruits.

Most were fed three times a day, and one was fed only twice. Inadequate frequency of feeding was identified as the second most important feeding problem in this

Appendix F: Summary of Dietary Patterns of Children Participating in the TIPs in Brakwa

group, when compared to the Freedom from Hunger recommended feeding frequency of four times a day for this age group.

The reported amounts of food given at a feeding tended to be adequate for the more energy-dense family foods, but inadequate for koko, given the low energy-density. Amount tends to be less of an issue in this age group because breast milk still provides a large proportion of the calories needed.

Children aged from eight up to twelve months:

All eight children in this group were breastfed on demand. They received foods similar to the younger children, but with improved quality and variety. Koko enriched with groundnut paste was given, as was mashed kenkey with sugar. Family foods such as banku, fufu, rice, and beans were given with tomato stew, kontomire stew, palm nut soup or groundnut soup. Soups and stews were reported to contain oil and fish in most cases. In one or two cases, bread, biscuits, sugar cane, and banana were given as snacks.

Feeding frequency was inadequate for all but one child in this group, when compared to the ideal of three meals and two snacks per day. Most received three feeds a day, one received only two, and one child was ill and did not eat anything besides breast milk on the day covered by the 24-hour recall. One child received four feedings, but only two were meals, and the other two feeds only snacks.

Variety was also identified as a common problem, particularly a lack of fruits. Only one child received fruits, and overall consumed a good variety of foods. Several diets also lacked vegetables. Nutritional quality was reasonable in terms of energy density and types of foods, except that a couple of the reported diets included few sources of high quality protein.

The amount served per feed and amount consumed per day appeared to be adequate in about half of the cases. A couple cases were very inadequate (including the child who was ill) and the others were borderline. Amount consumed was the most difficult information to collect, so analysis of this factor is very approximate.

Children aged twelve months to two years

Most of the children in this group were under eighteen months of age and were still breastfed on demand. The one child who had been weaned was twenty-three months at the time of the interview. These children consumed most of the types of foods served by families in the area, as well as continued to eat foods prepared specially for children such as koko (plain or enriched with groundnut, beans and/or fish powder), mashed kenkey, mpotompoto (cocoyam porridge made with palm oil and fish), or another type of porridge (Tom Brown, Cerelac). Staples such as

Appendix F: Summary of Dietary Patterns of Children Participating in the TIPs in Brakwa

banku, kenkey, fufu, and boiled cocoyam or plantain were eaten with palm nut soup, light soup, or kontomire (green leaves, palm oil) stew. Rice was served with beans, and in one case only with margarine. Fish and eggs were reported to be used in the preparation of soups and stews. Snacks and breakfasts included bread, chocolate beverage, biscuits, sugar cane, green coconut, avocado, oranges, and banana, although the fruits were given in only a couple cases and not daily.

The amount of food consumed was low in more than half the cases, and although considered adequate in three, was not large in any case. One child was reported to eat only a few bites at any meal, before rejecting the food. At this age group, more calories need to be consumed at a given feeding, leading to this identification of amount consumed as more of a problem than in younger age groups.

Inadequate feeding frequency continued to be a problem, with the only child who received five feedings in a day consuming two meals and three snacks rather than the ideal of three meals and two snacks. Although most children received an inadequate number of feeds, they usually lacked one or two snacks to make up the difference, rather than an increase in full meals.

Variety was increased for this age group, although a lack of fruits in the diet also remained a common problem. One child reportedly ate fruits regularly, and another occasionally. The energy-density of most children's diets appeared adequate with a good variety of energy sources. The same was true for protein, except for a couple of cases which appeared to be low in protein. Most children were reported to have received fish in their soups and stews. Vegetables were consumed regularly, again mostly in soups and stews. It should be noted that the lack of fruits, which are considered good sources of vitamins, may be *partially* compensated by the fact that