CHAPTER 8

RESULTS OBTAINED FROM QUALITATIVE RESEARCH METHODS:
GENERAL HEALTH AND FEEDING PRACTICES

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" You can't make an omelette without breaking eggs. And — to extend the aphorism — you can't make an omelette without beating the eggs together. 'Analysis' too involves breaking data down into bits, and then 'beating' the bits together. The word derives from the prefix 'ana' meaning 'above', and the Greek root 'lysis' meaning 'to break up or dissolve' " (Bohm in Dey, 1993:30)(92).

In this chapter the data reduction process will be discussed, as well as findings on general health practices in the first sampling unit on general knowledge on infant feeding and health, and findings on feeding practices in the following sampling units on breast feeding, bottle feeding and weaning.

8.1 THE DATA REDUCTION PROCESS

Once the data transcription had been finalised, a method for data reduction was devised in order to work with / use the masses of data recovered from the research (data transcription document - see Chapter 6)(88). A summary of the data reduction process is presented in Figure 15.

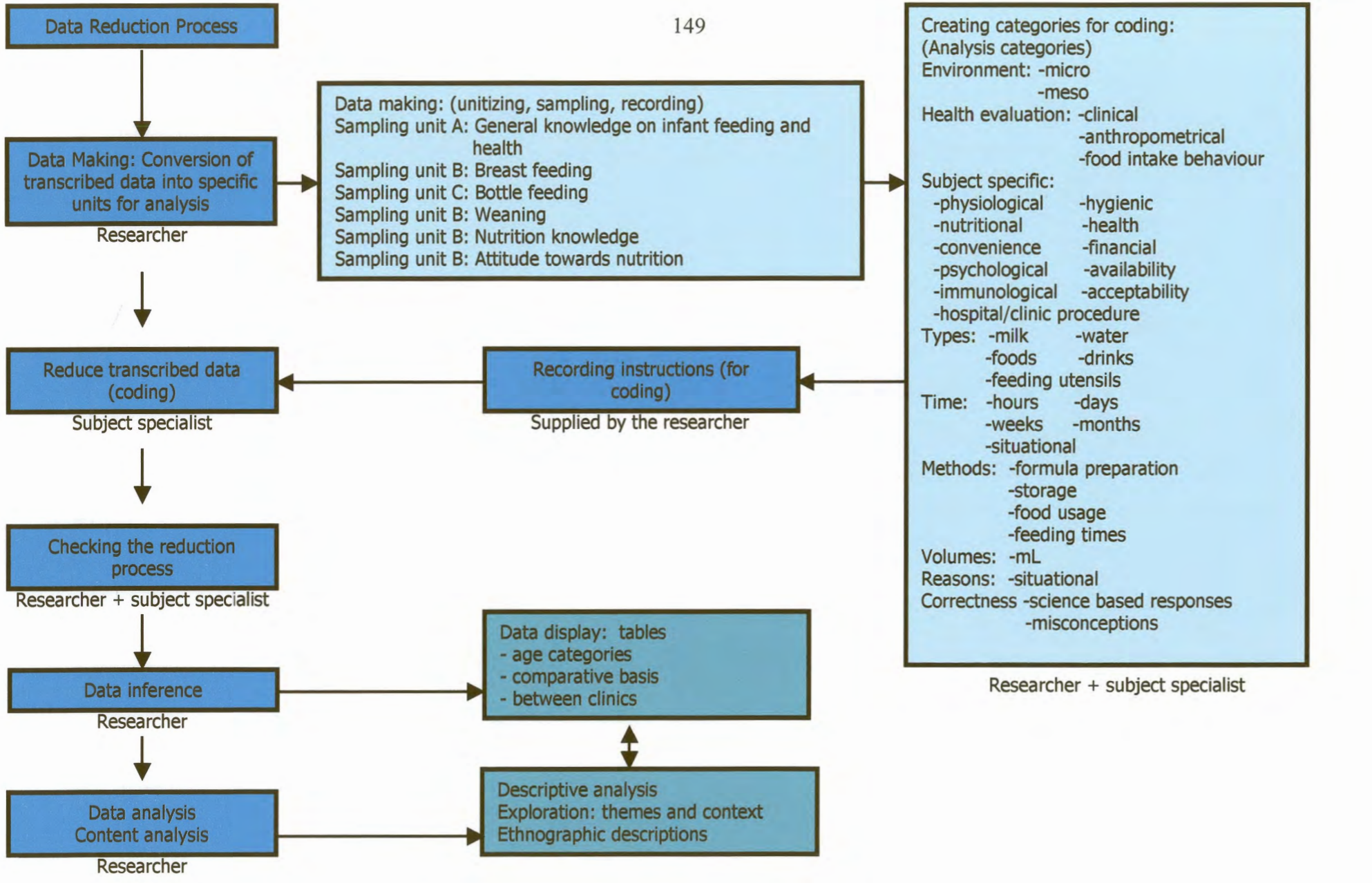

FIGURE 15: THE DATA REDUCTION PROCESS

The first step in the process was data making (unitizing, sampling, recording)(see Chapter 6). Categories were created for coding of data in the analysis process, using the structured interview schedule as outline in order to assemble the data. These data categories were created by the researcher and were derived from the theory as presented previously (see Chapters 5 and 6). For clarification, some of the category terminology used (refer to Figure 15) included the following:

For the purpose of this research, all the responses connected to any kind of **environment** were coded as either the micro or meso environments and were considered as being physical units of analysis. From an ecological perspective individuals and families in their living settings are identified as units with environmental relationships. These units interact interdependently with their environment (93). The **micro level** of reality refers to the individuals that interact on a daily basis (73). Usually the family is the centre of individual interaction and therefore the family has interrelationships with the various dimensions of the environment, including the micro, meso and macro environments (73, 93). The micro environment provides the immediate setting for the family system. It involves the area of regular personal contact within the living unit and surroundings with the objects, plants, animals and individual family members available to enhance the environment or promote the purpose of each member (93, 94). The family receives physical sustenance from the natural environment and is dependent upon the social environment for its affectional and socialization needs. The birth of each child affects some members more than others and the family's diversity will determine its ability to adapt to such changes (73). The **meso level** of reality attempts to link macro and micro levels or to operate at an intermediate level and includes organizations, social movements or communities (73). Permeating the boundaries of the family system is relatively easy, although much variation exists. A family's outer boundary for its micro environment is actually the result of environmental interchanges. These boundaries are non-physical and represent the meaningful interrelationships beyond the family unit (93). The macro environment surrounds the micro and meso environments through related socio-cultural, political, economic and technological systems and through the natural and structured surroundings for interchanges (93). The **macro level** of reality concerns the operation of larger aggregates such as social institutions, entire cultural systems and whole societies (73). For this research study, the micro and meso environments were applicable:

- micro environment — closest people to the respondent (individual) like her family, or members of the same household or very close friends with whom interaction took place on a daily basis,

- meso environment — people or objects in the community that could be seen as intermediary contacts. Interaction was less regular, like the clinic staff or neighbours.

Health evaluations included the subjective evaluation of the child's clinical appearance, his body measurements and eating behaviour:

- clinical evaluation — involved the subjective evaluation of physical appearance, good general health, no diseases present,

- anthropometrical evaluation — referred to the objective measurement of body size, weight and proportions at the clinic and included concepts like falling within applicable weight and height ranges,

- food intake behaviour — referred to eating or food consumed and included concepts like the mother's / caregiver's perception of a healthy appetite, or when a child is eating properly.

Subject specific categories were created for coding reasons given by the mothers / caregivers for their practices in terms of broad themes like physiological, nutritional, health, financial reasons, etc. Responses given as "good for you" / "good for the baby" were sometimes categorized in one or more of the subject specific categories because of the nonspecific nature of the response.

Physical items were classified according to the type of item, e.g. types of milk, water, food, drinks and utensils.

Time related responses were categorized in terms of hours, days, weeks, etc.

Methods for different actions were categorized separately according to type, e.g. formula preparation, food storage, etc.

Volumes of food or drink used or given to the child were given in mL.

Reasons for practices, knowledge or attitudes that did not fit into the subject specific categories were categorized separately in terms of the relevant situation / theme.

Correctness of reasons were categorized in terms of:

- science based responses — any response that was based on a well accepted scientific fact,

- misconceptions — any response that was based on some unknown or culturally based (scientific unsound) concept, or which was not based on a scientific fact or on wrong interpretations of scientific concepts.

The transcribed data (responses from the various focus groups) were reduced by means of coding according to the created categories and recording instructions which were supplied by the researcher (as described in 6.2.2.5 in Chapter 6). The document with the created analysis categories used by the two specialists to categorize the data is also a large document (56 pages) and therefore only the instructions to the coders and examples of the first six questions / probes will be included. (See Addendum H.)(The document is available on request.)

Data inference and analysis were done by the researcher by means of content analysis (i.e. exploration of the themes and context uncovered in the data) according to the methodology of Krippendorf (1980)(81) and

Stewart (1990)(91) as discussed in Chapter 6. Details on the data making categories are summarized in Table 67. Thirteen focus groups were conducted in each of the two clinics, with three groups in the 0-3/12 age category and two in the other five categories (i.e. 26 focus groups in total). On average six mothers/caregivers were included per focus group; resulting in a total sample of 144 children whose mothers / cargivers attended the focus group interviews. Due to a number of mothers / caregivers who were supposed to attend the scheduled focus group interviews but who did not pitch up and had to be replaced, the sample size for the quantitative data collection eventually increased to 174 children, while the mothers / caregivers attending the focus group interviews were only 144. The analysis was organized in terms of the six sampling units and the different topics / themes that were identified for communicating the essence of what the data revealed (88). These topics / themes delineated the context within which the data reduction was done. The data will be displayed on a comparative basis and discussed simultaneously with reference to each question / probe in the interview guide in terms of frequencies of responses from the two clinics. Descriptive analysis by means of ethnographic descriptions will be done simultaneously to the reporting of the content analysis.

TABLE 67: DATA MAKING FOR THIS RESEARCH STUDY

SAMPLING UNITS	RECORDING UNITS			CONTEXT UNITS	ETHNOGRAPHY
	PHYSICAL UNITS	REFERENTIAL UNITS	THEMATIC UNITS		
GENERAL KNOWLEDGE ON INFANT FEEDING AND HEALTH	- person teaching baby care - average age when taught baby care - person teaching baby feeding -duration of exclusive breast feeding -basis of knowledge concerning duration - number of months of exclusive breast feeding - number of months before discontinuing breast feeding -action taken with diarrhoea -action taken with vomiting - person teaching the appropriate actions - clinic informant	- reasons for visiting the clinic - health in terms of growth - type of milk best for a baby - reasons given for the type of milk chosen or not chosen - reasons for the duration of breast feeding - reasons for the action with vomiting - reasons for the action with diarrhoea - causes of vomiting - causes of diarrhoea - credibility of the clinic	- best kind of milk for a baby - reasons for exclusively breast feeding a baby for a number of months	- baby care - baby feeding - sick children - clinic involvement	- description of a healthy baby that grows well - perceptions of the causes of vomiting or diarrhoea
BREAST FEEDING	- appropriateness of breast feeding - soonest time to breast feed - breast feeding frequency - day versus night - timing per feed - age for exclusive breast feeding - age for discontinuing breast feeding - eating / drinking with breast feeding - additional feeds - frequency - age of first weaning food - age of eating family meals	- reasons for breast feeding - reasons for not breast feeding - timing of first feed and the reasons involved - reasons for the duration of exclusive breast feeding - reasons for discontinuing breast feeding - additional items with breast feeding: - time given - types given - reasons given	- the practice of breast feeding - introduction and duration of exclusive breast feeding - appropriate age for introducing solid foods - implementation of breast feeding: frequency and feeding time	- eating and drinking practices with breast feeding	- reasons for choosing or for avoiding breast feeding

SAMPLING UNITS	RECORDING UNITS			CONTEXT UNITS	ETHNOGRAPHY
	PHYSICAL UNITS	REFERENTIAL UNITS	THEMATIC UNITS		
BOTTLE FEEDING	- the attitude towards the practice of bottle feeding - person deciding on bottle feeding - type of milk used - brand of formula milk used - person teaching making bottle feeds - type of water used - cows' milk: usage boiling additions - making food/bottles in advance - places where it is kept	- reasons for giving bottle feeding or not - reasons for the type of water chosen - reasons for using cow's milk - reasons for boiling cow's milk - reasons given for preparing food/ bottles in advance	- preparation technique & general practice of bottle feeding	Bottle feeding: - type of feed - method/mixing procedures - hygiene	Bottle feeding: - brands with reasons used
WEANING	- age for discontinuation of breast feeding / milk feeds - milk drinking practices with weaning - type of milk used - utensils used for milk drinking - type of water used for mixing powder milk - temperature of water used for mixing powder milk - frequency of solid food meals - volumes of solid food given - volumes of milk drunk by a weaned child -separate preparation of food	- types of complementary foods - reasons for choices of complementary foods - reasons for stopping breast feeding / milk feeds - reasons for meal patterns - reasons for volumes of food given - reasons for volumes of milk given to weaned children - reasons for food prepared separately - additions made to the child's food - reasons for additions to the child's food	- milk mixing technique for cup drinking - temperature of the water used for milk mixing	- milk drinking practices - solid food intakes - explanations of preparation techniques for children's food and commercial products used	- traditional food preparation techniques for children - description of the reasons given for the choice of milk for a weaned child - volumes of food consumed by children in the different age categories

SAMPLING UNITS	RECORDING UNITS			CONTEXT UNITS	ETHNOGRAPHY
	PHYSICAL UNITS	REFERENTIAL UNITS	THEMATIC UNITS		
NUTRITION KNOWLEDGE	- meal frequency: adults - meal frequency: children - daily volume of milk for a child - daily volume of liquids for a child	- reasons for meal frequencies: adults - reasons for meal frequencies: children - reasons for keeping leftover food - reasons for checking leftover food - methods for checking leftover food - types of foods given to children - reasons for giving types of food to children - ways to use fat in the diet - the importance of daily intake of liquids by children -types of liquids / drinks given to children - reasons for the types of drinks / liquids given to children	- foods chosen and reasons given according to food group functions	- meal frequencies - hygiene control of meals - suitability of foods for children - suitability and variety of drinks used by children	- reasons for giving/withholding certain foods / groups for children
ATTITUDE TOWARDS NUTRITION	-	- the importance of food & health - importance of knowledge on healthy eating - fat children & health - food & illness - acceptability of new foods - availability of foods and health - money & health - reasons for following traditional cooking practices or not - father's food portions & reasons	- food & health - food availability & money - traditions relating to portion sizes	- health & eating - money influencing food choice / availability and thus health - traditions & culture affecting preparations and availability to the child	- attitudes towards food and health - trying new foods - traditional cooking methods - the father receiving largest portions

8.2 PRESENTATION AND DISCUSSION OF FOCUS GROUP DATA

8.2.1 SAMPLING UNIT: GENERAL KNOWLEDGE ON INFANT FEEDING AND HEALTH

The general knowledge on infant feeding and health was explored by asking questions and probing on baby care, baby feeding, sick children and clinic involvement. The four mentioned topics delineated the context within which the data reduction was done and the results will be presented.

8.2.1.1 Baby care

To describe the context of baby care by mothers / caregivers in this cultural group a few issues were considered, namely the age girls became mothers, by whom the baby care was taught and what a mother's own view was of baby care in terms of her evaluation of a healthy baby.

✦ How old were you when you were taught how to care for your baby?

DATA CATEGORIES	RESPONSES PER AGE CATEGORY (months)														
	0-3 n=6		4-6 n=4		7-9 n=4		10-12 n=4		13-24 n=4		25-36 n=4		CLINICS - TOTAL RESPONSES		
	MT	MP	MT	MP	MT	MP	MT	MP	MT	MP	MT	MP	MT	MP	TOT
12 years	0	0	0	0	0	1	0	0	0	0	0	0	0	1	1 0.9%
13 years	0	0	0	0	1	0	0	0	0	0	0	0	1	0	1 0.9%
14 years	0	2	0	0	0	0	0	0	0	1	0	1	0	4	4 3.6%
15 years	0	2	0	0	0	1	1	2	0	1	0	1	1	7	8 7.2%
16 years	3	2	0	1	0	0	2	1	0	0	2	3	7	7	14 12.6%
17 years	0	1	3	2	2	1	0	0	0	2	0	0	5	6	11 9.9%
18 years	2	1	4	2	7	2	3	1	5	1	5	2	26	9	35 31.5%
19 years	2	0	4	1	1	0	1	1	0	1	2	1	10	4	14 12.6%
20 years	1	0	0	1	0	2	1	2	1	0	0	1	3	6	9 8.1%
21 years	0	0	0	0	0	1	1	3	1	0	0	0	2	4	6 5.4%
22 years	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1 0.9%
23 years	1	0	0	1	0	0	0	2	0	0	0	0	1	3	4 3.6%
24 years	1	0	0	0	0	0	0	0	0	0	0	0	1	0	1 0.9%
25 years	1	0	0	0	0	0	0	0	0	0	0	0	1	0	1 0.9%
27 years	1	0	0	0	0	0	0	0	0	0	0	0	1	0	1 0.9%
TOTAL	12	8	11	8	11	8	9	12	7	7	9	9	59	52	111

DIFFERENTIATED BY CLINIC: MATHIBESTAD = MT ; MAKAPANSTAD = MP

The mothers' / caregivers' ages varied between 15-21 years (n=97, 87.4%). The majority of the mothers / caregivers learnt baby care at the age of 18 years (n=35, 31.5%). In the children's age categories, the 0-3/12 babies had the biggest variation in the ages of the mothers — from 14 years to 27 years. Most of the 4-6/12 babies' mothers were between the ages of 17-19 years (n=16, 54.2%). Most mothers in the 7-9/12 group were 18 years old (n=9, 47.4%). The 9-12/12 group had a broad representation of ages with most mothers being between the ages of 15-21 years. On the whole it was clear that the mothers in this community were all very young when they were taught about baby care. The majority (n=97, 87.4%) were 20 years old and younger when the first child was born and they were subsequently taught baby care.

✦ Who taught you how to care for your baby ?

DATA CATEGORIES	RESPONSES PER AGE CATEGORY (months)														
	0-3 n=6		4-6 n=4		7-9 n=4		10-12 n=4		13-24 n=4		25-36 n=4		CLINICS - TOTAL RESPONSES		
	MT	MP	MT	MP	MT	MP	MT	MP	MT	MP	MT	MP	MT	MP	TOT
Micro environment	1	4	1	3	2	2	1	2	1	3	2	2	8	16	24 47.1%
Meso environment	2	2	6	2	0	3	1	2	1	5	0	3	10	17	27 52.9%
TOTAL	3	6	7	5	2	5	2	4	2	8	2	5	18	33	51

DIFFERENTIATED BY CLINIC: MATHIBESTAD = MT ; MAKAPANSTAD = MP

The micro environment involved only parents and grandparents (mentioned twice only). From the responses it was clear that there was a fairly equal involvement from the micro environment (family members: 47.1%) and meso environment (clinic staff: 52.9%) in teaching baby care in this community.

✦ How do you do you know that your baby is healthy and growing well?

DATA CATEGORIES	RESPONSES PER AGE CATEGORY (months)														
	0-3 n=6		4-6 n=4		7-9 n=4		10-12 n=4		13-24 n=4		25-36 n=4		CLINICS - TOTAL RESPONSES		
	MT	MP	MT	MP	MT	MP	MT	MP	MT	MP	MT	MP	MT	MP	TOT
Clinical evaluation	2	4	2	2	0	3	1	1	2	4	1	4	8	18	26 49.1%
Anthropometrical evaluation	3	1	2	2	1	0	2	3	1	2	2	1	11	9	20 37.7%
Food intake behaviour	1	0	1	1	1	0	0	0	1	1	0	1	4	3	7 13.2%
TOTAL	6	5	5	5	2	3	3	4	4	7	3	6	23	30	53

DIFFERENTIATED BY CLINIC: MATHIBESTAD = MT ; MAKAPANSTAD = MP

All the responses made by the groups could be categorized according to the three categories for nutritional assessment methods (see Chapter 5)(1, 18, 29). Most of the responses (n=26, 49.1%) were for a subjective clinical evaluation of health and growth (healthy skin, activeness, happiness, absence of illness, absence of fever). Anthropometrical evaluation (growing well, weight increasing or not decreasing, using the growth chart) was mentioned second most (n=20, 37.7%). The least number of responses (n=7,13.2%) linked health with food intake (giving healthy food, eating all the food presented, healthy appetite).

In order to have a clear view of the mother's / caregiver's perception of a healthy baby that grew well, ethnographical descriptions of the data from the focus group interviews were done within a nutritional status framework. Clinical evaluation responses made by all or most of the groups were:

- "when the baby is happy and smiling"
- "when the baby is active and playing around"
- "when the baby is not getting ill easily"
- "when the baby has a healthy skin - no sores"
- "when the child has no temperature"
- "when the child's face is a picture of health"

Anthropometrical evaluation responses referred mostly to weight. Responses included:

- "when they see the baby's weight is increasing"
- "when the child does not weigh less than before"
- "when we take the child to the clinic to weigh, and they don't lose weight"
- "the weight is not going down, but up"
- "when we take the child to weigh, and they don't lose weight"
- "by looking at the growth chart"

Food intake behaviour responses were relatively unspecific and only three responses were made:

- "when they are giving the baby healthy food"
- "when the child eats all his food"
- "due to her appetite - if she eats well, it means she is healthy"

From these responses it could be concluded that mothers / caregivers decided themselves on their baby's health and growth. When the mothers / caregivers felt that they had a content, healthy (no illness present) and happy child, who did not seem to be affected by anything, the child was healthy. Mothers / caregivers made their own decisions on the foods children should get and the quantities were apparently based on the appetite of the child only. Weight and weight changes were mainly used as an indicator of growth in the health care clinics.

In summary: it could be said that new mothers / caregivers received their education on baby care and feeding from both the micro environment and the meso environment. More often both environments were simultaneously mentioned as a source of information. The micro environment referred to the mother or grandmother of the new mother, and the meso environment mainly referred to the nurses or nursing sisters at the local clinic that the new mothers / caregiver visited. Most girls became mothers between the ages of 15-20 years with an average age of 18 years. These mothers / caregivers evaluated the quality of the baby care they provided by means of their own evaluation of the health status and growth of their babies. This was done mainly by means of subjective clinical evaluations where the facial expression of the baby, the condition of the skin, the activity level and the ease of contracting illness were evaluated. In terms of

anthropometrical evaluation only the weight of the child on the growth chart was used as an indicator of health. The clinic staff assisted in the interpretation of the actual growth curves, whereas the mothers / caregivers were only concerned with the weight of the child, wanting it to increase which would automatically then indicate health. Evaluations in terms of food intake were seldom made. Their only concern was that the baby should receive food that they themselves considered healthy or that a child should have a healthy appetite and eat all the food presented to him / her.

Having contextualized "care", it is clear that education concerning general baby care, the growth progress, as well as nutritional needs and food intake behaviour of babies is necessary. It could therefore be appropriate to target clinic staff for training in baby care as to teach new mothers / caregivers. The female parents / grandparents of the new mother in the family should also be targeted, as these are the people giving advice to new mothers. It could also be appropriate to target adolescent girls in the education of baby care in a high school program, as they are the mothers to be.

8.2.1.2 Baby feeding

In order to describe the common baby feeding practices, a few issues were considered together, namely the person who taught the mother / caregiver of the child about feeding a baby, the views of the mothers / caregivers on the best kind of milk for a baby, the duration of exclusive breast feeding and the age when breast feeding was stopped altogether once weaning had been achieved.

✦ Who taught you how to feed your baby ?

DATA CATEGORIES	RESPONSES PER AGE CATEGORY (months)														
	0-3 n=6		4-6 n=4		7-9 n=4		10-12 n=4		13-24 n=4		25-36 n=4		CLINICS - TOTAL RESPONSES		
	MT	MP	MT	MP	MT	MP	MT	MP	MT	MP	MT	MP	MT	MP	TOT
Micro environment	2	5	0	2	1	3	2	2	0	2	3	2	8	16	24 58.5%
Meso environment	1	1	2	1	1	3	0	2	2	2	0	2	6	11	17 41.5%
TOTAL	3	6	2	3	2	6	2	4	2	4	3	4	14	27	41

DIFFERENTIATED BY CLINIC: MATHIBESTAD = MT ; MAKAPANSTAD = MP

Close family members in the micro environment were mentioned more often (n=24,58.5%) as teachers of baby care than the clinic staff in the meso environment (n=17,41.5%). All the groups in the Makapanstad area mentioned the micro environment and some also indicated the meso environment. In the Mathibestad area a choice was always made between the two environments and no group indicated the involvement of both. No differentiation was apparent according to the age groupings.

✦ What is the best kind of milk for a baby ?

DATA CATEGORIES	RESPONSES PER AGE CATEGORY (months)														
	0-3 n=6		4-6 n=4		7-9 n=4		10-12 n=4		13-24 n=4		25-36 n=4		CLINICS - TOTAL RESPONSES		
	MT	MP	MT	MP	MT	MP	MT	MP	MT	MP	MT	MP	MT	MP	TOT
Breast feeding	3	3	2	2	2	2	2	2	1	2	2	2	12	13	25 44.6%
Formula milk	0	3	1	3	0	3	0	5	2	3	0	3	3	20	23 41.1%
Other powder milks	0	2	0	0	0	0	0	1	1	1	0	3	1	7	8 14.3%
TOTAL	3	8	3	5	2	5	2	8	4	6	2	8	16	40	56

DIFFERENTIATED BY CLINIC: MATHIBESTAD = MT ; MAKAPANSTAD = MP

Most of the groups mentioned breast feeding to be the best source of milk for the baby (n=25, 44.6%). In addition to breast milk, formula milk (n=23, 41.1%) was mentioned as well. The mothers / caregivers had to be prompted regarding the fundamental meaning of this question. Different terminology for milk was used in these communities (breast feeding = letswele ; breast milk = mekgatho ; other milk = milk). The question was put as " What is the best kind of **milk** for the baby". If the moderator did not clearly explain what was meant, many of the mothers / caregivers assumed that breast feeding should not be considered and that the question only concerned other milks, i.e. milk choices other than breast feeding, although breast feeding was obviously practised. Without a prompt, 16 of the 26 groups said that breast feeding was the milk of choice for a baby (61.5%). After having been prompted that breast feeding might be considered as well, 25 (96,15%) groups indicated breast feeding to be the choice milk. If other kinds of milk than breast feeding was used, it usually was formula milk (n=23, 41.1%), and not other powder milks (n=8,14.3%). Most of the responses concerning the use of formula or powder milks were made by mothers / caregivers in the Makapanstad area.

✦ Why is it the best?

DATA CATEGORIES	RESPONSES PER AGE CATEGORY (months)														
	0-3 n=6		4-6 n=4		7-9 n=4		10-12 n=4		13-24 n=4		25-36 n=4		CLINICS - TOTAL RESPONSES		
	MT	MP	MT	MP	MT	MP	MT	MP	MT	MP	MT	MP	MT	MP	TOT
Physiologically more suitable	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1 1.7%
Nutritious	2	0	1	0	0	1	0	0	0	0	2	0	5	1	6 10.2%
Healthy	0	0	0	0	0	0	1	0	2	0	0	0	3	0	3 5.1%
Convenience	1	0	0	3	4	3	3	1	0	2	0	1	8	10	18 30.5%
Psychological reasons	1	2	0	1	0	2	0	2	0	1	0	2	1	10	11 18.6%
Immunological advantages	0	0	0	0	1	0	0	0	0	0	0	0	1	0	1 1.7%
Financial reasons	0	3	0	2	0	2	0	2	1	2	1	1	2	12	14 23.7%
Hygienic reasons	1	0	0	1	0	0	0	1	0	1	0	0	1	3	4 6.8%
Other: No answer given	0	0	1	0	0	0	0	0	0	0	0	0	1	0	1 1.7%
TOTAL	5	5	2	7	5	8	4	6	3	7	3	4	22	37	59

DIFFERENTIATED BY CLINIC: MATHIBESTAD = MT ; MAKAPANSTAD = MP

The reasons given for breast feeding as being the choice of milk for a baby were categorized into eight categories. However, three categories were mentioned more often. Convenience was mentioned most often (n=18, 30.5%). The mothers / caregivers from both clinics responded similarly in this regard, with eight responses from the Mathibestad area and ten responses from the Makapanstad area. Secondly, financial reasons (n=14, 23.7%), and thirdly psychological reasons (n=11, 18.6%) were mentioned by the Makapanstad area mothers / caregivers mostly. Hygiene, general health and nutrition were also mentioned.

✦ Why is the other option bad ?

DATA CATEGORIES	RESPONSES PER AGE CATEGORY (months)														
	0-3 n=6		4-6 n=4		7-9 n=4		10-12 n=4		13-24 n=4		25-36 n=4		CLINICS - TOTAL RESPONSES		
	MT	MP	MT	MP	MT	MP	MT	MP	MT	MP	MT	MP	MT	MP	TOT
Physiologically not suitable	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Not nutritious	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Not healthy	1	0	0	[1]	0	0	0	0	{1}	0	0	0	1	0	1 2.9%
Inconvenient	0	0	0	1	0	0	0	0	0	0	0	0	0	1	1 2.9%
Psychological reasons	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Immunological disadvantages	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Financial reasons	1	0	1	1	0	1	0	0	0	0	0	0	2	2	4 11.8%
Hygienic reasons	3	0	1	0	2	0	2	0	1	1	1	1	10	2	12 35.3%
Other: -Incorrect mixing procedures	1	3	0	2	0	2	0	1	0	2	1	2	2	12	14 41.2%
Skipped the question	0	0	1	0	0	0	0	1	0	0	0	0	1	1	2 5.9%
TOTAL	6	3	3	4	2	3	2	2	1	3	2	3	16	18	34

DIFFERENTIATED BY CLINIC: MATHIBESTAD = MT ; MAKAPANSTAD = MP

Incorrect mixing procedures (n=14, 41.2%) and hygienic reasons (n=12, 35.3%) were mentioned most often as reasons for an item being an unsuitable choice for baby feeding. Finances was also mentioned by a few mothers / caregivers (n=4, 11.8%). Bottle feeding was less considered a financial burden (11.8%) than breast feeding was considered a financial benefit (23.7%).

As indicated earlier, most of the groups mentioned breast feeding as the best source of milk for the baby. This finding was confirmed by a question put later to the mothers / caregivers when they were asked if a baby should be breast fed. A 100% positive response was achieved from all the groups. It can be concluded that mothers / caregivers from this cultural group felt strongly about breast feeding as the best feeding for their children. If milk other than breast feeding was used, it usually was formula milk of which Nan, Lactogen and S26 were mentioned most often. Powder milks like Nespray were also used, but not as often. The reasons given for using bottle feeding were all valid reasons, and the persons making such a decision were usually medical staff such as the doctor or a member of the clinic, as explained in the results (see discussion in 8.2.3 Sampling unit: Bottle feeding).

✦ How long can one continue to breast feed a baby without giving the baby anything else to eat or drink ?

This question was interpreted differently according to the way it was put by the focus group moderators. The Mathibestad area groups interpreted the question as was intended, namely the number of months breast feeding was continued before any solid food was added to the diet. In the Makapanstad area the responses were made in terms of two sets of interpretations. Firstly, according to the aforementioned interpretation similar to the Mathibestad area and secondly as an interpretation of when breast feeding was stopped completely after weaning foods had already been introduced. The results will be presented in terms of these two sets of interpretations.

✦✦ The number of months breast feeding is continued before any solid food is introduced

DATA CATEGORIES	RESPONSES PER AGE CATEGORY (months)														
	0-3 n=6		4-6 n=4		7-9 n=4		10-12 n=4		13-24 n=4		25-36 n=4		CLINICS - TOTAL RESPONSES		
	MT	MP	MT	MP	MT	MP	MT	MP	MT	MP	MT	MP	MT	MP	TOT
Two weeks	0	0	0	0	0	1	0	0	0	0	0	0	0	1	1 2.9%
One month	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1 2.9%
Two months	0	0	0	0	0	0	0	1	0	0	0	1	0	2	2 5.7%
Three months	3	0	2	0	2	2	2	4	2	1	2	2	13	9	22 62.8%
Four months	0	0	0	0	0	1	0	1	1	0	0	1	1	3	4 11.4%
Five months	0	0	0	0	0	1	0	0	0	0	0	2	0	3	3 8.5%
Six months	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1 2.9%
Twelve months	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1 2.9%
TOTAL	3	0	2	0	2	5	2	7	3	3	2	6	14	21	35

DIFFERENTIATED BY CLINIC: MATHIBESTAD = MT ; MAKAPANSTAD = MP

Most of the mothers / caregivers started giving solid food at the age of three months (n=22, 62.8%). The majority (n=26, 74.3%) of mothers / caregivers started giving solid food before or at the age of three months. Only 8 mothers / caregivers (22.8%) started giving solid food at the recommended age of 4-6 months (6, 50, 56). In this study group children were seldomly weaned after the recommended age. In the Mathibestad area the three month age was standardly practised as the age for introducing solids, while in the Makapanstad area a variety of ages were mentioned varying from 2 weeks to 6 months.

✦✦ When breast feeding was stopped altogether (completely) after weaning foods was introduced

DATA CATEGORIES	RESPONSES PER AGE CATEGORY (months)														
	0-3 n=6		4-6 n=4		7-9 n=4		10-12 n=4		13-24 n=4		25-36 n=4		CLINICS - TOTAL RESPONSES		
	MT	MP	MT	MP	MT	MP	MT	MP	MT	MP	MT	MP	MT	MP	TOT
Twelve months	0	0	0	1	0	0	0	0	0	0	0	0	0	1	1 5.6%
Sixteen months	0	0	0	1	0	0	0	0	0	0	0	0	0	1	1 5.6%
Eighteen months	0	3	0	2	0	0	0	0	0	2	0	0	0	7	7 38.9%
Twenty months	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1 5.6%
Twenty-four months	0	3	0	3	0	0	0	0	0	2	0	0	0	8	8 44.4%
TOTAL	0	6	0	7	0	0	0	0	0	5	0	0	0	18	18

DIFFERENTIATED BY CLINIC: MATHIBESTAD = MT ; MAKAPANSTAD = MP

Only some of the mothers / caregivers (n=18) from the Makapanstad area interpreted the question in this manner. Breast feeding was mostly stopped completely at the age of 18 (n=7) or 24 (n=8) months. The majority (n=16, 88.9%) stopped breast feeding between 18-24 months. Only one mother / caregiver indicated stopping breast feeding as early as 12 months after birth.

✦ How do you know this? (with reference to the question: how long can you continue to breast feed a baby without giving it anything else to eat or drink?)

DATA CATEGORIES	RESPONSES PER AGE CATEGORY (months)														
	0-3 n=6		4-6 n=4		7-9 n=4		10-12 n=4		13-24 n=4		25-36 n=4		CLINICS - TOTAL RESPONSES		
	MT	MP	MT	MP	MT	MP	MT	MP	MT	MP	MT	MP	MT	MP	TOT
Micro environment (own experiences)	1	3	0	2	0	2	0	3	0	3	0	2	1	15	16 55.2%
Meso environment (clinic involvement)	2	0	2	1	2	0	2	0	2	0	2	0	12	1	13 44.8%
TOTAL	3	3	2	3	2	2	2	3	2	3	2	2	13	16	29

DIFFERENTIATED BY CLINIC: MATHIBESTAD = MT ; MAKAPANSTAD = MP

Influences from the micro environment (n=16, 56.2%) and meso environment (n=13, 44.8%) were equally responsible for the choice mothers / caregivers make as to the length of breast feeding for their babies. In the micro environment it was mostly the mother's / caregiver's own experiences that guided her to make this decision, e.g. noticing constipation, loss of weight, unsatisfied vs satisfied babies and adequate growth. In the meso environment the clinic staff was solely responsible for giving advice in this regard. An interesting observation was that the responses for the micro environment (own experiences) came mostly from the Makapanstad area, and that the responses for the meso environment (clinic) came mostly from the Mathibestad area. This reiterates the previous observation that the mothers / caregivers from the Mathibestad area visited the clinic more often.

✦ How long can one continue to breast feed a baby without giving it anything else to eat or drink ?

✦✦ Why? [Reasons for stopping exclusive breast feeding and introducing solids]

DATA CATEGORIES	RESPONSES PER AGE CATEGORY (months)														
	0-3 n=6		4-6 n=4		7-9 n=4		10-12 n=4		13-24 n=4		25-36 n=4		CLINICS - TOTAL RESPONSES		
	MT	MP	MT	MP	MT	MP	MT	MP	MT	MP	MT	MP	MT	MP	TOT
Physiological readiness	4	0	2	0	2	3	1	1	3	2	2	3	14	9	23 85.2%
Health reasons	0	0	0	0	0	0	1	2	0	0	0	0	1	2	3 11.1%
Immunological reasons	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 0%
The first few days give just water to clean the stomach and after that give soft pap	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1 3.7%
TOTAL	4	0	2	0	2	3	2	3	3	3	2	3	15	12	27

DIFFERENTIATED BY CLINIC: MATHIBESTAD = MT ; MAKAPANSTAD = MP

The reasons given by the mothers / caregivers for introducing solid foods were mostly based on physiological readiness (n=23, 85.2%), concerning digestion, chewing, swallowing and constipation. Health concerns dealt mostly with weight and nutritional issues. In the two youngest age groups only the Mathibestad area mothers / caregivers gave responses, but in the 7-9/12 and older groups both the clinics responded similarly to this probe.

✦✦ Why? [Reasons for stopping breast feeding after weaning]

DATA CATEGORIES	RESPONSES PER AGE CATEGORY (months)														
	0-3 n=6		4-6 n=4		7-9 n=4		10-12 n=4		13-24 n=4		25-36 n=4		CLINICS - TOTAL RESPONSES		
	MT	MP	MT	MP	MT	MP	MT	MP	MT	MP	MT	MP	MT	MP	TOT
Physiological readiness	0	1	0	0	0	0	0	0	0	2	0	0	0	3	3 25.0%
Health reasons	0	2	0	4	0	0	0	0	0	1	0	0	0	7	7 58.4%
Immunological reasons	0	0	0	1	0	0	0	0	0	0	0	0	0	1	1 8.3%
For special bonding for the child and mother	0	1	0	0	0	0	0	0	0	0	0	0	0	1	1 8.3%
TOTAL	0	4	0	5	0	0	0	0	0	3	0	0	0	12	12

DIFFERENTIATED BY CLINIC: MATHIBESTAD = MT ; MAKAPANSTAD = MP

The reasons given were health concerns (n=7, 58.4%) rather than physiological readiness. Health issues mentioned included growth, nutritional adequacy and volume of food. Only some focus groups from the Makapanstad area responded in this manner due to the way in which the moderator structured the question / probe.

Since breast feeding is such an important issue, more detailed information in this regard seemed appropriate. A theme for discussion therefore pertained to the reasons for exclusively breast feeding a baby for several months. Most of the reasoning by mothers / caregivers to give breast feeding was based on physiological reasons, but differed from the accepted scientific principles. It is scientifically argued that a baby is not physiologically and nutritionally ready for solid foods before the ages of 4-6/12 due to a yet underdeveloped digestive system, poor chewing and swallowing reflexes, unnecessary exposure to the risk of allergens and simply overfeeding of the baby (14). Most of the mothers / caregivers in the focus groups argued the other way round. Most reasons, all physiologically based, were given for not being able to give a baby solid food any time sooner than 2-3/12, including too small and immature stomachs, swallowing problems, digestive problems and constipation (unable to pass stools). In the Sampling unit: Breast feeding (see 8.2.2) this theme was again brought up, and the responses confirmed the mentioned reasons.

Health issues were indicated as the second group of reasons for stopping exclusive breast feeding. Overweight seemed to be a concern and it was stated that feeding solid food before the age of 3 months might lead to overweight. It was felt that breast feeding was nutritionally adequate until the age of 3 months. In the theme (see 8.2.2 Sampling unit: Breast feeding) that cross checked this issue, the previously mentioned nutritional reason given for stopping exclusive breast feeding was confirmed, namely that due to physiological problems with the baby, mothers / caregivers could not give solid food any sooner. It was also stated that after 3 months of age, breast feeding was not adequate anymore and solid foods should be added to fulfill the nutritional needs of the baby. Other reasons included the age of the child relating to growth and suitability of foods, breast feeding being the best food and health in general. Their knowledge base for this practice was firstly their own experiences, by observing others in the family / community or from experiences with a previous child. If a child became constipated, it was ascribed to poor digestion, or that the solid food blocked the intestines in a very young baby. A baby that cried a lot was seen as an unhappy baby due to receiving solid food before the age of three months. It was perceived that breast fed babies seldomly cried. Secondly, the clinic, that also served as a source of information, was advising that the age of three months was the best age for starting to include solid food.

8.2.1.3 Sick children

Vomiting and diarrhoea are common occurrences among children. The actions taken together with the reasons and causes involved will be discussed.

✦ What does a mother do when a baby is vomiting ?

DATA CATEGORIES	RESPONSES PER AGE CATEGORY (months)														
	0-3 n=6		4-6 n=4		7-9 n=4		10-12 n=4		13-24 n=4		25-36 n=4		CLINICS - TOTAL RESPONSES		
	MT	MP	MT	MP	MT	MP	MT	MP	MT	MP	MT	MP	MT	MP	TOT
Micro environment	2	3	2	3	3	2	2	2	3	2	2	2	14	14	28 90.3%
Meso environment	1	0	0	0	0	0	0	0	0	1	0	0	1	1	2 6.5%
Don't know	1	0	0	0	0	0	0	0	0	0	0	0	1	0	1 3.2%
TOTAL	4	3	2	3	3	2	2	2	3	3	2	2	16	15	31

DIFFERENTIATED BY CLINIC: MATHIBESTAD = MT ; MAKAPANSTAD = MP

Most mothers / caregivers (n=28, 90.3%) gained knowledge from the micro environment to deal with the problem of vomiting. Only two mothers / caregivers referred to the meso environment (clinic) as the means to solve the problem. In the micro environment mothers / caregivers mostly used the mixture for oral rehydration therapy (ORT) as taught by the clinics. There was no difference between the responses from the two clinics or the six different age categories, the decision was unanimous to give "motswako" (mixture of 1L boiled water, 8 tsp of sugar and 1 tsp of salt — the home-made mixture for ORT).

✦ Why does a mother take the actions mentioned against vomiting?

DATA CATEGORIES	RESPONSES PER AGE CATEGORY (months)														
	0-3 n=6		4-6 n=4		7-9 n=4		10-12 n=4		13-24 n=4		25-36 n=4		CLINICS - TOTAL RESPONSES		
	MT	MP	MT	MP	MT	MP	MT	MP	MT	MP	MT	MP	MT	MP	TOT
Rehydration	1	3	2	2	2	2	2	2	0	2	1	2	8	13	21 67.7%
To stop the vomiting	2	0	1	1	0	0	0	0	2	2	0	0	5	3	8 25.8%
Don't know	0	0	0	0	0	0	0	0	0	0	1	0	1	0	1 3.2%
No answer given	1	0	0	0	0	0	0	0	0	0	0	0	1	0	1 3.2%
TOTAL	4	3	3	3	2	2	2	2	2	4	2	2	15	16	31

DIFFERENTIATED BY CLINIC: MATHIBESTAD = MT ; MAKAPANSTAD = MP

The majority (n=21, 67.7%) were aware of the necessity of rehydration during episodes of vomiting and therefore gave "motswako" to their children. Some mothers / caregivers (n=8, 25.8%), however, were unsure of the exact reason for giving the liquids, but gave it anyway as they knew that the "motswako" would aid in cessation of the vomiting.

✦ What does a mother do when a baby is having diarrhoea ?

DATA CATEGORIES	RESPONSES PER AGE CATEGORY (months)														
	0-3 n=6		4-6 n=4		7-9 n=4		10-12 n=4		13-24 n=4		25-36 n=4		CLINICS - TOTAL RESPONSES		
	MT	MP	MT	MP	MT	MP	MT	MP	MT	MP	MT	MP	MT	MP	TOT
Micro environment	3	3	2	3	1	0	2	2	3	2	2	2	13	12	25 96.2%
Meso environment	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1 3.8%
TOTAL	3	3	2	3	1	0	2	2	3	3	2	2	13	13	26

DIFFERENTIATED BY CLINIC: MATHIBESTAD = MT ; MAKAPANSTAD = MP

The mothers / caregivers again used their micro environment to determine the action to be taken with episodes of diarrhoea (n=25, 96.2%). All the mothers / caregivers also indicated using "motswako" for children with diarrhoea. An equal number of responses came from both clinics (13 versus 12). The group with the poorest response was the 7-9/12 age category with only one response documented.

✦ Why does a mother take the actions mentioned against diarrhoea?

DATA CATEGORIES	RESPONSES PER AGE CATEGORY (months)														
	0-3 n=6		4-6 n=4		7-9 n=4		10-12 n=4		13-24 n=4		25-36 n=4		CLINICS - TOTAL RESPONSES		
	MT	MP	MT	MP	MT	MP	MT	MP	MT	MP	MT	MP	MT	MP	TOT
Rehydration	2	3	2	2	2	2	2	2	2	2	2	2	12	13	25 86.2%
To stop the diarrhoea	2	0	0	0	0	0	0	0	0	2	0	0	2	2	4 13.8%
TOTAL	4	3	2	2	2	2	2	2	2	4	2	2	14	15	29

DIFFERENTIATED BY CLINIC: MATHIBESTAD = MT ; MAKAPANSTAD = MP

Rehydration seemed to be the reason of choice for giving "motswako" for diarrhoea (n=25, 86.2%); fairly similar in both clinics (12 versus 13). There was no difference between the responses from the different age groups.

✦ Who taught you to take the described actions against vomiting and diarrhoea ?

DATA CATEGORIES	RESPONSES PER AGE CATEGORY (months)														
	0-3 n=6		4-6 n=4		7-9 n=4		10-12 n=4		13-24 n=4		25-36 n=4		CLINICS - TOTAL RESPONSES		
	MT	MP	MT	MP	MT	MP	MT	MP	MT	MP	MT	MP	MT	MP	TOT
Micro environment	0	1	0	0	0	0	0	0	0	0	0	0	0	1	1 3.7%
Meso environment	3	3	2	2	2	2	2	2	2	2	2	1	13	12	25 92.6%
No answer given	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1 3.7%
TOTAL	3	4	2	2	2	2	2	2	2	2	2	2	13	14	27

DIFFERENTIATED BY CLINIC: MATHIBESTAD = MT ; MAKAPANSTAD = MP

Almost all the mothers / caregivers (n=25, 92.6%) indicated the meso environment as the source of information. These responses confirmed that the clinic (meso environment) was the source of information regarding the treatment of vomiting and diarrhoea. The nurses or nursing sisters at the clinics were mentioned as the persons conveying the information to the mothers / caregivers. There was no difference between the responses from the two clinics or between the various age groups.

✦ What causes vomiting in a baby?

DATA CATEGORIES	RESPONSES PER AGE CATEGORY (months)														
	0-3 n=6		4-6 n=4		7-9 n=4		10-12 n=4		13-24 n=4		25-36 n=4		CLINICS - TOTAL RESPONSES		
	MT	MP	MT	MP	MT	MP	MT	MP	MT	MP	MT	MP	MT	MP	TOT
Science based responses	3	4	3	4	2	4	2	5	2	3	1	2	13	22	35 81.4%
Misconceptions	0	0	1	0	0	0	1	0	3	0	2	1	7	1	8 18.6%
TOTAL	3	4	4	4	2	4	3	5	5	3	3	3	20	23	43

DIFFERENTIATED BY CLINIC: MATHIBESTAD = MT ; MAKAPANSTAD = MP

In the previous few questions / probes mothers / caregivers were asked what action they usually took when their children experienced vomiting and diarrhoea and why. With this probe mothers / caregivers were asked to discuss the causes of these occurrences as perceived by them. The responses given for the causes of vomiting were mainly science based (n=35, 81.4%). These responses concerned hygiene referring to food handling and leftover foods. Some of the other reasons mentioned were the eruption of teeth, giving large volumes of food or too many kinds of foods at the same meal. Only 18.6% (n=8) of the responses were classified as misconceptions. These responses included statements like too much sugar or salt, eating more than one kind of food, unhealthy foods, giving left-over foods, a sunken fontanelle "tlhogana", incorrect mixtures of bottle feeding, if a child is cold. Most of the misconceptions came from the mothers / caregivers in the Mathibestad area, while most of the science based responses were made by mothers / caregivers from the Makapanstad area. All the age groups responded in a similar manner in terms of the science based responses, but the misconceptions were more common in the two older age groups, 10-12/12 and 13-24/12.

✦ What causes diarrhoea in a baby?

DATA CATEGORIES	RESPONSES PER AGE CATEGORY (months)														
	0-3 n=6		4-6 n=4		7-9 n=4		10-12 n=4		13-24 n=4		25-36 n=4		CLINICS - TOTAL RESPONSES		
	MT	MP	MT	MP	MT	MP	MT	MP	MT	MP	MT	MP	MT	MP	TOT
Science based responses	4	3	2	3	2	2	2	4	2	7	1	2	13	21	34 72.3%
Misconceptions	0	1	0	1	1	2	1	1	2	1	2	1	6	7	13 27.7%
TOTAL	4	4	2	4	3	4	3	5	4	8	3	3	19	28	47

DIFFERENTIATED BY CLINIC: MATHIBESTAD = MT ; MAKAPANSTAD = MP

These results were very similar to that reported for the causes of vomiting. The science based responses (n=34, 72.3%) dominated, including spoiled food and unhygienic handling techniques. Other responses included teeth eruption, high fat intake, fresh milk intake, and incorrect mixing procedures for formula milk. However, even more misconceptions were reported (n=13, 27.7%) than with vomiting. These included walking with the baby in very hot sun, eating bananas, a bulging fontanel "tlhogana", too much sugar or salt, overeating, change of temperature and incorrect mixing procedures for formula milk.

To summarize: it became obvious that vomiting and diarrhoea were a common occurrence among children in these communities. The mothers / caregivers in these two communities had relative standard care procedures for sick children. If children had diarrhoea or were vomiting, they used the mixture that is taught by the clinic staff for ORT, also known as "motswako" in these communities. Most mothers / caregivers used the recipe correctly. However it was also evident from the focus group discussions that some of the mothers / caregivers did not know about the mixture and / or the recipe. Their reason for using the mixture was mainly the replacement of lost water from the body and to stop either the vomiting or diarrhoea. If the symptoms were severe or if the "motswako" mixture had no effect, the common practice was to take the child to the clinic for other medical treatment. It was also stated clearly that people would usually go to the clinic to get help if their children were ill, as the purpose of the clinic was to help cure diseases.

When the mothers / caregivers explained their perceptions of the causes of vomiting or diarrhoea, some interesting responses were made. An ethnographical description of these responses was done to differentiate between the factual reasons and the misconceptions as were given in the interviews by the mothers / caregivers. Science based responses were:

for vomiting

- "dirty food - germs"
- "when the teeth erupt"
- "rotten food"
- "when you prepare the baby's food without washing your hands"
- "last night's food"

for diarrhoea

- "wrong mixture of milk"
- "food that have expired (overstay foods)"
- "when the teeth erupt"
- "milk that doesn't agree with him"
- "eating a lot of fat or fatty foods"
- "left-over food that was left open overnight / after a meal"

It can thus be concluded that for both situations mothers / caregivers made the correct assumptions that non-hygiene could be a cause — referring to the food, handling techniques or utensils used. Teething and improper use of formula milk were also mentioned correctly.

The misconceptions mentioned, included the following:

for vomiting

- "when the food isn't healthy, like a lot of sugar or pap only"
- "when the child gets cold (she is not warm enough)"
- "mixed food - when more than one kind of food are eaten"
- "when the fontanel is down ('tlhogana'), the child starts vomiting"
- "lots of salts"

for diarrhoea

- "when you walk with your baby in very hot sun"
- "too much banana"
- "when the fontanel goes up, the child has diarrhoea"

  [A further explanation regarding this condition, " tlhogana", was provided:

  For both vomiting and diarrhoea "tlhogana" we take the child to the witch doctor. He uses leaves, put it on the fire to make smoke, let the child inhale the smoke and put the ashes on the fontanel. This same procedure is used when / before going into large crowds like weddings or funerals. The leaves are boiled in water which is drunk — this will prevent you from getting sick]
- "Change of temperature"
- "Prepare 125mL + 2 scoops milk - this is too weak and will cause diarrhoea"
- "lots of salts"

8.2.1.4 Clinic involvement

✦ Who told you about this clinic? (informant)

DATA CATEGORIES	RESPONSES PER AGE CATEGORY (months)														
	0-3 n=6		4-6 n=4		7-9 n=4		10-12 n=4		13-24 n=4		25-36 n=4		CLINICS - TOTAL RESPONSES		
	MT	MP	MT	MP	MT	MP	MT	MP	MT	MP	MT	MP	MT	MP	TOT
Micro environment	2	4	0	1	2	0	1	3	0	1	2	2	7	11	18 51.4%
Meso environment	1	0	2	2	0	3	1	2	2	2	0	2	6	11	17 48.6%
TOTAL	3	4	2	3	2	3	2	5	2	3	2	4	13	22	35

DIFFERENTIATED BY CLINIC: MATHIBESTAD = MT ; MAKAPANSTAD = MP

Both the micro environment (parents, mothers, friends, neighbours and fathers) (n=18, 51.4%) and the meso environment (tribal authority, the chief, Department of Health, nurses, nursing sisters, clinic, community) (n=17, 48.6%) were indicated as being the prompt for clinic attendance. In the micro environment the parents (implying the mother in most cases) were most often (n=16,45.7%) the informant for both clinics and all age groups. The mothers / caregivers in the Makapanstad area were more involved with their cultural/tribal leaders and friends in the community as such than the mothers / caregivers in the Mathibestad area. The mothers / caregivers in the Mathibestad area, however were making more use of the clinic / hospital staff.

✦ Reasons mentioned on why the clinics are in the community

DATA CATEGORIES	RESPONSES PER AGE CATEGORY (months)														
	0-3 n=6		4-6 n=4		7-9 n=4		10-12 n=4		13-24 n=4		25-36 n=4		CLINICS - TOTAL RESPONSES		
	MT	MP	MT	MP	MT	MP	MT	MP	MT	MP	MT	MP	MT	MP	TOT
Because of illness	1	0	0	0	2	0	2	0	0	0	1	0	6	0	6 42.86%
Growth monitoring	2	0	0	0	0	0	0	0	1	0	1	0	4	0	4 28.57%
Immunization	1	0	0	0	0	0	0	0	0	0	0	0	1	0	1 7.14%
Advice	2	0	1	0	0	0	0	0	0	0	0	0	3	0	3 21.43%
TOTAL	6	0	1	0	2	0	2	0	1	0	2	0	14	0	14

DIFFERENTIATED BY CLINIC: MATHIBESTAD = MT ; MAKAPANSTAD = MP

The clinics were mostly visited due to illness or disease (n=6,%). The clinic was also attended for growth monitoring (n=4) and advice (n=3). Immunization seemed to be of least importance (n=1).

✦ Do you believe what the clinic tells you about feeding your child?

DATA CATEGORIES	RESPONSES PER AGE CATEGORY (months)														
	0-3 n=6		4-6 n=4		7-9 n=4		10-12 n=4		13-24 n=4		25-36 n=4		CLINICS - TOTAL RESPONSES		
	MT	MP	MT	MP	MT	MP	MT	MP	MT	MP	MT	MP	MT	MP	TOT
Yes	3	3	2	2	2	2	2	2	2	2	2	2	13	13	26 100%
No	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	3	3	2	2	2	2	2	2	2	2	2	2	13	13	26

DIFFERENTIATED BY CLINIC: MATHIBESTAD = MT ; MAKAPANSTAD = MP

All the mothers / caregivers in both areas indicated that they could believe what they were told at the clinic (100%).

✦ Why do you believe what the clinic tells you about feeding your child?

DATA CATEGORIES	RESPONSES PER AGE CATEGORY (months)														
	0-3 n=6		4-6 n=4		7-9 n=4		10-12 n=4		13-24 n=4		25-36 n=4		CLINICS - TOTAL RESPONSES		
	MT	MP	MT	MP	MT	MP	MT	MP	MT	MP	MT	MP	MT	MP	TOT
Science based responses	3	3	3	2	2	2	2	3	2	3	3	2	15	15	30 100%
Misconceptions	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	3	3	3	2	2	2	2	3	2	3	3	2	15	15	30

DIFFERENTIATED BY CLINIC: MATHIBESTAD = MT ; MAKAPANSTAD = MP

All the responses made by the mothers / caregivers in both areas could be classified as science based

responses. Quite a number of the responses were positive and referred to the outcome achieved by following the advice given by the clinic staff. A number of responses also concerned the fact that the clinic staff was well educated and were therefore able to advise the mothers / caregivers on a number of matters. Responses included advice on child feeding, teaching important information concerning a specific issue, and teaching mothers / caregivers the correct way to work with their children. Most of the other responses were very general, just indicating that the child was healthy and therefore the advice was good, or the fact that the clinic staff was always helpful and if the advice was ignored it was to one's own detriment. One of the responses also mentioned the fact that the mothers / caregivers could not think of any reason why the clinic staff would lie to them, and therefore they were trusted.

It can be concluded that the people were making use of the health care clinics. Most adults in the community usually attended the clinic only when they were ill or when they were seeking advice of some kind. Mothers / caregivers with babies usually visited the clinic for growth monitoring and immunization purposes. Both the micro environment and the meso environment were used as a source of information and reference to the clinic. Mostly family members, such as mothers and grandmothers, advised new mothers about the value of the clinic during pregnancy, as well as for the baby. Cultural / tribal leaders in the community and close friends were also responsible for referring people to the clinics.

The purpose of the clinic in terms of baby feeding was investigated. In response to a question on the credibility of the information received from the clinic with reference to baby feeding, an overwhelmingly positive response came from all of the focus groups. The reasons given in this regard included mainly that they had success with the general health and growth status of the child, and that the advice given was always appropriate and successful. They felt that the information gained from the clinic was useful and gave them knowledge on previously unknown situations.

8.2.2 SAMPLING UNIT: BREAST FEEDING

The theme on breast feeding was explored by asking questions and probing on breast feeding as the choice of feeding, the introduction and duration of breast feeding, implementing breast feeding and the eating and drinking practices introduced while breast feeding. The four mentioned topics delineated the context within which the data reduction was done and the results will be presented.

8.2.2.1 Breast feeding as the feeding choice

✦ Should a baby be breast fed?

DATA CATEGORIES	RESPONSES PER AGE CATEGORY (months)														
	0-3 n=6		4-6 n=4		7-9 n=4		10-12 n=4		13-24 n=4		25-36 n=4		CLINICS - TOTAL RESPONSES		
	MT	MP	MT	MP	MT	MP	MT	MP	MT	MP	MT	MP	MT	MP	TOT
Yes	3	3	2	2	2	2	2	2	2	2	2	2	13	13	26 100%
No	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 0%
TOTAL	3	3	2	2	2	2	2	2	2	2	2	2	13	13	26

DIFFERENTIATED BY CLINIC: MATHIBESTAD = MT ; MAKAPANSTAD = MP

All the mothers / caregivers in all of the focus groups felt that a baby should always be breast fed. No negative responses were made, which indicated that all mothers had the intention of breast feeding even though at times circumstances might intervene and force bottle feeding (see 8.2.3 Sampling unit: Bottle feeding). Both clinics' responses were the same.

✦ Reasons for breast feeding a baby

DATA CATEGORIES	RESPONSES PER AGE CATEGORY (months)														
	0-3 n=6		4-6 n=4		7-9 n=4		10-12 n=4		13-24 n=4		25-36 n=4		CLINICS - TOTAL RESPONSES		
	MT	MP	MT	MP	MT	MP	MT	MP	MT	MP	MT	MP	MT	MP	TOT
Physiologically more suitable	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Nutritional reasons	1	0	0	0	0	1	0	0	0	0	0	0	1	1	2 4.5%
Health reasons	2	4	2	2	2	2	2	3	2	4	2	4	12	19	31 70.5%
Convenience reasons	0	0	0	0	0	0	1	0	0	0	0	0	1	0	1 2.3%
Psychological reasons	0	0	0	1	0	0	0	0	1	0	0	0	1	1	2 4.5%
Immunological advantages	1	0	0	0	0	0	0	1	0	2	0	1	1	4	5 11.4%
Financial reasons	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1 2.3%
Hygienic reasons	0	0	0	1	0	0	0	0	0	0	0	0	0	1	1 2.3%
Baby is crying (due to hunger)	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1 2.3%
TOTAL	4	4	2	4	2	3	3	5	3	7	2	5	16	28	44

DIFFERENTIATED BY CLINIC: MATHIBESTAD = MT ; MAKAPANSTAD = MP

Most (n=31, 70.5%) of the reasons mentioned for breast feeding a baby was health reasons. General health concerns like good health, strength and breast feeding being best were mentioned mostly. All the groups responded to this category, but the mothers / caregivers from the Makapanstad area gave more responses in this regard. The other main category mentioned was immunological reasons (n=5, 11.4%) indicating the prevention of illness; mainly from the Makapanstad area.

✦ Explanations given for not breast feeding a baby

DATA CATEGORIES	RESPONSES PER AGE CATEGORY (months)														
	0-3 n=6		4-6 n=4		7-9 n=4		10-12 n=4		13-24 n=4		25-36 n=4		CLINICS - TOTAL RESPONSES		
	MT	MP	MT	MP	MT	MP	MT	MP	MT	MP	MT	MP	MT	MP	TOT
Mother has illness	0	0	0	0	0	0	1	1	0	0	0	0	1	1	2 8.7%
Baby has illness	0	0	0	0	0	1	0	1	0	0	0	0	0	2	2 8.7%
Breast discomfort	0	0	0	0	0	0	1	0	1	0	2	2	4	2	6 27.3%
Free choice	0	0	0	0	0	0	0	0	0	0	1	0	1	0	1 4.3%
Low milk production	1	0	0	0	0	0	0	0	0	0	0	0	1	0	1 4.3%
Mother using drugs	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Baby failure to thrive	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
No answer given	2	0	2	1	2	1	0	0	1	2	0	0	7	4	11 47.8%
TOTAL	3	0	2	1	2	2	2	2	2	2	3	2	14	9	23

DIFFERENTIATED BY CLINIC: MATHIBESTAD = MT ; MAKAPANSTAD = MP

Although all the mothers indicated that breast feeding was the first choice of feeding for any baby, some explained that in some instances breast feeding was not suitable for the baby. These explanations were mostly valid although some mothers (n=11, 47.8%) could not give a reason why they opted for another type of feed. This could be due to the fact that they were advised by the clinic / hospital staff to implement a certain feed but were not informed as to the exact reasons. The main reason put forward was that of breast discomfort (n=6, 27.3%). Other explanations given were illnesses of either mother or baby (n=4, 17.4%). No differences in responses from groups or clinics were apparent.

One of the questions in this Sampling unit was: "should a baby be breast fed?". The mothers / caregivers were probed according to their beliefs on the reasons / advantages of breast feeding and to the reasons why breast feeding would not be a choice (see 8.2.2.2).

Health reasons were mentioned by nearly all the groups. However, most of these were very general:

- "breast milk is good for the baby"
- "a baby that receives breast milk will be strong and healthy"
- "for the baby to grow well"
- "breast is best"
- "it build the body"
- "it's suitable for small children"
- "for her to be healthy"
- "if you do not breast feed, the child will get kwashiorkor"
- "breast feeding gives the baby strength".

The second category of responses dealt with immunological advantages. Responses included:

- "it prevents infections"
- "it prevents illnesses"
- "when the child is sick you can easily feed her with breast feeding"
- "breast milk doesn't have any germs"
- "for the child not to become sick".

These were often linked to the health idea by virtue that breast feeding is good for the general health of the child and therefore will prevent the child from getting ill.

The third and fourth categories of responses worth mentioning, were that of the nutritional and psychological reasons, which received equal numbers of mentioning:

- "breast milk has protein and vitamins"
- "because they have all the vitamins"
- "the breast-fed child is getting a lot of love from the mother"
- "it builds the bonding between the mother and the child".

From these responses it can be concluded that the mothers did not have knowledge on all the advantages of breast feeding (see 3.3.3.1 in Chapter 3). Some reasons mentioned touched on the real issues, like nutritional content, prevention of some infections and bonding. It could be of great value to these mothers to learn more about ALL the advantages of breast feeding to both the mother and the baby. This may then aid in a change of attitude towards breast feeding practices in this community (1, 6, 8, 9, 22, 49, 50, 52, 54, 55, 56, 57, 58, 59, 60, 61).

Mothers / caregivers were also asked to explain why a baby would not be breast fed. Answers in this regard were more reserved as many groups (50%) did not even respond to this question. Most responses referred to breast discomfort and included:

- "when the mother has problems with the breast - e.g. breast abscess"
- "the mother may be suffering from 'rush' (sick) or some other disease"
- "maybe when the mother is having sores on the breast".

The responses to the next two analysis categories could be combined as they all concerned either illness of the mother or the child:

- "maybe the mother is sick and advised by the doctor not to breast feed"
- "when the child gets ill"
- " when they are sickly".

The other responses given were general:

- "when the mother have fear to breast feed the child - she doesn't want her breasts to "fall down", so she only give a bottle"
- "maybe enough milk is not coming from the breast".

These responses indicated that mothers had some knowledge as to the reasons for stopping breast feeding. Issues that may be addressed in nutrition education though, are that of milk production, especially concerning colostrum, of breast feeding and illnesses (which do not normally require breast feeding to be stopped), and of care of the breasts.

8.2.2.2 Introduction and duration of breast feeding

✦ How soon after the baby is born should it get breast milk?

DATA CATEGORIES	RESPONSES PER AGE CATEGORY (months)														
	0-3 n=6		4-6 n=4		7-9 n=4		10-12 n=4		13-24 n=4		25-36 n=4		CLINICS - TOTAL RESPONSES		
	MT	MP	MT	MP	MT	MP	MT	MP	MT	MP	MT	MP	MT	MP	TOT
Directly after birth	0	2	1	0	2	2	0	1	2	0	1	2	6	7	13 19.4%
Soon after birth	2	4	3	2	5	0	2	5	2	6	2	3	19	21	40 59.7%
After ½ day	3	0	1	1	0	0	0	0	0	0	0	2	4	2	6 9.0%
After one day or night	0	0	0	0	0	0	0	1	0	0	0	2	0	2	2 3.0%
After a day and night	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 %
After two days	0	1	0	0	0	1	0	0	0	0	0	1	0	3	3 4.5%
After three or more days	0	0	0	0	0	1	0	1	0	0	0	0	0	2	2 3.0%
Depends on clinic / hospital	0	0	0	0	0	0	0	0	0	0	1	0	1	0	1 1.5%
TOTAL	5	7	5	3	10	4	2	8	4	7	4	8	30	37	67

DIFFERENTIATED BY CLINIC: MATHIBESTAD = MT ; MAKAPANSTAD = MP

Most of the mothers / caregivers (n=40, 59.7%) indicated that breast feeding should be started soon after birth, or directly after birth (n=13, 19.4%). "Soon after birth" was interpreted as directly after the birth once medical examinations and procedures have been completed; approximately within four hours after the baby was born. "Directly after the baby is born" indicated that breast feeding should be started in the delivery room, which would in most cases only be possible with a lenient clinic / hospital, with a hospital adopting the BFHI or with a home birth. A few mothers (n=6, 9.0%) also indicated the initiation of breast feeding half a day after birth. It is thus clear that the mothers in these communities felt that breast feeding should be initiated as soon as possible. The response categories for one or more days of delay for the initiation of breast feeding were only mentioned in the Makapanstad area. It seemed that the people in the Mathibestad

area were implementing breast feeding within half a day after the birth of the baby.

✦ Reasons for the decision of the time to initiate breast feeding of a baby

DATA CATEGORIES	RESPONSES PER AGE CATEGORY (months)														
	0-3 n=6		4-6 n=4		7-9 n=4		10-12 n=4		13-24 n=4		25-36 n=4		CLINICS - TOTAL RESPONSES		
	MT	MP	MT	MP	MT	MP	MT	MP	MT	MP	MT	MP	MT	MP	TOT
Physiologically more suitable	4	2	4	0	2	0	2	2	2	1	2	2	16	7	23 46.0%
Nutritional reasons	0	0	0	0	0	1	0	0	0	0	0	0	0	1	1 2.0%
Health reasons	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Convenience reasons	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Psychological reasons	0	0	0	0	0	1	0	0	0	0	0	0	0	1	1 2.0%
Immunological reasons	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Financial reasons	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hygienic reasons	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hospital / clinic procedures	1	0	1	0	0	0	0	2	1	1	1	3	4	6	10 20.0%
Perceived lack of milk	0	1	0	1	0	1	0	2	0	0	0	2	0	6	6 12.0%
To allow time for the mother to rest	2	0	0	0	1	0	2	0	0	0	1	0	6	0	6 12.0%
No answer given	0	0	0	0	0	0	0	0	1	0	0	0	1	0	1 2.0%
Do not know	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1 2.0%
We still can't understand why the baby can't be breast fed immediately	0	0	0	1	0	0	0	0	0	0	0	0	0	1	1 2.0%
TOTAL	7	3	5	2	3	3	4	6	4	3	4	6	27	23	50

DIFFERENTIATED BY CLINIC: MATHIBESTAD = MT ; MAKAPANSTAD = MP

A variety of reasons were put forward to explain the various decisions (see Table) made to initiate breast feeding at a specific time. Four of these were most common. Firstly, physiologically based responses (n=23, 46.0%), where hunger or thirst (noticeable due to crying) and rest for the baby were mentioned. Mothers / caregivers from the Mathibestad area were responsible for about two-thirds (n=16, 70.0%)of the total number of responses categorized as physiologically more suitable (n=23). The 4-6/12 and 7-9/12 groups from the Makapanstad area did not respond to this category at all, while all the other groups gave one or more responses. This category was linked to the answer of breast feeding "directly after birth" and "soon after birth". Secondly, hospital / clinic procedure was the reason for the delay of initiation (n=10, 20.0%), including observation of the baby, bathing of the baby, or time schedules given. The delay was usually only about four hours ("soon after birth"). It was mostly mothers from the older children (10-12/12, 13-24/12, 25-36/12) who responded in this category. Thirdly, perceived lack of milk was the reason for

waiting with breast feeding (n=6, 12.0%), as the secretion of colostrum was not valued as milk. These reasons were linked to a delay of one or more days. This response was only given in the Makapanstad area, and all the groups except the 13-24/12 group gave it. The acceptance and usage of colostrum were not studied explicitly. Therefore only the perceptions of the low value it had and that it should be discarded rather than used, that were uncovered in the focus group interviews, were reported. It might therefore be valuable to investigate the attitudes towards and the usage of colostrum in newborn babies in these communities by means of similar research techniques as were implemented for this research study. Fourthly, the mother was allowed time to rest after the delivery (n=6, 12.0%) before breast feeding was initiated, which was also linked to the "soon after birth" category. This response was only given in the Mathibestad area and by all groups, except the 4-6/12 and 13-24/12 groups.

✦ How long should you give breast milk as the one and only feed to a child?

This question was interpreted differently according to the way it was put by the moderators. The Mathibestad area groups (except for one group) interpreted the question as was intended, namely the number of months breast feeding was continued before bottle feeding or any solid food was added to the diet. In the Makapanstad area the responses were made in terms of two sets of interpretations. Firstly, as the above-mentioned interpretation (similar to the Mathibestad area responses) and secondly, as an interpretation of when breast feeding was stopped altogether after weaning foods were already introduced. The results will be presented in terms of these two sets of interpretations.

FIRST INTERPRETATION

✦✦ The number of months breast feeding is continued before any other feed or solid food is introduced

DATA CATEGORIES	RESPONSES PER AGE CATEGORY (months)														
	0-3 n=6		4-6 n=4		7-9 n=4		10-12 n=4		13-24 n=4		25-36 n=4		CLINICS - TOTAL RESPONSES		
	MT	MP	MT	MP	MT	MP	MT	MP	MT	MP	MT	MP	MT	MP	TOT
Less than three months	1	0	0	0	0	1	0	1	0	0	0	4	1	6	7 17.9%
Three months	6	0	1	0	2	1	2	8	1	1	2	4	14	14	28 71.8%
Ideal age for exclusive breast feeding (4-6/12)	0	0	0	0	0	0	0	1	1	0	0	1	1	2	3 7.7%
More than 6, less than 12 months	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12 Months / older	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Skipped the question	0	0	0	1	0	0	0	0	0	0	0	0	0	1	1 2.6%
TOTAL	7	0	1	1	2	2	2	10	2	1	2	9	16	23	39

DIFFERENTIATED BY CLINIC: MATHIBESTAD = MT ; MAKAPANSTAD = MP

The mothers mostly introduced solid foods at the age of three months (n=28, 71.8%). The total number of responses were the same for both clinics, but in the 0-3/12 group the Mathibestad area responses dominated, and in the 10-12/12 group the Makapanstad area responses dominated. Some introduced solid

foods before the age of three months (n=7, 17.9%). Most of these mothers were from the Makapanstad area. Only three mothers (7.7%) introduced solid food at the correct age of 4-6 months (10, 50, 65). The total number of responses for this time period regarding solid food introduction corresponded well with the responses received in a similar question that was put to the groups in 8.2.1 Sampling unit: General knowledge on infant feeding and health.

✦✦Why ? [Reasons for stopping exclusive breast feeding and introducing other feeds or solids]

DATA CATEGORIES	RESPONSES PER AGE CATEGORY (months)														
	0-3 n=6		4-6 n=4		7-9 n=4		10-12 n=4		13-24 n=4		25-36 n=4		CLINICS - TOTAL RESPONSES		
	MT	MP	MT	MP	MT	MP	MT	MP	MT	MP	MT	MP	MT	MP	TOT
Physiological readiness	3	0	0	0	1	1	2	2	0	0	2	2	8	5	13 52.0%
Health reasons	2	0	0	0	1	0	0	3	0	0	0	2	3	5	8 32.0%
Immunological reasons	0	0	1	0	0	0	0	0	0	0	0	0	1	0	1 4.0%
Clinic advice	0	0	0	0	1	0	0	0	0	0	0	0	1	0	1 4.0%
No answer given	0	0	0	0	0	0	0	0	1	0	0	0	1	0	1 4.0%
Skipped the question	0	0	0	1	0	0	0	0	0	0	0	0	0	1	1 4.0%
TOTAL	5	0	1	1	3	1	2	5	1	0	2	4	14	11	25

DIFFERENTIATED BY CLINIC: MATHIBESTAD = MT ; MAKAPANSTAD = MP

Similar to the previous responses, the reasons for stopping exclusive breast feeding were based on physiological readiness (n=13, 52.0%). This included immature digestion, inadequate stomach capacity and constipation. For this probe, more health reasons (n=8, 32.0%) were put forward than with the previous question("reasons for the decision of the time to initiate breast feeding of a baby"; n=0 for health reasons). The health reasons mentioned in this regard were very general and less specific responses, like the child being old enough, grown up enough, breast is best etc., were given. The responses showed that the age of three months was given as a reason for introducing solid foods in a baby's diet. The responses between the clinics were more or less the same.

✦✦ At what age should the child get the first extra food item while still being breast fed?

DATA CATEGORIES	RESPONSES PER AGE CATEGORY (months)														
	0-3 n=6		4-6 n=4		7-9 n=4		10-12 n=4		13-24 n=4		25-36 n=4		CLINICS - TOTAL RESPONSES		
	MT	MP	MT	MP	MT	MP	MT	MP	MT	MP	MT	MP	MT	MP	TOT
Two months	0	1	0	0	0	2	0	0	0	0	0	0	0	3	3 11.1%
Three months	3	1	2	0	2	0	2	0	1	1	2	0	12	2	14 51.9%
Ideal age to start weaning (4-6/12)	1	0	0	0	0	0	0	0	1	8	0	0	2	8	10 37.0%
TOTAL	4	2	2	0	2	2	2	0	2	9	2	0	14	13	27

DIFFERENTIATED BY CLINIC: MATHIBESTAD = MT ; MAKAPANSTAD = MP

felt that breast feeding was the first choice of feeding for a baby. However, exclusive breast feeding, without any additional liquid or solid food was rarely practised. This was confirmed by the fact that ALL the mothers indicated that a child should get something to eat or drink together with breast feeding. This response came from all the different age groups, including the 0-3/12 group. The age for introduction of anything other than breast milk was determined by a few probes and the responses from each confirmed the finding. The age of three months was considered to be the ideal age for the introduction of solid foods in these communities. Most mothers (75%) introduced solid food in the period from two weeks up to three months of age. Most of the others introduced solid food at the recommended age of between four and six months (10, 50, 65). The overall conclusion from all the focus group interviews conducted was that the age of three months was the ideal age for the onset of weaning practices. This was very different to previous beliefs that exclusive breast feeding is practised for a longer period of time (up to six months) in the rural communities (49, 53).

The theme was expanded with discussions concerning the appropriate age / time to stop breast feeding a child. The focus groups who discussed this issue, all (86%) concurred that breast feeding should be stopped between the ages of 18 to 24 months. It was clear from the discussions that mothers were committed to either the age of 18/12 or to 24/12, and not to an age in-between. About half of the mothers / caregivers indicated the 18 month age as appropriate, and the other half indicated 24 months. This practice was much more in line with recommendations that breast feeding should be continued in rural communities at least to the age of two years for the nutritional benefit thereof for the child (10, 12, 53).

8.2.2.3 Implementing breast feeding

✦ How many times during the **DAY** should you normally breast feed your child?

DATA CATEGORIES	RESPONSES PER AGE CATEGORY (months)														
	0-3 n=6		4-6 n=4		7-9 n=4		10-12 n=4		13-24 n=4		25-36 n=4		CLINICS - TOTAL RESPONSES		
	MT	MP	MT	MP	MT	MP	MT	MP	MT	MP	MT	MP	MT	MP	TOT
On demand	1	0	0	0	2	1	0	0	3	0	0	0	8	1	9 16.1%
Hourly (12X)	0	1	0	0	0	0	0	0	1	0	0	0	1	1	2 3.4%
Two hourly	0	1	2	0	1	0	3	0	0	0	0	0	6	1	7 12.5%
Three hourly	1	0	1	0	0	0	1	1	0	1	0	2	3	4	7 12.5%
Four hourly	0	2	0	2	1	2	1	4	1	1	2	4	5	18	23 41.1%
Six hourly	3	1	0	0	0	1	0	0	0	0	0	0	3	2	5 9.0%
12 hourly	1	0	0	0	0	0	0	0	0	0	0	0	1	0	1 1.8%
When available	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1 1.8%
Depends on routine	0	0	0	0	0	0	0	0	0	0	1	0	1	0	1 1.8%
TOTAL	6	5	3	2	4	4	5	7	7	2	3	8	28	28	56

DIFFERENTIATED BY CLINIC: MATHIBESTAD = MT ; MAKAPANSTAD = MP

The "day" was specified as 12 daylight hours. Although breast feeding on demand was advocated widely, it seemed not to be the most popular response of all those given (n=9, 16.1%). The mothers / caregivers from the Mathibestad area gave most of these responses (80%) of which more mothers / caregivers were from the 7-9/12 and 13-24/12 groups with only one response from the 0-3/12 group. This indicated that feeding on demand for the very young babies, who should be exclusively breast fed to the age of 4 - 6 months (6, 9, 10, 13, 49, 50, 51), did not readily occur in these communities. The two-hourly response was also mainly made in the Mathibestad area (n=7, 12.5%). Three-hourly feeding responses (n=7, 12.5%) were similar between the two clinics. The category that had the most responses was that of four-hourly feedings (n=23, 41.1%). The 0-3/12 groups had responses in all the different hourly categories and the 4-6/12 group had responses in the two, three and four-hourly categories. This seemed to indicate that not much of a pattern existed in the breast feeding practices of especially the very young child who relied mostly on breast feeding alone.

✦ How many times during the **NIGHT** should you normally breast feed your child?

DATA CATEGORIES	RESPONSES PER AGE CATEGORY (months)														
	0-3 n=6		4-6 n=4		7-9 n=4		10-12 n=4		13-24 n=4		25-36 n=4		CLINICS - TOTAL RESPONSES		
	MT	MP	MT	MP	MT	MP	MT	MP	MT	MP	MT	MP	MT	MP	TOT
On demand	2	0	4	1	3	1	0	2	2	1	0	2	14	6	20 32.8%
Hourly	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 %
Two hourly	0	0	0	0	0	0	0	0	1	0	0	0	1	0	1 1.6%
Three hourly	0	0	2	1	0	1	0	1	0	0	0	1	2	5	7 11.5%
Four hourly	0	2	0	1	2	2	1	2	0	1	0	1	3	9	12 19.7%
6 Hourly	1	3	0	0	1	0	1	1	1	1	4	1	10	6	16 26.6%
12 Hourly	0	1	0	0	0	0	0	0	0	0	1	0	1	1	2 3.3%
Skipped question	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1 1.6%
Before introduction of solids more often than after introduction	0	0	0	0	0	0	0	0	1	0	0	0	1	0	1 1.6%
Not at night	1	0	0	0	0	0	0	0	0	0	0	0	1	0	1 1.6%
TOTAL	4	7	7	3	8	4	2	6	5	4	7	4	33	28	61

DIFFERENTIATED BY CLINIC: MATHIBESTAD = MT ; MAKAPANSTAD = MP

The "night" was specified as 12 nighttime hours. Demand feeding (the baby just suckles when it feels like it) at night received more responses (n=20, 32.8%) than for day time (16.1%). As such it was also the most popular response, but again more so with the groups in the Mathibestad area. The next most popular response was the six-hourly regime (n=16, 26.2%) with most responses from the Mathibestad area, and

the four-hourly regime (n=12, 19.7%) with most responses from the Makapanstad area. Very few mothers however could actually tell how often the baby breast-fed during the night, as the baby was kept in the bed and fed when it woke up or cried.

The theme concerning the frequency and feeding time per breast feeding session was quite an important issue as it referred to the quality of the diet of the child and might be important in the evaluation of the nutritional status of breast fed children. During the focus groups interviews the moderators tried to determine how long and how frequent the babies were actually put to the breast; firstly, during the daytime and secondly, during the nighttime. Initially this seemed to be a very good idea to try to determine the breast feeding practices, as the 24h-recall technique did not give satisfactory results concerning this issue. However, the same problems were experienced with the focus groups. Mothers could not really tell how many times or how long breast feeding sessions were. A lot of probing was required to even get the responses, and a lot of guessing took place in the process. However, eventually, with all the responses grouped together, a few conclusions could be drawn in this regard. Breast feeding on demand is marketed worldwide as the best option for a newborn baby (6, 8, 9,13, 22, 49, 50). The fact that breast is best, was well believed in these communities, but real demand feeding not so much. The breast was given to the baby as a pacifier on demand, rather than for actual feeding purposes — hence the remark, "kort-kort", that was given on practically all the 24h-recalls of the children's dietary intakes. The probes for feeding frequency specifically stated that the mothers / caregivers should only consider the FEEDING times, and not the times when breast feeding was given as a comforting tool / as pacifier. Different responses were documented, as presented previously. The most popular response amongst all the groups was four-hourly feeds (3x/day). It was discouraging to find that seven of the eleven responses in the 0-3/12 age category were for three, two or one feed/s per day. This was an inadequate intake for babies in this age group, as they were relying on breast feeding for their total nutrient intake. Not much of a pattern could be substantiated from these results, as the responses throughout the different age categories all varied.

Night FEEDS were questioned in a similar fashion. Demand feeding was much more popular with night time than daytime feeds. Although practices on the frequency and duration of feeding sessions were questioned, these responses remained vague, due to the fact that the mothers could seldomly verify frequency or time spent on a feed. Babies were usually kept with their mothers in bed during the night, and therefore the mothers did not even always realise when the baby drank. From the responses it appeared that demand feeding in this regard was more concerned with pacifying or comforting the child, than feeding the child. Common responses to this probe included: "every time the baby wakes up", "or cries", "often", "whenever the baby wants it", "can't estimate", "many times", "whenever the mouth comes in contact with the breast". The other most popular responses amongst all groups were four and six hourly feeds (3 and 2 times respectively). For the 0-3/12 age group, most of the groups mentioned twice per night.

✦ Decisions made for the length of time to keep a baby on the breast during each feeding session

DATA CATEGORIES	RESPONSES PER AGE CATEGORY (months)														
	0-3 n=6		4-6 n=4		7-9 n=4		10-12 n=4		13-24 n=4		25-36 n=4		CLINICS - TOTAL RESPONSES		
	MT	MP	MT	MP	MT	MP	MT	MP	MT	MP	MT	MP	MT	MP	TOT
According to time	0	2	0	2	0	1	0	0	0	4	0	0	0	9	9 16.1%
Until baby is asleep	0	1	1	1	0	0	0	4	2	1	0	3	3	10	13 23.2%
Self-determined by the baby	4	2	2	3	2	2	2	4	5	1	2	5	17	17	34 60.7%
TOTAL	4	5	3	6	2	3	2	8	7	6	2	8	20	36	56

DIFFERENTIATED BY CLINIC: MATHIBESTAD = MT ; MAKAPANSTAD = MP

Very few of the mothers / caregivers made structured / definite decisions concerning the length of a feeding session. They rather let the baby itself decide when to stop the feeding (n=34, 60.7%). The clinics responded equally in this regard (n=17 each). The next option most often chosen, was to keep on breast feeding until the baby was asleep (n=13, 23.2%). The mothers / caregivers from the Makapanstad area responded more to this category, and it was also most popular with the older groups of children (10 months and older). The least number of responses was made for timing of feeds (n=9, 16.1%). Only the mothers / caregivers from the Makapanstad area responded in this category.

In summary: the length of the feeding session was thus almost impossible to determine. Mothers found it extremely difficult to put a time period to a breast feeding session. If they eventually did commit themselves to time per feeding session, the answers seemed to be unrealistic, either being too short (5 minutes) or too long (one hour). The most popular response category was "until the baby is satisfied", and the next one was "until the baby is asleep". Thus the baby decided on the length of breast feeding and the mother was hardly aware of the amount of milk that the baby was consuming, because of the indifference regarding the time on the breast or suckling for pacifying or for feeding.

8.2.2.4 Eating and drinking practices with breast feeding

✦ Should the child ever get anything else to eat or drink together with breast feeding ?

DATA CATEGORIES	RESPONSES PER AGE CATEGORY (months)														
	0-3 n=6		4-6 n=4		7-9 n=4		10-12 n=4		13-24 n=4		25-36 n=4		CLINICS - TOTAL RESPONSES		
	MT	MP	MT	MP	MT	MP	MT	MP	MT	MP	MT	MP	MT	MP	TOT
Yes	3	3	2	2	2	2	2	2	2	2	2	2	13	13	26 100%
No	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	3	3	2	2	2	2	2	2	2	2	2	2	13	13	26

DIFFERENTIATED BY CLINIC: MATHIBESTAD = MT ; MAKAPANSTAD = MP

An overall positive response was achieved from all the groups from both the clinics. This led to a conclusion that true exclusive breast feeding was not really practised in these communities.

✦ How often does the baby get anything else to eat or drink together with breast feeding?

DATA CATEGORIES	RESPONSES PER AGE CATEGORY (months)														
	0-3 n=6		4-6 n=4		7-9 n=4		10-12 n=4		13-24 n=4		25-36 n=4		CLINICS - TOTAL RESPONSES		
	MT	MP	MT	MP	MT	MP	MT	MP	MT	MP	MT	MP	MT	MP	TOT
Once / day	1	0	0	0	0	0	0	1	0	1	0	0	1	2	3 7.1%
Twice / day	0	2	0	0	0	1	0	1	0	1	0	0	0	5	5 11.9%
Three times / day	1	2	2	1	2	1	1	0	1	2	2	6	9	12	21 50.0%
Four times / day	1	0	1	0	0	1	0	0	1	0	0	1	3	2	5 11.9%
Five times / day	1	0	1	0	0	0	0	0	0	0	0	0	2	0	2 4.7%
Once / week	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1 2.4%
Twice / week	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1 2.4%
Three times / week	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1 2.4%
After every meal	0	0	0	0	0	0	1	0	0	0	0	0	1	0	1 2.4%
Anytime the baby cries	0	0	0	0	0	0	0	0	1	0	0	0	1	0	1 2.4%
Nestum: 2x/day Porridge: 1x/day Purity: 1x/day	0	0	0	1	0	0	0	0	0	0	0	0	0	1	1 2.4%
TOTAL	4	4	4	2	2	3	2	5	3	4	2	7	17	25	42

DIFFERENTIATED BY CLINIC: MATHIBESTAD = MT ; MAKAPANSTAD = MP

The frequency of feeding additional food / drinks to breast feeding that was reported by most of the mothers / caregivers (n=21, 50.0%) was three times per day. All the age categories responded to this option and reactions between the two clinics compared well. Twice and four times per day was the next popular choice (n=5, 11.9% respectively).

✦ When does the baby get the additional item that is given with breast feeding?

DATA CATEGORIES	RESPONSES PER AGE CATEGORY (months)														
	0-3 n=6		4-6 n=4		7-9 n=4		10-12 n=4		13-24 n=4		25-36 n=4		CLINICS - TOTAL RESPONSES		
	MT	MP	MT	MP	MT	MP	MT	MP	MT	MP	MT	MP	MT	MP	TOT
After breast feeding	2	3	2	1	2	2	2	1	0	1	2	2	10	10	20 83.3%
Before breast feeding	0	0	0	0	0	0	0	1	0	1	0	0	0	2	2 8.3%
In between breast feeding	0	0	0	1	0	0	0	0	1	0	0	0	1	1	2 8.3%
TOTAL	2	3	2	2	2	2	2	2	1	2	2	2	11	13	24

DIFFERENTIATED BY CLINIC: MATHIBESTAD = MT ; MAKAPANSTAD = MP

The overwhelming response from all the groups was that the ideal time of the day to give a baby something additional was after a breast feeding session (n=20, 83.3%). Thus breast feeding as such would still be the main feed for the baby and the additional food or drink would not fill the stomach before breast feeding.

✦ What does the baby get additionally to breast feeding?

DATA CATEGORIES	RESPONSES PER AGE CATEGORY (months)														
	0-3 n=6		4-6 n=4		7-9 n=4		10-12 n=4		13-24 n=4		25-36 n=4		CLINICS - TOTAL RESPONSES		
	MT	MP	MT	MP	MT	MP	MT	MP	MT	MP	MT	MP	MT	MP	TOT
Water	2	0	1	0	1	0	2	0	2	0	2	1	10	1	11 16.7%
Milk	1	0	0	0	0	0	0	0	0	0	0	0	1	0	1 1.5%
Other milk products(e.g. yoghurt)	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1 1.5%
Cereals - mealie-meal porridge	4	3	0	2	1	2	0	1	1	3	0	2	6	13	19 28.8%
Cereals - commercial products	0	4	0	2	0	2	0	1	0	2	0	2	0	13	13 19.7%
Fruit - fresh	0	0	0	0	0	0	0	1	1	1	0	0	1	2	3 4.5%
Fruit - commercial products (juice)	0	1	0	1	0	0	0	0	1	1	0	0	1	3	4 6.1%
Vegetables - fresh	0	0	0	0	0	0	0	3	0	0	0	2	0	5	5 7.6%
Vegetables - commercial products (Purity)	0	0	0	2	0	2	0	1	0	1	0	1	0	7	7 10.6%
Protein foods	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Solid foods	1	0	1	0	0	0	0	0	0	0	0	0	2	0	2 3.0%
TOTAL	8	8	2	7	2	6	2	7	5	9	2	8	21	45	66

DIFFERENTIATED BY CLINIC: MATHIBESTAD = MT ; MAKAPANSTAD = MP

A large variety of products were added to breast feeding. The most popular item added was that of cereals, like maize meal that was used to make soft porridge for the baby (n=19, 28.8%). This was practised by most of the age groups. The second most popular item was a commercial cereal, like Nestum or Cerelac (n=13, 19.7%), which was also mentioned by all the age groups. Most of these responses were made by mothers / caregivers from the Makapanstad area. Water was also added to the child's intake (n=11, 16.7%). This seemed to be more practised in the Mathibestad area. Fruits were used in both areas, but vegetables were only mentioned by the Makapanstad area. Additional milk feeds were rarely used besides breast feeding.

of the items added and reasons for it. All the focus groups indicated that a baby should get some food complementary to breast feeding. Most focus groups felt that the additional foods should be given to the baby after the child was breast fed — even the older age groups revealed this practice. The mothers of two

Most of the mothers / caregivers (n=14, 51.9%) indicated three months as the appropriate age for the introduction of weaning foods. A total of 63% of mothers gave solid food to their babies between the ages of two and three months. This result again proved to be similar to previous answers given. Only a few mothers / caregivers (n=10, 37.0%) indicated the appropriate age of four to six months (10, 50, 65). Mostly mothers / caregivers from the Mathibestad area indicated three months and more mothers / caregivers from the Makapanstad area indicated the ages of four to six months.

SECOND INTERPRETATION

✦ How long should you give breast milk as the one and only feed to a child?

✦✦ When breast feeding was stopped altogether after weaning foods was introduced

DATA CATEGORIES	RESPONSES PER AGE CATEGORY (months)														
	0-3 n=6		4-6 n=4		7-9 n=4		10-12 n=4		13-24 n=4		25-36 n=4		CLINICS - TOTAL RESPONSES		
	MT	MP	MT	MP	MT	MP	MT	MP	MT	MP	MT	MP	MT	MP	TOT
Less than three months	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Three months	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ideal age for exclusive breast feeding (4-6/12)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
More than 6/12, less than 12/12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Twelve to seventeen months	0	0	0	0	0	1	0	0	0	1	0	0	0	2	2 11.1%
Eighteen to twenty four months	0	5	0	1	0	3	0	0	1	5	0	0	1	14	15 83.3%
Twenty five to thirty six months	0	1	0	0	0	0	0	0	0	0	0	0	0	1	1 5.6%
TOTAL	0	6	0	1	0	4	0	0	1	6	0	0	1	17	18

DIFFERENTIATED BY CLINIC: MATHIBESTAD = MT ; MAKAPANSTAD = MP

All the responses were in the age category for children twelve months and older (n=18, 100%). All the responses, but one came from the mothers / caregivers from the Makapanstad area. Two of the age groups, 10-12/12 and 25-36/12 , had no responses, but all the other age categories had. Most mothers indicated that breast feeding was stopped completely between the ages of 18 to 24 months (n=15, 83.3%). The 0-3/12 and 13-24/12 groups received the most responses in this regard. A few stopped earlier, between 12 to 17 months (n=2, 11.1%) and only one stopped at the age of 36 months (5.6%). The number of responses related well with the previous, similar question in 8.2.1 Sampling unit: General knowledge on infant feeding and health.

✦✦Why? [For stopping breast feeding after weaning]

DATA CATEGORIES	RESPONSES PER AGE CATEGORY (months)														
	0-3 n=6		4-6 n=4		7-9 n=4		10-12 n=4		13-24 n=4		25-36 n=4		CLINICS - TOTAL RESPONSES		
	MT	MP	MT	MP	MT	MP	MT	MP	MT	MP	MT	MP	MT	MP	TOT
Physiological readiness	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Health reasons	0	4	0	0	0	1	0	0	1	3	0	0	1	8	9 81.8%
Immunological reasons	0	0	0	1	0	0	0	0	0	0	0	0	0	1	1 9.1%
He will be biting your nipples	0	0	0	0	0	0	0	0	1	0	0	0	1	0	1 9.1%
TOTAL	0	4	0	1	0	1	0	0	2	3	0	0	2	9	11

DIFFERENTIATED BY CLINIC: MATHIBESTAD = MT ; MAKAPANSTAD = MP

As to why breast feeding was stopped completely, answers given concerned health issues (n=9, 81.8%), rather than physiological reasons. Reasons included the relevant age and growth of the child. These responses were mainly given by mothers / caregivers from the Makapanstad area.

✦ At what age should a child start to eat the normal family meals?

DATA CATEGORIES	RESPONSES PER AGE CATEGORY (months)														
	0-3 n=6		4-6 n=4		7-9 n=4		10-12 n=4		13-24 n=4		25-36 n=4		CLINICS - TOTAL RESPONSES		
	MT	MP	MT	MP	MT	MP	MT	MP	MT	MP	MT	MP	MT	MP	TOT
Ideal age to start weaning (4-6/12)	0	2	0	0	0	1	0	0	0	1	0	0	0	4	4 13.8%
Seven to nine months	0	1	0	0	0	3	0	2	0	2	0	2	0	10	10 34.5%
Ten to twelve months	0	1	0	1	0	0	0	1	0	1	0	0	0	4	4 13.8%
Thirteen to eighteen months	0	0	0	1	0	1	0	0	0	2	0	1	0	5	5 7.2%
Nineteen to twenty four months	0	0	0	2	0	0	0	0	0	0	0	0	0	2	2 6.9%
When the teeth start to erupt	0	0	0	0	0	1	0	0	1	0	0	1	1	2	3 10.3%
We child knows how to eat alone	0	1	0	0	0	0	0	0	0	0	0	0	0	1	1 3.4%
TOTAL	0	5	0	4	0	6	0	3	1	6	0	4	1	28	29

DIFFERENTIATED BY CLINIC: MATHIBESTAD = MT ; MAKAPANSTAD = MP

The moderator in the Makapanstad area also probed the mothers / caregivers about the timing of introduction of a mixed diet instead of the first solid food eaten. Most mothers (n=10, 34.5%) said that their children received a mixed family diet by the age of 7-9/12. The next most popular age category was that of 13-18/12 (n=5, 7.2%), and then 4-6/12 and 10-12/12 (n=4, 13.8%).

This theme concerned the duration of exclusive breast feeding and / or the ideal time to introduce soft solid foods in the diet of the children, as practised in this community. It was clear from the results that all mothers

of the older age groups of children said that the food should be given first and the breast feed afterwards since the child needed something to drink after he had eaten. This is similar to the belief to give liquids (water) after meals (see explanation for addition of specific items - 8.2.2.2).

Cereals were the most popular group of items added to a baby's diet. The raw cereals, like maize meal or oats, were more popular than the commercial products, like Nestum or Cerelac, mainly because of availability and price. Most of the focus groups said that they gave soft porridge ("bogobe") to the babies. It was most often given without any additions, but some mothers, especially of the older children, said that they might add milk or the thin watery gravy ("sop") in which meat was boiled, to the soft porridge. The reasons given for including soft porridge ("maize meal pap") or any of the commercial brands in the diet of the baby covered a very wide spectrum. Physiological reasons, like the correct soft texture for a baby, to aid in swallowing and chewing were important; also to satisfy hunger and to prevent the baby from getting hungry again too quickly. The perception about hunger was that a baby would cry when he was hungry, and therefore soft porridge was given to prevent him from crying too often. "She will not be satisfied with breast feeding only", was one phrase used by one of the 0-3/12 groups to explain this. Secondly, health reasons were also given for including cereals. These reasons covered general health concerns: "it is good for the baby", or "to make the baby strong and healthy" ("matla"), "for the baby to gain enough weight" and "it has all the nutrients that are good for the baby" ("dikotla"). Unfortunately, soft porridge was also considered to have other special functions, mostly misconceptions, e.g. being responsible for building the body and providing strong bones.

The second item added most often was water. Many reasons given specifically for giving water on a daily basis. According to some of the focus groups water was necessary for the following reasons: "to help the food during digestion", "to help pass the feeds", "too little water leaves the child weak and will cause a sunken fontanel", "to help keeping adequate body water levels" and "to quench thirst". Except for the last reason which is physiologically based, the rest of these reasons were misconceptions. It was believed that water should be consumed after every meal as water was considered essential to aid in the digestion of the food consumed and the passing of food through the digestive system. Therefore it was believed that water should be given AFTER a breast feed or other food eaten. This corresponds with the practice of giving any additional items to eat or drink after a breast feeding session (see previous responses).

Very few fresh fruits were consumed, and if they were, it was for health reasons. Fruits were considered healthy and having all the nutrients that are good for the baby ("dikotla"). Commercial fruit juices were also given to the children. These juices however were not the pure fresh juices, but rather the sweetened, artificial types, as they were cheaper. Thirst was the main reason for giving other drinks. Fresh vegetable intakes were also limited. Mostly potato, sweet potato and carrots were consumed. Purity products were also given to babies, when it could be afforded. Soft texture and healthy foods were the valid reasons for giving these foods to babies. A few misconceptions also existed concerning vegetables: "potatoes and sweet potatoes help to build the body", and "Purity products aid in bones becoming strong".

To conclude on breast feeding as a theme, it is clear that describing the practice in clear-cut terms is very difficult. Mothers hardly practiced exclusive breast feeding; breast feeding together with complementary

food was more common. It was impossible to accurately estimate breast milk intakes in these children, because the mothers could not supply accurate information on the frequency of feeds, nor the duration of each. Attitudes were very positive towards breast feeding, but in an absent minded way. The baby was put to the breast, but the mother was not concerned with the time or rather the amount of milk taken in by the baby. They were mostly concerned that the child were happy and looked well. It seemed as if the breast was presented at every opportunity when the child cried, to stop it from crying, or when the baby was tired to help put it to sleep. If breast feeding alone would not keep the child happy, soft porridge was immediately added to the diet; to prevent hunger, and to keep the child happy. The amount of milk taken in was thus secondary to their actions and intentions.

Mothers added foods to the diets of their small babies far too soon and mostly for the wrong reasons. When food is introduced too early the risk of diarrhoea, malnutrition or other illnesses increase (12, 20, 41) Nutrition education is necessary concerning the value of exclusive breast feeding, the correct age to start weaning foods with the correct reasons for it, the nutritional value and functions of specific foods in the diets of babies and the weaning procedure (1, 10, 12, 50, 65).

8.2.3 SAMPLING UNIT: BOTTLE FEEDING

The theme on bottle feeding was explored by asking questions and probing on bottle feeding as the choice of feeding, the type of bottle feed used, preparation of bottle feeds and the hygiene practices involved with bottle feeding. The four mentioned topics delineated the context within which the data reduction was done and the results will be presented.

8.2.3.1 Bottle feeding as the feeding choice

✦ Is it general practice to give a newborn baby milk to drink from a bottle?

DATA CATEGORIES	RESPONSES PER AGE CATEGORY (months)														
	0-3 n=6		4-6 n=4		7-9 n=4		10-12 n=4		13-24 n=4		25-36 n=4		CLINICS - TOTAL RESPONSES		
	MT	MP	MT	MP	MT	MP	MT	MP	MT	MP	MT	MP	MT	MP	TOT
Yes	2	5	2	2	2	2	1	1	5	2	1	1	13	13	26 61.9%
No	1	1	2	0	5	0	1	1	2	1	1	1	12	4	16 38.1%
TOTAL	3	6	4	2	7	2	2	2	7	3	2	2	25	17	42

DIFFERENTIATED BY CLINIC: MATHIBESTAD = MT ; MAKAPANSTAD = MP

When this question was asked directly in this subsection, the responses seemed to be more positive than was expected after the discussions on breast feeding. The positive response (n=26, 61.9%) came equally distributed from both clinics, but the negative response (n=16, 38.1%) came mainly from the mothers / caregivers from the Mathibestad area. There was no difference between the response from the various age groups, except that the fewest responses were made by the 25-36/12 age group.