SOUTH AFRICAN HUMAN SCIENCES RESEARCH COUNCIL

AN AUDIENCE ANALYSIS WITH REGARD TO A NUTRITION GUIDANCE PROGRAMME: RESULTS OF A BASE-LINE SURVEY IN THE CISKEI

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PREFACE

At the request of the Medical Research Council (MRC) and in collaboration with the National Research Institute for Nutritional Diseases of the MRC and the Departments of Health of the RSA and Ciskei, the Institute for Communi= cation Research is undertaking an extensive research project with a view to developing a nutritional guidance programme. The problem of malnutrition was selected for the purpose of the investigation. In order to compile a guidance programme, an audience analysis was undertaken as the first step in the research. The results of this analysis appear in this report and deal, inter alia, with the current position regarding knowledge, customs and atti= tudes in connection with nutrition, as well as the way in which respondents obtain information on nutrition.

I should like to express my sincere thanks and appreciation to all the officials of the above-named institutions who contributed to the study. The positive attitude of the respondents who participated in the investigation is also greatly appreciated. Without their assistance it would have been impossible to carry out the investigation.

The statistical processing for this report was done by the HSRC's Institute for Statistical Research and the Institute for Information and Special Services was responsible for the editing.

J G Garbers

PRESIDENT

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OPSOMMING

Hierdie verslag bied die resultate van 'n basislynopname wat gedurende 1977 in die Ciskei onder 741 landelike en stedelike vroue met kinders gedoen is. Die opname was die eerste fase in 'n langtermynnavorsingsprojek wat in samewerking met die Mediese Navorsingsraad en die Departement van Gesondheid onderneem word. Die doel met die ondersoek is om 'n gesondheidsvoorligtingsprogram daar te stel met die oog op die uitskakeling van voedingsiektes. Inligting van die vroue is ingewin in verband met hul kennis, handelinge en houdings met betrekking tot die voeding van moeders en kinders. Dit blyk onder andere dat die vroue oor die algemeen nie in staat was om kwasjiorkor en pellagra vanaf foto's wat aan hulle getoon is, te identifiseer nie. Hulle was ook nie bewus van die verband tussen hierdie siektes en voeding nie. Oor sekere ander sake, byvoorbeeld die aspekte van borsvoeding, was die Xhosa-vroue se kennis bevredigend. Wat gebruike betref, is sommige bevindinge bevredigend, veral met betrekking tot borsvoeding. Dit wil egter voorkom of die benutting van beskikbare voedselsoorte verbeter kan word. Die moeders se houdings met betrekking tot voeding en voedsel, hoewel belemmer deur 'n geloof in taboes, was positief en kan beskou word as 'n gesonde basis vir 'n voedingsvoorligtingsprogram.

SUMMARY

This report presents the results of a base-line survey conducted during 1977 in the Ciskei among 741 urban and rural women with children. This survey was the first phase of a long-range research project, conducted in collaboration with the Medical Research Council and the Department of Health, with the aim of establishing a health guidance programme for eliminating nutritional diseases. Information from the women was obtained concerning their knowledge, practices and attitudes with regard to the diet of mothers and children. It appears, inter alia, that the women were generally not capable of identifying kwashiorkor and pellagra from the photographs shown to them, neither were they aware of the relationship between nutrition and these diseases. Regarding certain other matters, for example some aspects of breast-feeding, the Xhosa women's knowledge was satisfactory. As far as practices were concerned, some results were encouraging, especially with regard to breast-feeding, but it appears that in many respects the use of available food can be improved. The mother's attitudes towards nutrition and feeding, although hampered by some taboos, were positive and could be considered as a sound basis for a nutrition guidance programme.

CHAPTER 1

INTRODUCTION, AIM AND METHOD

1.1 INTRODUCTION

This research is being undertaken at the request of the Medical Research Council in conjunction with the National Research Institute for Nutritional Diseases, the Department of Health of the Ciskei, the Department of Health of the Republic of South Africa and the Department of Community Medicine of the University of Cape Town. The investigation is being conducted in two urban and two rural areas in the Ciskei.

1.2 AIM OF THE INVESTIGATION

The aim of the research is to develop a nutrition guidance programme which will then be tested in specific communities in the Ciskei. It stands to reason that because of its comprehensiveness this investigation will be conducted in various phases. An exploratory base-line survey was first conducted among women with children to determine their knowledge, practices and attitudes regarding the nutrition of pregnant women, women who breast-feed their babies, toddlers and young school children. Attention was also devoted to the communication media through which information is obtained on the above aspects. This survey was conducted during October/November 1977. Secondly, a guidance programme will be developed for correcting any shortcomings that may be revealed by the base-line survey. Thirdly, the programme will be evaluated to determine its effectiveness.

The results obtained with the base-line survey are given in this report. Attention will also be paid to the commensurability of the areas with a view to compiling the experimental and the control groups that will constitute the basis of the second and third phases of the research.

1.3 METHOD

1.3.1 Questionnaire

The data were collected with the aid of a questionnaire (translated into Xhosa) divided into the following five sections: Biographical data, data

on the use of the communication media, knowledge, practices and attitudes with regard to the various aspects of nutrition and related matters.

1.3.2 Sample

The investigation was confined to the following two urban areas, Zwelitsha* and Mdantsane, and to the two rural areas of Zwelitsha district and Peddie district. The samples for these areas consisted of Xhosa-speaking female respondents of 15 years and older, with children, who were selected in a random manner. Only one respondent per living unit was involved. Table 1.1 gives a concise exposition of the samples, classified according to age.

Chi-square calculations were used to determine the significance of the differences in respect of age between

(1) total urban and total non-urban;
(2) Zwelitsha urban and Mdantsane urban and
(3) Zwelitsha district and Peddie district.

Statistically the age distribution of the respondents in the urban areas (total) apparently differs significantly from that of respondents in the rural areas (total). Table 1.1 shows that relatively more younger respondents were involved in the urban samples than in the rural samples: 32 per cent of the urban respondents as against 20 per cent of the rural respondents were younger than 25 years, whereas 15 per cent of the urban as against 26 per cent of the rural respondents were 45 years or older. The middle-aged group, 25 to 44 years, constituted 54 per cent of the urban and 55 per cent of the rural respondents. However, no significant difference at the 5 per cent level was found with regard to age distribution between the two urban areas or between the two rural areas.

It is thus unlikely that differences in the results of the Zwelitsha and Mdantsane urban areas on the one hand, and Zwelitsha and Peddie districts on the other can be ascribed to age differences.

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*Respondents from Dimbasa were also involved.

TABLE 1.1

COMPOSITION OF THE SAMPLES

	AGE IN YEARS								
	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50+	Total
	Percentages								N
Total urban areas	11	21	19	15	14	6	4	11	360
Total rural areas	4	16	20	15	10	10	5	21	372
	$\chi^2 = 32,467$ $p < ,05$								
Zwelitsha urban	8	20	18	17	15	5	3	13	182
Mdantsane urban	13	22	20	13	12	6	4	10	178
	$\chi^2 = 5,790$ $p > ,05$								
Zwelitsha rural	5	20	17	11	10	12	7	18	175
Peddie rural	3	13	22	18	10	8	4	24	197
	$\chi^2 = 13,804$ $p > ,05$								
TOTAL SAMPLE	7	19	19	15	12	8	5	16	732*

*Nine respondents did not give their age

1.3.3 Collecting the data

Questionnaires were filled in during interviews which were conducted by a group of selected nurses who had been trained in using the questionnaire.

1.4 PROCESSING AND PRESENTING THE DATA

The items reported in the finding were translated freely from Xhosa. For the sake of convenience the results are presented in the following chapters:

Biographical and background data and media utilization
Knowledge
Practices
Attitudes

For the purpose of this report a comparison is made throughout between the results of the two urban areas (jointly) and the two rural areas (jointly); between the two urban areas separately as well as between the two rural areas separately. The chi-square (χ^2) statistical tests are used to determine the significance of differences. Only differences with an exceedance probability of 0,05 or less were considered significant. Such chi-square values are indicated with an asterisk in the tables. (No statistical test was carried out in cases in which the numbers in the cells were too small.) T-tests were used where means were involved.

To simplify the presentation of the tables, only percentages are indicated in the different answer categories, whereas the total number (N) is provided in each area. In some cases the N does not remain constant because some respondents did not reply to all items. In all cases the percentages reported were calculated on the number who actually answered. On account of approximations the totals of percentages in the respective tables are not precisely 100.

CHAPTER 2

BIOGRAPHICAL AND BACKGROUND DATA AND MEDIA UTILIZATION

2.1 INTRODUCTION

This chapter is devoted to the biographical and background data of the respondents. It also sheds light on their need for more knowledge on various aspects of nutrition, as well as on the sources they utilize to obtain this knowledge.

2.2 BIOGRAPHICAL DATA

2.2.1 Marital status (Table 2.1)

Slightly less than a quarter (24%) of the respondents indicated that they had never been married; approximately two-thirds indicated that they were married in some way or other, while 10 per cent were widows.

Half of the unmarried women lived in the urban area of Mdantsane, as against less than a quarter in the urban area of Zwelitsha. The other respondents lived in the two rural areas. There were, however, twice as many unmarried women in the Zwelitsha district as in the Peddie district (Table 2.1).

It is interesting that more than twice as many women in the rural areas as in the cities were married under the lobola system, whereas the inverse applies to civil marriages.

2.2.2 Status in the marriage (Table 2.2)

A small number of the respondents (4%) indicated that they were 'first', 'second' or 'third' wives; 29 per cent were unmarried and 67 per cent were the only wives. The data in this table cannot be compared directly with the data in the previous table, since some widows also indicated whether they had been the 'only', 'first', 'second' or 'third' wives in the marriage.

2.2.3 Level of education (Table 2.3)

Table 2.3 shows that respondents in the urban areas were more highly qualified

than those in rural areas. Approximately one fifth (22%) of the entire test group had no educational qualifications; 61 per cent had reached the lower or higher primary level, whereas 16 per cent had passed a junior secondary or higher examination.

An analysis of the level of education according to the two urban areas as well as to the two rural areas reveals that there is no significant relationship between the level of education and the residential areas of the respondents.

2.2.4 Occupation (Table 2.4)

The large majority (91%) of the total number of respondents were housewives and were not economically active. The percentages are 84 and 97 respectively for the urban and rural areas.

2.3 BACKGROUND DATA

2.3.1 The frequency with which the respondents' husbands are at home (Table 2.5)

Whereas 31 per cent of all urban respondents' husbands were at home every night, only 10 per cent of those of the rural respondents came home every night. The husbands of 5 per cent of the urban respondents and of 12 percent of the rural respondents came home once a month. A statistically significant difference was found between the frequencies with which the husbands of urban respondents from Zwelitsha and of those from Mdantsane were at home.

As far as non-urban areas are concerned, no statistically significant differences were found at the 5 per cent level between Zwelitsha district and Peddie district.

2.3.2 Number of children: Living children and total number of children born (Table 2.6)

The mean number of living children for the two urban areas together is 3,29 per respondent, and 3,75 for the rural areas. The following mean numbers of living children were found for the four separate areas:

Zwelitsha urban:	3,53
Mdantsane urban:	3,04
Zwelitsha district:	3,75
Peddie district:	3,76

(It must be pointed out that these figures do not refer to completed families only.)

There is a statistically significant difference in the mean number of living children between the urban areas of Zwelitsha and Mdantsane, but not between that of Zwelitsha district and Peddie district.

Table 2.6 also shows the mean number of live births. The mean number varies from 3,92 for Mdantsane (urban) to 4,88 for Peddie (rural). As in the case of the number of living children, the difference between the two urban areas is significant, while there is no significant difference between the rural areas.

2.3.3 Mean number of children who died at various ages (Table 2.7)

Table 2.7 reflects the mean number of children per respondent who died at the respective ages. It appears that the higher the age categories are, the smaller the mean number of children who died. For example, in Mdantsane and Zwelitsha (urban) 0,24 and 0,39 children died when they were 6 months or younger, whereas 0,04 and 0,05 children died in the same two areas when they were between 5 and 10 years of age.

Table 2.7 also reveals that there was only one significant difference, namely that the average death-rate in the age group 0 to 6 months was higher in Zwelitsha (urban) than in Mdantsane (urban).

2.3.4 Number of adults and children in living units (Table 2.8)

An average of 3,14 and 2,45 adults and 4,49 and 4,47 children per living unit respectively live in the urban and rural areas (total). There is very little difference between the mean numbers of children, but urban living units are much more densely inhabited by adults than rural units.

With regard to the two urban as well as the two rural areas, no statistically significant differences were found in the number of adults per living unit. The averages of 4,50 children per unit in the Zwelitsha district and 4,44 in the Peddie district do not differ significantly either. The average of 4,17 children in Mdantsane does in fact differ significantly from the 4,79 in Zwelitsha.

2.3.5 Average age of youngest and eldest children (Table 2.9)

Although the average ages of the eldest as well as the youngest children differ statistically significantly between the urban and rural areas, the ages of the two groups of children do not differ significantly between the two urban and the two rural areas. This means that as far as this aspect is concerned the two urban and the two rural areas are comparable.

2.3.6 Present pregnancy and breast-feeding (Table 2.10)

Table 2.10 shows that approximately 5 per cent of the women in urban areas (total) and 6 per cent in rural areas (total) were pregnant at the time of the survey. This difference, as well as the difference between Zwelitsha (urban) and Mdantsane on the one hand, and between Zwelitsha (rural) and Peddie on the other is not statistically significant.

Thirty per cent of the respondents were breast-feeding at the time.

2.3.7 Place of last confinement (Table 2.11)

Table 2.11 shows that 31 per cent of the total number of respondents remained at home for their last confinement, whereas the remainder (69%) went to a hospital or clinic.

Twenty-one per cent of the women in the two urban areas and 40 per cent in the two rural areas remained at home for their last confinement.

In Zwelitsha (urban) 26 per cent of the women remained at home and 74 per cent went to a hospital or clinic - the respective figures for Mdantsane (urban) are 16 and 84 per cent. The difference between the two urban areas is statistically

significant.

Table 2.11 also shows that 47 per cent of the respondents in the Zwelitsha district and 34 per cent in the Peddie district remained at home for the confinement. This difference is also statistically significant.

2.3.8 Place preferred for next confinement (Table 2.12)

The women's confidence in the available medical and paramedical services in respect of confinements is reflected in the fact that the large majority of the total number of respondents intend going to a hospital or clinic for their next confinement: 84 per cent share this opinion, 13 per cent do not want to or cannot go, or do not know whether they will have another baby, and only 3 per cent wish to remain at home. It is significant that 15 per cent of the rural as against 11 per cent of the urban respondents cannot have or do not want another baby - a factor which may be related to the relatively higher ages (Table 1.1) and larger mean number of children (Table 2.6) of the rural population (Table 2.12).

No statistically significant differences were found between the answers to this question of respondents from Zwelitsha and Mdantsane urban areas or between the answers of respondents from the Zwelitsha and Peddie districts.

2.4 MEDIA UTILIZATION

2.4.1 Reading knowledge of Xhosa (Table 2.13)

More than half of the respondents (56%) mentioned that they can read Xhosa well, and 23 per cent indicated that they cannot read Xhosa at all. It was also found that 69 per cent of the urban respondents from Mdantsane as against 54 per cent of those from Zwelitsha can read Xhosa well.

A high degree of similarity was found with regard to the two rural areas: Approximately 51 per cent of the respondents interviewed in the districts of Zwelitsha and Peddie indicated that they can read Xhosa well; 29 per cent of the respondents in the Zwelitsha district and 25 per cent in the Peddie district cannot read Xhosa.

The level of education (Table 2.3) of the respondents must be taken into consideration in any interpretation of the data on the reading knowledge of Xhosa as well as their speaking and reading knowledge of English.

2.4.2 Speaking and reading knowledge of English (Table 2.14)

It appears that more respondents have a better reading knowledge than speaking knowledge of English; 39 per cent indicated that they can speak English well or reasonably well as against 46 per cent who can read it well or reasonably well. Comparatively more respondents in the urban areas than in the rural areas indicated that they have a reading and speaking knowledge of English.

With regard to reading as well as speaking, a significant difference was found between respondents from the Zwelitsha urban areas and those from Mdantsane: more respondents in Mdantsane indicated that they can speak and read English.

2.4.3 Possession of a radio (Table 2.15)

Approximately two-thirds of the test group (64%) own a radio. Seventy-one per cent of the urban respondents as against 59 per cent of the rural respondents indicated that they had a radio.

No statistically significant difference was found with regard to possession of a radio between respondents from the urban areas of Zwelitsha and Mdantsane or between those from the two rural areas.

2.4.4 Need for information on various aspects of nutrition (Table 2.16)

Table 2.16 illustrates the need of respondents for more knowledge on certain aspects of nutrition.

"Do you think you know enough about the food you should eat when you are pregnant?"
"Do you think you know enough about breast-feeding?"
"Do you think you know enough about baby feeding in general?"
"Do you think you know enough about weaning a baby?"
"Do you think you know enough about toddler feeding?"
"Do you think you know enough about feeding your family?"

With one exception there were more respondents in each of the four areas who replied "no" (they do not know enough) than those who replied "yes". Comparatively speaking the greatest need is for information on nutrition

during pregnancy. Almost two-thirds of the respondents indicated that they need more information on this aspect. A summary of the data reveals that the ratio between persons who know enough and those who wish to know more is more or less 45 : 55.

No statistically significant differences were found between respondents from the urban and rural areas or between those from the two urban areas. A significant difference was found between respondents from the Zwelitsha district and those from the Peddie district in respect of the need for information on infant nutrition, toddler nutrition and family nutrition. There were more respondents in all three cases in the Peddie district than in the Zwelitsha district who maintained that they had sufficient knowledge.

2.4.5 Sources of information on health during pregnancy and on various aspects of nutrition (Tables 2.17 to 2.20)

Respondents were asked where they obtained most information on:

Health during pregnancy
Infant nutrition
Weaning period
Family nutrition

It appears that without exception clinics are the most important sources of information: Clinics provide information to more than 60 per cent of the total number of respondents on health during pregnancy and on infant nutrition, and to 48 and 41 per cent of the respondents on the weaning of babies and on family nutrition.

As far as the total test group is concerned, it was found that the mother-in-law is the second most important source of information, followed by the mother of the respondent. The mother-in-law's role as a source of information is considerably greater in the rural areas (total) than in the urban areas (total). In the Mdantsane urban area the mother of the respondent has more influence than the mother-in-law.

Whereas it is noted that only 2 per cent of the respondents in this survey indicated that the mass media are the most important sources of information on

family feeding, it should also be taken into consideration that a considerable number of respondents indicated in a previous survey (D.P. van Vuuren, 1977) that the radio programme "Impilo Yethu" furnished them with knowledge on nutrition, or encouraged them to attend the clinic/hospital/doctor.

TABLE 2.1

MARITAL STATUS

	Never married	Living together	Married: By lobola	Married: Civil	Married: Civil & lobola	Widowed	Divorced/ Deserted	Total
	Percentages							N
Total urban areas	36	2	23	14	17	6	2	362
Total rural areas	13	2	47	6	17	14	1	379
	$\chi^2 = 94,135*$							
Zwelitsha urban	21	3	27	18	22	8	1	184
Mdantsane urban	51	2	19	10	11	4	3	178
	$\chi^2 = 39,584*$							
Zwelitsha rural	19	2	44	3	17	14	1	178
Peddie rural	8	1	49	8	18	14	1	201
	$\chi^2 = 12,914*$							
TOTAL	24	2	35	10	17	10	1	741

TABLE 2.2

STATUS OF WIFE IF HUSBAND HAS MORE THAN ONE WIFE

	Not married	Only wife	First, second or third wife	Total
	Percentages			N
Total urban areas	40	58	2	362
Total rural areas	19	75	6	379
	$\chi^2 = 43,993*$			
Zwelitsha urban	27	71	2	184
Mdantsane urban	53	46	2	178
	$\chi^2 = 24,874*$			
Zwelitsha rural	25	67	8	178
Peddie rural	13	82	4	201
	$\chi^2 = 10,907*$			
TOTAL	29	67	4	741

*$p < 0,05$

TABLE 2.3

EDUCATIONAL QUALIFICATIONS

	None and don't know	Lower primary	Higher primary	Junior secondary	Senior secondary and above	Total
			Percentages			N
Total urban areas	19	19	42	16	4	362
Total rural areas	26	17	45	11	2	379
			χ^2 = 13,578*			
Zwelitsha urban	22	20	40	13	5	184
Mdantsane urban	15	17	44	20	4	178
			χ^2 = 6,328			
Zwelitsha rural	28	15	43	12	2	178
Peddie rural	24	19	46	9	1	201
			χ^2 = 2,469			
TOTAL	22	18	43	13	3	741

TABLE 2.4

OCCUPATION

	Housewives and non-economically active	Different occupations	Total
	Percentages		N
Total urban areas	84	16	362
Total rural areas	97	3	379
	χ^2 = 37,740*		
Zwelitsha urban	84	16	184
Mdantsane urban	84	16	178
	χ^2 = 0,022		
Zwelitsha rural	98	2	178
Peddie rural	97	3	201
	χ^2 = 0,511		
TOTAL	91	9	741

*p < 0,05

TABLE 2.5

HOW OFTEN DOES YOUR HUSBAND COME HOME FROM WORK?

	N/a. Does not have a husband	Annually	Every night	Every week	Every month	Don't know	Total
			Percentages				N
Total urban areas	44	7	31	5	5	8	362
Total rural areas	28	30	10	6	12	13	379
			χ^2 = 122,925*				
Zwelitsha urban	30	10	31	8	10	10	184
Mdantsane urban	58	4	31	1	1	5	178
			χ^2 = 48,611*				
Zwelitsha rural	33	25	11	8	10	12	178
Peddie rural	24	35	8	4	14	14	201
			χ^2 = 10,526				
TOTAL	36	19	20	6	9	10	741

TABLE 2.6

MEAN NUMBER OF LIVING CHILDREN AND CHILDREN ALTOGETHER

	Living			Altogether		
	Mean	Min.	Max.	Mean	Min.	Max.
Total urban areas (N = 362)	3,29	1	11	4,30	1	17
Total rural areas (N = 379)	3,75	1	10	4,85	1	20
t	2,895*			2,467*		
Zwelitsha urban (N = 184)	3,53	1	11	4,68	1	17
Mdantsane urban (N = 178)	3,04	1	11	3,92	1	15
t	2,184*			2,387*		
Zwelitsha rural (N = 178)	3,75	1	10	4,83	1	12
Peddie rural (N = 201)	3,76	1	10	4,88	1	20
t	0,060			0,162		
TOTAL (N = 741)	1,918	1	11	2,481	1	20

*$p < 0,05$

TABLE 2.7

MEAN NUMBER OF CHILDREN THAT DIED AT DIFFERENT AGES

	Ages					
	0-6 months	7-12 months	1-2 years	3-4 years	5-10 years	11-20 years
Total urban areas (N = 362)	0,31	0,21	0,17	0,08	0,05	0,03
Total rural areas (N = 379)	0,32	0,18	0,14	0,09	0,05	0,02
t	1,139	0,884	0,853	0,328	0,189	1,098
Zwelitsha urban (N = 184)	0,39	0,22	0,18	0,08	0,05	0,03
Mdantsane urban (N = 178)	0,24	0,20	0,15	0,08	0,04	0,04
t	1,963*	0,354	0,665	0,73	0,160	0,644
Zwelitsha rural (N = 178)	0,28	0,20	0,16	0,09	0,06	0,02
Peddie rural (N = 201)	0,35	0,16	0,12	0,09	0,04	0,02
t	1,085	0,677	0,965	0,135	0,507	0,165
TOTAL (N = 741)	0,164	0,092	0,071	0,046	0,026	0,010

TABLE 2.8

MEAN NUMBER OF ADULTS AND CHILDREN IN LIVING UNITS

	Adults			Children		
	Mean	Min.	Max.	Mean	Min.	Max.
Total urban areas (N = 362)	3,14	1	9	4,49	1	15
Total rural areas (N = 379)	2,45	1	9	4,47	1	13
t	6,773*			0,096		
Zwelitsha urban (N = 184)	3,07	1	8	4,79	1	13
Mdantsane urban (N = 178)	3,20	1	9	4,17	1	15
t	0,831			2,423*		
Zwelitsha rural (N = 178)	2,51	1	9	4,50	1	13
Peddie rural (N = 201)	2,40	1	9	4,44	1	11
t	0,881			0,243		
TOTAL (N = 741)	1,253	1	9	2,286	1	15

*p < 0,05

TABLE 2.9

MEAN AGES AND MINIMUM AND MAXIMUM AGES OF OLDEST AND YOUNGEST CHILDREN IN YEARS

	Oldest			Youngest		
	Mean	Min.	Max.	Mean	Min.	Max.
Total urban areas (N = 362)	11,39	1	55	4,30	1	47
Total rural areas (N = 379)	15,26	1	60	5,51	1	40
t	4,390*			2,255*		
Zwelitsha urban (N = 184)	11,89	1	55	4,18	1	29
Mdantsane urban (N = 178)	10,89	1	50	4,43	1	47
t	0,878			0,359		
Zwelitsha rural (N = 178)	14,46	1	45	4,70	1	39
Peddie rural (N = 201)	15,97	1	60	6,22	1	40
t	1,125			1,867		
TOTAL (N = 741)	7,805	1	60	2,818	1	29

TABLE 2.10

PRESENT PREGNANCY AND BREAST-FEEDING

	Pregnant		Breast-feeding	
	Percentages		Percentages	
	Yes	No	Yes	No
Total urban areas (N = 362)	5	95	29	71
Total rural areas (N = 379)	6	94	31	68
χ^2	0,426		0,503	
Zwelitsha urban (N = 184)	4	96	32	68
Mdantsane urban (N = 178)	6	94	26	74
χ^2	0,309		1,151	
Zwelitsha rural (N = 178)	6	94	36	64
Peddie rural (N = 201)	6	94	27	73
χ^2	0,120		3,235	
TOTAL (N = 741)	5	95	30	70

*$p < 0,05$

TABLE 2.11

WHERE WAS YOUR LAST CHILD BORN?

	At home or elsewhere	Clinic/hospital	Total
	Percentages		N
Total urban areas	21	79	362
Total rural areas	40	60	379
	χ^2 = 33,565*		
Zwelitsha urban	26	74	184
Mdantsane urban	16	84	178
	χ^2 = 5,304*		
Zwelitsha rural	47	53	178
Peddie rural	34	66	201
	χ^2 = 6,488*		
TOTAL	31	69	741

TABLE 2.12

IF YOU HAVE ANOTHER CHILD, WHERE WILL YOU GO FOR THE BIRTH?

	Don't know, can't have more children	Home	Clinic/hospital	Total
	Percentages			N
Total urban areas	11	2	87	362
Total rural areas	15	5	80	379
		χ^2 = 6,036*		
Zwelitsha urban	11	4	85	184
Mdantsane urban	10	1	89	178
		χ^2 = 5,480		
Zwelitsha rural	16	5	79	178
Peddie rural	14	4	82	201
		χ^2 = 0,417		
TOTAL	13	3	84	741

*$p < 0,05$

TABLE 2.13

CAN YOU READ XHOSA?

	Well	Average	Poor	Not at all	Total
	Percentages				N
Total urban areas	61	16	4	19	362
Total rural areas	51	16	7	27	379
	χ^2 = 19,726*				
Zwelitsha urban	54	19	3	24	184
Mdantsane urban	69	12	4	15	178
	χ^2 = 10,912*				
Zwelitsha rural	51	16	5	29	178
Peddie rural	51	16	8	25	201
	χ^2 = 1,740*				
TOTAL	56	16	5	23	741

TABLE 2.14

CAN YOU SPEAK AND READ ENGLISH?

	Speak				Read				Total
	Percentages				Percentages				N
	Well	Average	Poor	Not at all	Well	Average	Poor	Not at all	
Total urban areas	13	36	14	38	20	34	12	33	362
Total rural areas	8	22	17	53	13	25	17	45	379
	χ^2 = 27,655*				χ^2 = 22,438*				
Zwelitsha urban	13	32	11	45	17	30	13	40	184
Mdantsane urban	14	40	16	30	24	38	12	26	178
	χ^2 = 9,567*				χ^2 = 8,140*				
Zwelitsha rural	10	20	16	55	15	24	14	47	178
Peddie rural	8	23	19	50	11	25	20	44	201
	χ^2 = 2,053				χ^2 = 3,533				
TOTAL	11	28	16	45	17	29	15	39	741

*$p < 0,05$

TABLE 2.15

DO YOU OWN A RADIO?

	Yes	No	Total
	Percentages		N
Total urban areas	71	29	362
Total rural areas	59	41	379
	χ^2 = 11,495*		
Zwelitsha urban	71	29	184
Mdantsane urban	71	29	178
	χ^2 = 0,007		
Zwelitsha rural	54	46	178
Peddie rural	63	37	201
	χ^2 = 2,949		
TOTAL	65	35	741

TABLE 2.16

DO YOU THINK YOU KNOW ENOUGH ABOUT FEEDING?

	Own feeding during pregnancy		Breast-feeding		Baby feeding		Weaning a baby		Toddler feeding		Family feeding	
	Percentages											
	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
Total urban areas (N = 362)	39	61	47	53	45	55	39	61	46	54	44	56
Total rural areas (N = 379)	33	67	47	53	42	58	45	55	48	52	48	52
χ^2	2,614		0,021		0,488		3,418		0,135		1,081	
Zwelitsha urban (N = 184)	39	61	46	54	42	58	38	62	43	57	45	55
Mdantsane urban (N = 178)	39	61	48	52	48	52	39	61	50	50	44	56
χ^2	0,005		0,163		1,051		0,063		1,816		0,001	
Zwelitsha rural (N = 178)	30	70	43	57	37	63	42	58	40	60	41	59
Peddie rural (N = 201)	36	64	50	50	47	53	49	51	55	45	54	45
χ^2	1,821		2,163		4,008*		1,965		8,331*		7,111*	

*$p < 0,05$

TABLE 2.17

SOURCES OF INFORMATION ON PREGNANCY

	Never pregnant	Mass media	Medical	Clinic	Mother	Sisters/ Sisters-in-law	Mother-in-law	Own ex= perience	Total
				Percentages					N
Total urban areas	3	2	3	69	9	1	10	3	362
Total rural areas	2	1	7	55	5	2	21	6	379
				χ^2 = 37,376*					
Zwelitsha urban	3	2	3	68	5	2	14	3	184
Mdantsane urban	3	3	3	69	12	1	5	3	178
				χ^2 = 14,678*					
Zwelitsha rural	2	2	6	54	6	3	19	8	178
Peddie rural	2	1	7	57	4	1	23	5	201
				χ^2 = 6,188					
TOTAL	3	2	5	62	7	2	15	5	741

TABLE 2.18

SOURCES OF INFORMATION ON THE WEANING PERIOD

	Don't know	Mass media	Medical	Clinic	Mother	Mother-in-law	Own expe= rience	Total
				Percentages				N
Total urban areas	6	1	3	54	14	14	7	362
Total rural areas	3	1	6	42	10	29	9	379
				χ^2 = 34,464*				
Zwelitsha urban	6	1	3	54	9	20	6	184
Mdantsane urban	7	2	2	54	18	8	9	178
				χ^2 = 16,485*				
Zwelitsha rural	3	2	9	40	11	26	10	178
Peddie rural	4	1	2	43	9	32	8	201
				χ^2 = 9,682				
TOTAL	5	1	4	48	12	22	8	741

*$p < 0,05$

TABLE 2.19

SOURCES OF INFORMATION ON INFANT FEEDING

	Don't know	Mass media	Medical	Clinic	Mother	Mother-in-law	Own ex=perience	Total
				Percentages				N
Total urban areas	2	3	3	66	11	11	4	362
Total rural areas	1	2	7	56	6	21	6	379
				χ^2 = 30,744*				
Zwelitsha urban	3	2	4	64	8	16	3	184
Mdantsane urban	1	4	2	68	15	6	4	178
				χ^2 = 15,686*				
Zwelitsha rural	1	2	10	53	7	20	7	178
Peddie rural	1	2	4	58	5	23	6	201
				χ^2 = 6,797				
TOTAL	1	3	5	61	9	16	5	741

TABLE 2.20

SOURCES OF INFORMATION ON FAMILY FEEDING

	Don't know	Mass media	Medical	Clinic	Mother	Mother-in-law	Own ex=perience	Total
				Percentages				N
Total urban areas	7	3	3	46	18	15	8	362
Total rural areas	4	2	5	36	13	31	10	379
				χ^2 = 31,728*				
Zwelitsha urban	6	2	4	43	15	22	8	184
Mdantsane urban	8	3	3	48	21	8	9	178
				χ^2 = 16,356*				
Zwelitsha rural	3	2	6	33	13	31	11	178
Peddie rural	4	1	4	38	14	30	8	201
				χ^2 = 3,987				
TOTAL	6	2	4	41	16	23	9	741

*$p < 0,05$

respondents in the rural areas (61%) than in the urban areas (35%) never spoke to their husbands about family planning.

4.2.4 Eating habits

(a) The pregnant women (Tables 4.12 and 4.13)

In order to determine what types of food respondents consumed during their most recent pregnancy, they were asked to indicate from the 8 types of food mentioned in Table 4.12 whether they had 'regularly' consumed these foods in the course of their most recent pregnancy. The foods are listed below in order of the percentages of the "yes" responses (eaten regularly) of the total test group.

Vegetables, 94%
Meat, 88%
Potatoes, 84%
Fruit, 82%
Milk, 81%
Eggs, 75%
Fish, 64%
Dry beans, 57%

In the case of each type of food excepting dry beans, more urban than rural respondents (total) indicated that they consumed it 'regularly'. As far as the use of milk and eggs is concerned, significant differences occurred between the two urban areas. These foods were used to a greater extent in Mdantsane than in Zwelitsha. Regarding the use of fruit and potatoes, it was evident that fewer respondents in the Zwelitsha district than in the Peddie district used these two foods.

It is interesting to note that 10 per cent of the women in the urban areas and 12 per cent of those in the rural areas indicated that, in order to maintain their health during their most recent pregnancy, they consumed herbal mixtures of a "kusiyazi" (Table 4.13).

role in taking decisions of such a nature is bigger in the urban areas than in the rural areas (22% as against 17%). According to the replies to the question as to whom the respondents approached for initial assistance (Table 4.7) it would appear that the majority (94%) chose the medical profession (clinic/hospital - 62%, and medical practitioners - 32%). However, there were more women in the rural areas (total) than in the urban areas (total) who initially approached a clinic/hospital for assistance (67% as against 57%).

With a few exceptions, the order of priority regarding the second instance to be consulted (Table 4.8) remains the same as stated above. The exception in this respect is that respondents in urban Zwelitsha to a larger degree preferred a medical practitioner to a hospital/clinic (53% as against 42%).

4.2.3 Family planning (Tables 4.9 to 4.11)

Particulars concerning family planning are contained in Tables 4.9, 4.10 and 4.11 from which it appears that 29 per cent of the women practice family planning. More urban (39%) than rural women (20%) followed this practice. From a comparison of the two urban areas, as well as of the two rural areas, it would appear that the women in Zwelitsha (urban as well as rural) were least willing to practice family planning (Table 4.9). Table 4.10 shows that apart from the 29 per cent women practising family planning, a further 6 per cent were infertile/sterile and that 14 per cent had already reached the stage of menopause.

Although contraceptives were readily available, Table 4.10 shows that in some cases they were not used, inter alia, because the respondents themselves did not like them, or because their husbands forbade the use of these appliances, or because the respondents were not aware of the existence of the contraceptives or because they wished to have more children.

The following question was put to the married women: "Do you and your husband talk to each other about family planning?" (Table 4.11).

Fifty per cent of these married women replied that they and their husbands never spoke to each other about family planning. Thirty one per cent indicated that they seldom and nineteen per cent that they often spoke about it. More

TABLE 3.13

WHICH ONE OF THE FOLLOWING TWO FOODS IS THE BEST FOOD FOR YOUR CHILDREN TO EAT?

	"Umngqusho" with white maize and beans and don't know	"Umngqusho" with yellow maize and beans	Cooked carrots and don't know	Raw carrots	Cabbage cooked for a short time and eaten when still green	Cabbage cooked for a long time until pinkish grey and don't know	Total
	Percentages						N
Total urban areas	77	23	49	51	85	15	362
Total rural areas	73	27	52	48	74	26	379
	χ^2 = 1,569		χ^2 = 0,84		χ^2 = 13,273*		
Zwelitsha urban	77	23	51	49	86	14	184
Mdantsane urban	77	23	46	54	83	17	178
	χ^2 = 0,002		χ^2 = 0,91		χ^2 = 0,513		
Zwelitsha rural	77	23	50	50	76	24	178
Peddie rural	70	30	54	46	72	28	201
	χ^2 = 2,568		χ^2 = 0,53		χ^2 = 0,858		
TOTAL	75	25	50	50	79	21	741

"Umngqusho" is a samp and bean dish.

TABLE 3.14

WHAT TYPE OF BREAD IS BEST FOR YOUR HEALTH?

	White bread	Brown bread	Total
	Percentages		N
Total urban areas	5	95	362
Total rural areas	17	83	379
	χ^2 = 24,339*		
Zwelitsha urban	6	94	184
Mdantsane urban	4	96	178
	χ^2 = 0,401		
Zwelitsha rural	11	89	178
Peddie rural	22	78	201
	χ^2 = 8,869*		
TOTAL	11	89	741

*p < 0,05

TABLE 3.15

IS POWDERED OR FRESH SKIMMED MILK A GOOD SOURCE OF BODY-BUILDING FOODS?

	Yes	No	Don't know	Total
		Percentages		N
Total urban areas	22	62	16	362
Total rural areas	29	52	20	379
		χ^2 = 7,848*		
Zwelitsha urban	21	59	20	184
Mdantsane urban	24	65	11	178
		χ^2 = 5,390		
Zwelitsha rural	30	51	19	178
Peddie rural	27	53	20	201
		χ^2 = 0,613		
TOTAL	25	57	18	741

*p < 0,05

CHAPTER 4

PRACTICES

4.1 INTRODUCTION

In this chapter the results concerning practices and habits related to nutrition and a number of relevant family matters are dealt with. Among the topics discussed are, inter alia, the influence of the husband within the household, food preparation and availability; visit to clinics/hospitals or doctors, and nutrition under specific circumstances, e.g. nutrition during pregnancy and infant feeding.

4.2 FINDINGS

4.2.1 Influence of the husband within the household with regard to nutrition (Tables 4.1 to 4.4)

An analysis of Table 4.1 reveals that 26 per cent of the total number of respondents indicated that their husbands either prescribed what types of food had to be bought (23%) or bought it themselves (3%). This phenomenon occurred to a greater extent in rural than in urban areas. From a comparison of the two urban areas, it is apparent that this custom prevailed to a greater extent in Zwelitsha than in Mdantsane. This difference may possibly be ascribed to the fact that there were more unmarried women in the urban than in the rural areas. Mdantsane had more unmarried women than Zwelitsha.

Of the total number of respondents, 35 per cent indicated that their husbands disliked the idea of eating new foods that are unfamiliar to them (Table 4.2). These phenomena occurred to a somewhat greater extent in the two rural areas (39% and 42%) than in the two urban areas (33% and 25%). As far as this aspect is concerned, the difference between the responses of the two urban areas is statistically significant, whereas in the case of the two rural areas it is not. Also in this case the uneven representation of unmarried women in the four test areas may have contributed to the differences obtained.

It appears from Tables 4.3 and 4.4 that respectively 9 and 11 per cent of the total number of respondents indicated that they never speak to their husbands

about the purchasing of food or about what the family should eat. Statistically significant differences were obtained in respect of-

(1) total urban areas against total rural areas; and
(2) Zwelitsha urban against Mdantsane urban.

It must be taken into consideration in the interpretation of the data (Tables 4.1 to 4.4) that 36 per cent of the total number of respondents indicated that these questions were not applicable to them.

4.2.2 Medical services

(a) During pregnancy (Table 4.5)

Table 4.5 reflects the following significant particulars:

(1) Fifteen per cent of the respondents stated that they had never visited a clinic/hospital or a doctor, whereas 2 per cent had visited a hospital/clinic for the confinement only.

(2) Thirty-one per cent regularly visited a clinic/hospital or a doctor during the whole period of pregnancy or after three months of pregnancy had elapsed.

(3) Fifty-two percent had already been pregnant for six months before visiting a clinic/hospital or a doctor.

A statistically significant difference was obtained only in respect of the comparison urban (total) as against rural (total). It would appear that in cases where six months of pregnancy had already elapsed, more women from rural areas than from urban areas had paid a first visit to a clinic/hospital or a doctor. It would therefore appear that women from urban areas visit the doctor at an earlier stage.

(b) During the illness of a child/children (Tables 4.6 to 4.8)

More than two thirds of the women indicated that they themselves would decide when their child/children needed treatment (Table 4.6). The husbands

TABLE 3.11

AT ABOUT WHAT AGE SHOULD A BABY START GETTING SOLID FOODS?

	One to two months	Three to four months	Five to six months	Seven to eight months	Nine to ten months	Eleven months plus	Don't know	Total
				Percentages				N
Total urban areas	5	43	28	9	4	9	4	362
Total rural areas	3	35	27	13	5	10	6	379
				χ^2 = 11,61				
Zwelitsha urban	6	43	29	6	3	9	4	184
Mdantsane urban	3	42	26	11	5	8	3	178
				χ^2 = 5,88				
Zwelitsha rural	3	39	23	13	6	8	7	178
Peddie rural	4	31	30	13	4	12	5	201
				χ^2 = 6,01				
TOTAL	4	39	27	11	4	9	5	741

TABLE 3.12

DO CHILDREN GROW PROPERLY IF THEY ONLY EAT PORRIDGE?

	Yes	No	Don't know	Total
		Percentages		N
Total urban areas	23	68	9	362
Total rural areas	19	74	7	379
		χ^2 = 3,469		
Zwelitsha urban	21	69	10	184
Mdantsane urban	26	67	7	178
		χ^2 = 2,695		
Zwelitsha rural	16	78	7	178
Peddie rural	21	71	7	201
		χ^2 = 2,204		
TOTAL	21	71	8	741

TABLE 3.9

WHICH OF THE FOLLOWING IS THE BEST MILK FOR A HEALTHY YOUNG BABY UNDER SIX MONTHS?

	Cow's milk	Breast milk	Milk powders, humanized milk and other milks. Don't know	Total
		Percentages		N
Total urban areas	8	87	5	362
Total rural areas	11	82	7	379
		χ^2 = 3,915		
Zwelitsha urban	6	89	5	184
Mdantsane urban	10	86	4	178
		χ^2 = 2,436		
Zwelitsha rural	11	81	8	178
Peddie rural	11	83	6	201
		χ^2 = 0,556		
TOTAL	10	85	5	741

TABLE 3.10

IF BABIES ARE BREAST-FED, ARE THEY BETTER PROTECTED AGAINST DISEASE?

	Yes	No	Don't know	Total
		Percentages		N
Total urban areas	88	5	7	362
Total rural areas	80	9	11	379
		χ^2 = 9,520*		
Zwelitsha urban	87	3	10	184
Mdantsane urban	89	6	5	178
		χ^2 = 4,385		
Zwelitsha rural	80	10	10	178
Peddie rural	79	9	12	201
		χ^2 = 0,339		
TOTAL	84	7	9	741

*$p < 0,05$

TABLE 3.7

EXACTLY HOW WOULD YOU TREAT A CHILD WHO HAS GASTRO-ENTERITIS?

	Take a child to hospital, clinic or a doctor	Sterile water	Medical aid and herbal medicines	Don't know	Total
		Percentages			N
Total urban areas	59	13	4	24	362
Total rural areas	67	7	5	21	374
		χ^2 = 9,146*			
Zwelitsha urban	56	16	4	24	184
Mdantsane urban	62	10	3	25	178
		χ^2 = 3,620			
Zwelitsha rural	66	8	5	21	177
Peddie rural	68	6	5	22	197
		χ^2 = 1,213			
TOTAL	63	10	4	23	736

TABLE 3.8

MUST A CHILD WHO HAS GASTRO-ENTERITIS DRINK A LOT OF WATER?

	Yes	No	Don't know	Total
		Percentages		N
Total urban areas	57	23	20	362
Total rural areas	57	25	18	379
		χ^2 = 0,644		
Zwelitsha urban	61	17	22	184
Mdantsane urban	53	29	18	178
		χ^2 = 7,849*		
Zwelitsha rural	63	21	16	178
Peddie rural	52	28	20	201
		χ^2 = 5,370		
TOTAL	57	24	19	741

*$p < 0,05$

TABLE 3.5

WHAT CAUSES PELLAGRA?

	Insufficient green vegetables and vitamin B." Good grasp of relationship between nutrition and pellagra.	Fair to poor grasp of relationship between nutrition and pellagra. Inadequate protein.	Don't know	Total
	Percentages			N
Total urban areas	32	13	55	362
Total rural areas	12	5	83	379
		χ^2 = 71,684 *		
Zwelitsha urban	33	15	52	184
Mdantsane urban	31	11	58	178
		χ^2 = 1,868		
Zwelitsha rural	16	7	78	178
Peddie rural	8	3	89	201
		χ^2 = 8,387 *		
TOTAL	22	9	69	741

TABLE 3.6

WHAT CAUSES GASTRO-ENTERITIS?

	Teething, worms. Incorrect diet.	Contamination. Dirty bottles, food infection, etc. Medical reasons like dirty water.	Eating wrong foods. Poor eating habits.	Poor diet and dry food. Blood poisoning. Witchcraft and inadequate diet.	Don't know	Total
			Percentages			N
Total urban areas	9	10	14	4	63	362
Total rural areas	18	7	8	4	63	378
			χ^2 = 17,972*			
Zwelitsha urban	8	9	13	4	66	184
Mdantsane urban	10	11	14	5	61	178
			χ^2 = 1,193			
Zwelitsha rural	20	8	6	2	64	177
Peddie rural	16	6	11	5	61	201
			χ^2 = 8,204			
TOTAL	13	9	11	4	63	740

*p < 0,05

TABLE 3.3

HOW CAN KWASHIORKOR BE TREATED?

	Diet of body-building foods like milk. Correct or balanced diet.	Combination of witchcraft and medicine. Generally wrong answer.	Correct diet, medical advice and treatment	Don't know	Total
			Percentages		N
Total urban areas	5	8	21	67	360
Total rural areas	3	9	13	75	378
			χ^2 = 8,957 *		
Zwelitsha urban	4	8	17	72	183
Mdantsane urban	6	8	24	62	177
			χ^2 = 4,427		
Zwelitsha rural	4	8	15	74	178
Peddie rural	3	10	12	76	200
			χ^2 = 1,462		
TOTAL	4	9	17	71	738

TABLE 3.4

WHAT IS THIS ILLNESS? (PELLAGRA)

	Incorrect answers like sunburn, poor diet, kwashiorkor, alcoholism, rash, measles, chicken-pox	Correct answer	Don't know	Total
		Percentages		N
Total urban areas	5	36	59	362
Total rural areas	5	10	85	379
		χ^2 = 72,463*		
Zwelitsha urban	1	41	58	184
Mdantsane urban	8	31	60	178
		χ^2 = 12,880*		
Zwelitsha rural	3	15	81	178
Peddie rural	6	6	88	201
		χ^2 = 9,589*		
TOTAL	5	23	72	741

*p < 0,05

TABLE 3.1

WHAT ILLNESS IS THIS? (KWASHIORKOR)

	Measles, smallpox, sores, scabies, itching, irritation of the skin, pellagra, malnutrition, swollen eyes, sunburn, burns, epilepsy	Correct	Don't know	Total
	Pe. centages			N
Total urban areas	6	14	80	362
Total rural areas	5	11	84	379
	χ^2 = 1,820			
Zwelitsha urban	5	12	83	184
Mdantsane urban	8	15	77	178
	χ^2 = 2,381			
Zwelitsha rural	7	11	83	178
Peddie rural	3	11	85	201
	χ^2 = 2,120			
TOTAL	6	12	82	741

TABLE 3.2

WHAT CAUSES KWASHIORKOR?

	Lack of protein/ nutrients	Fair to poor grasp of relationship of nutrition to kwashiorkor	Good grasp of relationship of nutrition to kwashiorkor	Don't know	Total
	Percentages				N
Total urban areas	4	6	15	75	362
Total rural areas	3	6	14	77	379
	χ^2 = 0,123				
Zwelitsha urban	4	5	13	79	184
Mdantsane urban	3	7	17	72	178
	χ^2 = 2,118				
Zwelitsha rural	6	7	16	71	178
Peddie rural	1	5	12	81	201
	χ^2 = 7,430				
TOTAL	4	6	14	76	741

The other items regarding nutrition in general included a question on two substitutes for meat, as well as a request to mention the names of four good types of food. Only 28 per cent of the respondents were able to mention two protein-rich foods as substitutes for meat. The responses to the question to mention four types of good food indicate that the respondents have an inadequate knowledge of the nutritional value of different types of food (responses to the last two items were not recorded in a table).

cannot grow properly if they are given only porridge to eat (Table 3.12).

With regard to some aspects of nutrition respondents in each case had to choose one of two alternatives that they considered the best for their children (Table 3.13). The items, and the responses of the total test group with regard to the best alternative are as follows:

(1) "Umngqusho" with white maize and beans, or "Umngqusho" with yellow maize and beans. In this item 25 per cent of the respondents chose the latter alternative.

(2) Cooked carrots or raw carrots. Exactly half preferred raw carrots.

(3) Cabbage cooked for a short time or cabbage cooked for long. Approximately 79 per cent indicated the former as the correct one.

Table 3.13 reveals only one statistically significant difference between the responses of the total urban area and those of the total rural area where 85 and 74 per cent respectively preferred cabbage that had not been cooked for too long.

3.2.6 Knowledge of nutrition in general (Tables 3.14 and 3.15)

The large majority of the total number of respondents were of the opinion that brown bread is more beneficial. The largest single percentage who considered white bread more beneficial to health, namely 22 per cent, came from the Peddie district. More respondents in the two urban areas (total) than in the two rural areas indicated that they thought brown bread more beneficial to health than white bread (Table 3.14).

To test respondents' knowledge of the nutritional value of milk they were asked whether fresh skimmed milk and skim milk powder are good body builders. Fifty-seven per cent of the respondents replied "no" and 25 per cent replied "yes" to this question. The remainder did not know (Table 3.15). Respondents in the rural areas (total) have a more positive attitude towards skimmed milk and skim milk powder than respondents in urban areas (total).

Almost 70 per cent of the respondents indicated that they did not know what caused pellagra. More rural respondents (total) than urban respondents (total), namely 83 and 55 per cent respectively indicated that they did not know what caused the disease. A comparison of responses between Zwelitsha urban and Mdantsane urban revealed no statistically significant difference, while there was a significant difference between the responses of Peddie district and Zwelitsha district.

Most respondents thought that a patient suffering from pellagra should be referred to a hospital or clinic (table not reported).

3.2.3 Knowledge - gastro-enteritis (Tables 3.6 to 3.8)

Table 3.6 reveals that 63 per cent of the respondents did not know what caused gastro-enteritis. The same percentage of respondents indicated that a patient suffering from this disease should be referred to a hospital/clinic or a doctor.

Fifty-seven per cent of the respondents replied "yes" to the question whether a child suffering from gastro-enteritis should drink a lot of water, whereas 24 per cent replied "no" (Table 3.8).

3.2.4 Knowledge - infant nutrition (Tables 3.9 to 3.11)

In each of the four areas where the survey was conducted more than 80 per cent of the respondents indicated that mother's milk is the best for a baby under 6 months of age (Table 3.9). It was also found that 84 per cent of the respondents were of the opinion that breast-feeding gives babies better protection against diseases (Table 3.10). More urban respondents (total) than rural respondents (total) were of this opinion.

Table 3.11 reveals that 39 per cent of the total number of respondents considered 3 to 4 months to be the correct age for babies to start eating solids, whereas 27 per cent thought that 5 to 6 months was the correct age.

3.2.5 Knowledge - toddler and child nutrition (Tables 3.12 and 3.13)

Seventy-one per cent of the respondents indicated that they thought children

CHAPTER 3

KNOWLEDGE

3.1 INTRODUCTION

This chapter deals with the respondents' knowledge of nutrition, nutritional diseases and related aspects. Photographs of kwashiorkor and pellagra cases were shown to the respondents to determine whether they could correctly identify these diseases.

3.2 FINDINGS

3.2.1 Knowledge - kwashiorkor (Tables 3.1 to 3.3)

Table 3.1 shows that 82 per cent of the respondents could not identify the disease at all, and another 6 per cent could not identify it correctly. Approximately 75 per cent of the respondents did not know what caused kwashiorkor (Table 3.2), and approximately 70 per cent did not know how a patient suffering from this disease should be treated (Table 3.3). However, the majority of them (approximately 75 per cent) were of the opinion that a child suffering from kwashiorkor should be taken to a hospital or clinic for treatment (table not reported).

Separate comparisons of the urban areas (total) with the rural areas (total), as well as of Zwelitsha (urban) with Mdantsane (urban) and Zwelitsha (district) with Peddie (district) revealed no statistically significant differences in respect of the above-mentioned aspects.

3.2.2 Knowledge - pellagra (Tables 3.4 and 3.5)

When photographs of patients suffering from pellagra were shown to the respondents, 23 per cent of them identified the disease correctly, whereas 72 per cent replied that they did not know what the disease was. The remainder identified the disease as sunburn or alcoholism, etc. (Table 3.4). More respondents in the two urban areas (41% and 31%) than in the two rural areas (15% and 16%) gave the correct answers.

(b) Liquids administered to infants immediately after birth (Table 4.14)

Table 4.14 reflects the following findings regarding the first liquids administered to the last infant immediately after birth:

(1) Urban areas (total): 33% of the respondents gave water, 12% gave "inembe/isicakathi" and the rest administered milk first to the infant.

(2) Rural areas (total): 28% of the respondents gave water, 23% gave "inembe/isicakathi" and the rest gave milk first to the infant.

It should furthermore be noted that more respondents in urban Zwelitsha than in urban Mdantsane had used "inembe/isicakathi".

Of the respondents who had made use of "inembe/isicakathi", 32 per cent stated that they had continued to do so for 1 to 7 days, 21 per cent for 8 to 15 days, and the rest (47%) for 16 days or longer. These respondents were also asked whether they had administered milk together with the "inembe/isicakathi", to which question 78 per cent answered in the affirmative. The answers to the two preceding questions are not indicated in tables.

(c) Breast-feeding (Tables 4.15 to 4.17)

Breast-feeding meets with general approval as is evident from the fact that only 8 per cent (Table 4.15) of the respondents indicated that they had not breast-fed their youngest infant. The reasons why these mothers refrained from breast-feeding their infants appear in Table 4.16. One of the most important reasons given is that the infant refused to take the breast.

Of the respondents who had, in fact, practised breast-feeding (excluding those who were still breast-feeding their latest offspring (29%)), the following particulars regarding the periods they continued to breast-feed are reflected:

0 - 1 month, 6%
2 - 3 months, 13%

4 - 6 months, 8%
7 - 12 months, 13%
13 - 18 months, 17%
19 - 24 months, 11%

Longer than 24 months/do not know, 32%

The following reasons for discontinuing breast-feeding are mentioned:

Child was old enough, 53%
Child refused breast, 20%
Medical grounds/insufficient milk supply, 13%
Went to work/away from home, 6%
Medical grounds regarding child, 5%
On family's advice/pregnant, 3%

Although 92 per cent of the women in the total sample practised breast-feeding, 7 and 5 per cent respectively of the women in the two urban areas indicated that they used products such as SMA, Bonnimil, S26, Lactogen, Nan and Pelargon as substitutes for mother's milk (Table 4.17). In each area two per cent indicated that they used cow's milk, Nespray or Klim. The same products were mentioned by the respondents in the rural areas. The percentages for the first-mentioned range of products are 4 and 6 per cent respectively, and 2 per cent for the last-mentioned range in both areas.

(d) Weaning period (Tables 4.18 and 4.19)

A number of questions relating to the period in which the youngest infant was being weaned or had already been weaned, were put only to those women to whom the question applied. The first question referred to foods supplementing the porridge given to the infant in the weaning stage. Naturally these questions were not put to women who had not yet weaned a child.

Of the total test group a large percentage of the respondents had never fed their child with any of the following types of food (Table 4.18):

Groundnuts, 88%
Soya beans, 87%
Peas, 84%
Powdered milk, 78%
Dry beans, 49%
Fish, 49%

Sugar (90%) and fresh milk (84%) were often administered with the porridge. Eggs were seldom fed by 39 per cent of the women, but often given by 50 per cent. The same was true regarding cooked vegetables (often - 40%, and seldom - 43%) and also regarding pureed fruit (often 41%, and seldom - 41%). Table 4.18 shows statistically significant differences between the urban areas (total) and rural areas (total) regarding the use of powdered milk, fish and groundnuts. More respondents in the urban areas than in the rural areas made use of these foods. It is also evident that respondents in urban Zwelitsha made more use of dry beans and less of pureed fruit, compared with respondents in urban Mdantsane. In the Zwelitsha area powdered milk was used to a greater extent than in the Peddie area.

The second question, "Was your youngest child weaned (eating mainly solid foods and drinking from the bottle or breast infrequently) before you started working?" (Table 4.19) was put only to women whose youngest child was one year old or older. Only 7 per cent of the respondents answered "no/do not know". The majority (84%) indicated that they were not employed.

(e) Eating habits of children (Table 4.20)

The data contained in Table 4.20 indicating how often children of the total test group consumed several foods may be summarized as follows:

Type of food	Percentage using foods "often"
Samp and beans	66%
Maize dishes with soured milk	61%
Sour porridge (thin/medium)	53%
Green vegetables and maize-meal (porridge)	41%
Pumpkin and maize meal (porridge)	33% (often and seldom)

Maize meal bread	21%
Whole boiled maize and beans	16%
Roasted ear of maize	3%

Statistically significant differences occurred in the following cases:

(1) Total urban areas as against total rural areas - preferences for green vegetables with maize meal (porridge), whole boiled mealies and beans, sour porridge, pumpkin and maize meal (porridge), roasted ear of maize, whole boiled maize and beans, roasted maize, as well as maize meal bread. In all of these cases more rural than urban respondents indicated that their children often consumed these foods.

(2) Differences also occurred between the two rural areas, and also between the two urban areas.

(f) Disposal of the water in which vegetables were boiled (Table 4.21)

According to the data in Table 4.21 it would appear that approximately three quarters of the women in each of the respective areas discarded the water in which the vegetables had been boiled.

4.2.5 Availability of food (Tables 4.22 and 4.23)

Table 4.22 shows that commodities such as milk, powdered milk, meat, fish, fresh vegetables, potatoes and eggs were readily available, although the women in the two urban areas, compared to those in the two rural areas, indicated that the above-mentioned commodities were more easily obtainable in their area.

From Table 4.23 it is evident that 10 per cent of the respondents in urban areas and 90 per cent of those in rural areas owned livestock. It would appear that urban Zwelitsha was slightly better off in this respect than urban Mdantsane (8% as against 2%).

TABLE 4.1

DOES YOUR HUSBAND TELL YOU WHAT FOOD TO BUY?

	N/a (Does not have a husband)	Often	Sometimes	Never	Husband buys food	Total
			Percentages			N
Total urban areas	44	2	19	33	2	362
Total rural areas	28	6	20	42	3	379
			χ^2 = 24,840*			
Zwelitsha urban,	30	3	23	41	3	184
Mdantsane urban	58	2	14	24	1	178
			χ^2 = 29,411*			
Zwelitsha rural	33	6	15	43	3	178
Peddie rural	24	7	24	42	3	201
			χ^2 = 7,788			
TOTAL	36	4	19	38	3	741

TABLE 4.2

DOES YOUR HUSBAND LIKE EATING NEW UNFAMILIAR FOODS?

	N/a (Does not have a husband)	Yes	No	Don't know	Total
			Percentages		N
Total urban areas	44	25	29	2	362
Total rural areas	28	27	41	4	379
			χ^2 = 24,895*		
Zwelitsha urban	30	34	33	3	184
Mdantsane urban	58	16	25	1	178
			χ^2 = 32,003*		
Zwelitsha rural	33	24	39	4	178
Peddie rural	24	29	42	4	201
			χ^2 = 4,173		
TOTAL	36	26	35	3	741

*$p < 0,05$

TABLE 4.3

DO YOU AND YOUR HUSBAND TALK TO EACH OTHER ABOUT THE PURCHASING OF FOOD?

	N/a (Does not have a husband)	Never	Seldom	Often	Total
		Percentages			N
Total urban areas	44	6	22	28	362
Total rural areas	28	12	35	25	379
		χ^2 = 32,060*			
Zwelitsha urban	30	8	27	35	184
Mdantsane urban	58	4	17	20	178
		χ^2 = 28,785*			
Zwelitsha rural	33	10	35	21	178
Peddie rural	24	14	35	27	201
		χ^2 =5,405			
TOTAL	36	9	29	26	741

TABLE 4.4

DO YOU AND YOUR HUSBAND TALK TO EACH OTHER ABOUT WHAT THE FAMILY SHOULD EAT?

	N/a (Does not have a husband)	Never	Seldom	Often	Total
		Percentages			N
Total urban areas	44	6	24	26	362
Total rural areas	28	16	32	24	379
		χ^2 = 32,552*			
Zwelitsha urban	30	7	30	33	184
Mdantsane urban	58	6	17	19	178
		χ^2 = 29,236*			
Zwelitsha rural	33	14	31	21	178
Peddie rural	24	17	33	26	201
		χ^2 = 4,285			
TOTAL	36	11	28	25	741

*p < 0,05

TABLE 4.5

FROM WHAT STAGE IN YOUR LAST PREGNANCY DID YOU ATTEND A CLINIC/HOSPITAL OR GO TO A DOCTOR?

	Never	Throughout the pregnancy/ after 3 months	After 6 months	Delivery only	Total
		Percentages			N
Total urban areas	13	38	48	2	362
Total rural areas	17	25	56	2	379
		χ^2 = 14,413*			
Zwelitsha urban	15	39	44	2	184
Mdantsane urban	11	37	51	2	178
		χ^2 = 2,614			
Zwelitsha rural	16	21	60	2	178
Peddie rural	18	28	52	2	201
		χ^2 = 2,834			
TOTAL	15	31	52	2	741

TABLE 4.6

WHEN YOUR CHILD/CHILDREN ARE SICK, WHO SAYS WHEN IT/THEY MUST GO FOR TREATMENT?

	You (wife)	Husband	Uncle/aunt Father-in-law/ Mother-in-law Grandfather/ Grandmother Other family	Mother/ father	Total
		Percentages			N
Total urban areas	65	22	5	8	358
Total rural areas	69	17	9	5	379
		χ^2 = 9,863*			
Zwelitsha urban	62	26	4	8	182
Mdantsane urban	67	17	7	9	176
		χ^2 = 5,612			
Zwelitsha rural	66	21	7	6	178
Peddie rural	71	14	11	4	201
		χ^2 = 6,036			
TOTAL	67	20	7	7	737

*$p < 0,05$

TABLE 4.7

- TO WHOM DID YOU GO FIRST, WHEN YOUR CHILD WAS LAST SICK?

	N/a (No children)	Medical doctor	"Kusiyazi" "Kwigqira" Herbalist Other No one Don't know	Clinic/ hospital	Total
		Percentages			N
Total urban areas	3	38	2	57	362
Total rural areas	2	26	4	67	379
		χ^2 = 16,257*			
Zwelitsha urban	3	45	2	51	184
Mdantsane urban	3	31	2	64	178
		χ^2 = 7,278			
Zwelitsha rural	1	22	8	70	178
Peddie rural	3	30	1	65	201
		χ^2 = 15,260*			
TOTAL	2	32	3	62	741

TABLE 4.8

WHO IS THE SECOND PERSON YOU WOULD GO TO FOR HELP IF YOUR CHILD WAS SICK?

	N/a (No children)	Medical doctor	"Kusiyazi" "Kwigqira" Herbalist Other No one Don't know	Clinic/ hospital	Total
		Percentages			N
Total urban areas	3	47	2	48	362
Total rural areas	2	26	9	63	379
		χ^2 = 48,593*			
Zwelitsha urban	3	53	3	42	184
Mdantsane urban	3	42	1	54	178
		χ^2 = 6,580			
Zwelitsha rural	1	25	11	63	178
Peddie rural	3	26	7	63	201
		χ^2 = 5,836			
TOTAL	2	36	6	56	741

*$p < 0,05$

"Kusiyazi" is a witchdoctor who does predictions but uses no herbs.

TABLE 4.9

DO YOU USE CONTRACEPTION OR FAMILY PLANNING?

	Yes	No	Total
	Percentages		N
Total urban areas	39	61	362
Total rural areas	20	80	379
	χ^2 = 31,086*		
Zwelitsha urban	35	65	184
Mdantsane urban	43	57	178
	χ^2 = 2,389		
Zwelitsha rural	16	84	178
Peddie rural	24	76	201
	χ^2 = 3,911*		
TOTAL	29	71	741

TABLE 4.10

IF YOU DO NOT USE CONTRACEPTION OR FAMILY PLANNING, WHY NOT?

	N/a (Use contraception or family planning)	Husband does not allow it	Wife does not like it	Want more children	Don't know about it	Still breast-feeding	Difficult to obtain/ medical reasons/paren-tal objection/too shy to ask for it/ no reason	No longer fertile/ sterilized	No intercourse/hus-band away	Old age	Total
	Percentages										N
Total urban areas	39	8	12	5	6	7	4	7	3	11	362
Total rural areas	20	11	13	8	11	7	1	4	9	17	379
	χ^2 = 54,508*										
Zwelitsha urban	35	13	13	4	5	7	3	6	2	14	184
Mdantsane urban	43	3	12	6	6	7	4	9	4	7	178
	χ^2 = 17,613*										
Zwelitsha rural	16	10	15	10	12	9	1	4	9	16	178
Peddie rural	24	11	12	5	10	5	2	3	8	19	201
	χ^2 = 9,991										
TOTAL	29	9	13	6	8	7	2	6	6	14	741

*$p < 0,05$

TABLE 4.11

DO YOU AND YOUR HUSBAND TALK TO EACH OTHER ABOUT FAMILY PLANNING?

	Never	Seldom	Often	Total
		Percentages		N
Total urban areas	35	36	29	200
Total rural areas	61	27	11	267
		χ^2 = 37,843*		
Zwelitsha urban	34	37	29	126
Mdantsane urban	37	34	30	74
		χ^2 = 0,256		
Zwelitsha rural	63	27	10	115
Peddie rural	38	17	7	152
		χ^2 = 0,172		
TOTAL	50	31	19	467

*$p < 0,05$

TABLE 4.12

WHEN YOU WERE PREGNANT WITH YOUR LAST CHILD, DID YOU REGULARLY EAT ANY OF THE FOLLOWING FOODS?

	Dry Beans			Meat			Fruit			Fish			Potatoes			Milk			Eggs			Vegetables		
	Yes	No	Seldom	Yes	No	Seldom	Yes	No	Seldom	Yes	No	Seldom	Yes	No	Seldom	Yes	No	Seldom	Yes	No	Seldom	Yes	No/Seldom	Total
	Percentages																							N
Total urban areas	55	40	5	94	3	3	90	5	5	80	16	5	85	12	3	86	10	4	83	13	4	96	4	362
Total rural areas	58	32	10	83	7	10	75	14	11	50	37	14	83	13	4	75	16	9	68	23	9	93	7	379
χ^2	8,734*			20,354*			27,896*			72,716*			1,461			14,594*			20,326*			3,565		
Zwelitsha urban	55	40	4	93	3	4	87	6	7	77	17	6	85	10	5	82	12	6	78	15	7	95	5	184
Mdantsane urban	55	39	6	94	3	2	93	5	2	83	14	3	85	13	1	90	9	1	87	11	2	97	3	178
χ^2	0,629			0,745			4,944			2,356			5,295			7,341*			7,600*			1,571		
Zwelitsha rural	55	35	10	80	10	10	72	19	9	48	38	14	79	17	4	76	15	8	66	26	8	93	7	178
Peddie rural	61	29	10	86	4	10	77	10	13	51	36	13	86	9	5	75	16	9	70	20	9	92	8	201
χ^2	1,407			4,534			6,578*			0,224			6,084*			0,185			1,698			0,205		
TOTAL	57	36	8	88	5	6	82	10	8	64	26	9	84	12	4	81	13	6	75	18	7	94	6	741

*p < 0,05

TABLE 4.13

DID YOU TAKE HERBAL MIXTURES FROM THE "KUSIYAZI" DURING YOUR LAST PREGNANCY TO KEEP YOU HEALTHY?

	Yes	No	Total
	Percentages		N
Total urban areas	10	90	362
Total rural areas	12	88	379
	χ^2 = 1,159		
Zwelitsha urban	12	88	184
Mdantsane urban	7	93	178
	χ^2 = 2,243		
Zwelitsha rural	14	86	178
Peddie rural	10	90	201
	χ^2 = 1,145		
TOTAL	11	89	741

TABLE 4.14

WHICH OF THE FOLLOWING IS THE FIRST LIQUID YOU GAVE YOUR LAST BABY?

	Breast milk	Bottle milk	"Inembe" "Isicakathi"	Water	Total
	Percentages				N
Total urban areas	50	4	12	33	361
Total rural areas	45	3	23	28	379
	χ^2 = 15,386*				
Zwelitsha urban	47	4	15	34	184
Mdantsane urban	54	4	10	32	177
	χ^2 = 2,693				
Zwelitsha rural	43	3	23	31	178
Peddie rural	47	3	24	25	201
	χ^2 = 1,528				
TOTAL	48	4	18	30	740

*$p < 0,05$

"Inembe" is water in which samp and beans have been cooked or a gruel made from cooked dry mealies, which have been ground, mixed with water, sifted and recooked.

"Isicakathi" is a fluid from cooked wild roots with a sweetish taste. (Only in Zwelitsha rural did 2 respondents indicate that the first liquid given to their last baby was inembe.)

TABLE 4.15

DID YOU BREAST-FEED YOUR LAST BABY?

	Yes	No	Total
	Percentages		N
Total urban areas	92	8	362
Total rural areas	93	7	379
	χ^2 = 0,209		
Zwelitsha urban	92	8	184
Mdantsane urban	92	8	178
	χ^2 = 0,010		
Zwelitsha rural	94	6	178
Peddie rural	92	8	201
	χ^2 = 1,151		
TOTAL	92	8	741

TABLE 4.16

IF YOU DID NOT BREAST-FEED, WHY NOT?

	N/a (Did breast-feed)	Previous unpleasant experience with breast-feeding/no milk/went to work/better for the baby to be bottle-fed/ medical reasons (mother)	Baby refused breast	Total
		Percentages		N
Total urban areas	92	5	4	362
Total rural areas	93	2	6	379
		χ^2 = 7,342*		
Zwelitsha urban	92	6	2	184
Mdantsane urban	92	3	5	178
		χ^2 = 4,755		
Zwelitsha rural	94	2	4	178
Peddie rural	92	1	7	201
		χ^2 = 1,671		
TOTAL	92	3	5	741

*p < 0,05

TABLE 4.17

IF YOU DID NOT BREAST-FEED AT ALL WHAT MILK DID YOU FEED TO YOUR LAST BABY?

	Did breast-feed	S.M.A. Bonnimil S26 Lactogen Nan Pelargon	Milk Nespray Klim	Total
		Percentages		N
Total urban areas	92	6	2	362
Total rural areas	93	5	2	377
		χ^2 = 1,071		
Zwelitsha urban	92	7	2	184
Mdantsane urban	92	5	3	178
		χ^2 = 0,904		
Zwelitsha rural	94	4	2	178
Peddie rural	92	6	2	199
		χ^2 = 1,747		
TOTAL	92	5	3	739

TABLE 4.18

HOW OFTEN DID YOU GIVE ANY OF THE FOLLOWING FOODS TO YOUR LAST CHILD, IN ADDITION TO PORRIDGE WHILE YOU WERE WEANING IT?

	Powdered skimmed milk				Beans (dry)				Eggs				Cowpeas				Fish				Ground nuts		
	Often	Seldom	Never	Total	Often	Seldom	Never	Total	Often	Seldom	Never	Total	Often/seldom	Never	Don't know	Total	Often	Seldom	Never	Total	Often	Never	Total
	Percentages			N	Percentages			N	Percentages			N	Percentages			N	Percentages			N	Percentages		N
Total urban areas	13	13	74	328	9	38	53	326	52	38	10	327	6	82	12	329	27	37	36	328	18	82	327
Total rural areas	6	13	81	354	10	44	46	354	48	39	13	355	7	86	7	359	13	26	61	355	6	94	354
χ^2	8,115*				3,438				1,898				4,963				47,015*				21,768*		
Zwelitsha urban	14	13	73	164	10	43	46	164	48	42	10	163	4	83	13	165	26	38	37	164	21	79	164
Mdantsane urban	12	13	75	164	8	32	60	162	55	35	10	164	7	82	11	164	28	37	35	164	14	86	163
χ^2	0,441				6,005*				1,812				1,577				0,267				2,930		
Zwelitsha rural	10	13	76	164	8	40	52	163	45	42	13	164	10	82	8	168	13	26	61	164	7	93	163
Peddie rural	3	12	84	190	12	47	41	191	51	37	12	191	4	90	6	191	13	26	61	191	5	95	191
χ^2	7,948*				3,970				1,394				5,304				0,005				0,682		
TOTAL	10	13	78	682	10	41	49	680	50	39	11	682	6	84	9	688	19	32	49	683	12	88	681

TABLE 4.18 (continued)

	Soya beans			Cooked vegetables				Pureed fruit (soft fruit)				Milk (fresh)			Sugar		
	Often/seldom	Never	Total	Often	Seldom	Never	Total	Often	Seldom	Never	Total	Often	Seldom/Never	Total	Often	Seldom	Total
	Percentages		N	Percentages			N	Percentages			N	Percentages		N	Percentages		N
Total urban areas	12	88	327	39	42	19	327	44	41	15	327	85	15	326	88	12	326
Total rural areas	15	85	352	41	45	14	355	38	41	21	354	83	17	354	91	9	354
χ^2		1,724			3,318				5,183				0,629			1,565	
Zwelitsha urban	10	90	164	39	45	17	163	36	45	19	164	82	18	164	88	12	164
Mdantsane urban	13	86	163	38	40	22	164	52	37	11	163	88	12	162	88	12	162
χ^2		1,114			1,746				9,603*				2,301			0,002	
Zwelitsha rural	13	87	161	40	45	15	164	39	38	23	163	87	13	164	90	10	164
Peddie rural	17	83	191	43	44	13	191	37	43	19	191	80	20	190	93	7	190
χ^2		0,940			0,549				1,326				2,712			0,990	
TOTAL	13	87	679	40	43	17	682	41	41	18	681	84	16	680	90	10	680

*$p < 0,05$

TABLE 4.19

WAS YOUR YOUNGEST CHILD WEANED (EATING MAINLY SOLID FOODS AND DRINKING FROM THE BOTTLE OR BREAST INFREQUENTLY) BEFORE YOU STARTED WORKING?

	Did not work	Yes	No and don't know	Total
		Percentages		N
Total urban areas	77	14	9	277
Total rural areas	91	4	4	293
		$\chi^2 = 24,731$*		
Zwelitsha urban	80	13	7	142
Mdantsane urban	73	16	12	135
		$\chi^2 = 2,648$		
Zwelitsha rural	86	6	8	140
Peddie rural	96	3	1	153
		$\chi^2 = 9,528$*		
TOTAL	84	9	7	570

*$p < 0,05$

TABLE 4.20

HOW OFTEN DO YOUR CHILDREN/BABY/CHILD EAT ANY OF THE FOLLOWING?

	Green vegetables and mealie meal				Stamped mealies and beans				Whole boiled maize and beans				Thin or medium soured porridge			
	Still breast-feeding	Often	Seldom	Never	Still breast-feeding	Often	Seldom	Never	Still breast-feeding	Often	Seldom	Never	Still breast-feeding	Often	Seldom	Never
	Percentages															
Total urban areas	5	40	45	11	5	64	24	7	5	10	42	43	5	43	21	31
Total rural areas	4	41	52	3	4	67	26	3	4	21	56	19	4	62	18	16
χ^2	19,926*				7,219				53,587*				30,478*			
Zwelitsha urban	6	49	45	10	6	61	30	3	6	10	50	34	6	45	24	25
Mdantsane urban	4	41	44	12	4	67	19	11	4	10	35	52	4	41	19	37
χ^2	1,301				13,011*				11,506*				5,916			
Zwelitsha rural	5	42	50	3	5	65	27	3	5	16	55	24	6	60	19	15
Peddie rural	3	41	54	3	3	70	25	3	3	25	57	14	3	64	16	17
χ^2	1,253				1,733				7,753				2,356			
TOTAL	4	41	48	6	4	66	25	5	4	16	50	31	4	53	19	23

TABLE 4.20 (Continued)

	Pumpkin and mealie meal			Mealie dish with soured milk				Roasted mealies				Mealie bread				
	Still breast-feeding	Often/seldom	Never	Still breast-feeding	Often	Seldom	Never	Still breast-feeding	Often	Seldom	Never	Still breast-feeding	Often	Seldom	Never	Total
	Percentages															N
Total urban areas	5	16	79	5	61	32	3	5	2	49	44	5	18	24	53	348
Total rural areas	4	49	47	4	61	29	5	4	5	73	19	5	23	47	25	376
χ^2		91,540*			3,223				58,103*					64,951*		
Zwelitsha urban	6	16	78	6	54	36	4	6	3	56	34	6	20	25	49	177
Mdantsane urban	4	16	81	4	68	27	1	4	1	42	54	4	16	23	58	171
χ^2		0,968			8,693*				16,040*					3,525		
Zwelitsha rural	5	40	54	6	59	29	6	6	6	70	19	6	20	46	28	178
Peddie rural	3	58	39	3	64	29	4	3	3	75	19	3	26	48	23	198
χ^2		11,114*			2,654				3,936					4,961		
TOTAL	4	33	62	4	61	30	4	4	3	61	31	5	21	36	39	724

*$p < 0,05$

TABLE 4.21

WHAT DO YOU DO WITH WATER LEFT OVER AFTER BOILING VEGETABLES?

	Throw away	Put in soup or other food	No water left	Family or children drink it/on pot plants	Total
		Percentages			N
Total urban areas	73	10	14	3	362
Total rural areas	74	8	16	2	379
		χ^2 = 2,373			
Zwelitsha urban	73	9	13	5	184
Mdantsane urban	73	11	15	2	178
		χ^2 = 3,291			
Zwelitsha rural	73	10	15	2	178
Peddie rural	75	5	17	2	201
		χ^2 = 3,052			
TOTAL	74	9	15	3	741

TABLE 4.22 –

ARE THE FOLLOWING FOODS ALWAYS AVAILABLE WHERE YOU LIVE?

	Fresh milk		Powdered milk		Meat		Fish		Fresh vegetables		Fresh fruit		Potatoes		Eggs		Legumes		
	Yes	No/Don't know	Yes	No/Don't know	Yes	No/Don't know	Yes	No/Don't know	Yes	No/Don't know	Yes	No/Don't know	Yes	No/Don't know	Yes	No/Don't know	Yes	No/Don't know	Total
	Percentages																		N
Total urban areas	90	10	71	29	91	9	86	14	97	3	89	11	97	3	90	10	79	21	362
Total rural areas	73	27	47	53	74	26	44	56	89	11	66	34	92	8	90	10	60	40	379
χ^2	35,627*		43,048*		34,287*		141,624*		18,747*		56,102*		9,151*		0,001		30,951*		
Zwelitsha urban	87	12	67	33	85	15	84	16	96	4	85	15	96	4	84	16	73	27	184
Mdantsane urban	93	7	75	25	96	4	88	12	98	2	93	7	98	2	96	4	85	15	178
χ^2	3,435		2,707		12,266*		1,518		1,512		5,922*		0,745		12,515*		8,615*		
Zwelitsha rural	70	30	43	57	71	29	43	57	88	12	63	37	92	8	88	12	50	50	178
Peddie rural	77	23	50	50	77	23	45	55	91	9	69	31	92	8	91	9	69	31	201
χ^2	2,335		1,852		1,972		0,088		0,827		1,130		0,044		8,826*		14,450*		
TOTAL	82	18	59	41	82	18	65	35	93	7	77	23	94	6	90	10	69	31	741

*p < 0,05

TABLE 4.23

DO YOU KEEP ANY LIVESTOCK?

	Yes	No	Total
	Percentages		N
Total urban areas	5	95	362
Total rural areas	90	10	379
	χ^2 = 538,868*		
Zwelitsha urban	8	92	184
Mdantsane urban	2	98	178
	χ^2 = 5,504*		
Zwelitsha rural	89	11	178
Peddie rural	91	9	201
	χ^2 = 0,317		
TOTAL	49	51	741

*p < 0,05

CHAPTER 5

ATTITUDES

5.1 INTRODUCTION

In order to facilitate matters, the findings with regard to the respondents' attitudes towards nutrition, nutritional diseases and family planning are given under the following subheadings:

The pregnant woman/woman who is breast-feeding
Breast-feeding and nutritional diseases
Infant nutrition and nutritional diseases
Toddler nutrition
Child nutrition and nutritional diseases
Provision of food
Family planning and nutrition
Treatment of diseases: Medical doctor, herbalist and "egqirheni".

5.2 FINDINGS

5.2.1 Nutrition of the pregnant woman/woman who is breast-feeding (Table 5.1)

Approximately 75 per cent of the test group as a whole thought that pregnant women and women who breast-feed their babies should consume more milk and dry beans. Comparisons between the two urban areas as well as between the two rural areas revealed no statistically significant differences. The answers of respondents from the total urban area to this item differ statistically to a significant extent from those of respondents from the total rural area.

5.2.2 Breast-feeding and nutritional diseases (Tables 5.2 to 5.6)

An analysis of the responses to the items surrounding breast-feeding revealed the following:

(1) All the respondents (100%) subscribed to the statement that breast-feeding is more beneficial to the baby than bottle-feeding (Table 5.2).

(2) Approximately 60 per cent of the respondents were of the opinion that "bad" milk is formed in the breasts of a woman if she undertakes a long trip (Table 5.3).

(3) Approximately 40 per cent of the respondents were of the opinion that a woman's milk becomes sour if she becomes pregnant while still breast-feeding (Table 5.4).

(4) More than a third of the respondents (36%) believed that when a breast-fed baby dies the "poison" in the mother's breasts will poison her next baby. Twenty-three per cent replied that they did not know (Table 5.5).

(5) It is interesting to note that 15 per cent of the respondents consider it a fact that when a breast-fed baby becomes sick his mother's milk must have been bewitched. Twenty-two per cent indicated that they did not know (Table 5.6).

According to the chi-square values, statistically significant differences were found only in the comparison of the two urban areas with the two rural areas. Differences were found in the following three statements: 56 per cent of the urban respondents as against 68 per cent of the rural respondents endorsed the statement that "bad" milk is formed in a woman's breasts when she undertakes a long journey; 32 per cent of the urban and 40 per cent of the rural respondents believed that when a breast-fed baby dies the "poison" in his mother's breasts will poison her next baby; 13 per cent of the urban and 18 per cent of the rural respondents believed that if a breast-fed baby becomes ill, his mother's milk must be bewitched. In all these cases the urban respondents were less uncertain than the rural respondents.

5.2.3 Infant nutrition and nutritional diseases (Tables 5.7 to 5.11)

The vast majority of the respondents (91%) were of the opinion that porridge alone is insufficient food for babies, and that milk, eggs or beans should be added. No statistically significant differences were found in respect of the responses to this statement between the respective areas (Tables 5.7).

Another general attitude that was found among respondents was that children should be weaned gradually: 94 per cent of the respondents were of this opinion (Table 5.8).

More respondents (57%) prefer fresh baby foods that are prepared at home to ready prepared bought infant food. The latter is preferred by 38 per cent of the respondents (Table 5.9). More of the respondents in urban areas (total) were in favour of home-prepared food (61%) than respondents in rural areas (53%).

According to Table 5.10, 76 per cent of the urban respondents and 79 per cent of the rural respondents believe that fat babies are always healthy babies. No significant differences were found in this respect between the two urban or between the two rural areas.

The results of the test group's opinions on the item "Babies suffering from kwashiorkor (udumbe) are sick because the ancestors are cross" are analyzed in Table 5.11. Between 70 and 77 per cent of the respondents in the four areas did not agree with this statement, while between 5 and 9 per cent did agree.

5.2.4 Toddler nutrition (Tables 5.12 to 5.14)

Tables 5.12 to 5.14 reveal information on the respondents' attitudes towards toddler nutrition. Table 5.12 shows that approximately 80 per cent of the respondents in the respective areas are of the opinion that small children should be fed with the aid of a cup and a spoon. Forty-two per cent of the total number of respondents did not agree that skim milk powder should be added to a small child's porridge, whereas 45 per cent thought that it should be added. Statistically, respondents' answers did not differ significantly according to area.

Although 42 per cent of the respondents were of the opinion that skim milk powder should not be added to porridge, approximately 90 per cent of them thought that in addition to their other food toddlers should also get some milk every day (Table 5.14). In comparison with the urban respondents (total), a smaller percentage of rural respondents (total) supported this idea - 95 per cent as against 87 per cent.

5.2.5 Child nutrition and nutritional diseases (Tables 5.15 to 5.19)

Almost 75 per cent of the respondents thought that it is better for young

girls to be fat (Table 5.15). More respondents in the Peddie district than in the Zwelitsha district were of this opinion. The differences between the urban areas were not statistically significant.

Between 8 and 12 per cent of the respondents (Table 5.16) in the respective areas agreed that it does not matter what kind of food a child is given as long as he has sufficient to eat. Between 84 and 88 per cent did not agree with this statement.

Approximately 64 per cent of the total test group thought that children cannot remain healthy if they eat only maize porridge, samp and bread. It should be mentioned, however, that 30 per cent of the respondents believed that children can remain healthy on this food only (Table 5.17).

According to 96 per cent of the urban and 90 per cent of the rural respondents the eating of good food is one of the best ways of preventing a child from becoming ill (Table 5.18).

The responses to the preceding three items (Tables 5.16 to 5.18) illustrate that the respondents are aware of the causal relationship between nutrition and some nutritional diseases, but that there is still room for improvement with regard to their interpretation of what foods constitute good nutrition (Table 5.17).

Eighty-three per cent of the total number of respondents rejected the idea that girls and women should not eat eggs, since this may result in their running after men (Table 5.19). It is interesting however, that 7 and 6 per cent of the respondents respectively in Zwelitsha and Mdantsane urban areas indicated that women and girls should not eat eggs, whereas twice as many (14% and 17% respectively) in the Peddie and Zwelitsha districts held this view.

5.2.6 Provision of food (Tables 5.20 to 5.23)

Table 5.20 reveals that more than 95 per cent of the respondents in the respective areas were of the opinion that the family's food should be bought before the income is used for any other purpose.

Other general attitudes about food provisioning are:

(1) Not only maize, but maize and beans should be cultivated (97 per cent of the total sample - Table 5.21).

(2) Fruit trees should be grown in the garden (98 per cent of the total sample - Table 5.22).

(3) Schools should provide meals for children (95 per cent of the total sample - Table 5.23).

5.2.7 Family planning and nutrition (Tables 5.24 and 5.25)

In the urban areas of Zwelitsha and Mdantsane almost 75 per cent of the respondents indicated that they are in favour of family planning, as against almost 60 per cent in the two rural areas (Table 5.24).

More than 85 per cent of the respondents in all four areas maintained that it is easier to keep the family healthy and well fed if a woman has only a few instead of many children (Table 5.25).

5.2.8 Treatment of diseases: Medical doctor, herbalist and "egqirheni" (Tables 5.26 and 5.27)

Almost 98 per cent of the respondents indicated that in case of an illnes they would first consult a clinic or medical doctor, while the remainder (2%) would consult the "egqirheni" (Table 5.26). Between 75 and 82 per cent of the respondents in the respective areas indicated that a herbalist (ixhwele) cannot protect or immunize them (Table 5.27). With regard to both items the responses did not differ significantly between urban (total) and rural (total), or between the two urban areas, or between the two rural areas.

TABLE 5.1

PREGNANT WOMEN AND BREAST-FEEDING MOTHERS SHOULD NOT DRINK EXTRA MILK AND EAT EXTRA DRY BEANS

	Eat extra	Not eat extra	Don't know	Total
		Percentages		N
Total urban areas	79	16	5	362
Total rural areas	70	16	14	379
		χ^2 = 16,044*		
Zwelitsha urban	80	14	6	184
Mdantsane urban	77	17	6	178
		χ^2 = 0,764		
Zwelitsha rural	66	18	16	178
Peddie rural	74	13	13	201
		χ^2 = 2,915		
TOTAL	74	16	10	741

TABLE 5.2

BREAST-FEEDING IS HEALTHIER THAN BOTTLE-FEEDING

	Bottle-feeding	Breast-feeding	Don't know	Total
		Percentages		N
Total urban areas	-	100	-	362
Total rural areas	-	100	-	379
Zwelitsha urban	-	100	-	184
Mdantsane urban	-	100	-	178
Zwelitsha rural	-	100	-	178
Peddie rural	-	100	-	201
TOTAL	-	100	-	741

*p < 0,05

TABLE 5.3

IF A MOTHER TAKES A LONG JOURNEY, "BAD MILK" FORMS IN HER BREASTS

	True	Untrue	Don't know	Total
	Percentages			N
Total urban areas	56	31	13	362
Total rural areas	68	20	12	379
	χ^2 = 12,238*			
Zwelitsha urban	56	33	11	184
Mdantsane urban	56	28	16	178
	χ^2 = 2,724			
Zwelitsha rural	71	21	8	178
Peddie rural	65	20	15	201
	χ^2 = 3,374			
TOTAL	62	25	13	741

TABLE 5.4

IF A MOTHER FALLS PREGNANT WHILE SHE IS BREAST-FEEDING DOES HER BREASTMILK GO SOUR?

	Yes	No	Don't know	Total
	Percentages			N
Total urban areas	38	12	49	362
Total rural areas	43	10	47	379
	χ^2 = 2,468			
Zwelitsha urban	37	11	52	184
Mdantsane urban	39	13	47	178
	χ^2 = 0,806			
Zwelitsha rural	44	11	44	178
Peddie rural	42	8	50	201
	χ^2 = 1,470			
TOTAL	41	11	48	741

*$p < 0,05$

TABLE 5.5

IF A BABY WHO HAS BEEN BREAST-FED DIES, THE "POISON" IN THE MOTHER'S BREASTS WILL POISON HER NEXT BABY

	True	Untrue	Don't know	Total
		Percentages		N
Total urban areas	32	43	25	362
Total rural areas	40	40	20	379
		χ^2 = 6,491*		
Zwelitsha urban	33	44	23	184
Mdantsane urban	30	42	28	178
		χ^2 = 1,389		
Zwelitsha rural	44	40	16	178
Peddie rural	37	39	24	201
		χ^2 = 3,839		
TOTAL	36	41	23	741

TABLE 5.6

IF A BREAST-FED BABY GETS SICK, HIS MOTHER'S MILK IS BEWITCHED

	True	Untrue	Don't know	Total
		Percentages		N
Total urban areas	13	68	19	362
Total rural areas	18	58	24	379
		χ^2 = 8,203*		
Zwelitsha urban	12	70	18	184
Mdantsane urban	14	66	20	178
		χ^2 = 0,878		
Zwelitsha rural	16	59	25	178
Peddie rural	19	57	24	201
		χ^2 = 0,464		
TOTAL	15	63	22	741

*$p < 0,05$

TABLE 5.7

A DISH OF PORRIDGE ONLY IS NOT GOOD ENOUGH FOR A BABY AND MILK, EGGS OR BEANS SHOULD BE ADDED

	Porridge plus	Only porridge	Don't know	Total
	Percentages			N
Total urban areas	93	5	2	362
Total rural areas	90	6	4	379
	χ^2 = 2,305			
Zwelitsha urban	93	5	2	184
Mdantsane urban	93	5	2	178
	χ^2 = 0,189			
Zwelitsha rural	92	7	1	178
Peddie rural	89	6	5	201
	χ^2 = 5,428			
TOTAL	91	6	3	741

TABLE 5.8

A MOTHER SHOULD WEAN HER CHILD QUICKLY

	Quickly	Slowly	Don't know	Total
	Percentages			N
Total urban areas	3	95	2	362
Total rural areas	2	94	4	379
	χ^2 = 2,716			
Zwelitsha urban	3	95	2	184
Mdantsane urban	3	95	2	178
	χ^2 = 0,116			
Zwelitsha rural	3	93	4	178
Peddie rural	1	95	4	201
	χ^2 = 1,437			
TOTAL	3	94	3	741

TABLE 5.9

READY PREPARED BOUGHT INFANT FOOD IS BETTER FOR BABIES THAN FRESH FOOD PREPARED AT HOME

	Bought food	Home food	Don't know	Total
	Percentages			N
Total urban areas	36	61	3	362
Total rural areas	41	53	6	379
	χ^2 = 6,759*			
Zwelitsha urban	35	62	3	184
Mdantsane urban	37	59	4	178
	χ^2 = 0,719			
Zwelitsha rural	42	50	8	178
Peddie rural	40	55	5	201
	χ^2 = 1,593			
TOTAL	38	57	5	741

TABLE 5.10

FAT BABIES ARE ALWAYS HEALTHY BABIES

	True	Untrue	Don't know	Total
	Percentages			N
Total urban areas	76	18	6	362
Total rural areas	79	12	9	379
	χ^2 = 7,185*			
Zwelitsha urban	72	21	7	184
Mdantsane urban	80	14	6	178
	χ^2 = 2,837			
Zwelitsha rural	78	14	8	178
Peddie rural	80	10	10	201
	χ^2 = 1,448			
TOTAL	77	15	8	741

*$p < 0,05$

TABLE 5.11

BABIES WHO HAVE KWASHIORKOR (UDUMBE) ARE SICK BECAUSE THE ANCESTORS ARE CROSS

	True	Untrue	Don't know	Total
	Percentages			N
Total urban areas	8	75	17	362
Total rural areas	7	71	22	379
	χ^2 = 3,275			
Zwelitsha urban	6	77	17	184
Mdantsane urban	9	74	17	178
	χ^2 = 1,188			
Zwelitsha rural	9	72	19	178
Peddie rural	5	70	25	201
	χ^2 = 3,941			
TOTAL	7	73	20	741

TABLE 5.12

YOU SHOULD FEED A YOUNG CHILD WITH A CUP AND SPOON

	Cup and spoon	No cup and spoon	Don't know	Total
	Percentages			N
Total urban areas	81	13	6	362
Total rural areas	79	14	7	379
	χ^2 = 0,900			
Zwelitsna urban	80	13	7	184
Mdantsane urban	82	13	5	178
	χ^2 = 1,095			
Zwelitsha rural	82	11	7	178
Peddie rural	76	16	8	201
	χ^2 = 2,494			
TOTAL	80	14	6	741

TABLE 5.13

POWDERED SKIMMED MILK SHOULD BE ADDED TO A YOUNG CHILD'S PORRIDGE

	To porridge	Not to porridge	Don't know	Total
	Percentages			N
Total urban areas	48	42	10	362
Total rural areas	43	41	16	379
	χ^2 = 5,033			
Zwelitsha urban	43	46	11	184
Mdantsane urban	52	38	10	178
	χ^2 = 2,806			
Zwelitsha rural	47	37	16	178
Peddie rural	39	46	15	201
	χ^2 = 3,430			
TOTAL	45	42	13	741

TABLE 5.14

A CHILD, BETWEEN TWO AND FIVE SHOULD DRINK MILK EVERY DAY, IN ADDITION TO HIS OTHER FOOD

	Agree	Disagree	Don't know	Total
	Percentages			N
Total urban areas	95	3	2	362
Total rural areas	87	8	5	379
	χ^2 = 13,232*			
Zwelitsha urban	94	4	2	184
Mdantsane urban	95	3	2	178
	χ^2 = 0,050			
Zwelitsha rural	89	6	4	178
Peddie rural	85	10	5	201
	χ^2 = 1,883			
TOTAL	91	6	3	741

*$p < 0,05$

TABLE 5.15

IT IS BETTER FOR YOUNG GIRLS TO BE FAT

	Fat	Not fat	Don't know	Total
	Percentages			N
Total urban areas	72	18	10	362
Total rural areas	75	15	10	379
	χ^2 = 1,073			
Zwelitsha urban	71	18	11	184
Mdantsane urban	74	17	9	178
	χ^2 = 0,735			
Zwelitsha rural	71	20	10	178
Peddie rural	80	10	10	201
	χ^2 = 6,413*			
TOTAL	74	16	10	741

TABLE 5.16

IT DOES NOT MATTER WHAT KIND OF FOOD A CHILD EATS AS LONG AS HE IS FULL

	Agree	Disagree	Don't know	Total
	Percentages			N
Total urban areas	9	87	4	362
Total rural areas	11	84	4	379
	χ^2 = 1,281			
Zwelitsha urban	8	88	4	184
Mdantsane urban	10	86	4	178
	χ^2 = 0,349			
Zwelitsha rural	12	84	4	178
Peddie rural	10	85	5	201
	χ^2 = 0,604			
TOTAL	10	86	4	741

*$p < 0,05$

TABLE 5.17

CHILDREN STAY HEALTHY IF THEY ONLY EAT MAIZE PORRIDGE, SAMP AND BREAD

	Healthy	Unhealthy	Don't know	Total
	Percentages			N
Total urban areas	28	68	4	362
Total rural areas	31	62	7	379
	χ^2 = 4,867			
Zwelitsha urban	25	70	5	184
Mdantsane urban	31	66	3	178
	χ^2 = 3,352			
Zwelitsha rural	25	68	7	178
Peddie rural	37	56	7	201
	χ^2 = 5,941			
TOTAL	30	64	6	741

TABLE 5.18

ONE OF THE BEST WAYS OF STOPPING A CHILD FROM BECOMING ILL IS TO GIVE HIM ENOUGH GOOD FOOD TO EAT

	True	Untrue	Don't know	Total
	Percentages			N
Total urban areas	96	4	-	362
Total rural areas	90	10	-	379
	χ^2 = 8,959*			
Zwelitsha urban	94	6	-	184
Mdantsane urban	96	4	-	178
	χ^2 = 0,108			
Zwelitsha rural	89	11	-	178
Peddie rural	91	9	-	201
	χ^2 = 0,317			
TOTAL	93	7	-	741

*$p < 0,05$

TABLE 5.19

WOMEN AND GIRLS SHOULD NOT EAT EGGS AS THIS CAN MAKE THEM RUN AFTER MEN

	Untrue	True	Don't know	Total
	Percentages			N
Total urban areas	87	7	6	362
Total rural areas	80	16	4	379
	χ^2 = 15,510*			
Zwelitsha urban	88	7	5	184
Mdantsane urban	86	6	8	178
	χ^2 = 1,412			
Zwelitsha rural	82	14	4	178
Peddie rural	78	17	5	201
	χ^2 = 0,909			
TOTAL	83	11	6	741

TABLE 5.20

YOU SHOULD FIRST BUY FOOD WITH THE MONEY YOU EARN

	Food	Other items	Don't know	Total
	Percentages			N
Total urban areas	98	2	-	362
Total rural areas	95	5	-	379
	χ^2 = 3,527			
Zwelitsha urban	97	3	-	184
Mdantsane urban	98	2	-	178
	χ^2 = 0,446			
Zwelitsha rural	97	3	-	178
Peddie rural	94	6	-	201
	χ^2 = 1,410			
TOTAL	96	4	-	741

*p < 0,05

TABLE 5.21

SHOULD YOU GROW FOOD LIKE MAIZE AS WELL AS BEANS, OR DO YOU NEED ONLY MAIZE?

	Maize and beans	Maize only	Don't know	Total
	Percentages			N
Total urban areas	96	4	-	362
Total rural areas	98	2	-	379
	χ^2 = 1,849			
Zwelitsha urban	97	3	-	184
Mdantsane urban	94	6	-	178
	χ^2 = 1,916			
Zwelitsha rural	98	2	-	178
Peddie rural	98	2	-	201
	χ^2 = 0,024			
TOTAL	97	3	-	741

TABLE 5.22

YOU SHOULD GROW FRUIT TREES IN YOUR GARDEN

	Fruit trees	No fruit trees	Don't know	Total
	Percentages			N
Total urban areas	99	1	-	362
Total rural areas	97	3	-	379
	χ^2 = 3,518			
Zwelitsha urban	99	1	-	184
Mdantsane urban	99	1	-	178
	χ^2 = 0,304			
Zwelitsha rural	96	4	-	178
Peddie rural	99	1	-	201
	χ^2 = 4,500*			
TOTAL	98	2	-	741

*$p < 0,05$

TABLE 5.23

WOULD YOU LIKE THE SCHOOL TO GIVE SCHOOL-CHILDREN MEALS?

	Meals	No meals	Don't know	Total
	Percentages			N
Total urban areas	92	2	6	362
Total rural areas	90	6	4	379
	χ^2 = 8,422*			
Zwelitsha urban	89	2	9	184
Mdantsane urban	97	1	2	178
	χ^2 = 8,859*			
Zwelitsha rural	90	7	3	178
Peddie rural	90	4	6	201
	χ^2 = 2,985			
TOTAL	91	4	5	741

TABLE 5.24

IT IS RIGHT FOR MARRIED COUPLES TO USE CONTRACEPTION OR FAMILY PLANNING

	Contraception	No contraception	Don't know	Total
	Percentages			N
Total urban areas	75	16	9	362
Total rural areas	60	19	21	379
	χ^2 = 24,242*			
Zwelitsha urban	74	16	10	184
Mdantsane urban	76	15	9	178
	χ^2 = 0,104			
Zwelitsha rural	57	21	22	178
Peddie rural	62	18	20	201
	χ^2 = 1,044			
TOTAL	67	17	16	741

*$p < 0,05$

TABLE 5.25

IF A WOMAN HAS A FEW CHILDREN IT IS EASIER FOR THEM TO BE HEALTHY AND WELL FED

	Few children	Many children	Don't know	Total
	Percentages			N
Total urban areas	89	6	5	362
Total rural areas	87	10	3	379
	χ^2 = 3,889			
Zwelitsha urban	91	4	5	184
Mdantsane urban	87	9	4	178
	χ^2 = 4,400			
Zwelitsha rural	86	11	3	178
Peddie rural	87	9	4	201
	χ^2 = 0,518			
TOTAL	88	8	4	741

TABLE 5.26

WHEN YOU ARE SICK, SHOULD YOU FIRST GO TO THE EGQIRHENI, OR FIRST GO TO A CLINIC OR MEDICAL DOCTOR?

	"Egqirheni"	Clinic or medical doctor	Don't know	Total
	Percentages			N
Total urban areas	2	98	-	362
Total rural areas	2	98	-	379
	χ^2 = 0,205			
Zwelitsha urban	1	99	-	184
Mdantsane urban	3	97	-	178
	χ^2 = 2,849			
Zwelitsha rural	1	99	-	178
Peddie rural	3	97	-	201
	χ^2 = 1,583			
TOTAL	2	98	-	741

"Egqirheni" is a witchdoctor who does predictions and uses herbs.

TABLE 5.27

THE HERBALIST (IXHELE) IMMUNIZES AND PROTECTS YOU WITH HIS MEDICINE

	Can protect	Cannot protect	Don't know	Total
	Percentages			N
Total urban areas	11	81	8	362
Total rural areas	15	76	9	379
	χ^2 = 3,433			
Zwelitsha urban	10	81	9	184
Mdantsane urban	11	82	7	178
	χ^2 = 0,490			
Zwelitsha rural	16	75	9	178
Peddie rural	14	77	9	201
	χ^2 = 0,417			
TOTAL	13	78	9	741

"Ixhele" is a herbalist only.

CHAPTER 6

SUMMARY

6.1 AIM OF THE INVESTIGATION

To develop and evaluate a comprehensive nutrition guidance programme can be regarded as a challenge. The project was planned to be launched in three different phases, the first of which has been completed. This first phase consisted of an exploratory survey which was undertaken amongst women with children in order to ascertain their knowledge, practices and attitudes with regard to the diet of pregnant and lactating mothers, as well as the diet of infants, toddlers and school-going children. In this phase attention was also paid to the communication media utilised to obtain information on the above aspects. Secondly, an educational or guidance programme will be developed to eliminate deficiencies found in the explorative results, and thirdly, this programme will be evaluated to testify to its effectiveness.

In this research finding the results of the first phase, the base-line survey, are reported.

6.2 THE SAMPLE, QUESTIONNAIRE AND COLLECTING THE DATA

The sample of 741 respondents was drawn from two urban and two rural areas, respectively Mdantsane (178) and Zwelitsha (184) and Peddie district (201) and Zwelitsha district (178). The respondents were chosen at random from a population count compiled by the fieldworkers. The sample was limited to Xhosa-speaking female respondents of 15 years and older, with children.

Relatively more respondents between the ages 15-29 years were involved in the urban samples (51%) than in the rural samples (40%). However, no significant difference at the 5 per cent level was found with regard to age distribution between the two urban areas or between the two rural areas.

The questionnaire contained questions on four aspects that were basically related to nutrition, nutritional diseases and eating habits. These were knowledge, practices, attitudes,and the use of communication media. Within this framework, several themes were investigated, namely the nutrition and eating habits of pregnant and lactating mothers, infants, toddlers, and the

family. In the knowledge section, the respondents' acquaintance with nutritional diseases was probed by showing them sets of photographs of patients suffering from kwashiorkor and pellagra, and asking them whether they recognise these deficiency diseases.

The questionnaires were completed by the interview method, conducted by highly qualified and experienced nursing personnel during October/November 1977.

6.3 SUMMARY OF THE RESULTS

6.3.1 Background data of the respondents

The following appears amongst others, from the results:

(1) Twenty-two per cent of the respondents had no educational qualifications. Thirty-one per cent achieved the lower and higher primary level while the rest (16%) had reached the junior secondary level. Educational level will have considerable bearing on the type of guidance programme that will eventually be implemented.

(2) Twenty-four per cent of the respondents indicated that they have never been married - this phenomenon occurred more frequently in the urban than in the rural areas. The children of unmarried mothers place an added burden on those families - often low income families - with whom they share a home. The general acceptance of family planning may help to minimize this problem.

(3) More urban respondents indicated that their husbands were at home every night (31%) while fewer rural respondents' husbands were at home every night (10%). The rest of the respondents indicated that their husbands came home every week or every month or annually.

(4) The mean number of living children per respondent were higher in the rural (3,75) than in the urban areas (3,29).

6.3.2 Knowledge

Several aspects of knowledge related to nutrition and nutritional diseases

were incorporated in the questionnaire. The impression gained from the data with respect to nutritional diseases, is that the Xhosa women's knowledge is not satisfactory. Only 12 and 13 per cent respectively of the sample were capable of identifying kwashiorkor and pellagra correctly from the photographs shown to them. Furthermore, the majority of the respondents appeared to be uninformed of the causes of these nutrition deficiency diseases or the way in which it can be treated. Consequently, emphasis should be laid in the guidance programme on the relationship between eating habits and the occurrence of these nutritional diseases as well as the recognition of the early symptoms.

As nutrition guidance in its widest sense is based on a knowledge of the basic functions of food in the body, an attempt was made to establish whether the respondents could name body-building, protective as well as heat and energy foods. It appeared from the results that the respondents' knowledge in this respect is also relatively poor.

With regard to some aspects of breast-feeding, the Xhosa women's knowledge was generally good. For example, the majority of the women maintained that breast milk is the best milk for an infant, and that breast milk protects their infants against disease.

6.3.3 Practices

Topics included under this heading comprise inter alia breast-feeding, eating habits of the infant and the family, procedures followed when a child falls sick, visits to the clinic for post and antenatal care and availability of foods. Because it constitutes an important aspect of a long-term health and nutrition campaign with serious implications, a couple of questions on family planning were also included.

With regard to infant feeding it appears that a third of the respondents gave water, 12 per cent "inembe/isicakathi" and the rest administered milk as the very first food to the infant. Of those that gave "inembe/isicakathi" 78 per cent gave milk in addition. The vast majority of the sample endorse the habit of breast-feeding, even up to the age of 24 months. From the diverse results on eating habits, it also appears that many mothers fall short of a standard that can reasonably be demanded for balanced feeding of their infants

during the weaning period. During this period the child is very vulnerable to malnutrition. The importance of teaching these mothers about suitable weaning foods and frequency of feeding cannot be over-emphasized.

Women in rural areas reported a greater usage of green vegetables and beans mixed with maize products. What may be regarded as a disturbing piece of information, from a dietician's point of view, is the general practice by nearly three quarters of the sample of throwing away the water in which vegetables were cooked.

In view of the fact that the preparation and consumption of foods are dependent on the availability of foods, it should be noted that foods deemed important for its nutritional value, were generally available in those areas where the survey was conducted. Urban areas had easier access to a wider variety of foods, including eggs, milk and fresh vegetables.

As far as medical assistance is concerned the results show that 52 per cent of the sample reported that they paid visits to a clinic or doctor from the sixth month of pregnancy, and 31 per cent throughout pregnancy or from the third month.

Almost three quarters of the Xhosa women in the sample mentioned that they do not use any form of contraception. It should be taken into consideration, however, that this figure included 20 per cent of women who indicated that they are sterile or past the child-bearing age.

It is interesting to note that half of the married women indicated that they and their husbands never discussed family planning. More respondents in the rural areas (61%) than in the urban areas (35%) never discussed family planning with their husbands.

6.3.4 Attitudes

As concerns the eating habits of pregnant and lactating women, about three quarters of the sample agree that women should consume additional milk and dry beans under these circumstances. Taken as a whole, the results of the attitude items reflect a positive attitude to breast-feeding *per se*.

Although the women acknowledge without exception that breast-feeding is healthier for a baby than bottle-feeding, this positive attitude is marred by the prevalence of some taboos about breast-feeding. For example, 60 per cent subscribe to the view that "bad milk" forms in a mother's breasts when she undertakes a long journey; 40 per cent believe that a lactating mother's milk will turn sour if she falls pregnant; a third share the opinion that a next baby will be poisoned if a baby dies that is still being breast-fed, and 15 per cent agreed that a mother's milk is bewitched if her breast-fed baby dies. These questions pertaining to taboos yielded a considerable percentage of "don't know" responses.

More than half of the respondents thought that fresh food prepared at home is better than ready prepared bought infant food - a preference which exists to a greater extent among urban mothers than among rural mothers.

A belief with rather important health implications prevails under the respondents, namely that fat babies are always healthy babies. This belief corresponds to the reported attitude that it is better for young girls to be fat than slim.

Although 30 per cent share the opinion that a child can stay healthy even if his diet provides only porridge, bread and maize products, it should be mentioned that, with negligible exceptions, all the Xhosa women agree that sufficient intake of good food is one of the best ways to prevent childhood diseases. This positive attitude with regard to child nutrition can be used as a stepping stone for nutrition guidance.

As far as the acquisition of food was concerned, nearly all the respondents stated that food should first be bought before income was spent on other items. There were also a preponderant majority who claimed that vegetables and fruit trees should be planted in the garden.

6.3.5 Sources of information

An effective nutrition guidance programme can only be implemented by guidance officers who have a sound grasp of the target group's existing sources of information. Consequently, a section was included in the questionnaire to obtain information on certain aspects of interpersonal communication, mass

media use, the need for more information on various aspects of nutrition and language proficiency.

With regard to the need for more information on the various aspects of nutrition (baby feeding, weaning and family feeding) and the health of the mother during pregnancy, the data reveal that the ratio between persons who think they know enough and those who wish to know more is more or less 45 : 55. The greatest need is for information about the health of the mother during pregnancy.

It also appears that clinics provided the majority of the respondents with most of their information on the health of the mother during pregnancy and on all aspects of nutrition hitherto mentioned. The mother-in-law is the second most important source of information followed by the mother of the respondent. The mother-in-law's role is considerably greater in the rural areas than in the urban areas.

Although it is noted from the results that the mass media supply an insignificant proportion of information, it should also be taken into account that a considerable number of respondents indicated in a previous survey that the radio programme "Impilo Yethu" furnished them with knowledge on nutrition or encouraged them to attend the clinic/hospital/doctor (D.P. van Vuuren, 1977). In this survey some two thirds of the respondents indicated that they are in possession of a radio.

Language proficiency is reflected where more than half of the sample mentioned that they can read Xhosa well; only 23 per cent cannot read Xhosa at all. As far as the reading and speaking of English is concerned, it was noted that fewer than half of the women can read English, while still fewer can speak it. (It can be expected, of course, that there would be a correlation between the educational level of the respondents and their ability to read Xhosa and reading and speaking of English).

6.3.6 A note on the differences between the sample groups

As was noted, the sample consisted of two urban and two rural areas. With regard to the results of the different areas, it appears - as could have perhaps been expected - that respondents in urban areas performed consistently

better than those in rural areas. Not only their educational level, for example, but also their knowledge, attitudes and many aspects of practices, seem to be superior to those in rural areas.

Comparing the two urban areas, the responses in Mdantsane were generally better than those in Zwelitsha. A similar finding was revealed with respect to the rural areas where Peddie district seemed to boast distinct advantages over Zwelitsha district.

6.4 CONCLUSION

With regard to the intended information programme on food and nutrition, an effort should be made to guide the public towards the improved utilization of the nutritional assets of available foods. Furthermore, since the results show that the public already rely a great deal on, and benefit by, the existing clinic facilities, it may be concluded that staff members could play an important role in an effective nutrition guidance programme. In addition such a programme will have to conform to the local cultural norms and values, and if possible, should also incorporate local opinion leaders such as chiefs, mothers and mothers-in-law.

It should be stressed however, that a comprehensive health and nutrition guidance programme will take time, patience and hard work.

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