

RESULTS

THE RESULTS

The results of the present study are shown in tables 9-38 and Figures 3-16.

1) ADMISSION DATA OF THE STUDIED CASES (tables 9-11 and Figures 3-5).

As shown in tables 9 and 10 all the admission criteria in both breast and formula fed groups that received either rice based oral rehydration solution or the standard WHO glucose based solution were comparable with no statistically significant difference $P > 0.05$.

Also table 11 represent the admission data of the cases that received the rice based and glucose based oral rehydration solution irrespective of their feeding pattern. The data of both groups were comparable and no statistically significant difference between them was noticed $P > 0.05$.

Table (9): Admission data of breast fed group that received either rice based or glucose based oral rehydration solution (Mean \pm SD).

Admission data	Breast fed group	
	Rice ORS N = 30	Glucose ORS N = 30
Age (m)	8.03 \pm 2.35	8.23 \pm 2.73
Body weight (kg)	7.61 \pm 1.25	7.61 \pm 1.32
Duration of diarrhoea before admission (days)	2.13 \pm 0.86	2.47 \pm 0.82
Weight for length % of median NCHS reference	90.04 \pm 7.91	93.94 \pm 12.95
Percentage weight loss due to dehydration	5.78 \pm 0.68	6.04 \pm 0.64
Number of cases with vomiting (%)	23 (76.7%)	25 (83.3%)
Number of cases with fever \geq 37.5%	20 (66.7%)	16 (53.3%)
Body temperature	37.7 \pm 0.48	37.6 \pm 0.46
Serum sodium (mmol/L)	136.47 \pm 4.04	136.77 \pm 4.12
Serum potassium (mmol/L)	3.99 \pm 0.49	4.11 \pm 0.88

P value showed no statistically significant difference between both groups.

Table (10): Admission data of formula fed group that received either rice based or glucose based oral rehydration solution (Mean \pm SD).

Admission data	Formula fed group	
	Rice ORS N = 30	Glucose ORS N = 30
Age (m)	12.15 \pm 4.84	10.90 \pm 5.34
Body weight (kg)	8.29 \pm 1.43	7.32 \pm 1.22
Duration of diarrhoea before admission (days)	2.80 \pm 0.41	2.40 \pm 0.82
Weight for length % of median NCHS reference	90.71 \pm 6.71	85.84 \pm 7.09
Percentage weight loss due to dehydration	5.72 \pm 0.64	5.66 \pm 0.49
Number of cases with vomiting (%)	14 (70%)	17 (85%)
Number of cases with fever \geq 37.5%	7 (35%)	7 (35%)
Body temperature	37.5 \pm 0.40	37.4 \pm 0.25
Serum sodium (mmol/L)	139.20 \pm 7.52	136.10 \pm 6.16
Serum potassium (mmol/L)	4.18 \pm 0.82	3.95 \pm 0.58

P value showed no statistically significant difference between both groups.

Results

Table (11): Admission data of cases received either rice based or glucose based oral rehydration solution irrespective of their feeding pattern. (Mean \pm SD).

Admission data	Rice ORS N = 50	Glucose ORS N = 50	P
Age (M)	9.68 \pm 4.06	9.3 \pm 4.15	N.S
Body weight (kg)	7.88 \pm 1.33	7.49 \pm 1.27	N.S
Duration of diarrhoea before admission (days)	2.40 \pm 0.78	2.44 \pm 0.81	N.S
Weight/length % of median NCHS reference	90.3 \pm 7.38	90.7 \pm 11.61	N.S
Percentage weight loss due to dehydration	5.75 \pm 0.66	5.79 \pm 1.04	N.S
Number of cases with vomiting (%)	37 (74%)	42 (84%)	N.S
Number of cases with fever \geq 37.5°C (%)	27 (54%)	23 (46%)	N.S
Body temperature °C	37.62 \pm 0.46	36.91 \pm 4.3	N.S
Serum sodium mmol/L	137.56 \pm 5.78	141.9 \pm 39.15	N.S
Serum potassium mmol/L	4.07 \pm 0.64	3.99 \pm 0.91	N.S

P value showed no statistically significant difference between both groups (P > 0.05).

Relation Between ORS Type and Body Weight

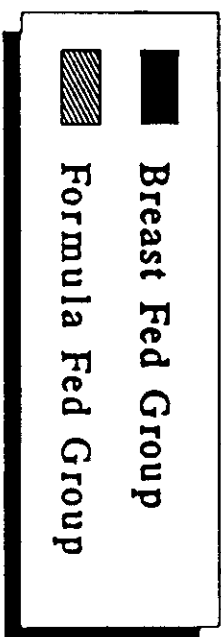
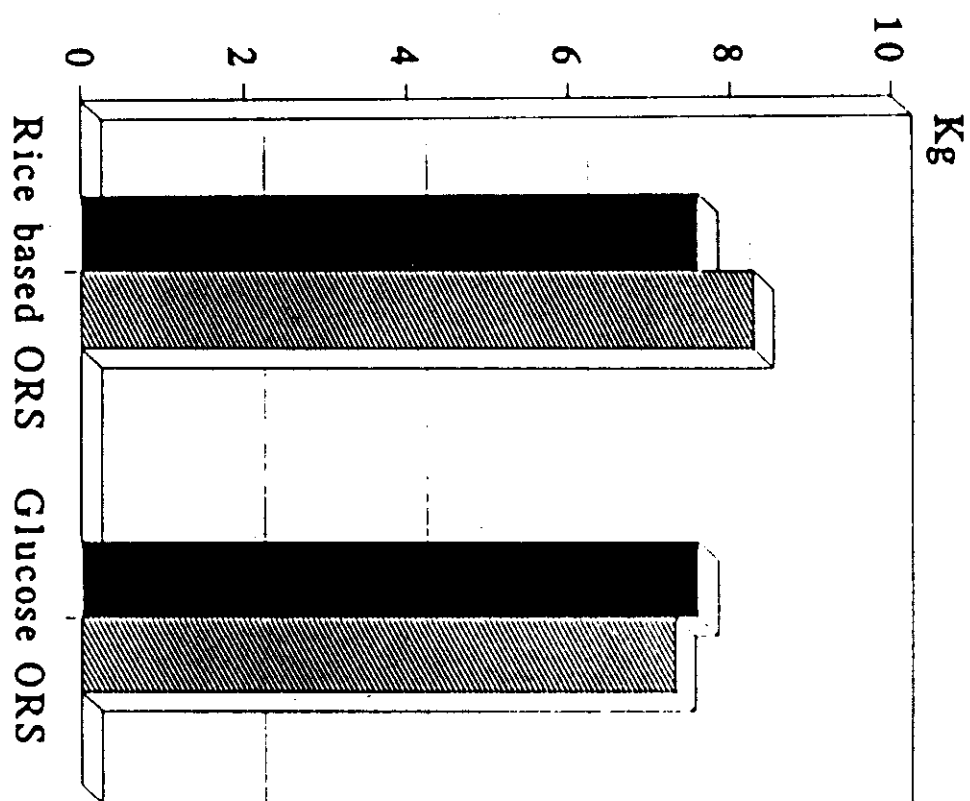
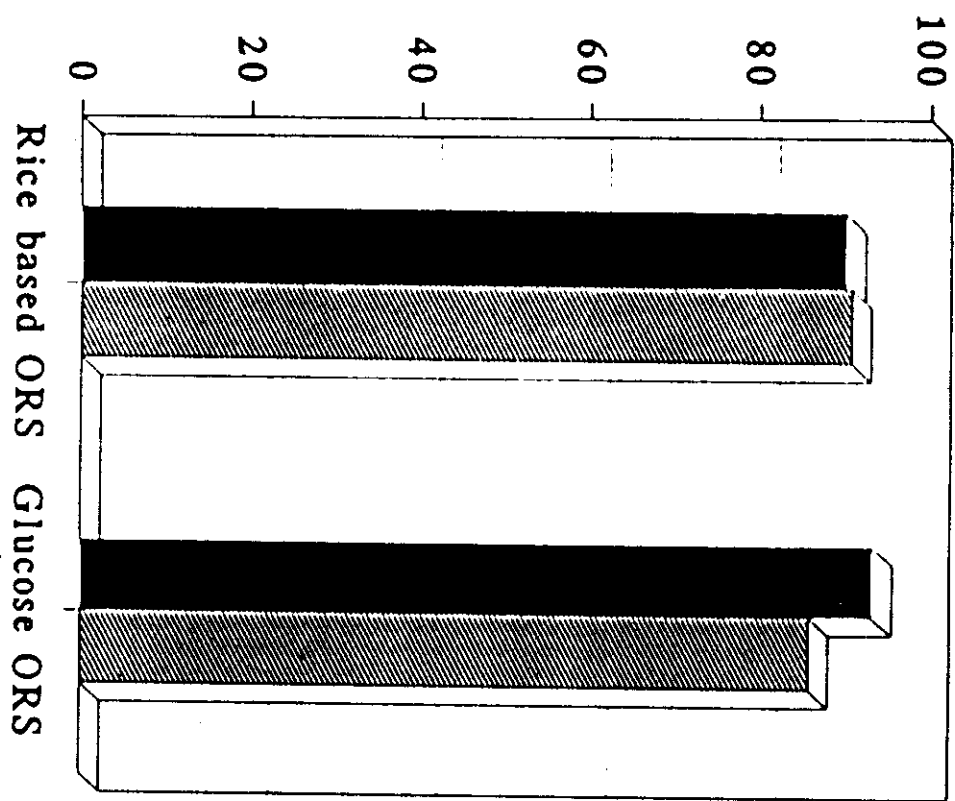


Figure 3

Relation Between ORS Type and Weight for length According to NCHS



■ Breast Fed Group
▨ Formula Fed Group

Figure 4

Relation Between ORS Type and Duration of Diarrhoea Before Admission (Days)

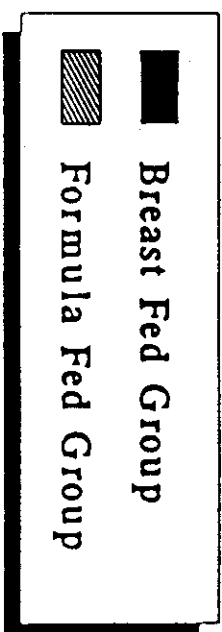
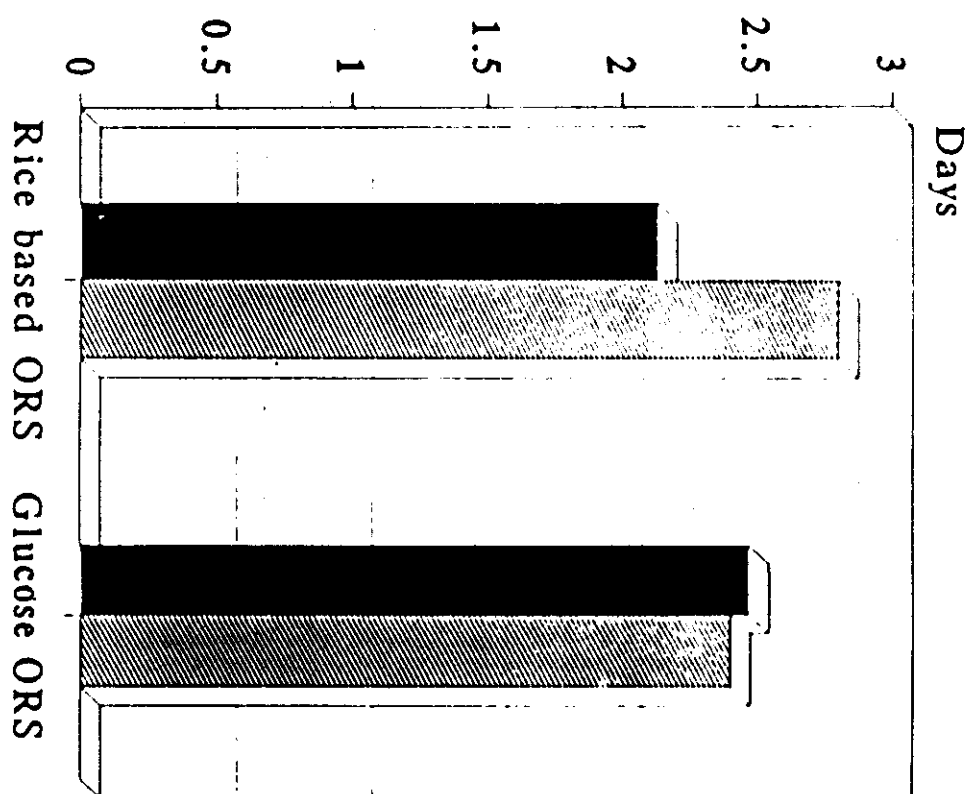


Figure 5

II) FLUID INPUT AND OUTPUT :-

A- Fluid input : The amount of oral rehydration solution intake (ml/kg) is shown in tables 12-13 and figure 6.

In breast fed group there was a numerical difference regarding the mean fluid intake between rice based and glucose based oral rehydration solutions treated groups during all period of admission. The rice based treated group received lesser amount of fluid than did glucose based one but the difference was statistically insignificant.

In formula fed group table 12 showed that during the first 6 hours after admission, the rice based treated group received smaller amount of oral rehydration solution than the glucose based treated group and this difference was significant $P < 0.05$.

It was noticed from table 13 that there were no significant differences, regarding the amount of solution intake between the cases that received rice based or glucose based solution irrespective of their feeding pattern.

Table (12): Amount of oral rehydration solution intake (ml/kg) in both breast and formula fed cases that received either rice or glucose based oral rehydration solution (Mean \pm SD).

Duration after Admission	Breast fed group			Formula fed group		
	Rice ORS	Glucose ORS	P	Rice ORS	Glucose ORS	P
First 6 hours	97.44 ± 20.07	95.58 ± 18.64	N.S	89.53 ± 13.84	97.68 ± 16.19	S
First 24 hours	160.26 ± 56.45	146.77 ± 42.4	N.S	137.11 ± 26.01	134.11 ± 28.79	N.S
All period of admission	197.7 ± 109.5	219.85 ± 121.86	N.S	179.74 ± 70.38	159.68 ± 56.73	N.S

Table (13): Amount of oral rehydration solution intake (ml/kg) in cases that received rice based and glucose based oral rehydration solution irrespective of their feeding pattern (Mean \pm SD).

Duration of diarrhoea after admission	Rice ORS	Glucose ORS	P
First 6 hours	94.1 ± 17.8	96.4 ± 17.2	N.S
First 24 hours	150.6 ± 46.8	139.3 ± 36.7	N.S
All period of admission	190.3 ± 93.6	194.5 ± 101.9	N.S

No statistical significant differences

Relation Between ORS Type and Intake (ml / Kg)

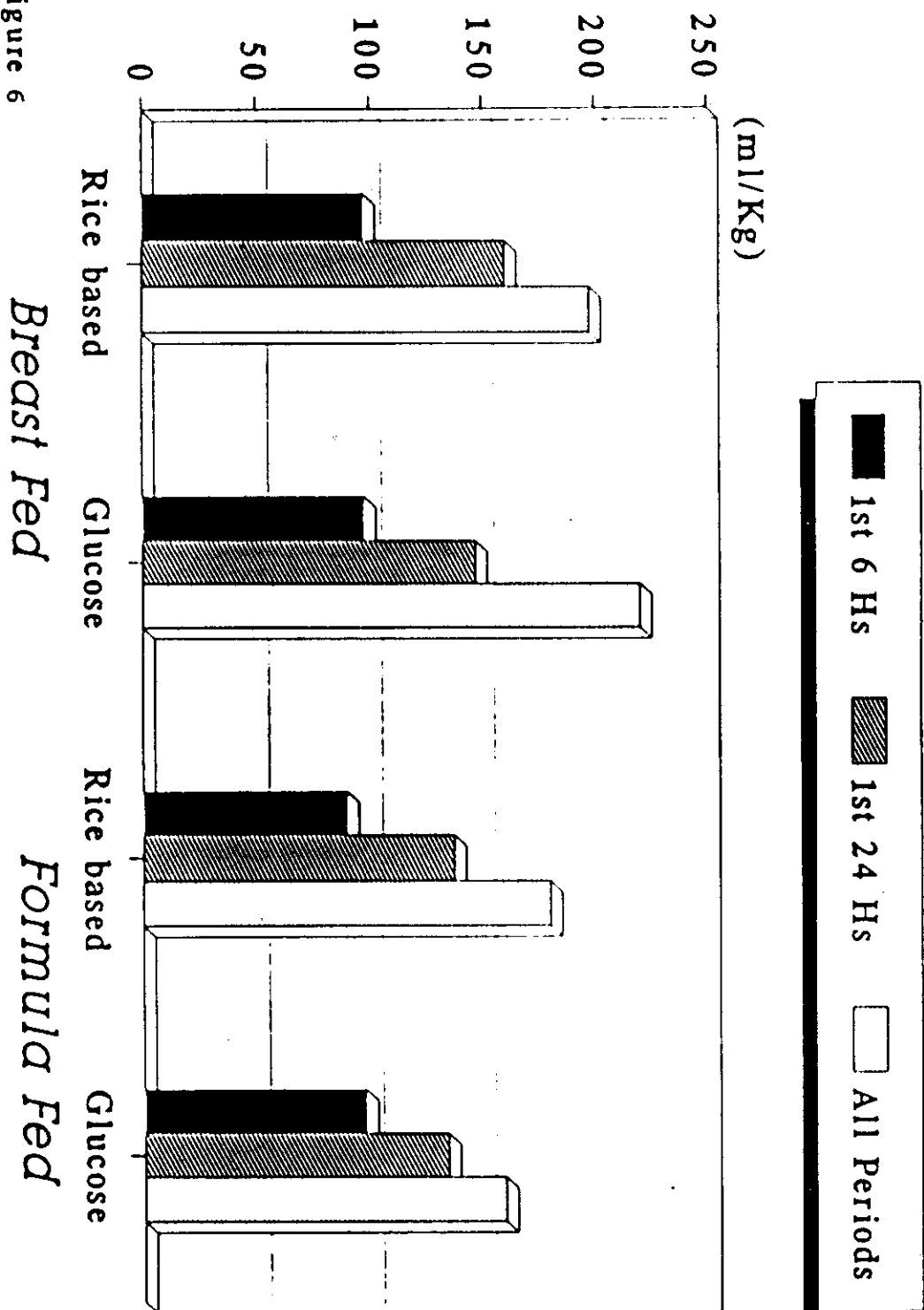


Figure 6

Breast Fed *Formula Fed*

Table (14): Stool output (gm/kg) in both breast and formula fed groups that received either rice or glucose based oral rehydration solution (Mean \pm SD).

Duration after Admission	Breast fed group			Formula fed group		
	Rice ORS	Glucose ORS	P	Rice ORS	Glucose ORS	P
First 6 hours	26.26 ± 16.68	20.65 ± 10.32	S	10.53 ± 5.0	17.53 ± 7.34	S
First 24 hours	75.11 ± 55.59	66.42 ± 42.93	N.S	48.22 ± 30.45	52.53 ± 33.05	N.S
All peroid of diarrhoea	105.67 ± 97.42	124.88 ± 110.27	N.S	91.0 ± 82.20	82.21 ± 65.77	N.S

Table (15): Stool output (gm/kg) in cases that received either rice or glucose based oral rehydration solution irrespective their feeding pattern (Mean \pm SD).

Duration of diarrhoea after admission	Rice ORS	Glucose ORS	P
First 6 hours	16.9 ± 15.3	17.2 ± 10.5	N.S
First 24 hours	64.7 ± 46.1	60.5 ± 38.8	N.S
All peroid of admission	98.4 ± 88.3	106.8 ± 94.4	N.S

No statistical significant differences.

Table (16): Purging rate (gm/kg/hour) in breast and formula fed group that received either rice or glucose based oral rehydration solution (Mean \pm SD).

Duration after Admission	Breast fed group			Formula fed group		
	Rice ORS	Glucose ORS	P	Rice ORS	Glucose ORS	P
First 6 hours	3.69 ± 2.99	3.07 ± 1.95	N.S	1.56 ± 0.91	2.57 ± 0.91	S
First 24 hours	3.67 ± 2.36	3.03 ± 1.61	N.S	2.48 ± 0.94	2.53 ± 1.22	N.S
All period of diarrhoea	3.33 ± 2.6	2.82 ± 1.32	N.S	2.65 ± 1.03	2.53 ± 0.88	N.S

Table (17): Purging rate (gm/kg/hours) in cases that received either rice or glucose based oral rehydration solution irrespective their feeding pattern (Mean \pm SD).

Duration of diarrhoea after admission	Rice ORS	Glucose ORS	P
First 6 hours	2.81 ± 2.58	2.8 ± 1.79	N.S
First 24 hours	3.18 ± 1.98	2.72 ± 1.54	N.S
All period of admission	3.01 ± 1.74	2.57 ± 1.26	N.S

No statistically significant difference.

Relation Between ORS Type and and Amount Stool Output (gm)

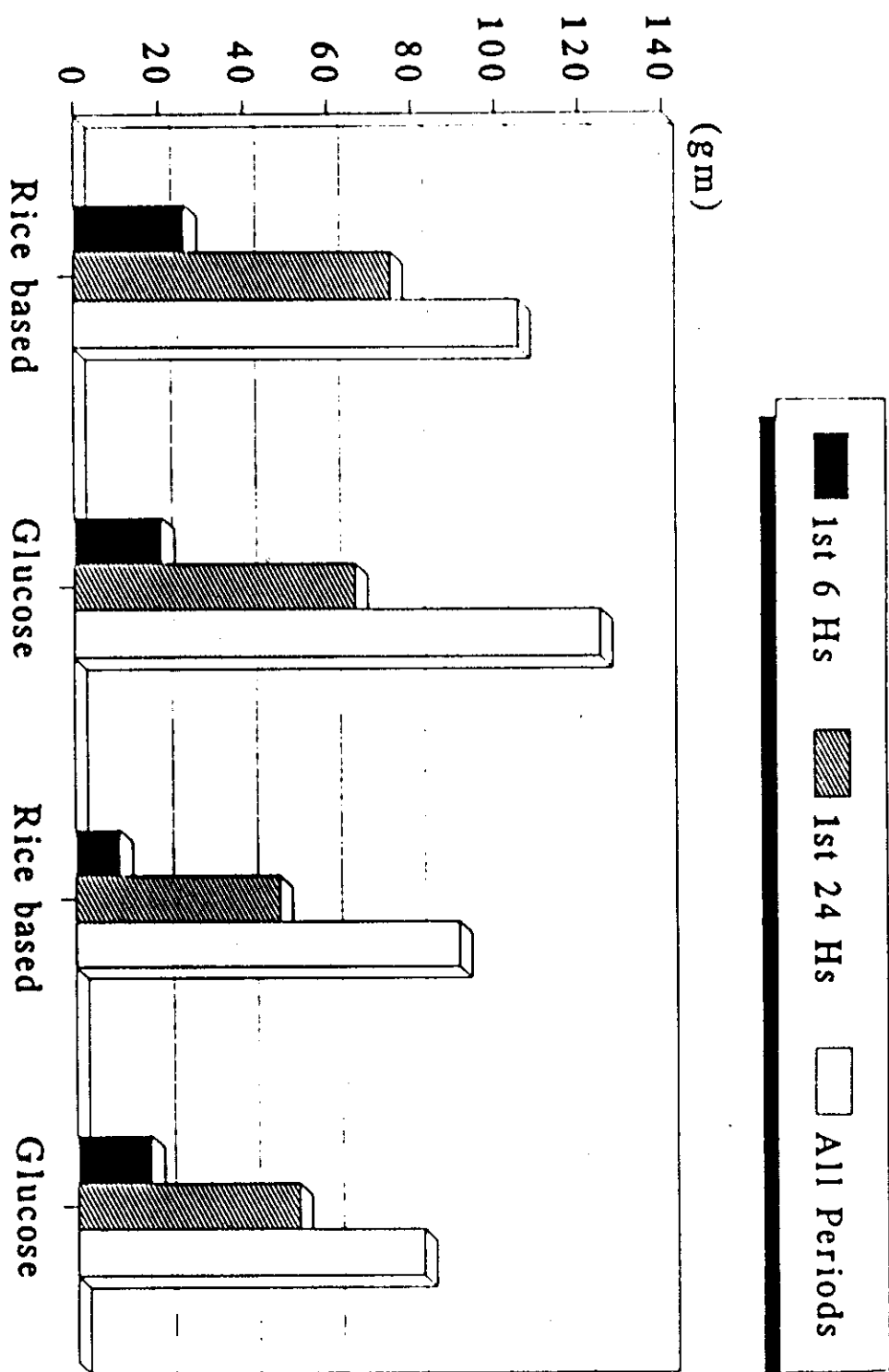


Figure 7

Relation Between ORS Type and and Purging Rate

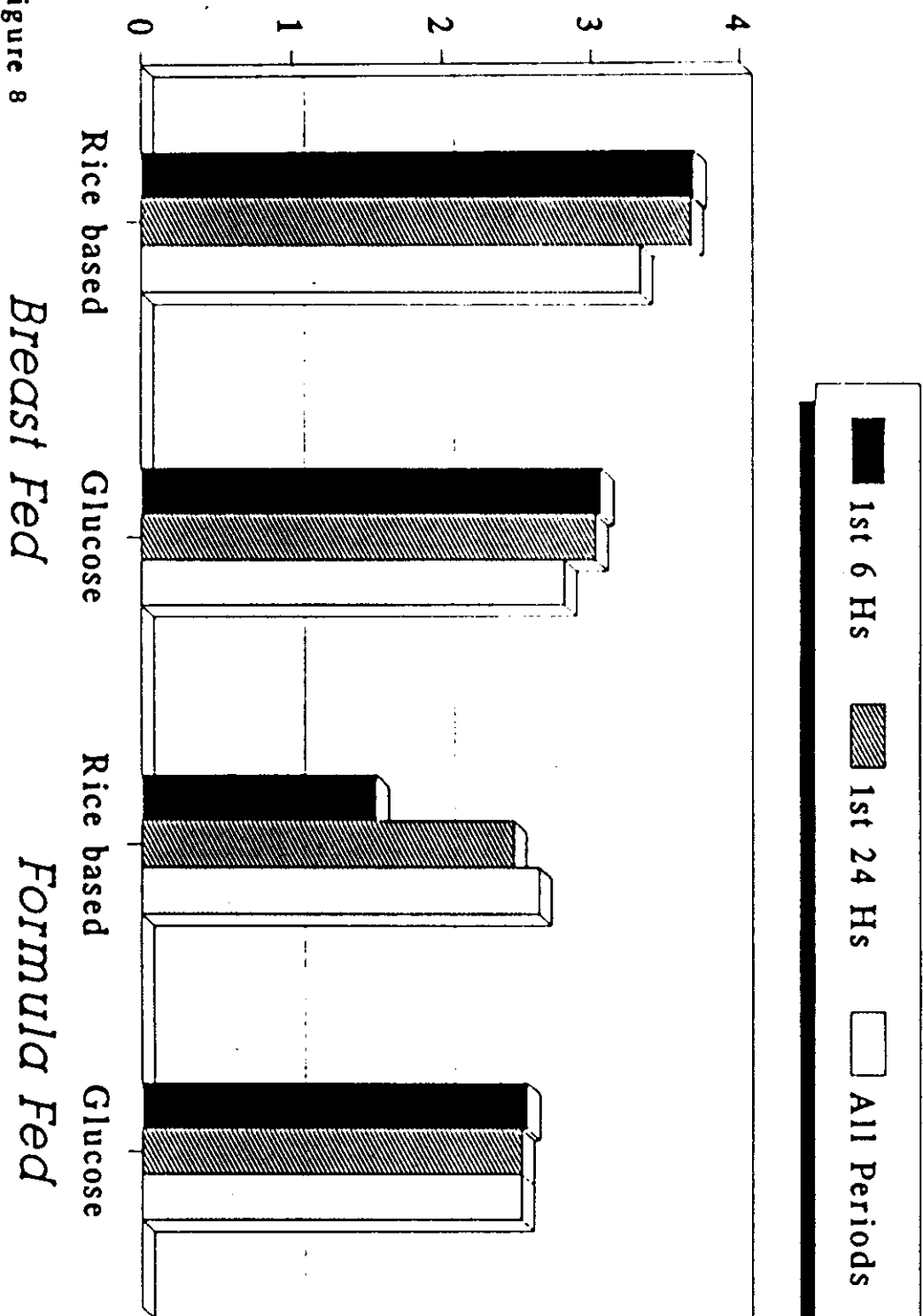


Figure 8

Breast Fed

Formula Fed

III) THE CLINICAL OUTCOME :-

A- The duration of diarrhea after admission (hours) tables 18-20 and figure 9 :-

It was observed from table 18 that the mean duration of diarrhoea (hours) after admission decreased in both breast and formula fed groups that received rice based oral rehydration solution compared to that received the glucose based solution but the difference was statistically significant only in breast fed group $P < 0.05$.

In table 19 irrespective of the feeding pattern 56%, of the cases with diarrhoeal duration less than 24 hours after admission were those treated with rice formula where as 44% were those receiving the glucose based formula. On the other hand cases with duration 60-120 hours after admission, 30% of them received rice based oral rehydration solution and 70% received glucose based oral rehydration solution. But there was no statistically significant difference $P > 0.05$.

Table 20, showed that the mean duration of diarrhoea (hours) after admission decreased in cases that recieved the rice based oral rehydration solution, this was more than in cases that received the glucose based oral rehydration solution irrespective of their feeding pattern but the difference was statistically in significant.

Results

Table (18): Duration of diarrhoea after admission (hours) in breast and formula fed group that received either rice or glucose based oral rehydration solution (Mean \pm SD).

Duration of diarrhoea (hours)	Breast fed group		Formula fed group	
	Rice ORS	Glucose ORS	Rice ORS	Glucose ORS
Mean	29.44	39.69	30.63	31.42
SD.	15.77	28.68	22.01	18.74
P.	S		N.S	

Table (19): Duration of diarrhoea after admission (hours) in cases that received either rice or glucose based oral rehydration solutions irrespective of feeding pattern.

Duration of diarrhoea	Rice ORS		Glucose ORS		Total
	No.	%	No.	%	
<24 hours	19	56%	15	44%	34
25-60 hours	24	51%	23	49%	47
60-120 hours	3	30%	7	70%	10

No. Statistically significant difference $P > 0.05$

Table (20): Duration of diarrhoea after admission (hours) in cases that received either rice or glucose based oral rehydration solutions irrespective of feeding pattern.

Duration of diarrhoea (hour)	Rice ORS	Glucose ORS
Mean	31.85	36.20
SD	22.43	25.06
P	N.S	

Relation Between ORS Type and Duration of Diarrhoea After Admission (Hours)

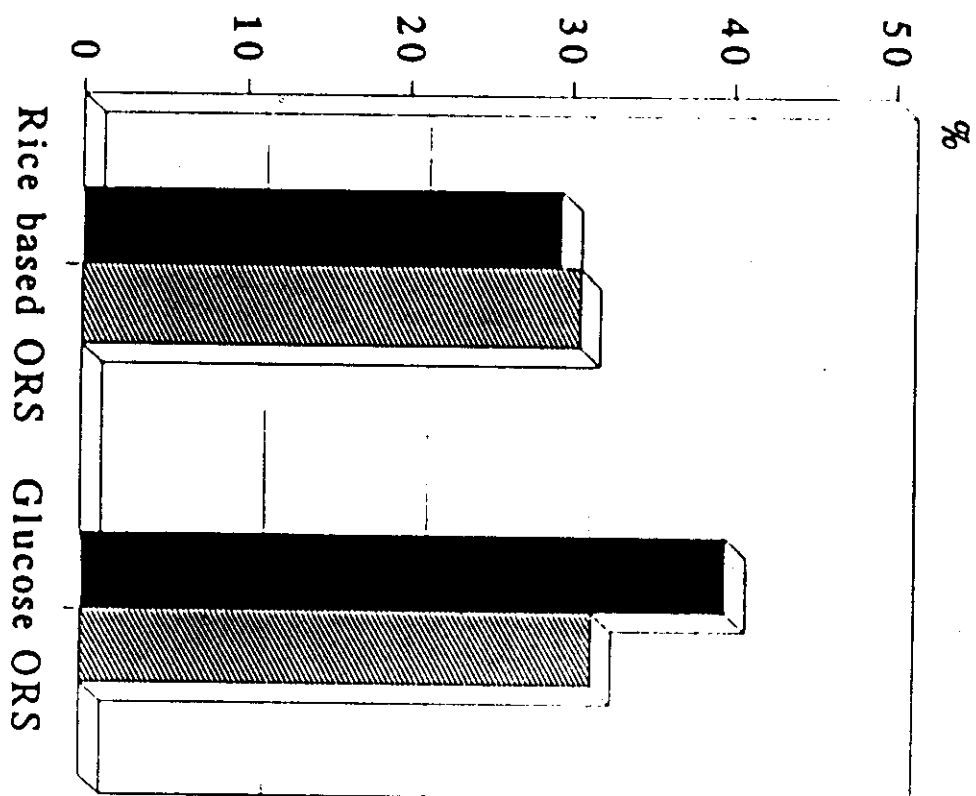
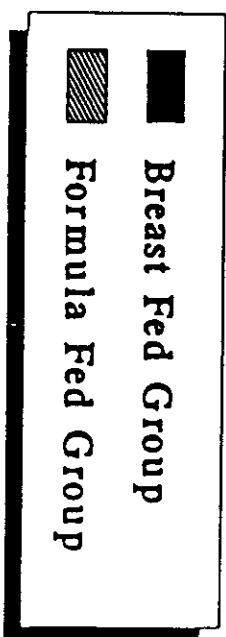


Figure 9



B- Weight gain :-

1- Percentage of weight gain due to rehydration is shown in tables 21-22 and figure 10 :-

Table 21 showed that in breast fed group cases that received glucose based oral rehydration solution gained more weight than the rice based oral rehydration solution treated group, the difference was statistically significant $P < 0.05$. This difference disappeared in formula fed group.

Table 22 showed no significant difference between rice based and glucose based oral rehydration solution treated groups due to rehydration regarding weight gain irrespective of their feeding pattern.

2) Weight gain as percentage of recovery weight is shown in tables 23-24 and figure 11 :-

It was noticed from table 23, that there was no significant difference between breast fed and formula fed groups that received either rice or glucose based oral rehydration solution.

Table 24 showed that the difference between rice based and glucose based oral rehydration solution received cases was statistically insignificant irrespective of their feeding pattern.

Table (21): Percentage of weight gain due to rehydration in both breast an formula fed group that received either rice or glucose based oral rehydration solutions (Mean \pm SD).

Percentage weight gain	Breast fed		Formula fed	
	Rice ORS	Glucose ORS	Rice ORS	Glucose ORS
Mean	5.68	6.82	5.74	5.73
SD	0.96	2.83	0.86	0.83
P	S		N.S	

Table (22): Percentage of weight gain due to rehydration in cases that received either rice or glucose based oral rehydration solution irrespective of their feeding pattern (Mean \pm SD).

Percentage weight gain	Rice ORS	Glucose ORS
Mean	5.75	5.79
SD	0.66	1.04
P	N.S	

Table (23): Weight gain as percentage of recovery weight in breast and formula fed groups that received either rice or glucose based oral rehydration solution (Mean \pm SD).

Weight gain as % of recovery weight	Breast fed		Formula fed	
	Rice ORS	Glucose ORS	Rice ORS	Glucose ORS
Mean	5.38	5.68	5.63	5.41
SD	1.12	2.31	1.81	0.69
P	N.S		N.S	

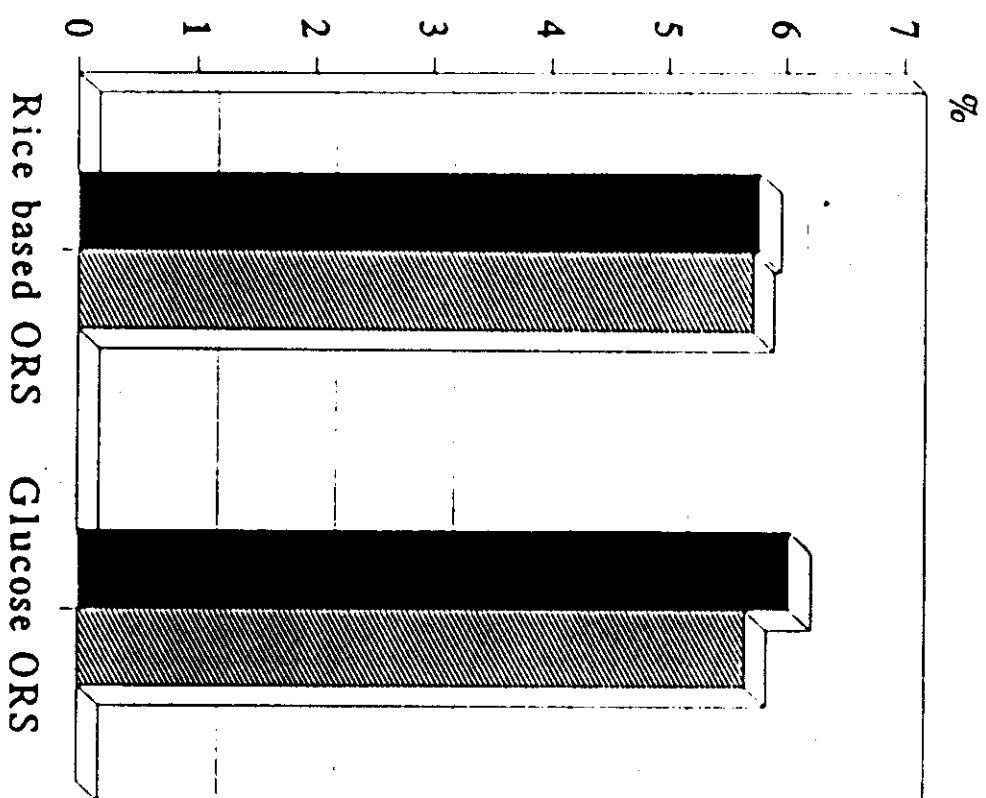
No statistically significant difference.

Table (24): Weight gain as percentage of recovery weight in cases that received either rice or glucose based oral rehydration solutions irrespective feeding pattern (Mean \pm SD).

Weight gain as % of recovery weight	Rice ORS	Glucose ORS
Mean	5.48	5.56
SD	1.43	1.80
P	N.S	

No statistically significant difference.

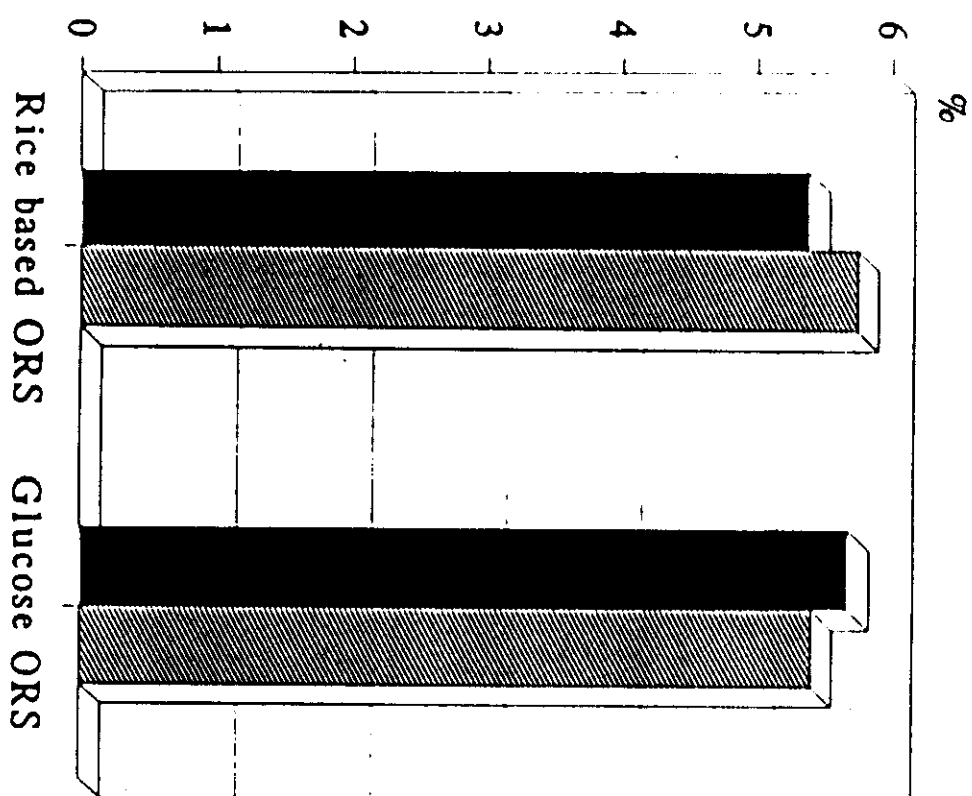
Relation Between ORS Type and Percentage of Weight Loss due to Dehydration



Breast Fed Group
 Formula Fed Group

Figure 10

Relation Between ORS Type and Weight Gain as a Percentage of Recovery Weight



Breast Fed Group
 Formula Fed Group

Figure 11

C- Number of vomiting episodes during the first 24 hours after admission tables 25-26 and figure 12 :-

Tables 25,26 and figure 12 demonstrated that there were no statistically significant differences regarding mean number of vomiting episodes during the first 24 hours after admission in cases that received rice or glucose based oral rehydration solution. This observation is the same in both cases whether the feeding pattern is taken into consideration or irrespective of the feeding pattern.

Table (25): Number of vomiting episodes in the first 24 hours after admission in breast and formula fed groups that received either rice or glucose based oral rehydration solution.

Number of vomiting episodes in first 24 h.	Breast fed		Formula fed	
	Rice ORS	Glucose ORS	Rice ORS	Glucose ORS
Mean	0.89	0.58	0.53	0.53
SD	1.31	0.95	1.17	1.07
P	N.S		N.S	

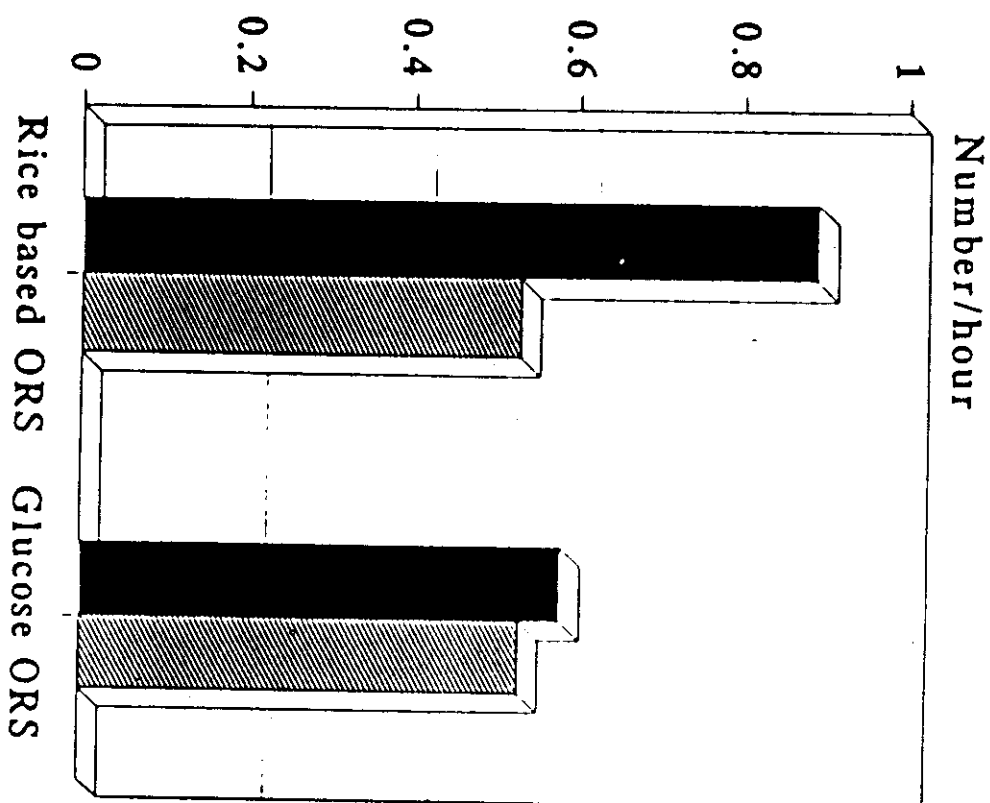
No statistically significant difference.

Table (26): Number of vomiting episodes in the first 24 hours after admission in cases that received either rice or glucose based or rehydration solutions irrespective of feeding pattern (Mean \pm SD).

Number of vomiting episodes in first 24h.	Rice ORS	Glucose ORS
Mean	0.88	0.56
SD	1.44	0.97
P	N.S	

There was no statistically significant difference.

Number of Vomiting Episodes in the First 24 Hours Versus ORS Type



■ Breast Fed Group
▨ Formula Fed Group

Figure 12

D- Serum sodium and potassium mmol/L on admission and 24 hours after admission tables 27-32 and figures 13-14 :-

Serum sodium :-

In breast and formula fed group tables 27-28 showed that there were no significant differences regarding the mean serum sodium level (mmol/L) at admission and after 24 hour after admission in both cases that received either rice based or glucose based oral rehydration solution. Also irrespective of the feeding pattern table 29 showed that the mean serum sodium at admission and 24 hour after admission were statistically insignificant.

Serum potassium :-

In breast and formula fed group tables 30-31 showed that there were no significant differences regarding the mean serum potassium level (mmol/L) at admission and after 24 hour after admission in both cases that received either rice based or glucose based oral rehydration solution. Also irrespective of the feeding pattern table 32 showed that the mean serum potassium at admission and 24 hour after admission was statistically insignificant.

Table (27): Serum sodium level in breast fed group that received either rice or glucose based oral rehydration solution at time of admission and 24 hours after admission (Mean \pm SD).

Serum sodium	At admission (Zero time)		24 hours After admission	
	Rice ORS	GlucoseORS	Rice ORS	Glucose ORS
Mean	136.667	137.154	137.963	138.538
SD	4.179	4.230	4.100	5.508
P	N.S		N.S	

Table (28): Serum sodium level in formula fed group that received either rice or glucose based oral rehydration solution at time of admission and 24 hours after admission (Mean \pm SD).

Serum sodium	At admission (Zero time)		24 hours After admission	
	Rice ORS	GlucoseORS	Rice ORS	Glucose ORS
Mean	138.895	135.421	135.579	136.842
SD	7.600	5.501	4.286	4.127
P	N.S		N.S	

Table (29): Serum sodium level in cases that received rice and glucose based oral rehydration solution at time of admission and 24 hours of admission irrespective of feeding pattern (Mean \pm SD).

Serum sodium	At admission (Zero time)		24 hours After admission	
	Rice ORS	GlucoseORS	Rice ORS	Glucose ORS
Mean	137.56	141.9	136.98	143.26
SD	5.78	39.15	4.16	39.25
P	N.S		N.S	

Table (30): Serum potassium level in breast fed group that received either rice or glucose based oral rehydration solution at time of admission and 24 hours after admission (Mean \pm SD).

Serum potassium	At admission (Zero time)		24 hours After admission	
	Rice ORS	Glucose ORS	Rice ORS	Glucose ORS
Mean	4.009	4.177	4.455	4.447
SD	0.513	0.876	0.647	0.671
P	N.S		N.S	

Table (31): Serum potassium level in formula fed group that received either rice or glucose based oral rehydration solution at time of admission and 24 hours after admission (Mean \pm SD).

Serum potassium	At admission (Zero time)		24 hours After admission	
	Rice ORS	Glucose ORS	Rice ORS	Glucose ORS
Mean	4.147	3.936	4.209	4.343
SD	0.827	0.589	0.701	0.634
P	N.S		N.S	

Table (32): Serum potassium level in cases that received either rice or glucose based oral rehydration solution at time of admission and 24 hours after admission irrespective of feeding pattern (Mean \pm SD).

Serum potassium	At admission (Zero time)		24 hours After admission	
	Rice ORS	Glucose ORS	Rice ORS	Glucose ORS
Mean	4.07	3.99	4.30	4.28
SD	0.64	0.91	0.70	0.92
P	N.S		N.S	

Serum Sodium Level Vs ORS Type

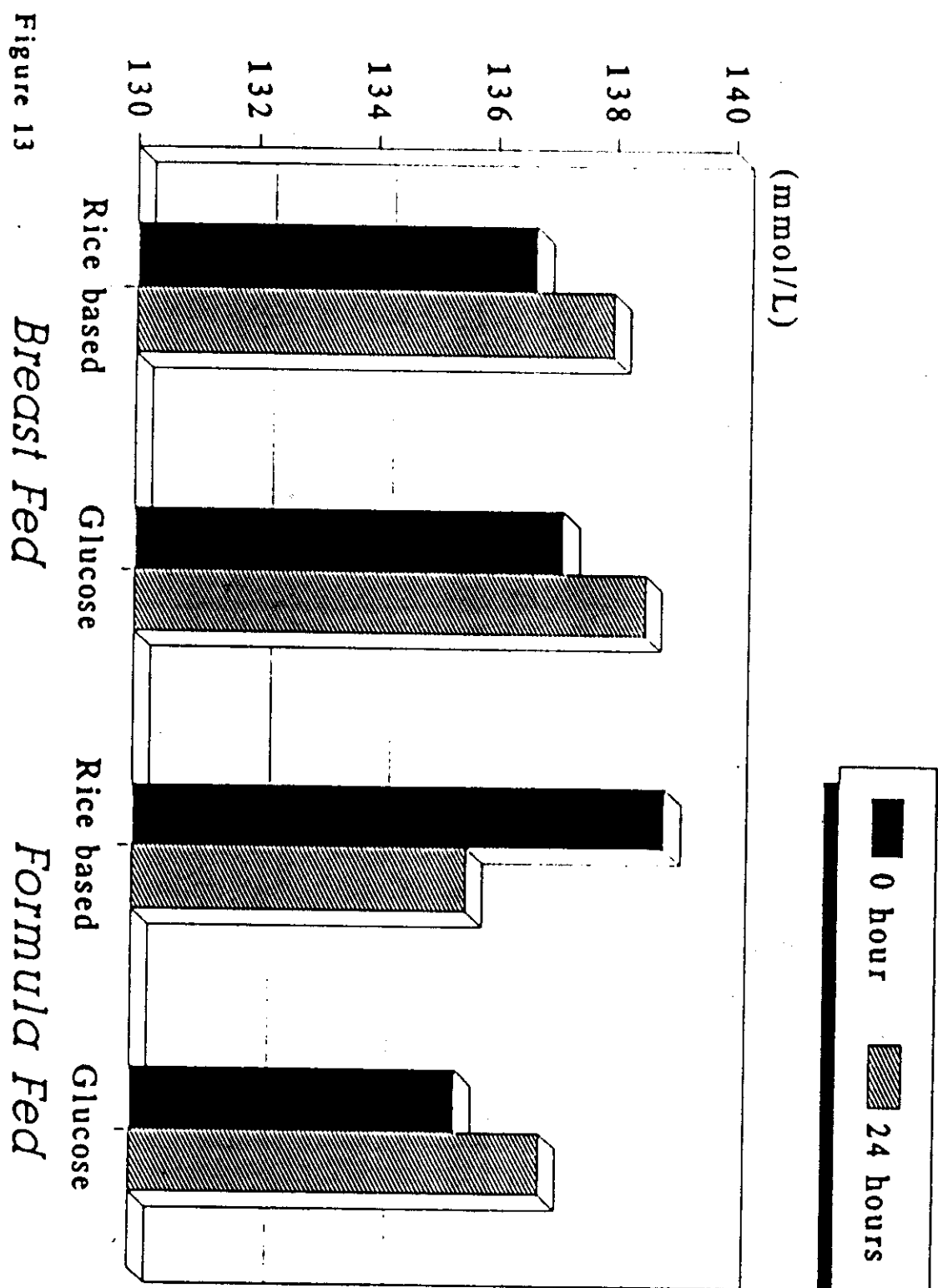


Figure 13

Breast Fed

Formula Fed

Serum Potassium Level Vs ORS Type

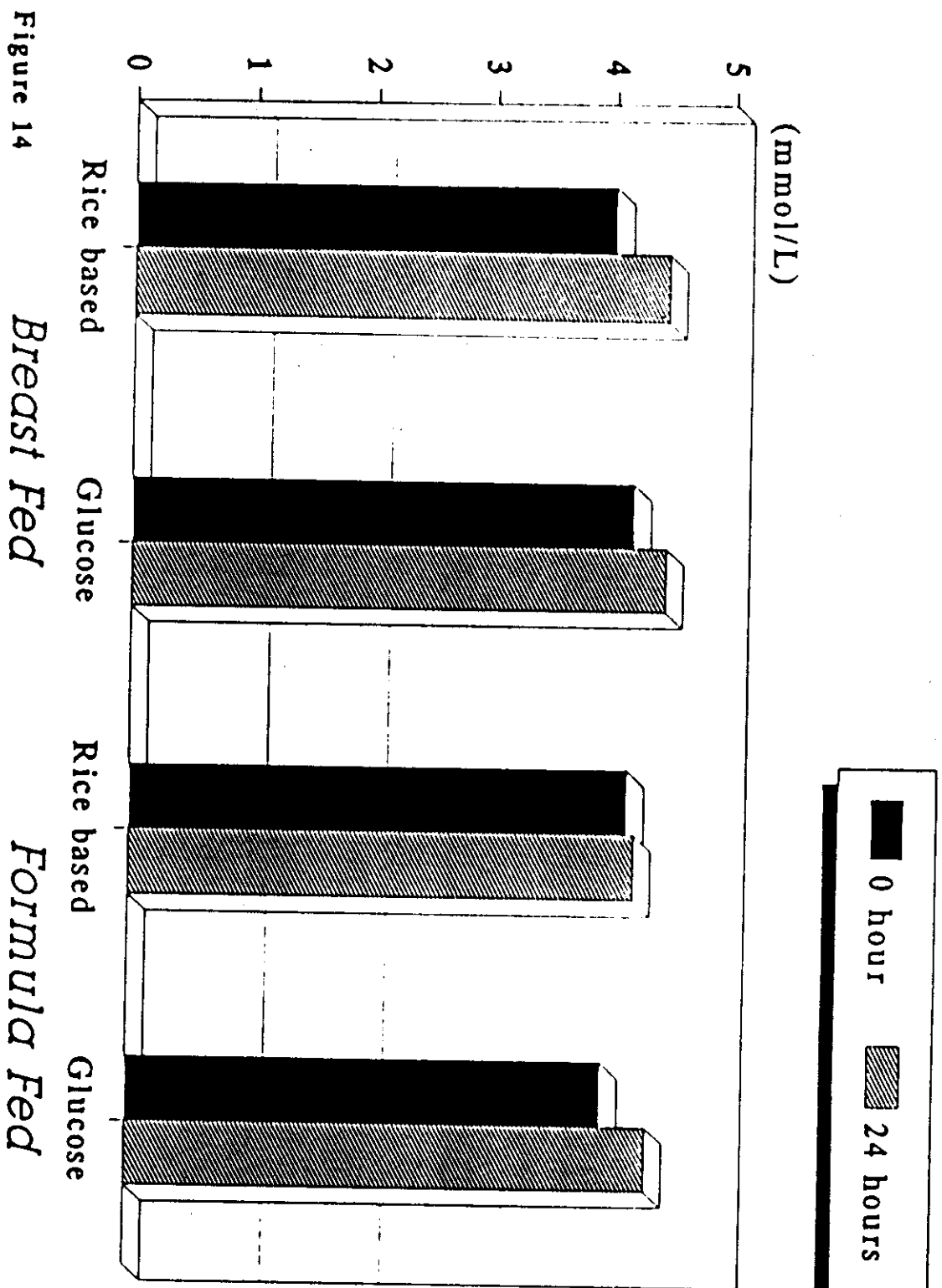


Figure 14

Breast Fed

Formula Fed

IV) SUCCESSFUL AND FAILURE CASES :- tables 33-38 and figures 15-16 :-

1- Percentage of success :-

In breast fed group the percentage of success was 90%, 86.7% for infants that received rice based and glucose based oral rehydration solution respectively. There was no statistically significant difference between both $P > 0.05$.

In formula fed group the percentage of success was 95% in either cases treated with rice or glucose based oral rehydration solution with no statistically significant difference between them.

Also there was no significant difference between rice and glucose based oral rehydration solution that received groups regarding percentage of success irrespective of the feeding pattern.

2- Failure cases table 35 :-

As regards the failure cases in our study, in breast fed group there were 4 failure cases that received glucose based oral rehydration and 3 failure cases that received rice based oral rehydration. But in formula fed group there was 1 failure cases treated with glucose based oral rehydration and another one treated with rice based oral rehydration solution. The cause of failure was due to persistence of diarrhoea more than 120 hours (6 cases) or

reappearance of signs of dehydration (3 cases). All failure cases were successfully managed either by I/V fluid therapy and /or lactose free milk depending on the underlying cause of failure.

In breast fed group, table 36 demonstrates the comparison of the admission data of successful and failure cases in infants treated with rice and glucose based oral rehydration solution. It was noticed that in both rice based oral rehydration solution group and glucose based oral rehydration solution group, failure cases showed a statistically significant difference from successful cases regarding number of cases with vomiting, number of cases with fever and mean body temperature " $P < 0.05$ ". Only in glucose based oral rehydration solution group, the mean ages of failure cases was younger (6.5 ± 1.29 months) as compared to the mean age of successful ones (8.5 ± 2.8 months) and this difference is statistically significant $P < 0.05$.

In formula fed group, (table 37) the admission data of failure and successful cases were comparable with no significant difference in both rice or glucose based oral rehydration solution cases except that vomiting was predominant in all failure cases.

Table (33): Number and percentage of successful cases versus failure cases in breast and formula fed group that received either rice or glucose based oral rehydration solution.

	Breast fed group				Formula fed group			
	Rice ORS		Glucose ORS		Rice ORS		Glucose ORS	
	No.	%	No.	%	No.	%	No.	%
Successful	27	90%	26	86.7%	19	95%	19	95%
Failure	3	10%	4	13.3%	1	5%	1	5%
P	N.S							

Table (34): Number and percentage of successful cases versus failure cases irrespective of feeding pattern that received either rice or glucose based oral rehydration solution.

	Rice ORS		Glucose ORS		P
	No.	%	No.	%	
Successful	46	92%	45	90%	N.S
Failure	4	8%	5	10%	

Table (35): Description of failure cases.

Type of feeding	ORS intake	Causes of failure	Fate
Breast	Glucose	Persistence of diarrhoea more than 120 hours	Cured
Breast	Rice	Reappearance of signs of dehydration after 24 hours of admission	Cured
Breast	Glucose	Persistence of diarrhoea more than 120 hours after admission	Cured
Breast	Rice	Reappearance of signs of dehydration after complete rehydration	Cured
Breast	Glucose	Reappearance of signs of dehydration after complete rehydration	Cured
Breast	Rice	Persistence of diarrhoea more than 120 hours	Cured
Breast	Glucose	Persistence of diarrhoea more than 120 hours	Cured
Formula	Rice	Persistence of diarrhoea more than 120 hours	Cured
Formula	Glucose	Persistence of diarrhoea more than 120 hours	Cured

Table (36): Admission data of the successful and failure cases in breast fed group that received either rice or glucose based oral rehydration solution (Mean \pm SD).

Admission data	Riced ORS group		Glucose ORS group	
	Success- full N = 27	Failure N = 3	Success- full N = 26	Failure N = 4
Age (m)	8.07 \pm 2.48	7.67 \pm 0.68	8.50 \pm 2.89	6.5 \pm 1.29*
Body weight (kg)	7.54 \pm 1.29	8.14 \pm 0.48	7.70 \pm 1.39	6.97 \pm 0.46
Duration of diarrhoea before admission (days)	2.19 \pm 0.79	1.67 \pm 1.53	2.42 \pm 0.76	2.75 \pm 1.26
Weight for length % of median NCHS reference	89.43 \pm 8.11	95.4 \pm 1.27	94.5 \pm 13.6	89.7 \pm 6.18
Percentage weight loss due to dehydration	5.81 \pm 0.71	5.47 \pm 0.12	6.02 \pm 0.81	6.18 \pm 1.30
No. of cases with vomiting (%)	7 (25.9%)	3 (100%)*	4 (15.4%)	4 (100%)*
No. of cases with fever \geq 37.5 (100%)	17 (63%)	3 (100%)*	12 (46.2%)	4 (100%)*
Body temperature	37.65 \pm 0.46	38.1 \pm 0.52 *	37.5 \pm 0.45	38.08 \pm 0.15 *
Serum Na mmol/L	136.67	134.6 \pm 1.5	137.1 \pm 3.2	134.2 \pm 2.22
Serum K mmol/L	4.01 \pm 0.51	3.86 \pm 0.21	4.18 \pm 0.88	3.65 \pm 0.65

* T test was done and differences were found to be statistically significant $P < 0.05$.

Table (37): Admission data of the successful and failure cases in formula fed group that received either rice or glucose based oral rehydration solution (Mean \pm SD).

Admission data	Rice ORS group		Glucose ORS group	
	Success- full N = 19	Failure N = 1	Success- full N = 19	Failure N = 1
Age (m)	12.26 \pm 4.81	10.0	11.10 \pm 5.2	7
Body weight (kg)	8.25 \pm 1.417	8.930	7.36 \pm 1.20	6.540
Duration of diarrhoea before admission (days)	2.78 \pm 0.408	3.0	2.36 \pm 0.80	3.0
Weight for length % of median NCHS reference	90.11 \pm 6.15	102.0	85.6 \pm 7.03	89.6
Percentage weight loss due to dehydration	5.72 \pm 6.641	5.5	5.64 \pm 0.48	5.9
No. of cases with vomiting (%)	6 (31.6%)	1 (100%)*	3 (15.8%)	1 (100%)*
No. of cases with fever \geq 37.5 (100%)	7 (36.8%)	0	7 (36.8%)	0
Body temperature	37.5 \pm 0.403	37.4	37.3 \pm 0.24	37.3
Serum Na mmol/L	138.8 \pm 7.39	145	135.4 \pm 5.5	149
Serum K mmol/L	4.14 \pm 0.805	4.8	3.93 \pm 0.57	4.3

* T test was done and differences were found to be statistically significant $P < 0.05$.

Table (38): Admission data of the successful and failure cases that received either rice or glucose based oral rehydration solution irrespective of feeding pattern (Mean \pm SD).

Admission data	Rice ORS group		Glucose ORS group	
	Success- full N = 46	Failure N = 4	Success- full N = 45	Falilure N = 5
Age (m)	9.80 \pm 4.2	8.25 \pm 1.26	9.66 \pm 2.29	6.6 \pm 1.03 *
Body weight (kg)	7.84 \pm 1.39	8.34 \pm 0.55	7.58 \pm 1.32	6.5 \pm 0.44 *
Duration of diar- rhoea before admission (days)	2.43 \pm 0.72	2.0 \pm 1.41	2.39 \pm 0.78	2.83 \pm 0.98
Weight for length % of median NCHS reference	89.71 \pm 7.36	97.1 \pm 3.43	91.0 \pm 12.1	88.18 \pm 6.04
Percentage weight loss due to dehydration	5.78 \pm 0.68	5.47 \pm 0.1	5.86 \pm 0.72	5.24 \pm 2.39
No. of cases with vomiting (%)	33 (71.7%)	4 (100%) *	37 (84.1%)	5 (100%) *
No. of cases with fever > = 37.5 (100%)	24 (52.2%)	3 (75%) *	19 (43.2%)	4 (80%) *
Body temperature	37.59 \pm 0.44	37.9 \pm 0.55	37.4 \pm 0.39	37.81 \pm 0.52
Serum Na mmol/L	137.5 \pm 5.87	137.2 \pm 5.3	136.3 \pm 4.8	132.8 \pm 4.9
Serum K mmol/L	4.07 \pm 0.66	4.09 \pm 0.50	4.09 \pm 0.77	3.23 \pm 1.46*

* T test was done and differences were found to be statistically significant $P < 0.05$.

Percentage of Failure Cases In Breast Fed Group Versus ORS Type

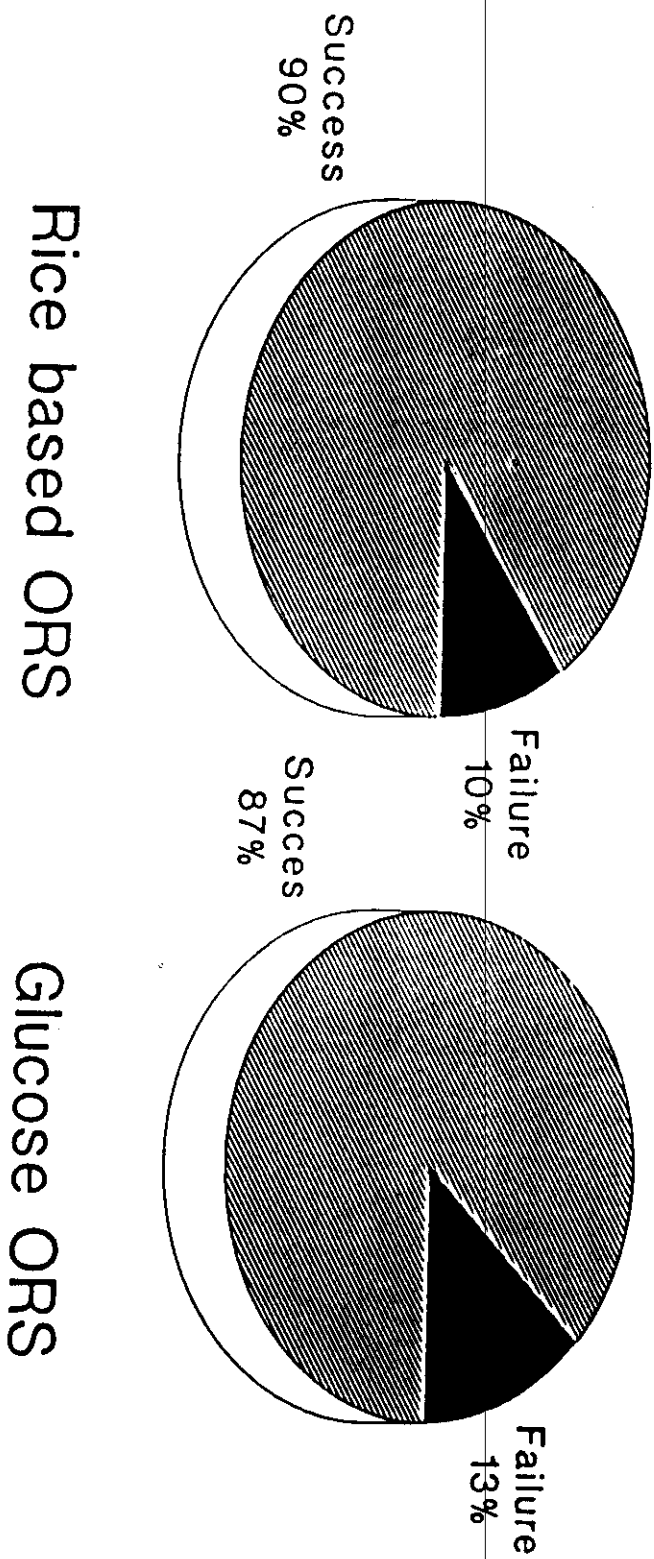


Figure 15

Percentage of Failure Cases In Formula Fed Group Versus ORS Type

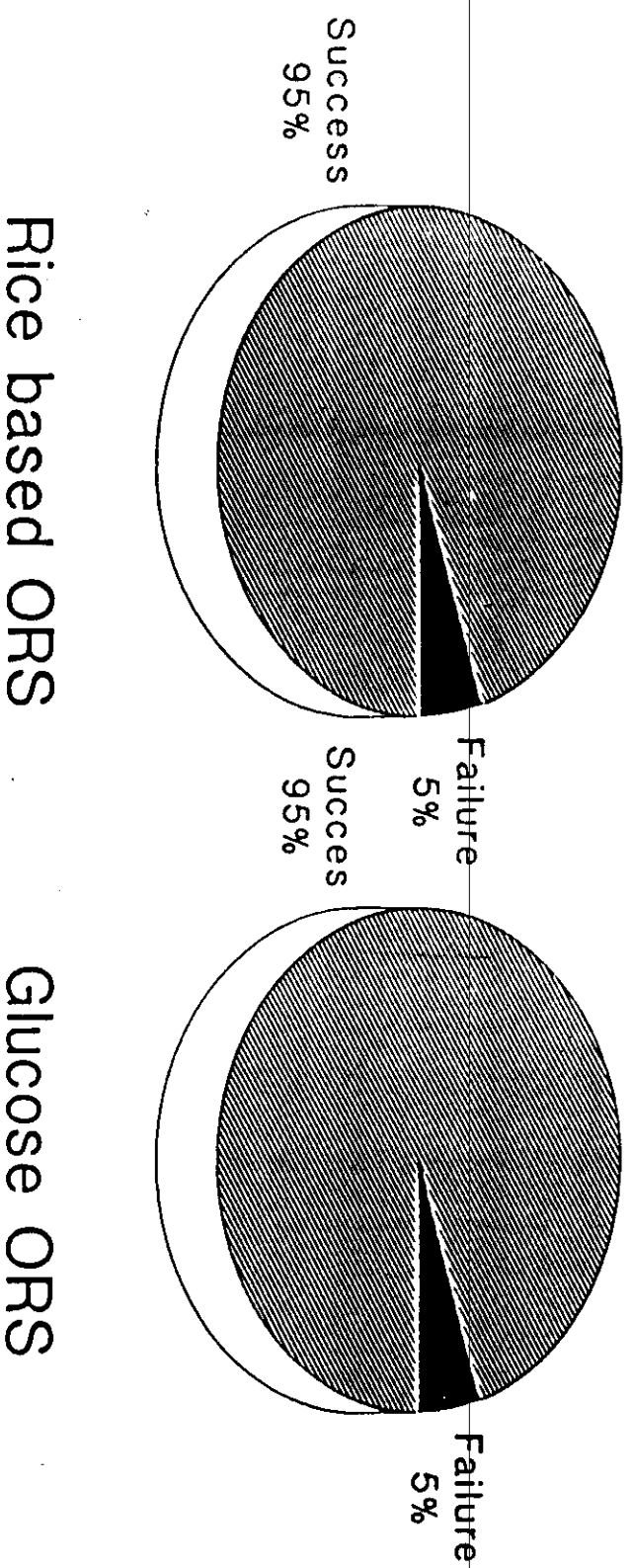


Figure 16