Table (1) : Distribution of the studied mothers according to residence.

Residence / St. group.	Rural		Urban		Total	
	No.	%	No.	%	No.	%
Mothers with full breast (Group A)	15	50.0	15	50.0	30	100
Mothers with empty breast (Group B)	14	46.7	16	53.3	30	100

$X^2 = 0.067$ $P > 0.05$

Table (1) : Shows that no significant difference was found in distribution of mothers with full breast and mothers with empty breast as regard residence.

Table (2): Distribution of infants of studied groups according to sex.

Sex / St. group	Males		Females		Total	
	No.	%	No.	%	No.	%
Infants of mothers with full breast	14	46.7	16	53.3	30	100.0
Infants of mother with empty breast	17	56.7	13	43.3	30	100.0

$X^2 = 0.601$ $P > 0.05$

Table (2) reveals that male infants of mothers with full breast and with empty breast were (46,7% and 56,7%) and also female

infants were (53,3% and 43,3%). The difference is statistically insignificant (P > 0.05).

Table (3): Means and standard deviations of some sociodemographic parameters of the two studied groups of mothers.

Diff. Parameters	Mothers with full breast (n = 30) $\bar{X} \pm SD$	Mothers with empty breast (n = 30) $\bar{X} \pm SD$	t	p
Age (years)	27.13 ± 4.19	26.5 ± 4.23	0.58	> 0.05
Wt (kgm)	70.97 ± 5.99	72.4 ± 7.49	0.82	> 0.05
Ht (cm)	161.5 ± 5.16	163.15 ± 6.15	0.96	> 0.05
* BMI	26.02 ± 1.94	27.29 ± 3.43	1.76	> 0.05
(No. of children)	2.6 ± 1.2	2.3 ± 1.4	0.88	> 0.05

* Body mass index = wt / $(Ht)^2$ meter

Table (3) : Shows no statistically significant difference between $\bar{X} \pm SD$ according to age, height, BMI and no of infants among the mothers of the two studied groups.

Table (4): Means and standard deviations of some sociodemographic parameters of infants of the two studied groups.

Diff. Parameters	Children of mothers with empty breast $\bar{X} \pm SD$	Children of mothers with full breast $\bar{X} \pm SD$	t	p
Age (months)	4.18 ± 1.24	4.2 ± 1.4	0.06	> 0.05
Wt (kgm)	6.65 ± 1.09	6.12 ± 1.08	1.89	> 0.05
Ht (cm)	64.5 ± 3.6	63.03 ± 3.64	1.53	> 0.05
* BMI	15.87 ± 1.83	15.19 ± 2.01	1.37	> 0.05

Table (4) : This table shows no statistically significant difference between $\bar{X} \pm SD$ according to Age, Wt, Ht and B.M.I. among the infants of the two studied groups .

Table (5): Concentration of lactic acid in milk of mothers of both groups (with empty breast and with full breast) before and after exercise.

St. group / Time	Lactic acid in milk of mothers with empty breast (n=30) $\bar{X} \pm SD$	Lactic acid in milk of mothers with full breast (n = 30) $\bar{X} \pm SD$	t	p
Before exercise	0.72 ± 0.22	0.63 ± 0.15	1.8	> 0.05
10 min after	2.35 ± 0.35	2.44 ± 0.35	1	> 0.05
30 min. after	2.64 ± 0.33	2.87 ± 0.13	3.54	< 0.01
60 min after	1.39 ± 0.28	1.36 ± 0.39	0.34	> 0.05
120 min after	0.71 ± 0.45	0.69 ± 0.15	0.74	> 0.05

Table (5) and chart (1) : Show that $\bar{X} \pm SD$ of concentration of lactic acid in milk of mothers with empty breast is 2,64 ± 0,33 at 30 minutes while it is 2,87 ± 0.13 in milk of mothers with full breast. This difference is statistically significant ($p < 0.01$). Also, the table shows no significant difference in concentration of lactic acid at other times.

Table (6) : Means and standard deviations of lactic acid in milk of mothers with empty breast according to acceptance by infants before and after exercise.

Acceptance Time	Lactic acid in milk of mothers with empty breast		t	p
	Accepted $\bar{X} \pm SD$	Refused $\bar{X} \pm SD$		
Before	0.7 ± 0.23 (n = 28)	74 ± 0.07 (n = 2)	0.61	> 0.05
- 10 min.	2.37 ± 0.37 (n = 27)	2.68 ± 0.08 (n = 3)	3.65	< 0.01
30 min.	2.56 ± 0.34 (n = 22)	2.86 ± 0.18 (n = 8)	3.31	< 0.01
60 min	1.39 ± 0.28 (n = 30)	-----	-----	----
120 min.	0.7 ± 0.46 (n = 29)	0.8 ± 0.0 (n = 1)	1.12	> 0.05

Table (6) reveals that the concentration of lactic acid is higher in refused milk at 10 minutes (2.68 ± 0.08) than that in accepted milk (2.37 ± 0.34) this difference is statistically significant (P < .01).

Also lactic acid concentration is higher in refused milk at 30 minutes (2,88 ± 0.18) than that of accepted milk (2.56 ± 0.34).

This difference is statistically significant and no significant difference at other times (before exercise, at 60 minutes, at 120 minutes).

Table (7): Means and standard deviation of lactic acid in milk of mothers with full breast according to acceptance by infants before and after exercise.

Acceptance Time	Lactic acid in milk of mothers with full breast		t	p
	Accepted $\bar{X} \pm SD$	Refused $\bar{X} \pm SD$		
Before	0.63 ± 0.16 (n = 28)	0.71 ± 0.1 (n = 2)	1.04	> 0.05
- 10 min.	2.58 ± 0.27 (n = 25)	2.8 ± 0.18 (n =- 5)	2.27	< 0.01
30 min.	2.8 ± 0.12 (n = 20)	2.98 ± 0.15 (n = 10)	3.3	< 0.01
60 min	1.36 ± 0.39 (n = 30)	---	---	----
120 min.	0.68 ± 0.15 (n = 28)	0.75 ± 0.05 (n =2)	1.56	> 0.05

Table (7) : Reveals that the concentration of lactic acid is higher in refused milk at 10 minutes (2.8 ± 18) than that in accepted milk (2.58 ± 0.27). Also lactic acid concentration is higher in refused milk at 30 minutes (2.98 ± 0.15) than that in accepted milk (2.8 ± 0.12).

These differences is statistically significant.

No significant difference at other times.

Table (8) : Means and standard deviation of the difference of lactic acid concentration in milk of mothers with empty breast before and after exercises (n = 30).

Time	Mean of the difference ± SD.	Paired t	p
10 min.	1.65 ± 0.35	25.8	< 0.001
30 min.	1.92 ± 0.49	21.5	< 0.001
60 min.	0.7 ± 0.31	12.37	< 0.001
120 min.	0.31 ± 0.36	4.72	<0.001

Table (8) : Shows high significant difference ($P < 0.001$) of lactic acid concentration in milk of pre exercise and at 10 minutes, 30 minutes, 60 minutes and 120 minutes in milk of mothers with empty breast.

Table (9) : Means of the difference of lactic acid concentration in milk of mothers with full breast before and after exercise (n = 30).

Time	Mean of the difference ± SD	Paired t	p
10 min.	1.82 ± 0.4	24.9	< 0.001
30 min.	2.22 ± 0.19	64.03	< 0.001
60 min.	0.73 ± 0.36	11.11	< 0.001
120 min.	0.12 ± 0.09	7.3	<0.001

Table (9) : Shows higher mean of the difference of lactic acid concentration in milk is 2.22 ±0.19 at 30 min. and this difference is highly significant (P < 0.001) also shows high significant difference (P < 0.001) of lactic acid concentration in milk of pre exercise and at 10, 60, 120 minutes in milk of mothers of full breast.

Table (10): Correlation coefficient between Lactic acid concentration in milk among studied mothers with empty breast pre and post - exercise.

Time	Correlation coefficient "r"	P
Pre - exercise	---	
Post - exercise		
10 min.	0.3566	< 0.05
30 min.	0.3638	< 0.05
60 min.	0.3935	< 0.05
120 min.	0.3361	> 0.05

Table (10) and chart (2) show significant correlation coefficient between concentration of lactic acid in milk pre and post exercise ($P < 0.05$) at different times except after 120 minutes in mothers with empty breast.

Chart (2) correlation coefficient between concentration of lactic acid in milk of mothers with empty breast pre.&post-exercise.

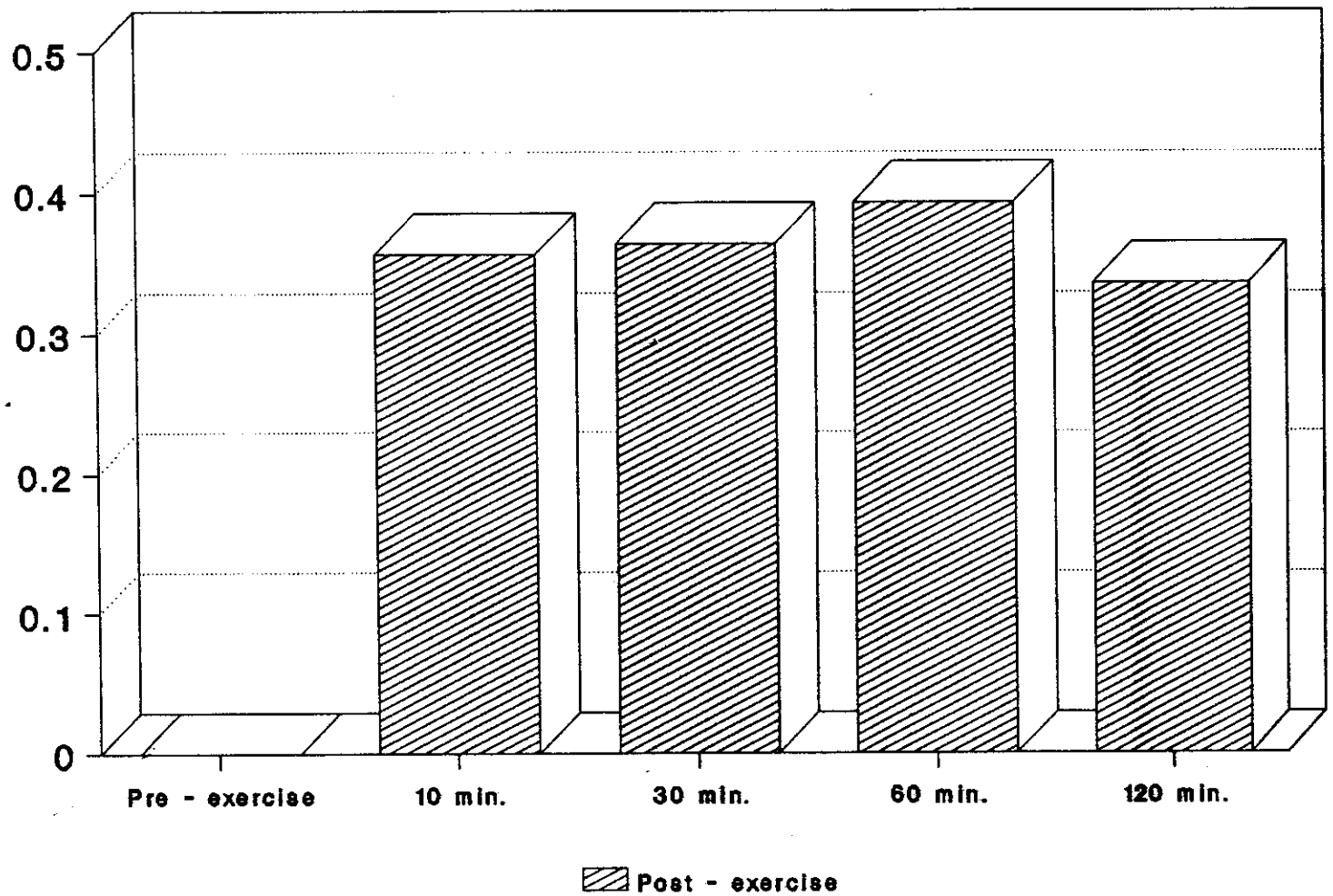

Table (11): Correlation coefficient between lactic acid concentration in milk among studied mothers with full breast pre and post - exercise.

Time	Correlation coefficient "r"	P
Pre - exercise	---	-----
Post - exercise		
10 min.	0.276	> 0.05
30 min.	0.3723	< 0.05
60 min.	0.3874	< 0.05
120 min.	0.0057	> 0.05

Table (11) and chart (3) show significant correlation coefficient between concentration of lactic acid in milk pre and post - exercise except after 120 minutes in mothers with full breast.

Chart (3) correlation coefficient between concentration of lactic acid in milk of mothers with full breast pre.& post-exercise (30 min.).

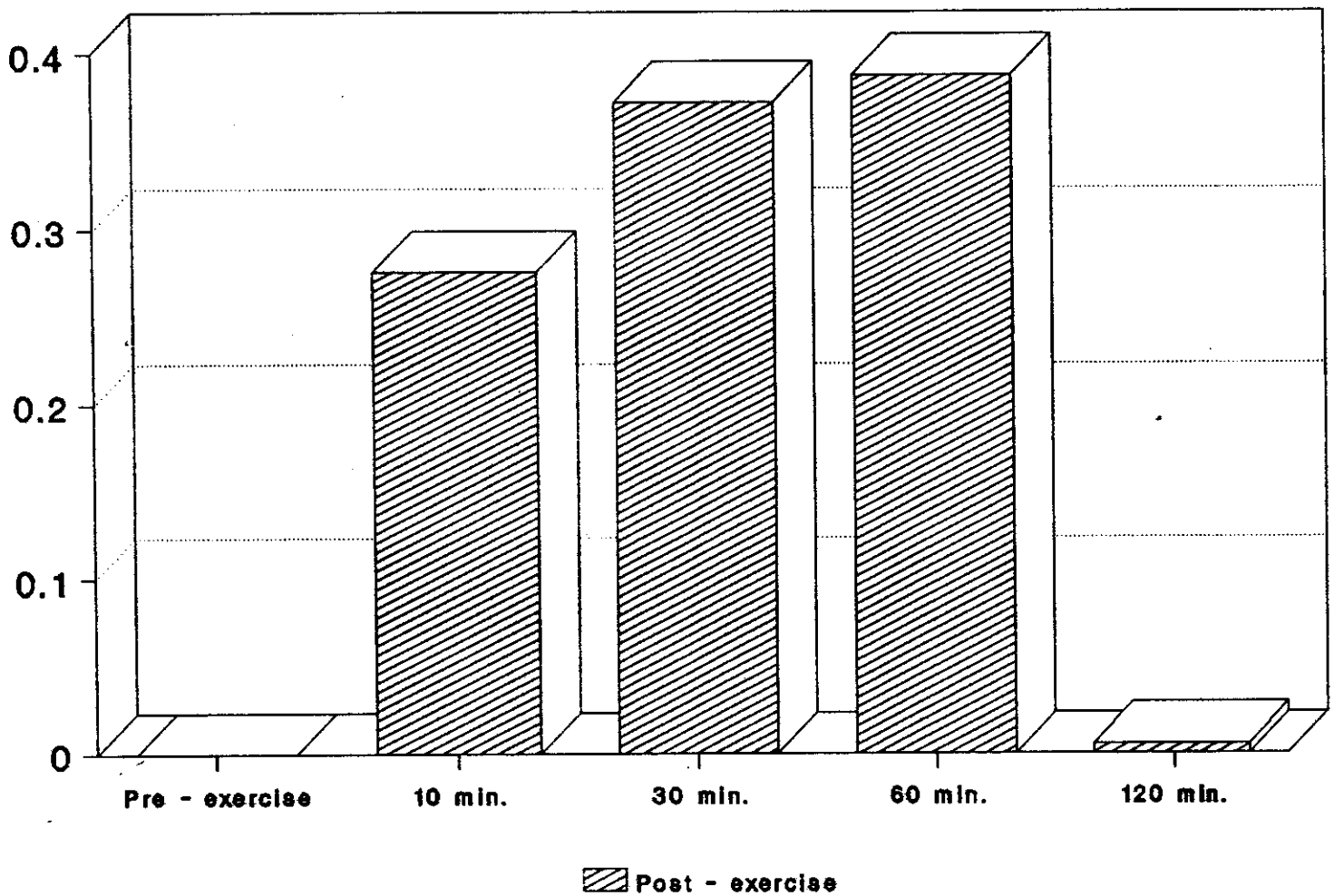

Table (12): Infants acceptance and rejection of milk (empty breast mothers) according to methods of examination.

Methods	Dropper (n = 15)				Breast (n = 15)			
	refused		Accept		refused		Accept	
Time	No.	%	No.	%	No.	%	No.	%
Before	1	6.7	14	93.3	1	6.7	14	93.3
10 min.	2	13.3	13	86.7	1	6.7	14	93.3
30 min.	5	33.3	10	66.7	3	20.0	12	80.0
60 min.	0	0.0	15	100.0	0	0.0	15	100.0
120 min.	1	6.7	14	93.3	0	0.0	15	100.0

Table (13): Infants acceptance and rejection of milk (full breast) according to methods of examination.

Methods	Dropper (n = 15)				Breast (n = 15)			
	refused		Accept		refused		Accept	
Time	No.	%	No.	%	No.	%	No.	%
Before	1	6.7	14	93.3	1	6.7	14	93.3
10 min.	3	20.0	12	80.0	2	13.3	13	86.7
30 min.	6	40.0	9	60.0	4	26.7	11	73.3
60 min.	0	0.0	15	100.0	0	0.0	15	100.0
120 min.	1	6.7	14	93.3	1	6.7	14	93.3