

Comparative study of postnatal food consumption pattern of mothers under normal delivery and caesarian section

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ABSTRACT

Background: Motherhood the only act that manifest in human form is the cosmic wonder of creation. Women in postnatal period need to maintain a balanced diet and food group consumption is a mirror of dietary intake. Lactation is one of the period of considerable physiological stress which call for additional nutrient requirement. **Aim :** The aim of this study was to assess the postnatal food consumption pattern and postnatal nutrient intake of mother undergone normal delivery and caesarian section and to know about feeding practices of infant born by normal delivery and caesarian section. **Material and methods:** This cross sectional study was conducted on 200 randomly selected mothers 100 each of undergone through normal delivery and c-section delivery and 200 infants 100 each of born through above selected mother undergone normal delivery and c-section delivery. General information regarding socioeconomic characteristics have been collected through interview method conducting personal interview and dietary intake of mothers assessed using 24 hour recall method. **Result :** The result about postnatal food consumption of mothers during first three months of lactation period indicated that none of the food group was taken by mothers in adequate amount throughout the study period. The nutrient intake of mothers calculated by the food group intake obviously showed that majority of the nutrient intake of mothers was found within 70-90% of RDA in both of the group mainly of major nutrient intake and the maximum of normally delivered infants had started breast feeding within half hour, while caesarian infants have given breast feeding after 24 hour. **Suggestion :** This is highly recommendable that mothers should know importance of lactating diet and their effect on growth of infant.

Key Words : Felt, Product diversification, Surface enrichment

INTRODUCTION

Motherhood the only act that manifest in human form is the cosmic wonder of creation. Imagine a life growing within you, nurtured with your life blood. And then the wonder of all,

Cite this Article: Chaudhary, Shweta, Husain, Munira M. and Asha (2017). Comparative study of postnatal food consumption pattern of mothers under normal delivery and caesarian section. *Internat. J. Appl. Home Sci.*, 4 (9 & 10) : 753-759.

this vague motion within your womb turns in to tiny hands.

The story begins with a birth and life all beginnings a positive childbirth is not only spiritually more fulfilling, but can also strengthen the mother-child bond.

Motherhood brings an inner awareness. But it also comes with its own share of responsibilities and worries from the moment of conception, neatly patterned world feeters on the brink of chaos. Priorities change, forced to look at life from a different perspective and all that had taken for granted seems like a thing of the past. This moment need to organize sufficient resources financial security, family support. Safe environment adequate food, rest and excercies, a skilled and wise practitioner, and above all confidence in your ability to give birth. A baby can be born in one of two ways a vaginal birth is one in which the baby is delivered through the mother's birth canal (vagina).

A casarean birth is one in which the baby is delivered through an incision in the mother's lower abdomen and uterus. A cesarean birth is a surgical procedure done with anesthesia.

In the developing world childbirth and the first day's post partem are a risky time for mother and baby. Appoximately one-fourth to one-half of death in the first year of life occurs in the first week.

It is threfore very important that women regain their strength and maintain their health as they adjust to life with their new baby. Women in the postnatal period need to maintain a balanced diet. food group consumption is a mirror of dietary intake. lactation is one of the period of considerable physiological stress which call for additional nutrient requirement.

The ultimate aim of the diet is to supply nutrients needed to lactating mother for maintaence of health and adequate milk supply. So this present retrospective cross sectional study has been undertaken to know about the post natal food consumption of mother undergone normal delivery and cesarean section with following objectives.

Objectives :

1. To find out the postnatal food consumption pattern of mother's undergone normal delivery and cesarean section.
2. To calculate the postnatal nutrient intake of mother's under normal delivery and cesarean section.
3. To know about the feeding practices of infant born by normal and c- section delivery.

H.ypothensis :

1. The postnatal food consumption pattern of mothers undergone normal delivery and c-section shall not be different.
2. The postnatal nutrient intake of mother's under gone normal delivery and c- section shall not be different.
3. The feeding partices of infant born by normal delivery and c- section shall not be different

METHODOLOGY

Research design :

The study was preceded with the selection of sample mothers and their infant through

purposive sampling method as per following specification.

Locale :

Ante natal clinics /obstetric clinics / hospitals.

Sample size :

200 mothers – 100each of under gone normal delivery and c – section delivery

200 Infant – 100 each of born through normal delivery and c – section.

Women immediately after delivery, infant of the first and second birth order, infant of either sex.

The collection of data was done through interview method, observation method, 24 hour dietary recall method, assessment method, Biochemical method.

RESULTS AND DISCUSSION

In present study postnatal food group intake and consequently some of the nutrient intake were found as per h-1 “ the postnatal food group intake of mother’s under gone normal delivery and c- section shall not be different “ obtained result are presented in following.

The Table 1 indicate that obtained mean difference of cereal consumption of mother undergone normal delivery and c- section delivery on 8th day is 13.02 g.

Table 1 : Mean cereal (g) intake of mother after undergone normal and cesarean delivery during first three months [Mean , sd,and't' value]						
Age	Group	Mean	S.D.	Mean diff.	t-value	Sig.
8 th day	Normal	169.1667	44.39	13.0208	2.145	.033
	c-section	156.1458	37.024			
15 th day	Normal	219.38810	40.9881	4.0268	.623	.534
	c-section	215.8542	45.1001			
30 th day	Normal	248.9286	37.6978	15.4911	2.971	.003
	c-section	233.4375	32.2679			
60 th days	Normal	276.9762	44.4958	5.7262	.814	.417
	c-section	271.2500	49.2309			
90 th days	Normal	308.3333	43.9011	-.4167	-.067	.947
	c-section	308.7500	39.874			

15th day 4.02 g 30th day 15.4 g 60th day 5.7 g and 90th 4.1 g so, the result indication that mother undergone normal delivery had cereal consumption higher than mother undergone c-section.

The Table 2 indicate that the mother’s undergone normal delivery had lower had lower milk consumption only 15th and 60th day than the other days.

The Table 3 reveals that obtained t- value for the mean difference of pulses + meat + eggs consumption of mother’s undergone normal delivery and c- section is not significant at all so the hypothesis h-1 is accepted for totally.

The result about postnatal food consumption of the mother during first three months of

Age	Group	Mean	S.D.	Mean diff.	t-value	Sig.
8 th day	Normal	273.809	92.6440	29.0179	2.021	.045
	c-section	244.791	99.0691			
15 th day	Normal	297.1429	80.6685	-18.4821	-1.420	.157
	c-section	315.6250	92.4271			
30 th day	Normal	327.3810	82.2883	5.5060	.471	.638
	c-section	321.8750	74.06261			
60 th days	Normal	323.8095	78.5701	-22.0238	-1.531	.128
	c-section	345.8333	109.4644			
90 th days	Normal	297.6190	87.7787	1.7857	.148	.882
	c-section	295.8333	73.8657			

Age	Group	Mean	S.D.	Mean diff.	t-value	Sig.
8 th day	Normal	84.04762	75.03555	-1.7247	.792	.474
	c-section	86.35417	113.4796			
15 th day	Normal	62.7381	56.12483	-6.982	.682	.525
	c-section	69.6875	69.33747			
30 th day	Normal	78.69048	76.83231	9.835	.443	.682
	c-section	68.7375	63.16021			
60 th days	Normal	97.19048	63.90086	13.327	.824	.456
	c-section	84.16667	51.3832			
90 th days	Normal	65.83333	69.51838	13.1258	.466	.673
	c-section	78.95833	116.7994			

the lactation period indicated that none of the food group was taken by mother in adequate amounts throughout the study period. only cereals and fruit group was found remained constantly better in both of group.

The pulse + meat+ egg group has been taken quit adequately but only up to first two month while it was not found in case of milk and milk products.

The nutrient intake of the mothers calculated by the food group intake obviously showed that majority of nutrients intake of mothers was found within 70 to 90% of R D A in both of the groups mainly of major nutrient in takes. the mean micronutrient intake was found more deprived comparatively and their approximate intake range of R D A % lay in between 60-80% wherein iron intake was found least among the group in particular. An over all significant gap of 150-200 kcal in energy intake, with 10-15 gm infant intake was found in between the group was found where in normal delivery mothers got higher intake than their c- section peers.

From results regarding feeding patlern of infants born by normal delivery and c- section, it is clear that majority of infants of later group had prelacteal feeding than former group. In caesarean infants major prelacteal feeding was formula milk while in ni\ormally delivered

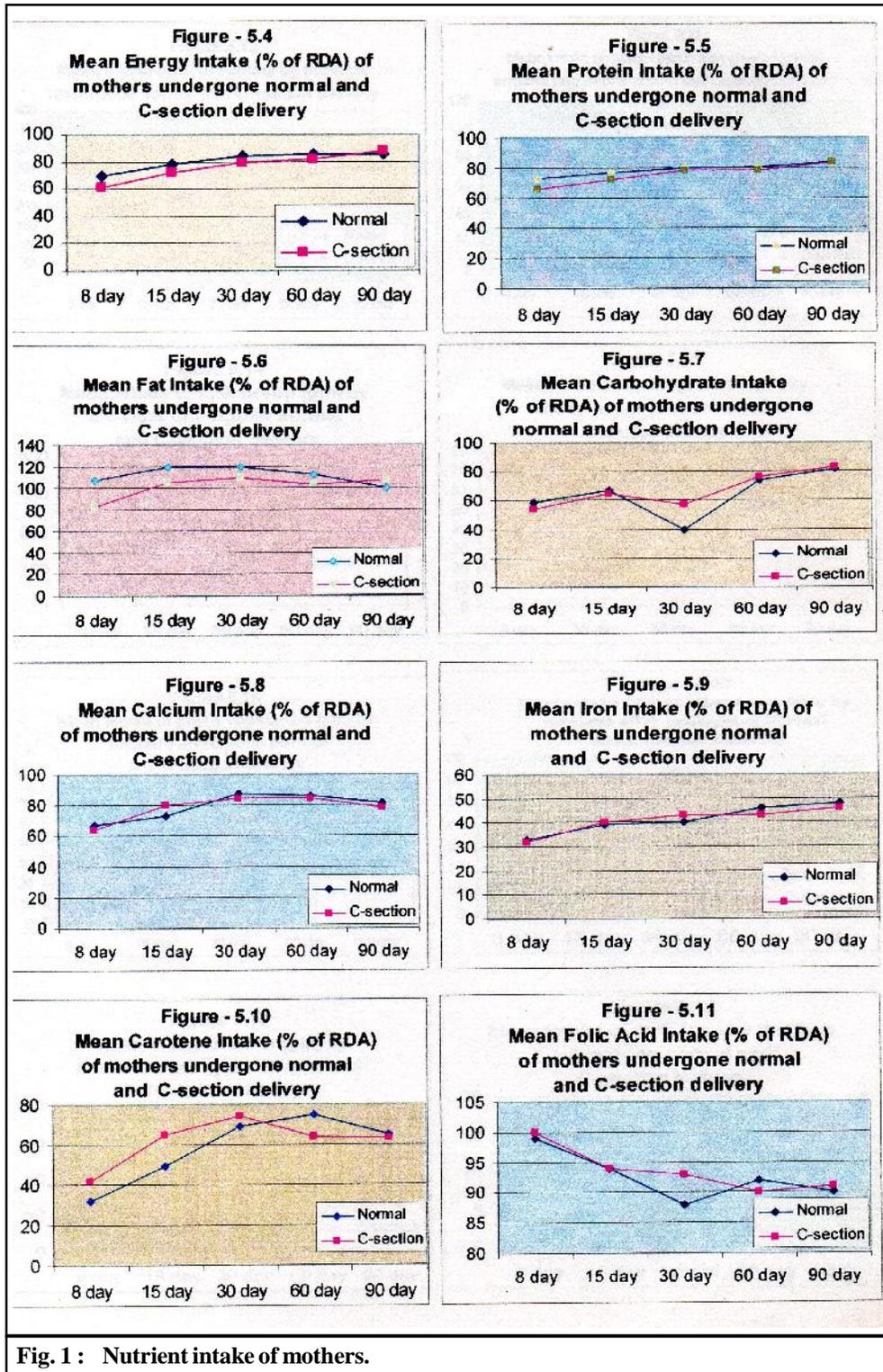
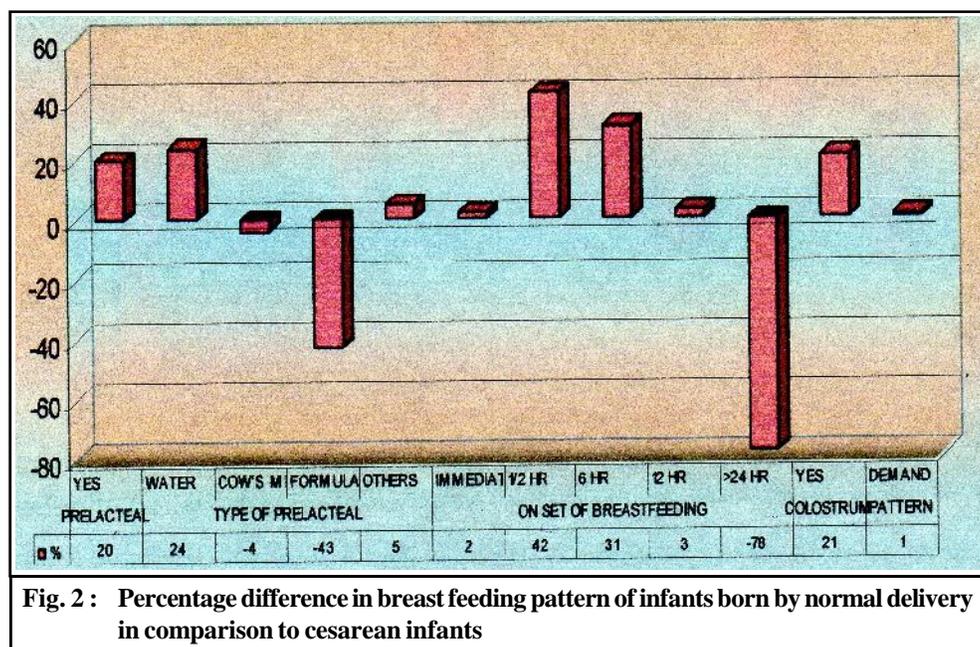


Fig. 1 : Nutrient intake of mothers.



infants it was water. the result further showed that maximum of normally delivered infants had started breast feeding within 1/2 hour, while cesarean infants have given breast feeding after 24 hours. 100% of normally delivered and 79 out of 100 c-section infants have colostrums feeding and pattern of feeding was demand feeding almost equally in both group. However 38% normally delivered infants led top milk while in c-section infant, this percentage was found 52% and among those top milk receivers 68% fed upon cow's milk and remaining got formula milk. Thus the prelacteal feeding was found significantly high among the c-section group which may concern the early health and nutritional status of the infants (Fig. 1 and 2).

Suggestion:

This is highly recommendable that mothers should know importance of lactating diet and their effect on growth of infant and should know about effect of mode of delivery on post natal food consumption of mother. The last but not least suggestion from the study comes that mode of delivery does not have any significant serious of long run effect on child's growth, development and health the only thing which can change this process is the method of breast feeding and early infant feeding practices. so, by practicing healthy infant and young child practices every child can be better placed on road of health.

REFERENCES

Evans, K.C., Evans, R.G. and Royol, R. (2003). Effect of Caesarean section on breast milk transfer to the normal term new born over the first week of life. *Archives Disease Childhood Fetal & Neonatal Edition*, **88** (5) : 380-382.

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- Kolås, T., Saugstad, O.D., Daltveit, A.K., Nilsen, S.T. and Øian, P.(2004). Planned cesarean versus planned vaginal delivery at term: comparison of newborn infant outcomes. *American J. Abstertric & Gynecologs*, **195** (6) :1538-1543.
- Liston, F.A., Allen, V.M., O'Connell, C.M. and Jangaard, K.A. (2008). Neonatal outcomes with caesarean delivery at term. *Arch. Dis. Child Fetal Neonatal Ed.*, **93**: F 176-82
- Mery, Paul and Vijaylaksmi, P. (2002). Effect of improving the maternal nutritional Status with preference to zinc vitamin A and iron the birth weight of the new born. *Indian J. Nutr. Dietet.*, **39** : 95-104
- Pérez-Ríos, N., Ramos-Valencia, G. and Ortiz, A.P. (2008). Cesarean delivery as a barrier for breastfeeding initiation: the Puerto Rican experience. *Internat. Breast Feed J.*, **84** (6) : 588-592.
- Sentilhes, L., Goffinet, E., Talbot, A., Diguët, A., Verspyek, E., Cabrol, D. and Marpeaul, L. (2007). Attempted vaginal versus planned Caesarean delivery in 195 breech first twin pregnancies. *Acta Obstet Gynecol Scand.*, **86**(1):55-60.
