- 6. Helsing E, King FS. Breastfeeding in Practice, Delhi, Oxford University Press, 1984, pp 36-39.
- 7. Winikoff B, Baer EC. The obstetricians opportunity. Translating 'breast is best' from theory to practice. Am J Obstet Gynecol 1980,138:105-117.
- Sharma P, Dutta AK, Narayanan I. Attitudes of medical and nursing personnel to breastfeeding practice. Indian Pediatr 1987, 24: 911-915.
- 9. Gupta A, Gupta R. Obstetric and infant feeding practices in Punjab: Effect of education intervention. Indian Pediatr 1992, 29: 333-335.
- Reiff IM, Essock, Vitace SM. Hospital influences on early infant feeding practices. Pediatrics 1985, 76: 872-879.

- 11. Kulski JK, Smith M, Hartmann PE. Normal and Cesarean section delivery and the initiation of lactation in women. Aust J Exp Bio Med Sri 1981, 59: 405-412.
- 12. Bathija CG, Anand RK. Effect of perinatal motivation on breastfeeding in educated mothers. Indian Pediatr 1987, 24: 933-937.
- De Chateau P, Holmberg H, Jakobsson K, Winberg J. A study of factors promoting and inhibiting lactation. Dev Med Child Neurol 1977,19: 575-584.
- Procianoy RS, Fernandes-Filho PH, Lazaro L, Sartori NC. Factors affecting breastfeeding: The influence of Cesarean sections. J Trop Pediatr 1984, 30: 39-42.

# Use of Milk Based Commercial Weaning Foods Amongst Scheduled Caste Communities in Haryana

Umesh Kapil D. Verma H.P.S. Sachdev D. Nayar A.D. Shah N. Gnanasekaran

Breastmilk is the best food for a child till the age of 4-6 months. During the re-

cent past an increase in trend of providing milk based commercial weaning foods (CWF) has been observed in the urban areas(1). Inadequate data is available regarding the use of CWF from the rural areas particularly in the underpriv-

- From the Human Nutrition Unit and Computer Facility, All India Institute of Medical Sciences, Ansari Nagar, New Delhi 110 029; and Division of Clinical Epidemiology, Department of Pediatrics, Maulana Azad Medical College, New Delhi 110 002.
- Reprint requests: Dr. Umesh Kapil, Associate Professor, Human Nutrition Unit, All India Institute of Medical Sciences, New Delhi 110 029.

Received for publication: June 22,1994; Accepted: November 1,1994

905

#### BRIEF REPORTS

ileged section of the society. The present study was, therefore, conducted to assess the use of CWF amongst the scheduled caste population in two districts in Haryana State. The data presented here, is a part of a larger study conducted on breastfeeding and weaning practices in Haryana.

## **Material and Methods**

Complete census data of Haryana state was obtained from the Registrar General of India. The total percentage of Scheduled Caste population (rural and urban) in each district of Haryana was enlisted. Scheduled Caste (SC) population in different districts ranged from 13.8% to 29.38% of the total population. One district with below 20% of rural SC population (Faridabad with 18.25%) and the other district Hisar with 23.3% of rural SC population (SC population more than 20%) were selected using multistage random sampling procedure for the detailed study (*Fig. 1*).

In each district, all blocks were enlisted and one block was selected using purposive sampling keeping in view the operational feasibility. In the block, selected villages were enlisted according to the proportion of SC population to the total population. Villages with more than 20% of SC population and within 20 km from the district headquarters were enlisted. Four hundred and nine

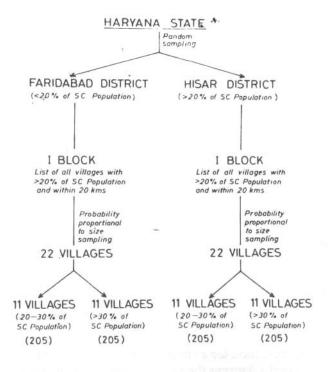


Fig. 1. Details of the sampling procedure employed.

### INDIAN PEDIATRICS

Thus a total of 818 children from 44 villages were included from 2 districts. Details regarding feeding practices were filled in a pretested proforma by the trained nutritionists.

## Results

Out of 818 children in the age group of 0-35 months, only 68 had received milk based CWF at the time of survey or any other point of time in the past. There was no significant difference between the socio-economic characteristics of children who were given milk based CWF versus those who did not receive it *(Table I).* 

*Table II* depicts the reasons for starting CWF and the major source of advice for initiating it. The major reasons for starting the CWF were insufficient lactation" (36%) and "high price of animal milk" (37%). The family members (75%) and medical functionaries (16%) were the major source of advice for initiating the use of CWF. The katori and spoon was the most common mode of feeding of CWF (67%) followed by bottle (25%).

TABLE I-Socio-economic Profile of Children Receiving Milk Based Commercial Weaning Food

	Receipt of milk based CWF			
Category	Received (n-68)		Not Received (n=748)	
	(No.)	(%)	(No.)	(%)
1. Family Type				
Joint	28	41.2	331	44.3
Nuclear	39	57.3	400	53.5
Extended	1	1.5	17	2.3
2. Per capita income per	r month (Rs.)			
<250	58	85.3	578	77.3
250-349	6	8.8	125	16.8
≥350	4	5.9	42	5.6
3. Age of mother (yr)				
<20	2	3.0	52	7.0
20-24	20	29.4	290	69.8
≥25	46	67.6	398	53.2
4. Literacy status of mo	ther			
Illiterate	58	85.3	652	87.2
<5	1	1.5	12	1.6
5-8	8	11.7	76	10.2
>8	1	1.5	8	1.0

BRIEF REPORTS

TABLE II—Reasons and Source of Advise for Using CWF

6	Total Children received CWF (n=68)	
Parameters	(No.)	(%)
Reasons for starting CWF		
Animal milk expensive	25	36.7
Easy to prepare	1	1.5
CWF more nutritious	1	1.5
Mother's pregnancy	5	7.3
Breastmilk insufficient		
/lactation failure	25	36.7
Working mother	7	10.3
Others	4	5.9
Persons who advised use of	CWF	
Health functionaries	11	16.2
Peer group women	1	1.5
Family/relation	51	75.0
Advertisments	1	1.5
Others	2	3

It was found that 65% of total children surveyed received home based weaning foods. The percentage of children receiving home based weaning foods in the age groups 0-5, 6-11, 12-17, 18-23, 24-29 and 30-35 months was 1%, 56%, 77%, 97%, 95% and 96%, respectively. All the seven children less than 3 months of age receiving CWF were breastfed. However, only 73.7% children aged above 3 months were breastfed along with CWF.

## Discussion

The Innocenti Declaration states that "all women should be enabled to practise exclusive breastfeeding and all infants should be fed exclusively on breastmilk for 4-6 months of age". In the present study, 8.3% of children used milk based CWF at some time or the other indicating that the use of CWF has also infiltrated into the underprivileged section of the rural communities. This is an alarming finding as the use of CWF in an unhygienic environment may lead to diarrhea and malnutrition. Other studies(2,3) have also reported similar results.

The major source of advise for initiating CWF was by family members. Similar findings have been reported earlier(3). The medical functionaries advice to mothers on the use of CWF in present study was 16.2%. In a hospital based study this has been reported to be more than 80%(4).

The findings of the present study indicates the urgent need of inservice continued education to the medical functionaries on proper feeding practices and dissemination of the same to the lay public.

## REFERENCES

- Gopalan S, Puri RK. Breastfeeding and infant growth. Indian Pediatr 1992, 29: 1079-1087.
- Shrivastava DK, Shani OP, Kumar A. Infant feeding with commercial milk formula in an urban community of Central India. Indian Pediatr 1987, 24: 889-894.
- Gopujkar PV, Chaudhuri SN, Ramaswami MA, Gore MS, Gopalan C. Use of Commercial Infant Foods. *In:* Infant Feeding Practices with Special Reference to the Use of Commercial Infant Foods. New Delhi, Nutrition Foundation of India Scientific Report 4,1984, pp 59-78.
- Bhat IA, Hafeeza, Shah GN, Dhar GM. Who is responsible for artificial feeding? An evaluation. Indian J Mat Child Hlth 1993, 4: 55-58.