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## Assessment of knowledge regarding recommended weaning practices amongst tribal mothers of Sabarkantha

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### Abstract

Weaning refers to the period during which an infant gradually becomes accustomed to food other than milk. Weaning too early may cause baby at higher risk of developing digestive disorders and adverse reactions or allergies to certain foods. On the other hand, weaning too late may deprive adequate nutrition and can result in improper growth and development. In the present study assessment of knowledge regarding recommended weaning practices among tribal mothers of Sabarkantha was carried out. Two tribal taluka of Sabarkantha i.e. Khedbrahma and Poshina taluka were purposefully selected for the study. Total 120 tribal mothers were selected using random sampling. Data was collected with the help of personal interview method. SPSS windows version 19.0 was used for statistical analysis and frequency, per cent, mean, standard deviation were calculated. It can be concluded from the study that majority of tribal mothers were coming from lower socioeconomic group, living in large, joint families, having limited resources and low literacy was observed. Majority of mothers were having medium knowledge about recommended weaning foods and practices. Longer period of exclusive breast feeding and late introduction of weaning foods on regular bases than recommendation was observed. It was also found that mother's education and father's / husband's education shows significant positive correlation with the knowledge level of tribal mother regarding recommended weaning practices.

**Keywords:** Tribal mother, knowledge, recommended weaning practices

### Introduction

The term "to wean" comes from an ancient phrase that means "to accustom to". So weaning refers to the period during which an infant gradually becomes accustomed to food other than milk (Kambli, 2014) <sup>[1]</sup>. The term "weaning" has been traditionally described as withdrawal from breast feeding, when breast feeding is gradually replaced by fresh or modified animal milk, or by semisolid food. Weaning means addition or introduction of semi-solid foods along with continuation of breast feeding as long as possible. The term 'Weaning' describes the process by which baby moves or shifts from having breast milk to consuming semi-solid or solid foods with a gradual reduction in the intake of breast milk and /or baby formula (Gupta, 2004) <sup>[2]</sup>. It is transitional to change from liquid to solid diet, the feeding behaviour changes from sucking to chewing and biting and the obligatory introduction with the mother or other caretaker changes to independent feeding (Bhutta, 2004) <sup>[3]</sup>.

Weaning too early may cause baby at higher risk of developing digestive disorders and adverse reactions or allergies to certain foods. On the other hand, weaning too late may deprive adequate nutrition and can result in improper growth and development (Ambike *et al.*, 2017 <sup>[4]</sup> and Parkinson <sup>[5]</sup>). After 6 months, breast milk alone does not provide all the nutrients that growing baby need, in particular iron and calories that solid foods provide. For other sources of nourishment, try to gradually introduce semi solid or solid foods to baby. Hence weaning provides child a nutritional balance for proper growth and development. According to National Family Health Survey-3 data, about 20 million children are not able to receive exclusive breastfeeding (EBF) for the first six months, and about 13 million do not get good, timely and appropriate complementary feeding along with continued breastfeeding (Arnold *et al.*, 2015) <sup>[6]</sup>. The delayed introduction of semisolid foods is a major cause of child malnutrition in South Asia as well as in India. Most children do not receive semisolids until 9 months of age, and many not till their second year of life. Weaning practices are influenced by socioeconomic, cultural & educational background of the child's parents. A balanced and well prepared weaning food ensures appropriate nutrition to the child during the most crucial years of growth. Tribal population is socio-economically backward population of our country. Looking to this, the present study assessment of knowledge regarding recommended weaning practices among tribal mothers of Sabarkantha was carried out.

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## Materials and Methods

The present study was conducted in Sabarkantha district of Gujarat. Two tribal taluka of Sabarkantha i.e. Khedbrahma and Poshina taluka were purposefully selected for the study. Five villages from each taluka were randomly selected. Total ten villages were selected for the study. Twelve tribal mothers having babies less than 3 years were randomly selected from each village. Total 120 (60 from each taluka) tribal mothers were selected using random sampling. An interview schedule was prepared based on recommended weaning practices suggested by NIN (Anonymous, 2011) [7], WHO (Anonymous, 2002) [8] and Tiwari *et al.*, (2016) [9]. The information related

to socio-economic background of the tribal mothers and their knowledge regarding recommended weaning practices was collected with the help of personal interview method. SPSS windows version 19.0 was used for statistical analysis and frequency, per cent, mean, standard deviation were calculated.

## Results and Discussion

In the present study, knowledge regarding recommended weaning practices among tribal mothers of Sabarkantha district was studied. Results obtained were presented in the tabular form as below.

**Table 1:** Distribution of the tribal mothers according to their personal detail (n=120)

Sr. No.	Personal detail	Frequency	Per cent
1	Religion		
	Hindu	120	100
2	Age		
	< 18	0	00.00
	18- 30	90	75.00
	> 31 - 40	30	25.00
3	Education of the respondent		
	Illiterate	85	70.83
	Primary education (1-7 Std.)	27	22.50
	Secondary education (8-10 Std.)	08	06.67
4	Number of children		
	1	23	19.17
	2	34	28.33
	3	27	22.50
	4	23	19.17
	5	13	10.83

Table 1 shows personal information of the tribal mothers. All the tribal mothers were following Hindu religion. Most of the tribal mothers (75%) were of 18 to 30 years of age group. Education level of the tribal mothers was found poor. Most of

the respondent were illiterate (70.83%) and others were educated upto secondary education. It was observed that tribal mothers were having many children and most of the mothers were having more than two children.

**Table 2:** Distribution of the tribal mothers according to family detail (n=120)

Sr. No.	Detail	Frequency	Per cent
1	Type of family		
	1. Joint	77	64.17
	2. Nuclear	43	35.83
2	Family size		
	1. Small family (Up to 4 members)	27	22.50
	2. Medium family (5-8 members)	62	51.67
	3. Big family (Above 8 members)	31	25.83
3	Occupation		
	1. Farming only	29	24.17
	2. Farming + Animal husbandry	80	66.67
	3. Farming + Farm Laborer + Animal husbandry	01	00.83
	4. Farming + Service+ Animal husbandry	07	05.83
	5. Farming + Business+ Animal husbandry	02	01.67
	6. Only Service	01	00.83
4	Monthly Income (Rs.)		
	> 1000	02	01.67
	1000 to 2499	22	18.33
	2500 to 4999	50	41.67
	5000 to 9999	43	35.83
	Above Rs. 10000	03	02.50
5	Type of the house		
	1. Kachcha	59	49.17
	2. Pakka	38	31.67

Data presented in table 2 showed that tribal mothers were living in joint families (64.17%) and family size was medium (51.67%) to large (25.83%) in most of the cases. Main

occupation of the families was farming and animal husbandry (66.67%). Most of the families were earning less than 5000 Rs per month and little less than half (49.17%) families were

living in kachcha house. Similar results were also found by Dave *et al.* (2016) <sup>[10]</sup> reported lower socio-economic condition of tribal families of Sabarkantha district. Dave and Mistry (2017) <sup>[11]</sup> who studied nutritional and health status of

tribal farm women of Sabarkantha and reported about their poor socio-economic background i.e. low income, large family size, more number of children and living in kachcha houses.

**Table 3:** Distribution of the tribal mothers according to their knowledge regarding recommended weaning practices (Concept and preparation of weaning foods) (n=120)

Sr. No.	Statements showing concept and preparation of weaning foods	Frequency	Percent
1	Foods which are used during gradual transition of the infant from breastfeeding to a normal diet is called weaning foods	106	88.33
2	Child can become malnourished if weaning foods are not introduced after six months	93	77.50
3	Home made weaning foods are cheaper and better than ready made weaning foods	33	27.50
4	Combination of cereal, pulses, nuts and jaggery in weaning food are more nutritious than single grain preparation	108	90.00
5	Weaning foods should be freshly prepared	116	96.67
6	Weaning foods should not store in refrigerator for longer period of time	65	54.17
7	Packaged food and ready to eat snacks should not be given as weaning foods	70	58.33
8	Spicy and fried foods can not be given as weaning foods	71	59.17
9	Animal milk should be boiled before given in weaning	112	93.33

Table 3 depicts the distribution of the tribal mothers according to their knowledge regarding recommended weaning practices especially concept and preparation of weaning foods. It was observed that majority of tribal mothers were having knowledge of what is weaning food (88.33%) and nutritional importance of weaning food in child growth and development (77.50%). Knowledge regarding

composition of weaning food (90%), fresh serving of weaning food (96.67%) and pre-preparation (boiling of milk 93.33%) of weaning foods was recorded very high among tribal mothers. On the other hand, only half of the tribal mothers were aware that ready made packaged snacks (58.33%) and spicy-fried foods (59.17%) should not be given as weaning foods to the child.

**Table 4:** Distribution of the tribal mothers according to their knowledge regarding recommended weaning practices (Feeding of weaning foods) (n=120)

Sr. No.	Statements showing knowledge regarding feeding of weaning foods	Frequency	Percent
1	Exclusive breast feeding for first 6 months of birth is recommended	115	95.83
2	Weaning foods should be introduced soon after six months	108	90.00
3	Weaning should be introduced with liquid foods and then gradually semisolid (6-8 months) and then chopped/ mashed foods and solid foods (9 months onwards) should be given	112	93.33
4	Weaning food should be given 3-4 times a days	118	98.33
5	Boiled, mashed, crushed vegetables and juice should be incorporated in weaning foods	65	54.17
6	Ghee, oil, butter should be added to the weaning foods	66	55.00
7	Jaggery should be added to the weaning food	93	77.50
8	Fruits and vegetables should be properly washed before giving in weaning foods	115	95.83
9	Sprouts of cereals and pulses should be given in weaning foods	40	33.33
10	Roots and tubers like potato, sweet potato etc. should be incorporated to weaning foods	71	59.17
11	Boiled, mashed, crushed fruits and juice should be incorporated in weaning foods	107	89.17

Table 4 represents data about knowledge of tribal mothers regarding feeding of weaning foods. It can be said that most of the tribal mothers knew about exclusive breast feeding for first six months (95.83%), timings of weaning introduction (90%) and interval (98.33%) and types of weaning foods (93.33%). Agarwal and Bezboruah (2017) <sup>[12]</sup> in their study noticed that mothers with higher education initiated weaning at the correct age compared to their less educated counterparts.

Majority of mothers (77.50%) knew that jaggery should be added to the weaning food but only half of them were aware about addition of ghee/oil in weaning food (55%). Complementary or weaning feeding as described by WHO refers to the addition of energy and non-energy containing fluids, non-human milk, and semi-solids or solids to children's diet (Canadian Pediatric Society) <sup>[13]</sup>. Though majority of them knew that fruits and fruit juice should be included but only half of them knew about incorporation of roots, tubers and vegetables in weaning foods. Knowledge regarding giving sprouts of cereals and pulses was observed among very few (33.33%) tribal mothers. Kambli S. (2012) <sup>[1]</sup> found in her study that majority of the mothers are having

wrong concept about weaning and are not knowledgeable about current weaning recommendations. Chaudhry and Humayu (2007) <sup>[14]</sup> reported in their study that the quality, type and choice of food for weaning was not ideal for an adequate growth.

**Table 5:** Distribution of the tribal mothers according to their knowledge level regarding recommended weaning foods practices (n=120)

Sr. No.	Knowledge level	Frequency	Per cent
1	Low (below 13)	19	15.83
2	Medium (13 to 18)	87	72.50
3	High (above 18)	14	11.67
Total		120	100.00
Mean =15.25		S.D.= 2.60	

The knowledge level of tribal mothers regarding recommended weaning foods is presented in table 5. Majority of mothers (72.50%) were having medium knowledge while almost 15 per cent mothers showed low level of knowledge regarding recommended weaning foods. Few mothers (11.67%) showed high level of knowledge regarding

recommended weaning foods. Rai *et al.*, (2007) <sup>[15]</sup> in their study mentioned that awareness about weaning food was less in rural mothers as compared to urban mothers.

**Table 6:** Co-relation of the Knowledge level of tribal mother regarding recommended weaning practices with dependent variable (n=120)

Sr. No.	Variables	Knowledge level of tribal mother regarding recommended weaning practices
1	Age	0.092
2	Mother's Education	0.338**
3	Father/Husband education	0.184**
4	No. of children	0.030
5	Family size	-0.056
6	Family Type	-0.012
7	Occupation	0.056
8	Income	0.039

\*\* Correlation is significant at the 0.01 level (2-tailed)

Table 6 shows that mother's education and father's / husband's education had significant positive correlation with the knowledge level of tribal mothers regarding recommended weaning practices.

### Conclusion

It can be concluded from the study that majority of tribal mothers were coming from lower socioeconomic group, living in large, joint families, having limited resources and low literacy was observed. Majority of mothers were having medium knowledge about recommended weaning foods and practices. Longer period of exclusive breast feeding and late introduction of weaning foods on regular bases than recommendation was observed. It was also found that mother's education and father's / husband's education shows significant positive correlation with the knowledge level of tribal mothers regarding recommended weaning practices.

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