

Use of *Katlu*, a Traditional Food for Lactating Mothers: A Study of Three Generations of Gujarati Women

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DOI: <https://doi.org/10.52403/ijshr.20220143>

ABSTRACT

Background & Aim - 'Katlu' or 'Battrisu' is a traditional Gujarati preparation consisting of 32 herbs and is given to lactating mothers. With globalization and exposure to varied cuisines, diet patterns in urban areas in India have changed considerably. Therefore, this study was undertaken to determine whether consumption of 'katlu' and knowledge about it, has changed over three generations.

Methodology - Practices related to 'katlu' consumption were examined across three generations within the same family; lactating mothers (n = 79), their mothers/ mothers-in-law (n = 77), and their grandmothers/ grandmothers-in-law (n = 57). Participants were recruited by snowball sampling from three cities - Mumbai, Maharashtra state, and Junagadh and Ahmedabad in Gujarat State.

Results - More than half of participants from all three generations were aware of 'katlu' and knew how it is prepared. Among the participants, 98.2% of new mothers and all participants from the two older generations had a favourable opinion about 'katlu'. Percent participants who consumed 'katlu' were slightly higher among grandmothers (70.9%) as compared to 64.9% mothers/ mothers-in-law and 65.8% new mothers.

Conclusion - These results suggest a declining trend for consumption. There is a need for further research into the medicinal benefits of 'katlu' and other such herbal preparations and to

bring this knowledge to consumers and create public awareness about their benefits.

Keywords: *katlu, battrisu, lactation, galactagogues, polyherbal formulation, traditional food*

INTRODUCTION

Historically, food has been a vital part of Indian culture and continues to occupy an important place at the family and community levels. India is unique in its use of herbs and spices both in the recipes that are part of regular meals and snacks, but also in preparations that have health benefits and medicinal value. Across the world, different cultures have their own practices and use formulations/ galactagogues that may help overcome insufficient milk production. Breastfeeding was universally practised in India in the past and over time, communities have evolved their own specific practices for lactating mothers.

In India and other parts of the world, it is considered important to nourish the mother during lactation and herbs and special foods are included in the breastfeeding mothers' diets. ^[1]

Traditionally, in India, special foods are given to mothers in the postpartum period. These special foods tend to be energy-dense as they are made from

considerable amounts of ghee, cereals/ millets, sugar/ jaggery as well as nuts and seeds, and sometimes dry fruits. Such foods are given for a period of 2 to 6 months and sometimes include foods that will also provide minerals like calcium and iron.^[2] Shrivastav (1986)^[3] reported that many foods are offered to new/ breastfeeding mothers, depending on the community and region. These include “harira”, “panjiri”, “gond ke laddu”, “badam sheera”, “methi puri”, “milk daliya”, “mung dal vegetable khichdi”, “ajwain halwa”, “ajwain paratha”, “mandua ka halwa”, “garlic rasam”, “masoor ki dal” and there may be many more such traditional foods.

In the Saurashtra region of Gujarat, a traditional polyherbal formulation known as ‘Katlu’ or ‘Battrisu’ is given to lactating mothers in the form of ‘katla laddu or katla pak’. This preparation contains about 32 different herbs in a powdered mix, that is added to a preparation called ‘gud papdi’ made from wheat flour, ghee, jaggery. Nuts like almonds are optional. It is also consumed during winter by persons of all ages, as protection against the cold weather.

However, industrialization and globalization have exposed Indians, particularly in urban settings, to cuisines and foods/ ingredients from various cultures and countries. This has led to changes in dietary habits and eating patterns. These shifts are also attributable to the easy availability of processed and preserved foods, consequent to the expansion of the food industry. In metropolises and cities, Indians, particularly the young adults have been quick to adapt and incorporate many of these foods into their diets, while they are gradually moving away from traditional foods. Not many studies have been reported in the literature regarding whether in the 21st century, new mothers still willingly consume traditional foods and whether they are aware of the importance of incorporating special foods during lactation. Therefore, we undertook the present investigation to study the knowledge, attitudes and practices regarding the use of ‘Katlu’ across three

generations of women, within the same families.

MATERIALS AND METHOD

Ethics approval: The study was approved by the Inter System Biomedica Ethics Committee (letter no ISBEC/NR-52/KM-JVJ/2013 dated 6th May 2013).

Study location: The study was conducted in three cities; Mumbai in Maharashtra state and Junagadh & Ahmedabad cities in Gujarat state.

Selection of sample: The survey was conducted with new mothers, their mothers/ mothers-in-law and grandmothers/ grandmothers-in-law.

Practising obstetricians from the three cities were contacted and asked if they would share the names of their patients. From those gynaecologists who were willing, a list of women who had delivered within six months before the study was obtained. The mothers were contacted telephonically, explained the purpose of the study and women willing to participate in the survey were recruited. Besides the lactating mothers, their mothers/ mothers-in-law and grandmothers/ grandmothers-in-law were also recruited. Written informed consent was obtained from all willing participants before they were interviewed. The number of participants from each generation is given in Table 1. In each city, it was planned to include 35 mothers from each generation. However, the actual number who participated was less (Table 1).

City	Lactating/ New mothers (Generation 3)	Mothers/ Mothers-in-law (Generation 2)	Grandmothers/ Grandmothers-in-law (Generation 1)
Junagadh	34	34	27
Ahmedabad	30	29	20
Mumbai	15	14	10
Total	79	77	57

Information was obtained first from the new mothers (Generation 3) and then from the mother/ mothers-in-law and lastly from the grandmother/ grandmother-in-law in each family.

Data collection: An interview schedule was used to obtain information from each group. A pilot study was conducted with eight mothers who were not part of the study, following which the tool was finalized. Interviews were conducted in Gujarati, the mother tongue of the participants, and mothers/ mother-in-law (Generation 2), and grandmothers/ grandmothers-in-law (Generation 1) particularly, were comfortable conversing in their mother tongue.

RESULT

Profile of participants

Age: Most lactating mothers i.e., Generation 3 (85.3 % of those from Junagadh, 76.7% of those in Ahmedabad and 60% in Mumbai) were in the age group of 20-29 years. A little less than one-fourth (22.8%) were between 30 and 40 years of age. In Generation 2, 90.9% of mothers/ mothers-in-law were in the age group of 45-65 years but 7.8% were less than 45 years old. In Generation 1, most of the grandmothers (77.2%) were 60-80 years old, and 21.1% were >80 years of age. Only one grandmother was less than 60 years of age.

Education: Among the 79 lactating mothers, 34.2% were graduates, 22.8% were undergraduates, and 43% were professionally qualified. In Generation 2, 68.8% of the 77 mothers/mothers-in-law of lactating mothers were undergraduates, 18.2% were graduates and 13% were professionals. In Generation 1, 53.6% had not attended school, 42.9% had studied up to the 10th standard and 3.6% had received professional education.

Native place: All participants from Junagadh hailed from the Saurashtra and Kutch region of Gujarat, compared to 40% of the families surveyed in Ahmedabad and 66.7% in Mumbai city. The other families in Ahmedabad and Mumbai belonged to other regions in Gujarat.

Type of delivery: Overall, 43% of mothers had a normal delivery whereas the remaining had undergone C-sections. The percentage of women who had undergone a C-section was higher in Junagadh (64.7%) and Ahmedabad (70%) as compared to Mumbai (13.3%). A majority (74.7%) of Generation 3 were first-time mothers, 22.8% mothers had 2 children, and only 2.5% had more than 2 children.

A small percentage of the lactating women belonged to extended families: 20.6% in Junagadh, 16.7% in Ahmedabad, but there were none in Mumbai. Percentages of joint families in the three locations were 64.7% in Junagadh, 53.3% in Ahmedabad and 80% in Mumbai, respectively. The remaining mothers were from nuclear families.

A small percentage (5.1%) of mothers reported that they were not able to secrete sufficient breast milk and 2.5% stated that they were not able to breastfeed at all.

Nutrient Supplements: The majority of mothers (79.7%) took vitamin supplements and 81% of the mothers were taking calcium supplements.

Special foods given to the mothers after delivery

Mothers were asked whether they consumed special foods other than '*katlu*' during lactation. Five foods were mentioned (Table 2); among these '*sheera*' made from wheat flour or semolina was consumed by the majority of mothers in all three urban areas, but the percentage was highest for Mumbai and was lowest in Junagadh. Besides this, 69.7% of mothers consumed '*Suwa*' (dill seeds) with dry coconut. More than half the mothers (57.9%) consumed '*Sunth*' or dry ginger or an aqueous extract of dry ginger and *Ganthoda* (long pepper root). A little less than half the mothers consumed dry ginger with jaggery, a preparation known as '*Sunth ni raab*' and 17.1% of mothers consumed 'dry fruit

kheer’ made with milk and dry fruits after delivery.

Table 2: Special Foods consumed by the lactating mothers

Preparation	City (Percent respondents)			All mothers
	Junagadh	Ahmedabad	Mumbai	
<i>Sheera</i>	71.9	86.2	93.3	81.6
Dill seeds [<i>Anethum graveolens</i>] and dry coconut	62.5	69.0	86.7	69.7
Dry ginger and <i>ganthoda</i> (long pepper root [<i>Piper longum</i>]) decoction	56.2	55.2	66.7	57.9
Dry ginger ‘ <i>Sunth ni Raab</i> ’	25.0	58.6	60.0	44.7
Dry fruit <i>kheer</i>	9.4	27.6	13.3	17.1

Knowledge about *Katlu*

Knowledge about *katlu* differed among the three cities and by generation. Comparison between generations indicated that all the respondents from Junagadh belonging to all three generations knew *katlu*. However, a lower percentage of mothers from Generation 3 from Ahmedabad (56.7%) and Mumbai (53.3%) knew about it. Among mothers/ mothers-in-law (Generation 2) 46.6% from Ahmedabad and 57.1% from Mumbai said they knew about this and in the oldest generation, i.e., grandmothers/ grandmothers-in-law, 50% from Ahmedabad and Mumbai knew about *katlu* (Table 3).

In all, 71.4% of mothers/ mothers-in-law knew about this formulation and among the 57 grandmothers who participated in the study, 41 grandmothers had knowledge about *katlu*. Among the 55

women belonging to Generation 2 who knew about *katlu*, all their daughters/ daughters-in-law knew about it and among the remaining 22 women from Generation 2, 20 (90.9%) of the lactating mothers (Generation 3) had no idea. Similarly, there were 17 grandmothers (Generation 1) who did not know about *katlu* and 80% of their granddaughters/ granddaughters-in-law had no idea.

Opinion about *Katlu*

The 56 participants from Generation 3 who knew *katlu*, all had a good opinion about it, and only one respondent was ‘neutral’. All the participants belonging to the two older generations had a favourable opinion and considered *katlu* to be beneficial. Three benefits were listed by the respondents (Table 3).

Table 3: Knowledge about *Katlu* and the health benefit perceived by three Generations of Mothers

Knowledge/ City/ Opinion	(Number and Percentage of Respondents)		
	Generation 1 (Grandmothers) N = 57	Generation 2 (Mothers) N = 77	Generation 3 (Lactating Mothers) N = 79
<i>Aware about <i>Katlu</i></i>			
Junagadh	27 (100)	34 (100)	34 (100)
Ahmedabad	10 (50)	13 (46.6)	14 (56.7)
Mumbai	4 (50)	8 (57.1)	8 (53.3)
All locations	41 (74.5)	55 (71.4)	56 (70.9)
<i>Perceived benefits of <i>Katlu</i></i>			
Reduces backache	32 (78)	49 (89)	44 (80)
Helps to regain energy	39 (95)	31 (56)	38 (69)
Good for lactation	24 (58)	22 (40)	27 (49)

Numbers in parentheses represent the percentage of subjects

Knowledge about Preparation of *Katlu laddu*

All participants from the two older generations in all three cities knew how to prepare the *katlu laddu/ pak* and did so for their daughters/ granddaughters. In Junagadh, all lactating mothers (Generation 3) knew how the *katlu laddu* is made, but

the percentage was lower in Ahmedabad (71.4%) and much lower in Mumbai (25%).

Source of information about *Katlu*

All grandmothers and 84.6% of the Generation 2 respondents who knew about *Katlu*, had obtained their knowledge either from family or community members.

Among Generation 3 i.e., lactating mothers, all participants from Junagadh said it is traditional to consume this supplement and they had received the knowledge from the elders in their families, particularly their mothers/ mothers-in-law who prepared the *katla laddus* for them. In Ahmedabad and Mumbai also, the major source of information were family members; although, in both cities, mothers said that other sources had provided information (Ahmedabad - 28.5% and 12.5% - Mumbai).

Preparation of Laddu/ Pak

The respondents informed that traditionally, this mix of herbs is added in powdered form to a preparation called '*Golpadi/ Gulpadi*' that is made with wheat flour roasted in *ghee* (clarified butter)

to which jaggery is added. The method of preparation varied among the families surveyed, but, the three major ingredients (whole wheat flour, jaggery and pure *ghee*) were used by all families. The *katlu* powder was added to the *Golpadi* mixture, which was then rolled out into '*Katlu pak*' or made into small balls '*Katla laddu*' (Plate 1). The preparation may be garnished with poppy seeds and desiccated coconut. In the present study, some families stated that they also used black gram/ *udad dal* flour, or *besan* i.e., Bengal gram flour, along with wheat flour. Some also used additional *sunth* (dry ginger), *gond* (gum), *ganthoda* (*Piper longum*), grated dry coconut and dill seeds (*Suvadana*), although these ingredients are present in the mixture. Some families also added nuts like almonds or cashew nuts while preparing the *pak/ laddu*.



Plate 1: Image of *Katlu*

Number of Mothers for Whom Prepared

None of the Generation 3 mothers had prepared *katlu pak or laddu* in contrast to the previous two generations. Among the 77 mothers/ mothers-in-law, 53 (68.8%) had prepared and among the 57 grandmothers interviewed, 39 (68.4%) had prepared the *laddus/ pak*. Some participants had prepared it for several lactating mothers. Grandmothers had more experience in preparing the *katlu laddus* than the Generation 2 mothers/ mothers-in-law.

Procurement of Katlu powder

A small percentage of mothers (2.9% in Junagadh and 6.7% in Ahmedabad) had received *katlu* as a gift. In Junagadh, 8.8% of mothers from

Generations 2 and 3, in contrast to 18.5% of Generation 1 had made *katlu* at home. In Ahmedabad, the percentage of mothers who used the homemade herbal formulation was 0% in Generation 3, 3.3% in Generation 2 and 0% in Generation 1. Among the respondents from Mumbai, 3.8% of Generation 3 mothers, none from Generations 2 and 3 made the mix at home. Most of the families purchased the *Katlu* powder from local grocers. In Junagadh, 82.4% among Generation 3, 79.4% from Generation 2 and 74.0% from Generation 1 (grandmothers) purchased it from the local grocery store. In Ahmedabad, 36.7% from Generation 3, 33.3% from Generation 2 and 25% from Generation 1 purchased the powder from the local grocery stores. A

small percentage from each generation procured the herbal formulation from speciality stores: in Junagadh, 6.7% from Generation 3, 5.9 % from Generation 2; in Ahmedabad, 6.7% from Generation 3, 6.7% from Generation 2, and 20% from Generation 1. For Mumbai, the corresponding percentage of respondents who purchased from speciality shops was 2.5%, 40% and 37.5% respectively.

Consumption of *Katlu*

All respondents did not consume *Katlu*. Overall, 70.9% of grandmothers, 64.9% of mothers/ mothers-in-law and 65.8% of lactating mothers had consumed/ were consuming *katlu*. City-wise analysis showed that the percentage of *katlu* consumers from Junagadh was much higher: Generation 1 - 95.2%, Generation 2 - 94.1% and Generation 3 - 91.2%. In Ahmedabad, the percentages were comparatively much lower: Generation 1 - 50%, Generation 2 - 41.3% and Generation 3 - 43.3%. The corresponding percentages for Mumbai city were: 50%, 50% and 53.3%, respectively. The reasons for not consuming *katlu* were: 'do not like the taste (n = 4, 1.8%), 'does not suit' (n = 5, 2.3%), for religious reasons (n = 3, 1.4%). The highest percentage was lack of knowledge about *katlu* (n = 60, 28.4%). Generation-wise percentages citing lack of knowledge as the reason for not consuming *katlu* were: Generation 1 -

23.3%, Generation 2 - 34.1% and Generation 3 - 29.1%.

For the first 7-10 days postpartum, the lactating mothers were given '*kacchu katlu*' in the morning. The '*kacchu katlu*' consisted of the herbal mix with dry ginger, grated dry coconut, dill and *gond* (edible gum) and *Piper longum* along with *ghee* and jaggery. The relative proportions of these ingredients varied among the families surveyed and was dictated by family tradition. After 7-10 days, the '*Kacchu katlu*' was discontinued and *laddus* made with the *katlu* powder were given.

Katlu consumption was started in the first 10 days postpartum by three-fourths of the lactating mothers (Generation 3) in Junagadh, although 7 mothers started between days 11-30 and one mother had started after 30 days postpartum. In Ahmedabad, 53.8% of mothers started consuming this between 11 and 30 days, although 38.4% started consuming in the first 10 days postpartum, whereas one mother did so after a month. In Mumbai, all mothers who consumed *katlu* did so in the first 10 days postpartum. Among the Generation 2 and 3 participants, all except 2 had started consuming it between days 1-10 postpartum.

Further, the number of mothers who consumed *katlu* and had knowledge about it was calculated (Table 4).

City	Generation 1		Generation 2		Generation 3	
	Grandmothers/ in-law N, %	Grandmothers- N, %	Mothers/ Mothers-in-Law N, %	Mothers-in-Law N, %	Lactating Mothers N, %	Lactating Mothers N, %
Junagadh	25, 92.5%	27, 100%	31, 91.2%	34, 100%	31, 91.2%	34, 100%
Ahmedabad	10, 100%	10, 100%	12, 92.3%	13, 100%	13, 92.8%	14, 100%
Mumbai	4, 100%	4, 100%	7, 87.5%	8, 100%	8, 100%	8, 100%
All Respondents	39, 95.1%	41, 100%	50, 94.3%	53, 100%	52, 92.8%	56, 100%

In Junagadh city, there was not much difference between the three generations, but in Ahmedabad, percentages of respondents from Generations 2 and 3 were lower than Generation 1. In Mumbai, the lowest percentage was noted for Generation 2.

Amount of *katlu* consumed

Approximately one-third of mothers consumed one or two pieces of either the *laddu* or '*katlu pak*' in a day. Overall, a higher percentage of mothers from Junagadh consumed more *katlu*. About half of them consumed more than three pieces in a day, compared to those from Mumbai and

a much smaller percentage of the participants from Ahmedabad (Table 5).

Table 5: Percentage of Mothers Consuming different amounts of <i>Katlu</i>			
Group	(Number and Percentage of Respondents)		
	1-2	3-5	>5
Pieces/ day			
Junagadh			
Generation 1 (Grandmothers)	2 (8.0)	13 (52.0)	10 (40.0)
Generation 2 (Mothers/Mothers-in-law)	6 (19.3)	19 (61.2)	6 (19.3)
Generation 3 (Lactating mothers)	5 (62.5)	3 (37.5)	0
Ahmedabad			
Generation 1 (Grandmothers)	10 (76.9)	3 (23.0)	0
Generation 2 (Mothers/ Mothers-in-law)	4 (33.3)	7 (58.3)	1 (8.3)
Generation 3 (Lactating mothers)	4 (40.0)	6 (60.0)	0
Mumbai			
Generation 1 (Grandmothers)	1 (25.0)	1 (25.0)	0
Generation 2 (Mothers/ Mothers-in-law)	1 (14.2)	3 (42.8)	3 (42.8)
Generation 3 (Lactating mothers)	1 (25.0)	1 (25.0)	2 (50.0)
All participants			
Generation 1 (Grandmothers)	13 (32.5)	17 (42.5)	10 (25.0)
Generation 2 (Mothers/ Mothers-in-law)	11 (22.0)	29 (58.0)	10 (20.0)
Generation 3 (Lactating mothers)	10 (45.5)	10 (45.5)	2 (9.0)

Overall, 48% of Generation 3 mothers consumed the *katlu* in the morning, compared to 54% and 56.4% in Generations 2 and 1 respectively. A little more than 26.9% of the lactating mothers (Generation 3) consumed it at any time of the day as had been practised by 33% in Generation 2 and 28.2% in Generation 1. Some mothers consumed it in the morning and the evening (25% in Generation 3, 33% in Generation 2 and 15.3% in Generation 1).

Duration of Consumption

Overall, 46.1% of mothers consumed the supplement for 2-5 months

and the remaining did so for ≤ 59 days. The proportion of mothers who consumed it for more than 2 months was 61.2% in Junagadh, 30.7% in Ahmedabad, compared to only 12.5% in Mumbai. There was not much difference between the three generations for how long it was consumed after delivery.

Since a considerable percentage of the lactating women were not consuming *katlu laddu/pak*, they were asked if they consumed anything else. Figure 1 shows the percentage of Generation 3 mothers who consumed items like ‘*methi laddu*’, ‘*gunder pak*’, ‘*sunth ni sukhadi*’.

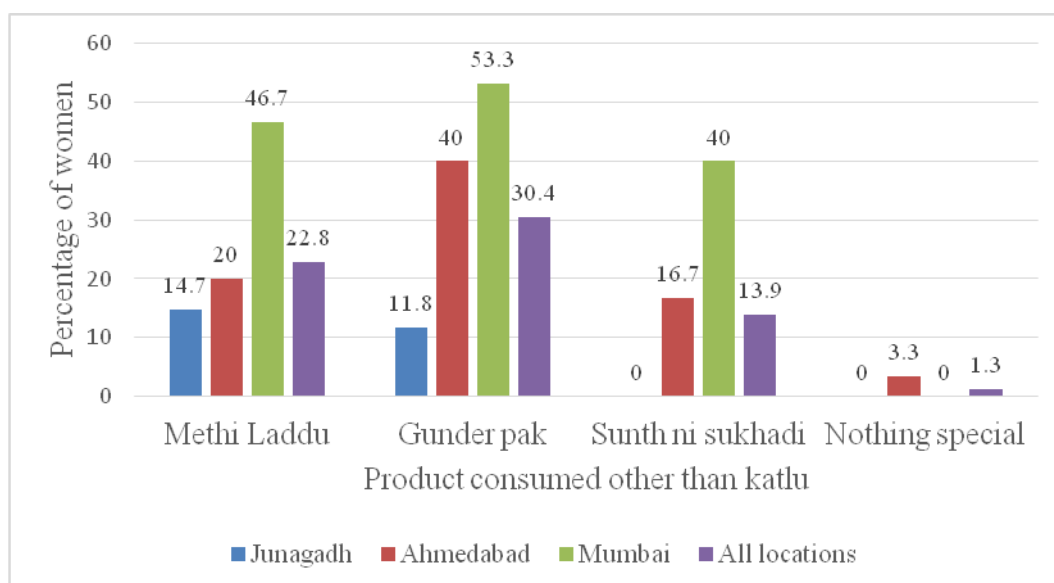


Figure 1: Percent mothers who consumed special foods instead of *katlu*

Has consumption of special foods during the post-partum period decreased in younger generations?

Participants from Generations 2 and 3 were asked whether they felt there was any difference between their generation and the mothers in Generation 3 vis-à-vis consumption of traditional foods. From Generations 1 and 2, 41 grandmothers and 68 mothers gave their opinions. Among the 109 participants from the two older generations, 76.1% opined that the consumption of special foods by new mothers has decreased, only 2.8% felt that it has increased, whereas 21.1% stated that there is not much change.

Katlu is also consumed traditionally during winter, other than for women after their deliveries. Among Generation 1 respondents, 35% consumed it during winter and 30% of Generation 2 respondents did so. None of the Generation 3 mothers reported that they consumed *katlu* in winter.

DISCUSSION

Foods or ingredients as well as processing or production/ cooking methods that have been used/practised for generations could be regarded as 'traditional'. Such foods are often region-specific and community-specific. In various cultures, in different regions of the world, a variety of foods and plant products have been given to lactating mothers since ancient times. Usage rates vary in different countries, with about 60% of breastfeeding women from Australia reporting usage.^[4] In almost every region of India, some food(s) are traditionally given to lactating mothers and there are specific dietary recommendations for pregnant and lactating mothers.

Rawtani and Varma (1989)^[5] reported that in the desert areas of Jodhpur, Rajasthan state, lactating mothers consumed special foods that included *ajwain/* Carom seeds, *gond/* edible gum, jaggery, fenugreek seeds and *ghee* along with wheat flour for two months. This preparation was essentially used as a galactagogue.

Similarly, Mishra et al., (1993)^[6] reported the use of dry ginger, turmeric, pepper, honey and dry fruits by lactating mothers. Many of these foods or condiments and spices are also ingredients of the *Katlu* powder that was the focus of the present study. The *katlu/ battisu* powder, as it is known in Gujarat or *battisa* as it is called in Rajasthan and Maharashtra, is generally incorporated into a sweet preparation *gulpapadi* and given as a supplement to lactating mothers in these three states. Chawla and co-workers (1997)^[7] reported that lactating rural mothers from Haryana consumed *halwa* (made with *ghee*, sugar and flour) and *gond/* edible gum to overcome weight loss and avoid backache. They also consumed *pasta dana* (poppy seeds) for sound sleep and to avoid headaches.

Joshi et al., (2000)^[8] studied the practices of lactating women in Parbhani district, Maharashtra. Among the 100 women surveyed, 89% consumed garlic chutney, 97% consumed poppy seeds to improve milk secretion. Also, the women believed that fenugreek seeds would prevent inflammation and back pain. These investigators also studied urban women and reported that more than 90% of the women consumed *sheera*, milk, *ghee*, etc. in the first ten days after delivery. More than 90% of both rural and urban mothers consumed *gond laddu*, carom seeds, fenugreek seeds and garden cress seeds.

Mulimani et al., (2001)^[9] studied the nutritional composition of special foods consumed by Gujaratis residing in Dharwad, Karnataka. Lactating mothers were found to consume *raab* of either wheat or bajra, *battisa/ katlu*, *ajwain* (carom seeds) *kadha*, Piper longum (*pipramool*), *gond ka sunth* i.e., dry ginger with edible gum. They noted that the *battisa laddu* was a good source of several nutrients. Earlier, Prasad (1990)^[10] reported the nutrient content of some of these foods. She reported that the mean protein content was 6.1g per dose of five preparations namely *badam halwa*, *gond laddu*, *sunth* preparation, *methi laddu* and a

preparation made from carom seeds. Among these *methi laddu* supplied about 12 gm protein per dose. Energy content varied from 13 to 345 kcal/dose. All recipes were good sources of magnesium.

Later, Sonkar and Singh (2010)^[11] reported that lactating mothers in Kanpur city consumed a variety of traditional foods such as *paga doodh*, *badam halwa*, *ajwain pani*, *mewa laddu*, *panjiri*, *harira*, *gond laddu*, and *sathaura*. The health benefits associated with the foods were: *harira* and *sathaura* are hot foods and increase bleeding; *paga doodh* and *mewa laddu* give strength and increase milk secretion; *badam halwa*, *ajwain pani* and *panjiri* provide energy and strength and are considered as hot foods; and *gond laddu* is believed to strengthen the waist.

It is evident that in almost every region and community of India there has been a long-standing practice of giving nutritious food supplements to mothers during the postpartum period. Not only are these foods nutritious, but many of them have some health benefits as well.

In all cultures and communities, there is knowledge about food that is transmitted from one generation to the younger/ next generation, generally from grandmothers, mothers to daughters/granddaughters.^[12-13] However, in many parts of the world, there is concern that traditional knowledge could be lost and it may be difficult to regain this knowledge because more often than not, the transmission is oral or through hands-on participatory cooking as well as observation. Loss of knowledge could be due to new generations neglecting or not being interested in the ethnic traditional foods.^[14-16]

Knowledge about traditional foods plays an important role in the continued practice of consumption of these foods as well as sometimes the conversion of these foods into formats that may be more attractive and acceptable to younger generations. As pointed out by Schönplüg, and Yan (2012),^[17] mothers have an

important role in transferring knowledge about traditional foods. It is in this context that our study examined knowledge and practices among three generations. Our study revealed that knowledge about traditional foods continues to be orally passed on from older to younger generations. However, even within a single community, there are differences. The continued practice of consuming traditional foods during the postpartum period are more likely in smaller cities/ urban areas than in large cities and metropolises. The second important finding was that while more grandmothers knew about this traditional food that is used for lactating mothers as well as during the winter season, a lesser number of mothers/ mothers-in-law knew about it. Thus, among Generation 3 mothers, if their mothers/ mothers-in-law lacked the knowledge or did not appreciate this nutritious food, they would be less likely to consume it. Also, none of the lactating mothers i.e., Generation 3 had prepared the '*katlu laddoo*' but even among the two older generations, approximately one-third of the grandmothers and mothers/ mothers-in-law had not made this preparation. Another finding was that almost all participants in the survey, if they knew about this polyherbal formulation containing food preparation, also consumed it.

If the collective knowledge about these foods and formulations, and their consumption gradually fades away, we are not only at risk of losing our food heritage but also the wisdom accumulated and incorporated into the food culture.

Frez-Muñoz and co-workers (2021)^[18] studied the perceptions of people from nine different countries towards traditional foods and beverages. Among the nine countries, six demonstrated the presence of a core of traditional foods and beverages. However, some differences were observed between age groups – younger cohorts focussed on those categorised as snacks and 'Foods-on-the-go' whereas the older cohorts considered that these referred

to savoury preparations that are time-consuming to prepare. The authors noted that convenience and health are some of the factors influencing current food choices.

Dhall et al., (2021)^[19] have stated that in India, cuisines have evolved over centuries. However, in the late 20th and particularly in the 21st century there have been considerable changes in the preferences and food choices of people. This is attributable to globalization, the evolution of taste after exposure to various cuisines from different regions of the world, greater demand for easy to cook or fast foods, easier access to and availability of processed foods, that are often made available to consumers in very attractive formats. Also, the availability of ready-to-cook and ready-to-eat foods has paved the way for these shifts, particularly with the greater participation of women in the workforce. Consequently, there is a risk of losing the food heritage.

CONCLUSION

Our study focused on three generations of women within the same family. Our survey results showed that grandmothers had better knowledge about the polyherbal formulation *Katlu*, whereas a lesser percentage of lactating mothers and their mothers/ mothers-in-law knew about it. However, there is less knowledge and use of it in the next generation i.e., Generation 2, suggesting that as Indian cities became exposed to processed foods and easily accessible, available and often affordable foods, there has been a gradual turning away from tradition. This issue should be addressed seriously from a scientific perspective in terms of studying the health benefits of such foods and then reinforcing the traditional knowledge and practice with this information to the community on the one hand and with reference to foods such as *katlu* to professionals who work with mothers, particularly lactating mothers and their children.

Acknowledgement: None

Conflict of Interest: None

Source of Funding: None

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How to cite this article: Raval N, Goyal A, Udipi SA et.al. Use of *katlu*, a traditional food for lactating mothers: a study of three generations of Gujarati women. *International Journal of Science & Healthcare Research*. 2022; 7(1): 289-299. DOI: <https://doi.org/10.52403/ijshr.20220143>
