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## Traditional practices used by rural women for storage of preserved products

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### ABSTRACT

The present study was undertaken to study the indigenous technical knowledge (ITK) regarding processing, preservation and storage of preserved products. Information was collected from 300 rural women of Parbhani district of Maharashtra. The results indicated that the selected rural women were following the traditional practices regarding storage of preserved foods. Majority of respondents stored preserved products up to 12 months. Aluminium boxes were found to be commonly used container for the storage of preserved products. A relatively very high per cent rural women applied washing and sun drying treatment to container prior to storage and sun drying treatment was used for preserved product during storage to protect from webbing and bad odor.

**Key words :** Traditional practices, Preserved products, Containers, Storage

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### INTRODUCTION

The safety of food is essential for the health and well being of man and its quality for his satisfaction. If quality and safety are to be assured, good practices must be used in the growing and post harvest handling of crops, the processing, packaging and distribution of foods derived from them and in their storage at household and commercial level. Thus, proper storage of grains at domestic level is of paramount importance (ICAR, 2001) and the farmers, scientists and homemakers must combine their different types of knowledge to improve the indigenous practices as food processing and food storage.

The preservation of foods makes possible the saving of food in times of plenty for use in times of scarcity. In our modern civilization, with each family member, including the homemaker is busy in many and varied activities, meals that can be prepared and served in a comparatively short period of time which are often desirable. In this context the traditional preserved product has important role in daily meals.

Food preservation by drying is one of the methods practiced from ancient times. Sun drying or simply laying the food under the sun is a popular traditional method of preserving the foods. Drying in addition to preservation

helps decrease the weight and bulk of food. Drying thus results in great economy in storage, packaging and transport of food.

### MATERIALS AND METHODS

A total sample of 300 rural women was selected from six Talukas of Parbhani district of Maharashtra State namely, Parbhani, Purna, Gangakhed, Pathri, Jintur and Selu. From each Taluka one village and 50 women from every village were selected randomly. All the selected rural women were personally interviewed by the investigators so as to elicit information on their socio-economic background, prevailing Indigenous Technical Knowledge regarding period of storage of preserved foods, containers used for the storage, treatment given to containers prior to storage, treatment given to food stuffs prior and during storage and reasons for giving the treatments.

### RESULTS AND DISCUSSION

It is clear from the study that more than 50 per cent rural women were belonging to the age group of < 40 years and around 40 per cent belonged to the age group of 40 to 60 years while only 14 rural women were having

the age > 60 years. A relatively high per cent (74) of the selected rural women were illiterate while 24 per cent were school educated. Only 2 per cent of women were college educated. Out of 300 respondents, 174 were homemaker whereas 34 were daily wager and the remaining 92 were belonging to the farming occupation. Fifty per cent of rural women were from middle-income group whereas 48 per cent belonged to low-income group family. Only 2 per cent were from high-income group. Majority (250) of rural women belonged to families who were having land.

Period of storage followed by respondents for preserved foods is given in the Table 1. More than 2/3 families were found to be storing preserved foods like *vermiceilli*, *pappad*, *papadi*, *kurdai* and *wada* for varying periods. A relatively very high per cent of respondents stored these products up to one year and the remaining per cent respondents stored these products for

found to be commonly used containers for the storage of preserved foods among rural families. Maximum number of families were found to be using aluminum boxes for the storage of all preserved foods followed by steel boxes and tin boxes.

Traditional storage practices like, use of gunny bag, earthen pot and bamboo basket was also prevalent among rural areas surveyed. From these bamboo basket was used by more number of families as compared to gunny bag and earthen pot. Even the studies conducted by Singh (1999), Sethi and Maliaviya (2000) and AICRP, ICAR (2003) indicated that traditional storage practices like jute bags, earthen pots and gunny bags were used for the storage of grains in different parts of the country.

On the whole, it can be concluded from the result that aluminium boxes was the most commonly used container for the storage of preserved foods followed by steel box. On the other hand, it was observed that very less number of families were following traditional storage practices like use of gunny bag, earthen pot and bamboo basket for the storage of preserved foods.

Treatments applied to containers prior to storage of preserved foods are presented in Table 3. Among surveyed families, it was observed that smoking, washing and sun drying were the indigenous treatments applied to containers prior to storage of preserved foods.

More number of respondents were found to be applying washing and sun drying treatment to containers prior to storage of *vermiceilli* (99.3%), *pappad* (99.2%), *papadi* (96.4%), *kurdai* (99.3%), *kharvadi* (99.2%) and *wada* (99.2%). On the other hand, less number of respondents were found to be applying smoking treatment to containers prior to storage of various preserved foods like, *vermiceilli* (2), *pappad* (2), *papadi* (10), *kurdai* (2), *kharvadi* (3) and *wada* (2). On the whole, it can be concluded from the results that majority of the respondents were applying washing and sun drying treatments to containers prior to storage of different preserved foods.

It was also found that, majority of the respondents

**Table 1 : Period of storage followed by respondents for preserved foods**

Preserved foods	N	Per cent respondents according to period of storage	
		1 to 6 months	6 to 12 months
<i>Vermiceilli</i>	286	-	100 (286)
<i>Pappad</i>	258	11.6 (30)	88.3 (228)
<i>Papadi</i>	284	9.1 (26)	90.8 (258)
<i>Kurdai</i>	262	9.1 (24)	90.8 (258)
<i>Kharvadi</i>	280	7.8 (22)	92.1 (258)
<i>Wada</i>	238	-	100

(Figures in parenthesis indicate number of respondents)

a period of 1 to 6 months.

On the whole, results indicated that all the preserved foods were stored up to 12 months by maximum number of families.

Various containers used for the storage of preserved foods by respondents are presented in the Table 2. Steel boxes, aluminium boxes, plastic boxes and tin boxes were

**Table 2: Containers used for the storage of preserved foods**

Preserved foods	N	Per cent of respondents using different types of storage practices						
		Steel box	Aluminum box	Plastic box	Tin box	Gunny bag	Earthen pot	Bamboo basekt
<i>Vermiceilli</i>	286	23 (66)	31.4 (90)	23 (12)	4.2 (12)	7.7 (22)	0.7 (2)	9.8 (28)
<i>Pappad</i>	258	26.3 (68)	36.4 (94)	20.1 (52)	1.5 (4)	3.8 (10)	0.7 (2)	10.8 (28)
<i>Papadi</i>	284	22.5 (64)	34.5 (98)	22.5 (64)	0.7 (2)	5 (14)	4.2 (12)	10.5 (30)
<i>Kurdai</i>	262	22.1 (58)	38.1 (100)	23 (60)	1.5 (4)	3.8 (10)	0.7 (2)	10.6 (28)
<i>Kharvadi</i>	280	23.5 (66)	37.1 (104)	27.8 (78)	2.1 (6)	2.8 (8)	2.1 (6)	4.2 (12)
<i>Wada</i>	238	17.6 (42)	42 (100)	29.4 (70)	0.8 (2)	4.2 (10)	0.8 (2)	5 (12)

(Figures in parenthesis indicate number of respondents)

**Table 3 : Indigenous treatments applied to containers prior to storage of preserved foods**

Preserved foods	N	Per cent respondents applying various treatments	
		Washing and sun drying	Smoking
<i>Vermiceilli</i>	286	99.3 (284)	0.7 (2)
<i>Pappad</i>	258	99.3 (256)	0.7 (2)
<i>Papadi</i>	284	96.4 (274)	3.6 (10)
<i>Kurdai</i>	262	99.3 (260)	0.7 (2)
<i>Kharvadi</i>	280	99 (277)	1 (3)
<i>Wada</i>	238	99.2 (236)	0.8 (2)

(Figures in parenthesis indicate number of respondents)

applied indigenous sun drying treatment to preserved foods like, *pappad* (88.3%), *papadi* (90.8%) and *kurdai* (90.8%) during storage to protect it from webbing, bad odor and to retain its texture while *kharvadi*, *vermiceilli* and *wada* were not dried in the sun during storage.

It can be concluded from results that the selected rural women were found to be following traditional practices regarding storage of preserved foods. Majority of respondents stored preserved products up to 12 months. Aluminium boxes found to be commonly used container for the storage of preserved products. A relatively very high per cent rural women applied washing and sun drying treatments to container prior to storage and sun drying treatment was used for preserved product during storage to protect from webbing and bad odor.

## REFERENCES

- ICAR** (2001). Golden grains storage of paddy. AICRP on Home Science Extension Component, Technology Kit Series No. 1.
- ICAR** (2003). Storage of grains by indigenous storage methods. Booklet, AICRP on Home Science (Extension component), Series 3.
- Sethi, N. and Malaviya, A.** (2000). Scientific rationality of Indigenous grain storage practices practiced by rural women. *Indian J. Agric. Res.*, **34** (3) : 188-190.
- Singh, S.C.** (1999). A study of post harvest practices on paddy, wheat and pulses in selected areas of Barh Subdivision under Patana district of Bihar state. *J. Zoo.*, **19** (2) : 139-142.

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