Knowledge, attitude and practices regarding food storage & food preservation: A study of females of Kandharpur village, Bareilly

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Abstract
Food is any substance consumed to provide nutritional support for the body. It is usually of plant or animal origin, and contains essential nutrients, such as fats, proteins, vitamins or minerals. Food Storage means the action or method of storing food or food products for future use whereas food preservation means the archiving of protecting food from loss and preventing the growth of bacteria, fungi or other microorganism as well as retarding the oxidation of fats that causes rancidity.

Focusing on the importance of food storage and food preservation a study was conducted by the researcher to check the knowledge, attitude and practices adopted by females of Kandharpur village, Bareilly.

The main objectives of study were
1. To know about the females’ knowledge regarding food storage and food preservation.
2. To check out the practices adopted by females to store and preserve food & food products.
3. To enhance females’ knowledge regarding food storage & food preservation.
4. To provide knowledge to females regarding importance of preservation.
5. To give them knowledge about how to preserve food safely.

The results of the study were 87% females used sterilized utensils or equipment before preserving food material whereas 13% did not do so. 86% females used canning method, 98% females used pickling method, 80% females used freezing method whereas only 15% females used chemicals for preserving food. 73% females knew the right time of using preserved food material whereas 27% females had no idea about this. 48% females knew that preservation is also important for health whereas 52% females did not know the benefits of appropriate methods of food storage and preservation in attaining good health. 50% females blanched vegetables for preservation whereas 50% females did not use blanching method.

Suggestions: It was suggested that food storage and preservation should be done keeping budget and practical aspects in mind. Drying and pickling methods were suggested to be used for preserving food. Suggestions were given regarding proper storage of spices and appropriate use of chemicals in preserving food.

Keywords: Food storage, Food preservation, knowledge and practices.

1. Introduction
Food is any substance consumed to provide nutritional support for the body. It is usually of plant or animal origin, and contains essential nutrients, such as fats, proteins, vitamins or minerals.

Historically, people used to secure food through two methods: hunting and gathering, and agriculture. In modern times the techniques of storage and preservation of food and preservation have underwent a drastic change. Food Storage means the action or method of storing food or food products for future use whereas food preservation means the archiving of protecting food from loss and preventing the growth of bacteria, fungi or other microorganism as well as retarding the oxidation of fats that causes rancidity. Food preservation helps in:
1. Increasing shelf – life of foods thus increasing the supply, so many perishable foods can be preserved for a long time.
2. Making the seasonal food available throughout the year.
3. Adding variety to diet.
4. Saving time by reducing preparation time and energy, as the food had already been partially processed.
5. Stabilizing prices of food, as there is less scope of shortage of supply to demand.
6. Decreasing wastage of food by preventing decay or spoilage of food.
7. Improving the nutrition of the population. Preserved foods help people to bring a variety in the diet, thereby decreasing nutritional inadequacies.

2. Materials and Methods
Focusing on the importance of food storage and food preservation a study was conducted by the researcher to check the knowledge, attitude and practices adopted by females of Kandharpur village, Bareilly. Kandharpur village is situated in the outskirts of Bareilly city near Lal Phatak. 100 families of the village were randomly selected. A questionnaire was prepared which had 30 questions regarding food storage & food preservation. Interview method was used to carry out the survey for the study and those questions were asked from the females of the families which were chosen as females are the backbone of every house hold in India specially when it comes to food and its storage and preservation. Arithmetic mean and percentiles were calculated for analysis of the survey.

2.1 The main objectives of study were
1. To know about the females’ knowledge regarding food storage and food preservation.
2. To check out the practices adopted by females to store and preserve food & food products.
3. To enhance females’ knowledge regarding food storage & food preservation.
4. To provide knowledge to females regarding importance of preservation.
5. To give them knowledge about how to preserve food safely.

3. Results and Interpretation
The results of the study are as follows
(A) Based on the first objective which was to know about the females’ knowledge regarding food storage and food preservation few questions were prepared by the researcher. The analysis clarified that 100% females used to store and preserve food material by using different techniques. 77% females knew the correct domestic methods of preservation whereas as 23% females did not have proper knowledge about appropriate methods of food preservation. 87% females used sterilized utensils or equipment before preserving food material whereas 13% did not do so.

(B) Based on the second objective which was “To check out the practices adopted by females to store and preserve food & food products it was seen that 86% females used canning method, 98% females used pickling method, 80% females used freezing method whereas only 15% females used chemicals for preserving food. 75% females dried food material for preserving it for long duration whereas 25% females did not use this method.

78% females had refrigerator in their home where as 22% females did not use refrigerator.
88% females use refrigerator for preserving food whereas 12% females did not use refrigerator for preserving food. 40% females knew that for how much time food products can be preserved in refrigerator whereas 60% females had no knowledge about this.
45% females used aluminum foil for preserving food products in Refrigerator whereas as 55% females did not use aluminum foil for this purpose.
33% females uses zipped bag for preserving food products in refrigerator whereas as 67% females did not do so.
42% females knew the perfect temperature for preserving different food products whereas as 58% females had no knowledge regarding this.
98% females preserve fruits & vegetables in refrigerator and only 2% females did not preserve fruits & vegetables in refrigerator.

Only 15% females used chemicals for preserving food whereas as 85% females did not use chemicals for preservation. 95% females used sugar & salt for food preservation, only 5% females did not do so.
78% females prepared Pickle whereas 22% females did not.

(C) Based on third objective which was ‘To enhance females’ knowledge regarding food storage and food preservation the observation was as follows:
12% females used burial method for food preservation whereas 88% females did not use this method. More than 70% females did not even know about this method.

Only 10% females knew which chemicals could be used for preserving food whereas 90% females did not know this. 89% females used dehydration method for preservation of food where as 11% females did not use this method.
73% females knew the right time of using preserved food material whereas 27% females had no idea about this. They even don’t that there is a certain time period for using preserved food.

(D) Based on fourth objective which was “To provide knowledge regarding importance of preservation”, questions were prepared by the researcher, the analysis of those depicted that:
Only 33% females knew that preservation is economically important whereas 67% females did not know the economic value of preservation.

48% females knew that preservation is also important for health whereas 52% females did not know the benefits of appropriate methods of food storage and preservation in attaining good health.

(E) Based on fifth objective which was “To give them knowledge about how to preserve food safely the analysis of the questions asked by the researcher pointed that:
63% females knew which fruits and vegetables can be preserved in refrigerator and which cannot whereas 37% females could not differentiate among fruits and vegetables which can and cannot be preserved in the refrigerator.
50% females blanched vegetables for preservation whereas 50% females did not use blanching method.

Only 23% females knew the right time for blanching of different vegetables safely whereas 77% females used this process by idea as they did not have exact knowledge about the appropriate time for blanching of different vegetables.

4. Suggestions
Suggestions were also given to the villagers to enhance the knowledge regarding food storage and food preservation which were as follows:-
1. Food storage or preservation should be done in such a way that nutrient loss can be minimized.
2. Food storage & preservation has to be done keeping budget in mind.
3. The practical aspects of food preservation must be also followed.
4. The researcher also suggested the females to step up in the field of getting financially strong by food preservation like...
by setting up small scale industry of pickles, papad, badis etc. which would lead to women empowerment.

5. Researcher specially suggested those females who did not store food to emphasize on food storage and preservation by telling them that food storage would also reduce their expenditure on food as during offseason, they can enjoy the food preserved by them at low cost.

6. They were suggested to use drying & pickling method mainly for preserving food as they are economical & easy.

7. They were suggested to use aluminum foil or zipped bag for preserving food in refrigerator.

8. The researcher told them not to use canned and tetra packed food e.g. juices, canned pineapples, corn kernels etc., once opened for more than four days even if it is kept in the refrigerator.

9. The researcher suggested them to store spices in airtight containers only after drying them in sun and to use neem leaves or mercury tablets while storing grains, rice and pulses for longer duration.

10. The researcher also gave knowledge to them about different chemicals like sodium benzoate, citric acid, ascorbic acid etc. which would not have an adverse effect on their health and would preserve food safely. Use of some natural preservatives like mustard oil, salt, sugar, lemon juice, vinegar, cloves, oregano, cinnamon, sage and rosemary extract was also suggested by the researcher.

5. References


