

## Research article

**A survey on knowledge and practices in food preparation at home by women for preserving nutritive value and quality of diet in Ratnagiri, Maharashtra****Meenal Rane**

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**Abstract**

The well established fact is that food preparation is a symbol of culture and tradition of a community and every style of food preparation has its own unique flavour and style. However, from the nutritional point of view, this is essential to bear in mind that the preservation of nutrients can be maximized and loss of nutrients can be minimized by adopting correct handling and food preparation methods. Moreover, a well balanced and nutritious diet could be planned using local produces. In this study using expert opinion and scrutiny a questionnaire was prepared and tested for reliability on the data collected. Thus, the data collected through this standardized tool shows that in spite of majority of women being educated (68 %) and having an earning potential (52 %) of more than Rs. 5 000/ with awareness on local produces, are still following a number of wrong cooking practices that could be improved to increase preservation of nutrients during food preparation. This could be achieved using a number of tools like booklets, videos and workshops.

**Keywords:** knowledge and practices, food preparation, nutritive.

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**1. Introduction**

The nutrition of the individual is profoundly influenced by the quality of the food preparation [1]. Use of improper methods food preparation for highly nutritious foods can seriously reduces nutritive values, especially in the levels of soluble vitamins. When the food resources of a family or a community are limited, such losses will have a major impact. Good cookery encourages high acceptance of food, while poor cookery leads to excessive plate wastage. Many times a vegetable, rich in minerals and vitamins, has been left on the plate because it was neglected or abused in its preparation. Generally speaking, food preparation that leads to the highest level of acceptability is also characterized by the highest level of nutrient retention [4].

The manufacture and home preparation of food are based upon a highly complex food science which involves knowledge and skills of the chemist, biologist, food technologist and dietician.

Nevertheless, preparation within the home can be efficient and satisfying only if few basic rules are remembered. The principles of preparation are based upon the physical and chemical characteristics of the various food groups: foods high in sugars, starches and cellulose to those high in proteins and fats. In addition, environmental factors, such as heat, light, air, water and their particular combinations of ingredients used in preparation must be considered.

Moreover, food preparation is an art linked with the total cultural pattern of people. Food preparation requires a sense of discrimination in the blending of flavors, as well as of textures, colors and shapes. Food preparation, like any skill, requires a considerable amount of practice in order to achieve a high quality of product with efficient use of time, money and materials.

In India women are predominantly responsible to cook and feed members of the family. Nutritional status of all family members and quality of family

diet is depending on the nutritional knowledge and practices of women [3,5]. Correct practice toward selection of food, cooking, preserving the nutrients, etc. helps to improve the quality of diet and decreases problems of malnutrition [2,6]. In this study a questionnaire was developed to assess the prevalent knowledge and practice of women for efficient food preparation in the Ratnagiri District of Maharashtra, India. The study expects to correlate education and economical status with the knowledge and practices in food preparation thereby stressing on the need for education to women.

### **Materials and methods**

The present study was conducted in Ratnagiri District (Maharashtra) with sample population comprising of married women numbering to 200 in the age group 20-55 years. Simple random sampling technique was used to select the sample population based on specific criteria and availability during data collection period. The questionnaire used in this study was formulated after discussion with the experts in related field and on the prevalent knowledge of nutrition in practice in the chosen study area. The structured questionnaire consisted of questions grouped into sections for demographic data and knowledge regarding food preparation in relation to preservation of nutritive values to enrich the quality of diet. Furthermore, the questionnaire, tool for data collection was validated following expert's advice and tested for reliability using test-retest method with 30 respondents with a gap of one week between the first and second tests. The reliability coefficient was computed using Karl Pearson 'r' and was found to be 0.76, which is highly reliable. Data collection spanned for one month and was carried out by personal home visits of the subjects at a time convenient of the subjects in Shirgoan village. Collected data were analyzed using descriptive and inferential statistical methods with the help of MS Excel.

### **Results**

#### **a) Demographic Data:**

Out of the assessed 200 respondents, majority (38%) of the subjects belong to the age group of 25 to 29 years: Hindu women were 68 percent and 42 percent respondents education was up to primary school. Most of the women (52%) had income of above Rs. 5000/- per month and majority of them (36.5%) had one, two or three children.

#### **b) Analysis of knowledge score:**

Majority of the women (82%) had adequate knowledge regarding locally and seasonally available food stuff and they were consumed by their family members. 75% percentage of the women responded correctly on selection of vegetables and fruits. 81% women had adequate knowledge about importance of parboiled and milled rice, while only 22% of the women implemented the use of milled rice in their family diet. Moreover, only 31% women responded correctly on preservation of nutrients in vegetable during cutting, washing, cooking and storing.

Majority of the women (72%) had inadequate knowledge and wrong practices of washing and draining rice during cooking. About 81% women are not used to cook many kinds of leaves and the green tops of vegetable like radish, coriander in their food preparation. However, majority of the women (86%) had knowledge of sprouting gram though only 28 % of the women actually used them in food preparation. In spite, only very few women i.e. 29 % responded correctly –in identifying millets, cereals and pulses mixture to add extra nutrients to the diet and improve the quality of protein in the diet. Nevertheless, most of the women (59%) used pressure cooker regularly for cooking foods and had knowledge about advantages of cooking in pressure cooker. Contrarily, only very few women (21.5%) had knowledge regarding importance to fermenting process, which makes nutrients more accessible during digestion.

Considering the practice of using cooking soda during cooking of dal, 58% women had inadequate knowledge regarding disadvantages of adding cooking. In a similar fashion, majority of women, 37% sewed the flour before preparing dough for chapatti or roti and had inadequate knowledge about disadvantages regarding this practice. However, they (63 %) consumed poultry and eggs having knowledge on nutrition of eggs and chicken consumption for better health. Surprisingly, most of the women (88 %) had knowledge on importance of kitchen garden with nearly 53.5 % of those women actually planting kitchen garden in their houses. 44% percent women responded correctly towards importance of consuming raw fruits, vegetables and salad. Besides, 81% of women served freshly prepared food to the family members.

### **Conclusion**

Based on the results from the study, this was concluded that most of the women had inadequate knowledge and adopted wrong practices in food

preparation. As a result of these incorrect practices, these people lost nutrients during food preparation. Thus there is a need to adopt correct cooking practices to enrich the family diet, which were ignored by women due to lack of knowledge. This study thus implies that to improve the quality of family diet, the women should be motivated to adopt the correct practices of food preparation. For this purpose effective resources like videos and booklets, and workshops to teach these people on food preparation practices should be prepared and implemented.

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