

FOOD CONSUMPTION PATTERN OF THE RURAL HOUSEHOLDS IN THE ADOPTED VILLAGE OF MANAGE INSTITUTE

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India's rural population is spending about 54% of its income on food alone. However, share of non-food consumption has increased proportionately when compared to food consumption expenditure over the years as observed by the researchers. Also, it can be noticed that different components of the food basket such as cereals like rice and wheat, has declined steadily, as a share of food consumption (Basole and Basu, 2015). Rice and wheat are the primary grains consumed, accounting for 90% of cereals consumption (Kumar and Kalita, 2017). Food consumption is one of the determining factors for health and nutritional status of the population. Poor dietary intake is the major risk factor, in addition to alcohol, tobacco and lack of physical activity for the non-communicable diseases (NCDs) (Ezzati and Riboli, 2013). Cooking plays significant role by incorporating changes in chemical composition and influencing the concentration and bioavailability of bioactive compounds, For Ex: vegetables. Food consumption surveys, sometimes referred to as food intake surveys or dietary surveys monitor the food consumption at national, household and individual level.

Household food consumption has been defined as the total quantity of food available for consumption in the household, generally excluding the food taken outside unless prepared at home (Fogel, 1993). It serves as a direct indicator of food security as well as an indirect measure for poverty (Webb *et al.*, 2006). Hence, this study focused on cooking methods, food consumption pattern and seasonal food intake by the rural households with the following objectives: to find out the cooking methods practiced by the respondents; to assess food consumption pattern of the rural households. The study was conducted in the adopted village of MANAGE, Hyderabad namely Sriramnagar, Moinabad Mandal, Ranga Reddy District of Telangana state with 100 rural women as the respondents. Data was collected through structured questionnaire in the year 2019.

A list of different cooking methods (12) was mentioned and the respondents were asked to indicate the response as 'yes' or 'no' for the given method that they were used on a daily basis. The sum of all the methods practiced by the respondents was obtained and then categorized

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into different groups based on the number of cooking methods practiced by them. Food consumption pattern of the respondents was collected by using an exhaustive list of probable food items which were listed under the respective food groups. The respondents were asked to indicate food consumption of different food items at the household level. For the ease of computation and comparison, the data was converted to monthly basis. A summated quantity of a particular food item per month for all the 100 household was obtained. This was further reduced to food consumed by 100 households per day by dividing the total amount of a particular food item by 30 (days). This data was again divided by 100 to obtain per day consumption of a particular food item by an individual. It has to be noted that the data was taken on average consumption of the different food items which denotes that the same foods may not be consumed on a daily basis. Hence, the values indicates an average consumption calculated over a period of one month. Food pattern was also studied to know the variations in food preference over the different seasons of the year.

Cooking methods adopted will influence the quality of the nutrients, hence, efforts were made to study different cooking methods used by the respondents. An exhaustive list of cooking methods was prepared. As per the findings, out of the 12 cooking methods, four cooking methods *i.e.* steaming, poaching, blanching and deep frying was used by cent percent of the respondents. Next commonly used cooking method is 'stir frying' and 'roasting' with 94% and 89%, respectively. Steaming might be used for idli making and cooking rice, a common breakfast

meal of the respondents, poaching method for eggs, deep frying for puri and vada making, blanching for vegetables, stir frying for curries making and roasting for making chutney from peanuts, channa dal, etc. Moist heat methods of steaming, poaching, blanching and dry heat method of deep frying was adopted by the respondents which will have advantages of conserving nutritive value, colour, flavor and palatability. This cooking processes also helps in easy digestion (Greeley, 2009).

Food habits of the respondents were assessed by collecting food consumption pattern at the family level. These highlights the food consumption pattern of the respondent's under different food category. It is evident that rice is the staple diet of the respondents *i.e.* 849.7g per day/ household, while there is very less consumption on wheat *i.e.* 93.8 g/day/household. They consumed chapatis mainly made from wheat flour occasionally, and, hence, the average consumption of wheat per day is very low. The average per day consumption of millets and its products is 249.8 g/day/household. Sorghum forms the next important food source next to rice consumption. The millets commonly consumed were sorghum and ragi, whereas, other millets were not noticed. Millets are rich source of protein, fibre, minerals, and Vitamin B complex. Finger millet (ragi) has a high calcium content. Millets are also a rich source of phytochemicals, which act as antioxidants and detoxifying agents (Devi *et al.*, 2014). Hence, the respondents should be encouraged to start consumption of different millets to meet the dietary requirements and to ensure the nutritional security. The commonly consumed pulses and legumes were black gram dhal (42.17

g/day/household), red gram dhal (35.33 g /day/ household), cluster beans (28.50 g/day/ household) and beans (26.33 g/day/household). An individual family consumed about 115.71 g/ day from the different types of pulses and legumes group. The most widely consumed roots and tubers were potato (144.3 g/day/household), carrot (72.7 g/day/household) and onion (68.3 g/day/household). The findings indicated that frequent consumption of roots and tubers, because of their easy availability and lower price. The respondents commonly consumed the following green leafy vegetables such as spinach, Chinese spinach, amaranthus, and sorrel. The consumption of individual green leafy vegetables range was 162.7g to 66.0g per day. Vegetables occupied an important part of the respondent's food habits. They consumed different types of available vegetables such as brinjal (65.0g per day), tomato (75.7g per day), ladies finger (71.3g per day), gherkins (72.0g per day). The data showed that a good amount of vegetables consumption by the respondents which are good source of micronutrients, vitamins and minerals. The yellow fruits such as papaya and mango are known as the rich sources of vitamin A. Vitamin A is good for eye sight and immune system. However, the data denotes poor consumption of vitamin A rich fruits by the respondents. The data pertaining to consumption of other fruits is also low. The data depicts that average daily consumption of milk per family is 480 ml only. Most of this milk is used for preparing tea. There is no consumption of other milk products like curd, butter milk, ghee etc. The frequency of consumption of eggs, fish and other meat products is also noticed to be very low. Since the frequency of consumption is very low, the corresponding values were also

significantly low. The food item of this group is rich source of protein, but it was compensated by the adequate consumption of pulse and legumes from the respondent's diet. The respondents can also be trained in poultry farming especially backyard farming so that they can afford to eat eggs in adequate quantities and on a regular basis. It can have a significant impact on their food habits and nutritional status.

The percentage adequacy for food groups consumed was calculated. For the food groups cereals, vegetable-A and vegetable-B consumption was on par with the suggested consumption by National Institute of Nutrition (NIN) with 110%, 123% and 108%, respectively. Whereas, consumption was very low for the food groups of pulses and legumes, fruits, milk and milk products, and meat & meat products (48%, 18%, 45% and 18%, respectively). The respondents have to increase the consumption of fruits as they are good sources of micronutrients which protects from many degenerative diseases. Also, consumption of pulses & legumes, meat & meat products, milk & milk products which are good source of protein, iron and calcium.

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