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Awareness of Women about Macro and Micro-nutrients in Food at Household Level

Aprajita and Smita Tripathi

Department of Extension Education & Communication Management , Chandra Shekhar Azad University of Agriculture & Technology, Kanpur

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Abstract

Living in the modern world is great – we have the benefits of modern medical science and technology on our side, but what if our diet is lacking? As much as food production has been modernized in order for us to have access to good food, not all of us make use of it. To top it off, not all of our food sources ensure that we will get all the micronutrients and macronutrients that we need. Food, through preparation, transportation or cooking methods, ends up losing their nutrients and being less nutritious when it comes to us eating them. This study was conducted in Kanpur district of Uttar Pradesh during the year 2015-2016. A total of 120 women respondents were selected randomly for the study purpose. After studying the various nutrients as Protein, Fat, Carbohydrate, Vitamins, Minerals and Water awareness of respondents was assessed. It was found that 70.0 per cent of respondents were fully aware about water with rank I and mean scores 2.60, followed by 58.3 percent of respondents who were fully aware about protein with rank II and mean scores 2.35.

Key words: awareness, nutrients

Introduction

A person's body must be in good physical condition in order to properly utilize the food and its micronutrients efficiently for optimum health. Utilization requires not only an adequate diet, but also a healthy physical environment, including safe drinking water, better knowledge of nutritional needs for women and children improved infant feeding practices, fair intra-household distribution of food, adequate sanitation and hygiene, decreased burden of infectious diseases and the knowledge and understanding of proper care for oneself for food preparation and safety.

Research Methodology

Uttar Pradesh was purposively chosen as locale of the study. Kanpur district of Uttar Pradesh was selected purposively for the study purpose as the research scholar is well acquainted to this place and has good knowledge about the socio-economic and cultural conditions of the district. Kanpur district is divided into six zones. These six zones are divided into 110 wards in all. From the list of 110 wards, only 6 wards were randomly selected to draw the required sample size of respondents. Out of the selected 6 wards, 20 women respondents were selected from each ward. Thus, a total of 120 women respondents were selected for the study purpose. This deals with the research procedure applied in conducting the present study statistical analyses for this study statistical tools, such as percentage, weighted mean, rank, and correlation coefficient etc. were used.

Corresponding Author's E-mail : smita22_03@yahoo.com
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Results

Table 1: Distribution of respondents according to age group

N =120

Age group	Frequency	Per cent
20 to 30 years	20	16.7
30 to 40 years	86	71.7
40 to 50 years	14	11.6
Total	**120**	**100.0**

Table 1 indicates the distribution of women respondents according to age group. Maximum, 71.7 per cent of women belonged to 30 to 40 year followed by 16.7 per cent of women respondents who belonged to 20 to 30 years. 11.6 per cent of respondents belonged to 40 to 50 years age group.

Table 2 indicates the distribution of women respondents according to education. Maximum 41.7 per cent of respondents were educated up to intermediate whereas, 23.3 per cent of women were educated up to secondary.

Table 2: Distribution of respondents according to Education

Education	Frequency	Per cent
Up to Primary	6	5.0
Secondary	28	23.3
Intermediate	50	41.7
Graduate	22	18.3
Post Graduate	14	11.7
Total	**120**	**100.0**

18.3 per cent of women respondents were educated up to graduate level while, 11.7 per cent of women were educated up to post graduate. Only 5.0 per cent of women respondents were educated up to primary level.

Table 3: Awareness of respondents about various macro and micronutrients

Macro Nutrients	Yes	No	Mean Scores	Rank
Carbohydrates	80(66.7)	40(33.3)	1.67	II
Fats	48(40.0)	72(60.0)	1.40	III
Proteins	95(79.2)	25(20.8)	1.79	I
Others	12(10.0)	108(90.0)	1.10	VI
Micro Nutrients				
Vitamins	45(37.5)	75(62.5)	1.37	IV
Minerals	15(12.5)	105(87.5)	1.12	V
Others	8(6.7)	112(93.3)	1.07	VII

Table 3 indicates the knowledge level of women respondents about macro and micronutrients. Almost 79.2 per cent of women had knowledge about protein with rank I and mean score 1.79 whereas, 66.7 per cent of respondents knew about carbohydrates with rank II and mean score 1.67. 40.0 per cent of respondents knew about fats with rank III and mean score 1.40, followed by only 10.0 per cent who knew about other nutrients. 37.5 per cent of women respondents knew about vitamins with rank IV and mean score 1.37, while 12.5 per cent of respondents who knew about minerals with rank V and mean score 1.12.

Table 4: Awareness of respondents about various nutrients

Nutrients	Always	Sometimes	Never	Mean Scores	Rank
Protein	70(58.3)	22(18.3)	28(23.4)	2.35	II
Fat	24(20.0)	18(15.0)	78(65.0)	1.55	V
Carbohydrate	35(29.2)	20(16.7)	65(54.1)	1.75	IV
Vitamin	60(50.0)	24(20.0)	36(30.0)	2.20	III
Minerals	12(10.0)	22(18.3)	86(71.7)	1.38	VI
Water	84(70.0)	24(20.0)	12(10.0)	2.60	I

Table 4 indicate the awareness of respondents about various nutrients present in food, 70.0 per cent of respondents always fully were aware about water with rank I and mean scores 2.60, followed by 58.3 per cent of respondents who were always fully aware about protein with rank II and mean score 2.35. 50.0 per cent of respondents were aware about the presence of vitamins with rank III and mean score 2.20, whereas, 29.2 per cent of respondents were very well aware with carbohydrate with rank IV and mean score 1.75. 20.0 per cent of respondents were aware about fat nutrient with rank V and mean score 1.55 whereas, 10.0 per cent of women were aware with mineral nutrients with rank VI and mean score 1.38.

Recommendations

- Rinse fresh vegetables well just before using.
- Never soak vegetables, as that can remove key nutrients, like Vitamin C.
- To preserve water-soluble vitamins and minerals, cut vegetables into large pieces or cook them whole.
- Keep cooking time, temperature, and the amount of liquid to a minimum.
- Smash or chop the garlic first to release enzymes that discourage blood vessel clots.

Conclusion

One must be in good physical condition in order to properly utilize the food and its micronutrients efficiently for optimum health. Utilization requires not only an adequate diet, but also a healthy physical environment, including safe drinking water, better knowledge of nutritional needs for women and children improved infant feeding practices, fair intra-household distribution of food, adequate sanitation and hygiene, decreased burden of infectious diseases and the knowledge and understanding of proper care for oneself for food preparation and safety.

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