ORIGINAL ARTICLE

COOKING PRACTICES AND FOOD INTAKE PATTERN AMONGST ADULT WOMEN IN PUNE CITY

Gothankar Jayashree S1, Patil Reshma2, Vaidya Varsha M1, Ghate Mrunalini M3

¹Associate Professor, ²Assistant lecturer, ³Professor, Department of Community Medicine, Bharati Vidyapeeth Deemed University Medical College, Pune

ABSTRACT

Background: A Health exhibition was organized in Dhanakawadi, one of the drainage areas of a tertiary care Hospital in Pune city on women's day 2008. Department of Community Medicine created a stall on the topic 'Nutrition'. Since women in the family takes responsibility of cooking the food at household level, it is important to understand cooking and washing practices and promotion of healthy cooking practices amongst adult women.

Objectives: To determine washing and cooking practices of women related to fruits, vegetables and rice and to elicit intake of different food groups by women.

Methodology: Every alternate woman who visited the "Nutrition stall' i.e 130 women were interviewed and a pre structured proforma was filled and women were then explained the charts which were displayed for the health exhibition.

Results: Eighty percent women were up to the age of 50 years .Almost one third of women follow practice of washing fruits and vegetable after cutting .Eighty percent of women wash rice twice in excess of water which may lead to loss of water soluble vitamins. Seventy seven women use pressure cooker for cooking rice which is a good practice. Almost 71% of women have daily protein intake in the form of pulses and sprouts and almost one fourth women consume non vegetarian food 1-2 times per week. However fruits intake is low, only 28% consume fruits daily. 63 (almost 50%) women mix roasted soya bean grain in wheat grain before milling.

Conclusion: Many women follow cooking practices which may lead to loss of vital nutrients like vitamin and minerals. Thus there is need for such health awareness programmes for women and adolescent girls on topics like healthy cooking practices.

Keywords: health exhibition, cooking practices, food intake pattern, adult women

INTRODUCTION

Food is a primary need of a human being. It is the need that drives all human beings to action. All the productive work and labour on the earth is associated with the fulfillment of this requirement. The state has the responsibility for the food security for its people¹. Only once it is able to provide sufficient food to its people can it think for other dimensions of development¹. So a comprehensive understanding of the food consumption pattern is a prerequisite to the initiation of any nutrition related programme. The importance of optimal nutrition for health and human development is well understood.¹. Since women in the family takes responsibility of cooking the food at household level, it is

important to understand cooking and washing practices and promotion of healthy cooking practices amongst adult women.

OBJECTIVES

- 1. To determine washing and cooking practices of women related to fruits, vegetables and rice.
- 2. To determine frequency of intake of various food groups by women.

METHODOLOGY

Gynecology department of a Medical college and tertiary care hospital organized a health exhibition on women's day on 8th March 2008 in Dhanakawadi in Pune city. Various departments of Medical College and Hospital participated in the exhibition. Department of Community Medicine created a stall on "Nutrition" .Topics like balanced diet ,recommended dietary allowance, diet of an adolescent menopausal woman, chart on anemia, Vitamin A deficiency, malnutrition were displayed .Specimen of fruit tray ,green leafy vegetables, sprouts were displayed and interns were involved in giving health education to the women who were visited the stall.

Every alternate woman visiting the stall was interviewed and information was collected on predesigned and pretested proforma after taking oral consent from the women. Then they were allowed to see the charts and they were explained about importance of balanced diet, healthy cooking practices, food requirements of women belonging to different age groups. Women enthusiastically participated in the exhibition and were free to ask questions. Demonstration on food adulteration was also organized by department of Community Medicine with the help of Regional Public Health laboratory.

Study Sample: 130 women were included in the study.

Tool of data collection: Pretested semiclosed ended proforma was filled by interview technique and it consisted of questions related to frequency of intake of different food groups and cooking practices.

RESULTS

Majority i.e. 80% of women in the study were up to the age of 40 years. Almost half of the women (49%) were educated up to secondary school while 12 women i.e. 9% were illiterate. Eighty eight women were house wives.

More than one third women i.e.35% of women in present study washes fruits and vegetables after cutting. 15% of women wash rice 3-4 times in water while 5.5% of women wash rice till water is clear. Eighty five women i.e.64% use lid while cooking vegetables and 13% of women cook vegetable in pressure cooker while equal number of women i.e.13% cook vegetable in vessel without the lid.

Table 1: Age wise and education wise distribution of women (n=130)

	Number (%)
Age group	
20-40	68(52.5)
41-60	49(37.7)
>60	13(10)
Educational status	
Illiterate	12(09)
Primary (upto 4 th std.)	-
Secondary (upto 10th std.)	64(49)
Higher secondary (11th &12th std.)	33(26)
Graduate and above	21(16)

Table 2: Practices related to washing and cooking of vegetables and rice (n=130)

Practice	Number(%)		
washing of vegetables/fruits			
Before cutting	84(64)		
After cutting	45(35)		
Don't wash	01(01)		
Washing of rice			
Once in excess water	23(17)		
Twice in excess water	80(62.5)		
3-4 times	20(15)		
Till water is clear	07(5.5)		
Practice of cooking vegetables			
Pressure cooker	17(13)		
Vessel with lid	85(64)		
Vessel without lid	17(13)		
Both (vessel with lid & without	11(10)		
lid)	` ,		
Cooking of rice	100(77)		
Pressure cooker	100(77)		
In vessel and throwing away	15(11.50)		
excess water	,		
In vessel and using water for	09(07)		
cooking Both	06(4.50)		
DOUL	06(4.50)		

Eighty five women in current study consume pulses on daily basis. Majority women consume sprouts 1-2 times a week. Majority of women i.e.95 (71%) consume protein daily in the form of pulses or sprouts while only 44 women consume green leafy vegetables daily. Ten women consume fruits rarely while majority i.e.55 consumes 1-2 times a week. 47 women being vegetarian don't consume egg. While majority i.e.32 women consume eggs once-twice per week and non vegetarian food is consumed 1-2 times per month by 28 women. 63 (almost 50%) women mix roasted soya bean grain in wheat grain before milling.

Table 3: Frequency of consumption of different food groups

Food group	Daily	Week		Month	Rarely	Don't consume
		1-2 times	3-4 times	1-2 times		
Pulses	85	20	25	00	00	00
Sprouts	10	57	31	24	04	04
GLV	44	36	41	09	00	00
Fruits	22	55	23	20	10	00
Soya	63	05	01	22	00	39
Eggs	00	59	08	12	04	47
Non veg	00	32	02	28	20	48

DISCUSSION

Foods should be washed well before cooking and consumption to remove contaminants like pesticide residues, parasites and extraneous material however certain precautions need to be taken while washing and cutting to minimize the loss of nutrient.2 Vegetables and fruits should be washed thoroughly before cutting2 .However one third of women in current study wash vegetable/fruits after cutting.Repeated washing of food grains like rice and pulses and draining away the rice water after it is cooked results in losses of certain minerals and vitamins (thiamine) 2, 3, 4. Saibaba A. et al in their study found 60% of respondents were found to be washing rice thrice or more than that before cooking and majority (83.4%) of them discarded kanji and excess water after cooking.3 The practice of using excess water while cooking rice should be discouraged; just sufficient water to be fully absorbed should be used. Water in which the food grains and vegetables have been cooked soaked/should not be discarded but put to use to prevent nutrient loss2. Almost 20% of women in current study wash rice 3-4 times or till water is clear.

Vegetables should be cooked on low heat using just adequate water in a covered vessel to preserve flavour and nutrient to reduce cooking time². In current study 87% of women follow practice of cooking vegetable in pressure cooker or cook in vessel with lid.

In current study ninety one percent of women use iodized salt for cooking.

CONCLUSION

Many women follow cooking practices which leads to loss of vital nutrients like vitamin and minerals. There is need for such health awareness programmes for women and

adolescent girls on topics like healthy cooking practices.

LIMITATIONS

Dietary pattern was not compared with nutritional health status of the women .If history of deficiency diseases would have been asked it would have provided valuable data.

ACKNOWLEDGEMENT

Dr. M. P. Dandare professor and Head of the department of Community Medicine for his valuable support, Mrs Kulkarni and Mrs. Sonawane for their help in preparation of charts, interns for their participation.

REFERENCES

- Consumption-Pattern-Across-Selected-Indian-Villages available on http://www.scribd.com/doc/13611688/A-Comparative-Study-of-Food accessed on 12/01/2012
- Dietary guidelines for Indians: A Manual NIN; 2nd
 Edition 2010 available at www.ninindia.org/DietaryguidelinesforIndians-Finaldraft.pdf accessed on 11/04/2012
- Saibaba A., Mohan Ram M, Rao Ramana G.V., Uma Devi, Syamala T.S. Nutritional status of adolescent girls urban slums and impact of IEC on their nutritional knowledge and practices. IJCM); 2002:27(4), 151-56.
- Victor R. Preedy. Handbook of Growth and Growth Monitoring in Health and Disease, first edition. London: Springer; 2012,607.

Correspondence:

Dr. Jayashree S. Gothankar Manik,31-Meghana Soc., Sahakarnagar no.2,Pune-411009 E-mail:jayashreesg@rediffmail.com, Phone: 9423037645