ISSN: 2456–5474 RNI No.UPBIL/2016/68367 Vol-2* Issue-11* December- 2017
Innovation The Research Concept

Dietary Assessment of Non Working Women (25-40 Years) From Rohtak District

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Abstract

Dietary life is the fundamental element affecting health maintenance. Individual dietary life is influenced by several environmental factors such as age, education, family status and residence. House wives often have less time available to maintain their own health due to typical homemaking duties, which include maintenance of familial, dietary life and child care. Women are the last person in family to eat whatever is left after feeding the whole family they consumed. Sometime it leaves to over eating or under eating. The present study was conducted in Rohtak district of Haryana to assess the nutritional status of Non-working women of 25-40 years. A total of 300 Non-working women were selected from Rohtak district including Kalanaur block. In this study it was found that majority (92.00%) of respondents were vegetarian. Only 1.67 per cent of women were ova vegetarian. Most of non working women (44.33%) were consuming five meal. Most (37.00%) of non working women were taking outside meal on fortnightly basis whereas 35.33% women were taking outside meal on weekly basis.

Keywords: Food, Assessment, Non Working Women, Recommended Dietary Intake.

Introduction

House wives often have less time available to maintain their own health due to typical homemaking duties, which include maintenance of familial, dietary life and child care [8, 9]. Dietary life is the fundamental element affecting health maintenance. Individual dietary life is influenced by several environmental factors such as age, education, family status and residence [10].Women's social participation has recently increased the number of working housewives, resulting in changes in dietary patterns. Recently the use of instant and processed foods has increased for reasons of convenience. Instant and processed food are high-calorie foods and lead to safety problems when consumed regularly. Consequently, disease onset associated with obesity and a sedimentary life style have increased due to unbalanced diets. Dietary intake pattern plays a significant role in human health [1, 2]. Improper and inadequate dietary intake pattern especially in women of reproductive age have resulted in the deficiency of essential nutrients especially during pregnancy and lactation in Nepal, where 18 % of women are malnourished and 35 % are anemic [3], which pose threat to physical, mental and social well being of women [4].

Aim of the Study

The aim of the study is to dietary assessment of non working (25-40 years) women of rohtak district.

Review of Literature

Rout (2009) conducted a study on food consumption pattern and nutritional status of women in Orrissa: A rural- urban differential and reported that Food consumption was concerned, urban women enjoyed a better position in all the food items. Nutritional status was found to be positively related with education of respondent, education of husband, household standard of living. A better occupational type of respondent's husbands also resulted in a better nutritional status of the women. However, the variation in nutritional status was not found to be very high between different categories of any explanatory or background variable in rural areas. Most of the rural women when categorized were found to be taking less food than their requirement.

Rao *et al* (2010) conducted a study on diet and nutritional status of women in india and reported that the intake of all the foods except for

other vegetables and roots and tubers was lower than the suggested level among rural as well as tribal women. The study recorded inadequate dietary intake, especially micronutrient deficiency (hidden hunger) during pregnancy and lactation. The prevalence of goiter was relatively higher among tribal women compared to their rural counterparts. Tribal women particularly vulnerable to under nutrition compared to women in rural areas. The prevalence of chronic energy deficiency was higher among tribal NPNL women compared to rural women. The study highlights the need for necessity steps for more community participation in various developmental programents for removal of poverty and improve literacy rate among females. Health and nutrition education has to be strengthened through department of health and ICDS to bring awareness and behavioral change for better health and nutrition practices to improve, the nutritional status of mother and child.

Torheim *et al* (2010) conducted a study on Women in resource- poor settings are at risk of inadequate intake of multiple micronutrients and reported that pregnant and NPNL women from resource – poor settings are at risk of inadequate intakes for most of the micronutrients included in the review (vitamin A, vitamin C, thiamin, riboflavin, niacin, vitamin B_6, folic acid, vitamin B_{12}, Iron and zinc). However, very limited data were available for a number of micronutrients and certain countries were disproportionally represented in each region, which is likely to bias such comparisons. The sampling procedures and methods used to analyze the data were weak in many studies; highlighting the need for more high- quality published studies that document the risk of inadequate micronutrient intakes among women living in low- income settings. Results suggest that fortification and supplementation programs that focus only on a few micronutrients are likely to miss important micronutrients for which intakes are inadequate. Dietary diversification is one safe approach towards filling a range of gaps in micronutrient intakes.

Material and Method

The present study was conducted in Rohtak district of Haryana state purposively. As we know Haryana is one of the 29 states in India, situated in North India. Rohtak is the sixth most populous city in Haryana as per 2011 census with population of 1,061,204 of which males and females are 568,479 and 492,725. There are five blocks in Rohtak district i.e Rohtak city, Lakhan Majra, Meham, Kalanaur, and Sampla. Out of these Rohtak city and Kalanaur were selected purposively. Kalanaur has mainly seven colonies i.e Mahavir Mohalla, Chotta Panna, Bada panna, Jat Colony, Chamar Colony, Saini Pura, Railway Colony. Out of these two colonies were selected by chit method. In Rohtak city, list of colonies in north, west, south and east was prepared. One colony out of each direction i.e. four colonies were selected randomly.

List of non pregnant & non working women in the age of 25-40 years was prepared from each selected colony. Fifty non working women from each colony of Kalanaur were randomly selected. List of non working women doing yoga, brisk walk, attending gym and not doing any physical activity was prepared from selected four colonies were prepared and subjects were selected purposively according to their activities. Two hundred subjects from Rohtak city and 100 from Kalanaur were selected thus making a total sample of 300.

Result

Socio personal economic profile of non working women (25-40 years) has been presented in Table 1. Most of non working women (61%) were from 25-32 years age while 39 per cent were in the age group of 32-40 years. Majority i.e. 88.33 per cent non working women were married whereas 11.67% were unmarried. All non working women were from middle category. Most of the women (64.67%) were having nuclear families while 35.33 per cent were having joint families. Sixty three per cent non working women were having small family size whereas 35.33 per cent were having medium family size. Only one per cent non working women were having large family size.

Majority (74.33%) of non working women were graduate and twenty per cent non working women were going to high school. Only five per cent non working women were educated up to middle. Majority (42.67%) of non working women were having average income between Rs 20,001-40,000 while 34.33, 16.67 and 6.33 per cent were having average monthly income between Rs 40,001- 60,000, 60,001-80,000 and up to 20,000.

Table 1: Socio Personal Economic Profile of Non Working Women (n=300)

Characteristics	Frequency	Percentage
Age		
25-32 years	183	61
32-40 years	117	39
Marital status		
Married	265	88.33
Unmarried	35	11.67
Category		
High	-	-
Middle	300	100
Low	-	-
Type of family		
Nuclear	194	64.67
Joint	106	35.33
Size of family		
Small (4 members)	191	63.67
Medium (5-8 members)	105	35
Large (9 and above)	4	1.33
Education		
Illiterate	-	-
Can read and write	-	-
Primary	-	-
Middle	15	5
High school	62	20.67
Graduate	223	74.33
Income		
Upto 20,000	50	16.67

20,001-40,000	128	42.67
40,001-60,000	103	34.33
60,001-80,000	19	6.33

Table 2 presented the meal pattern of non working women. Majority (92.00%) of respondents were vegetarian and 6.33 per cent of them were non vegetarian. Only 1.67 per cent of women were ova vegetarian. Most of non working women (44.33%) were consuming five meal and thirty five per cent of non working women consuming six meal. Only 20 per cent were consuming four meals. Most (37.00%) of non working women were taking outside meal on fortnightly basis whereas 35.33 per cent women were taking outside meal on weekly basis. Twenty five per cent non working women were taking outside meal on rarely basis.

Twenty four per cent of non working women were consuming outside snacks/sweets daily while 22 per cent rarely consumed. Some of the non working women (18.33%) consumed outside snacks/sweets on fortnightly basis while 15.67 per cent on weekly basis and thirteen per cent on alternate basis. Six per cent of the women did not consume any of the snacks/sweets.

Table 2: Meal pattern of Non Working Women (n=300)

Characteristics	Frequency	Percentage
Eating habit		
Vegetarian	276	92.00
Non vegetarian	19	6.33
Ova vegetarian	5	1.67
Common dietary pattern		
3 Meal	-	-
4 Meal	60	20
5 Meal	133	44.33
6 Meal	107	35.67
Eat outside Meal		
Daily	1	0.33
Alternatively	-	-
Weekly	106	35.33
Fortnightly	111	37
Rarely	75	25
Not consumed	7	2.33
Outside snacks/ sweets		
Daily	73	24.33
Alternatively	39	13
Weekly	47	15.67
Fortnightly	55	18.33
Rarely	68	22.67
Not consumed	18	6

The mean daily cereals intake of the non working women was 212.41 g which was 78.67 per cent of RDI (Table 3). Data regarding the mean daily pulses consumption was 76.28g which was 127.13 per cent of RDI. It was significantly (P≤0.01) higher than RDI. The mean daily intake of milk and milk products of non working women were 374.47g which was 124.82 per cent of the RDI. The mean intake of roots and tubers by non working women were 82.66g, which was lower than RDI. The daily mean intake of green leafy vegetables by respondents was 123.53g/day, which was higher of RDI.

The result showed in Table 3 that the mean daily intake of other vegetables of non working women was 164.75g (82.37 per cent of RDI). Data revealed that the mean fruit intake of non working women was 183.19 g which was 183.19 per cent of RDI. Data observed that the mean sugars and jaggery intake of respondents were 22.08g which was 110.25 per cent of RDI. Daily mean fats and oils intake of the non working women was 28.21g which was 141.05 per cent of RDI. Similarly study of Bhandari *et al* (2016) reported that majority of women in Nepal depends upon cereals to fulfill their energy need. These foods have become the sole sources of energy. The women can fulfill the daily need of proteins from local products like pulses/legumes that can be grown in their own fields. However, more women consumed pulses/legumes once a week in mountain region. Padmadas *et al* (2006) showed that 87.8 per cent of married women consumed pulses or beans once a week. This suggests that the women were less like to get enough protein content. The frequency of consumption of meat and fruits was once a week in 31.9 and 33.0 per cent of women.

Table 3: Mean daily food intake of non working women (n=300)

Food Stuff (g)	Recommended Dietary Intake (RDI)	Mean Daily Food Intake	'Z' vale	Overall Intake (% of RDI)
Cereals	**270**	212.41±18.41	-54.33**	78.67
Pulses	**60**	76.28±18.44	15.35**	127.13
Milk and milk products	**300**	374.47±57.65	24.36**	124.82
Roots and Tubers	**200**	82.66±11.36	-177.78**	41.33
Green Leafy vegetables	**100**	123.53±39.77	10.23**	123.53
Other vegetables	**200**	164.75±19.07	-32.04**	82.37
Fruits	**100**	183.19±70.44	20.43**	183.19
Sugar and jaggery	**20**	22.08±4.18	8.66**	110.25
Fats and oils	**20**	28.21±4.13	34.20**	141.05

Value are mean ± SD

RDI- Recommended dietary intake (ICMR 2010)

Z values shows comparison of nutrients intake with RDI

** Significantly at 1% level

Conclusion

The study concluded that housewives were busy in their household activities. Mean daily food intake of non working women indicated that they were consuming inadequate amount of cereals, roots and tubers and other vegetables. Intake of other food stuff like pulses, milk and milk products, green leafy vegetables and fruits were higher than RDI. Intake of sugar and jaggery and fats and oils was significantly higher than RDI. They need to be educated about good food habits and balanced diet to maintain their health and improve nutritional status.

References

1. *Togo P, Osler M, Sorensen TI, Heitmann BL. Food intake patterns and body mass index in*
2. *observational studies. Int J Obes Relat Metab Disord. 2001;25:1741–51.PubMed View Article Google Scholar*
3. *Osler M, Heitmann BL, Hoidrup S, Jorgensen LM, Schroll M. Food intake patterns, self rated health and mortality in Danish men and women. A prospective observational study. J Epidemiol Community Health. 2001;55:399–403.PubMed PubMed Central View Article Google Scholar*
4. *Ministry of Health and Population (MOHP), New ERA, ICF International Inc. National Demographic and Health Survey, 2011. Kathmandu: Ministry of Health and Population, New ERA, and ICF International; 2012.Google Scholar*
5. *Black RE, Allen LH, Bhutta ZA, Caulfield LE, de Onis M, Ezzati M, et al. Maternal and child undernutrition: global and regional exposures and health consequences. Lancet. 2008;371:243–60.PubMed View Article Google Scholar*
6. *Ransom IE, Elder KL. Nutrition of women and adolescent girls: why it matters? Washington, DC: Population Reference Bureau; 2003. http://www.prb.org/Publications/Articles/2003/NutritionofWomenandAdolescentGirlsWhyItMatters.aspx. Accessed 10 Jun 2014.Google Scholar*
7. *Huffman LS, Baker J, Shumann J, Zehner RE. The case for promoting multiple vitamin and mineral supplements for women of reproductive age in developing countries. Food Nutr Bull. 1999;20:379–94.View Article Google Scholar*
8. *Choi J, Chung YJ. Evaluation of diet quality according to food consumption between highly educated, married, unemployed and employed women. Korean J Nutr. 2006;39:274–285.*
9. *Shin KO, Yoon JA, Lee JS, Chung KH. A comparative study of the dietary assessment and knowledge of (full-time) housewives and working (job-holding) housewives. J East Asian Soc Dietary Life. 2010; 20:1–10.*
10. *Kim WK. A study on the housemaker's interest in dietary life and the knowledge of cooking principle and method. J Korean Soc Diet Cult. 1992;7: 157–171.*
11. *Rout ranjan nihar 2009. Food consumption pattern and nutritional status of women in Orrissa: A rural- urban differential. J Hum Ecol, 25 (3): 179-185*
12. *Rao mallikharjuna, N. Balakrishna, N. Arlappa, A. Laxmaiah and G.N .V. Brahman 2010. Diet and Nutritional status of women in India. J hum Ecol, 29(3): 165-170.*
13. *Torheim Liv E., Elaine L. Ferguson, Katherine Penrose, and Mary Arimond 2010. Women in Resource- Poor Settings Are at Risk of Inadequate Intakes of Multiple Micronutrients[1-4]. J. Nutr. doi:10.3945/jn.110.123463.*
14. *Bhandari Shiva, JamunaTamrakarSayami, PukarThapa, MatimaSayami, Bishnu Parasad Kandel and Megha Raj Banjara.2016. Dietary Intake pattern and nutritional status of women of reproductive age in Nepal: Finding from a health Survey. Journal of the Belgian Public Health Association. 74(2).*
15. *Padmadas SS, Dias JG, Willekens FJ. Disentangling women's responses on complex dietary intake patterns from an Indian cross-sectional survey: a latent class analysis. Public Health Nutr. 2006; 9:204–11.PubMedView ArticleGoogle Scholar*