

GLOBAL JOURNAL OF ENGINEERING SCIENCE AND RESEARCHES
STUDY OF NUTRITIONAL STATUS& DIETARY PATTERN OF WORKING WOMEN
AND NON-WORKING WOMEN OF JABALPUR

Sudha Tiwari*¹ & Shweta Tripathi²

*¹Research Scholar, Govt. M. H. College of Home Sci.and Sci. for Women, Jabalpur (MP)

²Assistant Professor, Govt. Madhav Sapre Girls College, Pendra Road (CG)

ABSTRACT

Women are playing multiple roles in the family as a care giver mother and a money earner as well. Lack of time and strenuous pressure at work and home can affect their diet and health. Therefore, present study was taken to assess to nutritional status of working and non-working women. Cross sectional study design with dietary recall method employed to collect data. Results showed that mean Basal metabolic index of working women (22.21) is significantly higher than non-working women (21.65). Cereal, fruit and milk consumption was higher in non-working women. The working women were taking more nuts/oil, sugar and other vegetables than non-working group. Also, working women were taking significantly high energy, carbohydrate and fat but lower calcium and fiber than non-working women. It can be concluded that working women should choose their meal wisely and nutritional awareness program for healthy food choices need to be introduced in the society.

I. INTRODUCTION

Indian society scenario has been changing at much pace in women's education and their economic contribution in the family more strongly. Women are playing multiple roles which can affect their health as they are care-giver and family structure now-a-days are changing towards more nuclear type. Employment status of women directly related to their health status. Health status of women is an important implication for her children's health. Many women do not get enough time for self-care and for children as well instead of having more financial freedom than non-working women due to ignorance, pressure of work or activity both at home and at work place, coupled with lack of time [Monga S *et al.*, 2008]. These life style pushing the society to inclined towards more ready to eat convenient foods which are high energy and high fat content. Many studies reported that working mothers and their children tended to show higher prevalence of nutrient deficiency than housewives and their children [Bamji *et al.*, 2000]. Therefore, present study was undertaken to assess nutritional status of working and non-working women of Jabalpur city.

II. MATERIAL AND STUDY POPULATION

A total of 50 working and 50 non-working women of 30-40 year age group were selected by random sampling from Jabalpur city. General information (type of job work, working hour, family structure and medical history) was collected by self-structured questionnaire method, anthropometric measurements were taken by standardized tools; dietary intake and meal pattern were collected by three day recall method with extensive interview. The data were statistically analyzed on SPSS software version 16 and independent t-test was applied to compare mean of nutrient intake and mean BMI of working and nonworking women.

III. RESULTS & DISCUSSION

Table 1 Anthropometric Measurement of Working & Non-working Women

Mean Value	Working	Non-Working	t-value	Remark
BMI	22.21	21.65	0.859	Significant

Table 1 demonstrates mean Basal metabolic index of working women (22.21) is significantly higher than non-working women (21.65). This could be due to various factors like eating unhealthy foods, sedentary job work type and meal skipping compared to non-working group.

Table 2. Categories of BMI in Working & Non-working Women

Class of BMI	Health status of W.W. (N=50)	Health status of N.W.W.(N=50)
Under weight	3	7
Normal	38	34
Over weight	7	9
Obesity	2	0

Majority working women and non-working women were belonging to categories of normal BMI only 2 working women were having BMI in the categories of obesity. The number of underweight working women and non-working women was 3 and 7 respectively as shown in table 2.

Table 3. Food Group Consumption in Working and Non-working women

S.NO.	FOOD GROUPS	MEAN OF RAW FOOD INTAKE	
		W.W.(N=50)	NW.W.(N=50)
1.	Cereals	220.4	246.4
2.	Pulses	42.6	38
3.	Leafy vegetables	202	173
4.	Other vegetables	21	8
5.	Fruits	12	24
6.	Milk & milk products	131	147
7.	Fish & flesh food	8	12
8.	Nuts & oil	22.3	21.7
9.	Sugar	14.3	13.3

From the table 3, it can be concluded that cereal, fruit and milk consumption was higher in non-working women. The working women were taking more nuts/oil, sugar and other vegetables than non-working group. This might be due to their habit of using more ready to eat convenient foods than non-working women as they lack time for the preparation of food at home.

Table 4. Meal pattern between working women & Non-working women

Meal timing	Working Women N=50	Non-working women N=50
Breakfast	40	34
Lunch	50	50
Snacks	25	17
Dinner	40	50

Table 4 shows the meal pattern of working women & non-working women and it was noted that only 40 and 34 working and non-working women were taking breakfast respectively. Maximum numbers of non-working women were skipping snacks and none of the women in both categories was found to skip lunch. Working women were found to skip dinner than their non-working counterparts.

Table5. Nutrient Intake of working women & Non-working women

Nutrient	Working	Non-working	t-value	Remark
Energy	1780 Kcal	1721 Kcal	1.02	Significant
Protein	44.06	45.20	0.5	Not-significant
Fat	25.3 g	21.7g	1.1	significant
Fibre	23.8 g	25.1 g	1.1	significant
CHO	258 g	247 g	0.3	Not-significant
Iron	16.2200	15.0800	1.3	Significant
Calcium	456g/day	499g/day	1.5	significant

From the table no. 5, it was observed that working women were taking significantly high intake of energy, carbohydrate and fat but lower calcium and fiber intake than non-working women. However, they iron intake of working women was significantly more than from non-working women. More protein and calcium intake in non-working women could be due to their habit of eating of homemade, more nutritious meal at home compared to working women who prefer ready to eat convenient foods due to shortage of time for the meal preparation at home.

Also, non-working women were taking more pulse and milk and milk products in the diet that contributed to their increased calcium and fiber intake than working study population. It can be said that non-working women has more time for meal preparation and raw material purchasing than working who dependent on convenient and processed food from the market.

IV. CONCLUSION

From the above study it can be concluded that working women were in the habit of taking snacks in regular pattern but their diet was high in energy and fat than non-working women with high fibre and calcium rich foods. Therefore, working women should choose their meal wisely while purchasing it from the market or should add some food item for fibre and calcium needs while replacing unhealthy item.

REFERENCES

1. Pandey A (2007). *Mother's status in the family and nutritional status of their under five children*. Regional Leprosy Training and Research Institute, Lalpur, Raipur.
2. Nti C, Inkumsah D, Fleischer G (1999). *Influence of women's workload on their nutritional status in selected communities in Ghana*. *Journal of Consumer Studies & Home Economic*, 23(3), 165–170.
3. Thilagamani S and Mageshwari U (2010). *Risk appraisal for cardiovascular disease among selected young adult women in Coimbatore, India*. *Indian Journal of Science and Technology*, 3(6), 672-675.
4. Monga S, Sachdeva R, Kochhar A and Banga K (2008). *Efficacy of Nutrition Counselling on the Knowledge, Attitude and Practices of Working Women*. *Stud Home CommSci*, 2(2), 99-102.
5. Bamji M and Thimayamma B (2000). *Impact of women's work on maternal and child nutrition*. *Ecology of Food and Nutrition*, 39(1), 13-31.
6. Muthuswamy S (2006). *Are Working Mothers in India Investing Less Time in the Next Generation? .Paper presented at the Population Association of America (PAA) 2006 Annual Meeting held at Westin Bonaventure Hotel, Los Angeles, California, USA between March 30- April 1, 2006*. <http://paa2006.princeton.edu/download.aspx>
7. Jain S, Choudhry M (1993). *Mother surrogate and nutritional status of preschool children*, *Indian* 60(3), 429-33.
8. Mittal A, Singh J, Ahluwalia S (2007). *Effect of maternal factors on nutritional status of 1-5 year old children in urban slum population*. *Indian journal of community medicine*, 32(4), 264-267.
9. Schutz Y, Kyle U & Pichard C (2002). *Fat-Free Mass Index and Fat Mass Index Percentils in Caucasians Aged 18-98 y*. *International Journal of Obesity*, 26, 953–960.
10. Yeleswarapu B and Nallapu S (2012). *A Comparative Study of Nutritional Status of Pre-School Children*. *Journal of Clinical and Diagnostic Research*, 6(10), 1718-1721.

[Tiwari, 5(5): May 2018]

DOI- 10.5281/zenodo.1250300

ISSN 2348 – 8034

Impact Factor- 5.070

11. Thampi B (2007). *Economic Roles of Women and its Impact on Child Health and Care: A Study in Kerala*. Population Research Center, Institute for Social and Economic
12. Jain H and Singh N (2003). *A Study on Nutritional Status of Women in the Age Group of 25-50 Years Working in a Sedentary Job in Jaipur City*. *Indian Journal of Nutrition and Dietetics*, 40(3), 91-98.
13. Kaur G, Bains K, Kaur H (2012). *Body Composition, Dietary Intake and Physical Activity Level of Sedentary Adult Indian Women*. *Food and Nutrition Sciences*, 3, 1577-1585.
14. Hetal Damania and Perpetua Machado (2014). *Nutritional Assessment of Working and Non-Working Mothers: A Pilot Study*. *International Journal of Innovative Research & Development*, Vol. 3 Issue 3,pg 398-404