

# International Multidisciplinary Research Journal

## *Golden Research Thoughts*

Chief Editor  
Dr.Tukaram Narayan Shinde

Publisher  
Mrs.Laxmi Ashok Yakkaldevi

Associate Editor  
Dr.Rajani Dalvi

Honorary  
Mr.Ashok Yakkaldevi

Golden Research Thoughts Journal is a multidisciplinary research journal, published monthly in English, Hindi & Marathi Language. All research papers submitted to the journal will be double - blind peer reviewed referred by members of the editorial board. Readers will include investigator in universities, research institutes government and industry with research interest in the general subjects.

### Regional Editor

Dr. T. Manichander

### International Advisory Board

Kamani Perera  
Regional Center For Strategic Studies, Sri Lanka

Mohammad Hailat  
Dept. of Mathematical Sciences,  
University of South Carolina Aiken

Hasan Baktir  
English Language and Literature  
Department, Kayseri

Janaki Sinnasamy  
Librarian, University of Malaya

Abdullah Sabbagh  
Engineering Studies, Sydney

Ghayoor Abbas Chotana  
Dept of Chemistry, Lahore University of  
Management Sciences[PK]

Romona Mihaila  
Spiru Haret University, Romania

Ecaterina Patrascu  
Spiru Haret University, Bucharest

Anna Maria Constantinovici  
AL. I. Cuza University, Romania

Delia Serbescu  
Spiru Haret University, Bucharest,  
Romania

Loredana Bosca  
Spiru Haret University, Romania

Ilie Pinteau,  
Spiru Haret University, Romania

Anurag Misra  
DBS College, Kanpur

Fabricio Moraes de Almeida  
Federal University of Rondonia, Brazil

Xiaohua Yang  
PhD, USA

Titus PopPhD, Partium Christian  
University, Oradea, Romania

George - Calin SERITAN  
Faculty of Philosophy and Socio-Political  
Sciences Al. I. Cuza University, Iasi

.....More

### Editorial Board

Pratap Vyamktrao Naikwade  
ASP College Devrukh, Ratnagiri, MS India Ex - VC. Solapur University, Solapur

Iresh Swami

Rajendra Shendge  
Director, B.C.U.D. Solapur University,  
Solapur

R. R. Patil  
Head Geology Department Solapur  
University, Solapur

N.S. Dhaygude  
Ex. Prin. Dayanand College, Solapur

R. R. Yaliker  
Director Management Institute, Solapur

Rama Bhosale  
Prin. and Jt. Director Higher Education,  
Panvel

Narendra Kadu  
Jt. Director Higher Education, Pune

Umesh Rajderkar  
Head Humanities & Social Science  
YCMOU, Nashik

Salve R. N.  
Department of Sociology, Shivaji  
University, Kolhapur

K. M. Bhandarkar  
Praful Patel College of Education, Gondia

S. R. Pandya  
Head Education Dept. Mumbai University,  
Mumbai

Govind P. Shinde  
Bharati Vidyapeeth School of Distance  
Education Center, Navi Mumbai

G. P. Patankar  
S. D. M. Degree College, Honavar, Karnataka

Alka Darshan Shrivastava  
Shaskiya Snatkottar Mahavidyalaya, Dhar

Chakane Sanjay Dnyaneshwar  
Arts, Science & Commerce College,  
Indapur, Pune

Maj. S. Bakhtiar Choudhary  
Director, Hyderabad AP India.

Rahul Shriram Sudke  
Devi Ahilya Vishwavidyalaya, Indore

Awadhesh Kumar Shirotriya  
Secretary, Play India Play, Meerut (U.P.)

S. Parvathi Devi  
Ph.D.-University of Allahabad

S.KANNAN  
Annamalai University, TN

Sonal Singh,  
Vikram University, Ujjain

Satish Kumar Kalhotra  
Maulana Azad National Urdu University



## CONSUMPTION PATTERN OF FEMALE FARM LABOURERS (AGE 20- 40 YEARS)

Mrs. Aruna R Kharwade<sup>1</sup> and Dr. Mrs. Varsha S Zanvar<sup>2</sup>

<sup>1</sup>Ph.D.Research Student,Asst.Prof.Home Science, Shri Yoganand Swami Arts College ,  
Basmath Dist Hingoli.

<sup>2</sup>Ph.D. Research Supervisor (guide) Asst.Prof.Home Science,  
Shri Yoganand Swami Arts College , Basmath Dist Hingoli.

### ABSTRACT

**T**his study was undertaken to know the consumption pattern of selected female farm labourers from urban slum and rural area of Parbhani District of Marathwada region of Maharashtra state aged between 20 to 40 years. The study involved survey to find out the socio-economic background and food consumption pattern of selected 500 female farm labourers. i.e. 250 each from urban slums and rural were selected. Equal number of 21-30 and 31-40 years i.e. 125 each in all group were covered for study. The findings of the study shows that the cereal consumption of 21-30 years and 31-40 years female farm labourers was 288.86 gm and 295.88 gm respectively. Fruits and sugar and jaggery consumption was little bit more in 31-40 years age group. Among two groups percent adequacy was



maximum for consumption of sugars and jaggery (157.16 and 166.00%) followed by cereals (80.23 and 82.18%) and fats and oils (63.76 and 67.20%). The intake of different nutrient was better in higher age group (31-40 years) than lower age group (21-30 years). Highest per cent adequacy was noted for fat intake and lowest percent adequacy was recorded for  $\beta$ -carotene intake.

**KEYWORDS:** Food Intake, Nutrient Intake, Percent Adequacy

### INTRODUCTION

According to National Commission on Labour "an agricultural labourer is one who is basically

unskilled and unorganized and has little for its livelihood, other than personal labour". According to Census 2011, Out of the total workers population, female workers comprise 25.51 per cent. About one-third of women do more work than men, is a matter of common knowledge, while their work remains largely unrecorded, hence the real issue, therefore, is more serious. Despite –their involvement in agriculture work in such a large magnitude, women have not been actively involved in the main stream of development and there is hardly any appreciation and recognition

of their extensive contribution. A female farm labourer irrespective of her degree of affluence, provides 14 to 16 hours of productive physical labour every day in a wide variety of activities directly connected with agriculture, allied and domestic chores. Hence they lack in basic needs such as food and health care, which directly affect their health status. Food habits are also predictors of health and nutritional status. Cultural and socioeconomic status of women population influence food choice and pattern of consumption of some food items is likely to vary according to season and often based on availability and price. Hence this study aims to know consumption pattern of female farm labourers from Parbhani District aged between 20 to 40 years.

## MATERIALS AND METHODS

The present research study was conducted to assess the consumption pattern of female farm labourers of Parbhani District of Marathwada region of Maharashtra state. The urban population was exclusively selected from different slums in city namely Bharat Nagar, Kadrabad plot, Beleshwar Nagar and Shankar Nagar. While, rural population was selected from four talukas namely Parbhani, Manwat, Pathri and Selu of Parbhani district. A survey was carried out to find socio-economic background of selected female farm labourers from Parbhani district. Randomly 500 female farm labourers were selected i.e. 250 each from urban slums and rural. Equal number of 21-30 and 31-40 years i.e. 125 each in all groups were covered for study. Information of female farm labourers about socio-economic status, family structure, family background and educational level was collected by personal interview method with a pre-planned questionnaire. Food and nutrient intake of all 500 female farm labourers was assessed by using 24 hours recall method for three consecutive days to determine the type and approximate quantity of food stuff consumed by each subject. The amount of food consumption was measured using standardized spoons, glasses and plates for measurements of the raw foodstuffs. The data was analyzed statistically by applying different suitable tests to compare between the two groups and to find out the significant difference between groups (ICMR 1999).

## RESULTS AND DISCUSSION

### Socio-economic background of selected female farm labourers

Table 1 explains the socio-economic background of selected female labourers. The distribution of female farm labourers in urban slums and rural was same in both the groups of 21-30 years and 31-40 years. Majority of female farm labourers were from nuclear families (72%). Whereas only 28 per cent were from joint families. More number of families were containing 4 - 6 members. The findings were similar to the study conducted by Jethi and Chandra (2013). More than 50 per cent of female farm labourers were vegetarian. These results were inline with study conducted in Punjab state by Kaur and Kochar (2009). However 45 per cent were non-vegetarian. The selected female farm labourers were categorized into 3 groups based on the family income per month. Whereas maximum numbers of farm women were belonging to income group Rs. 6001-10,000/- per month. Mittle (2013) and Mishra et.al. (2012) carried out research in rural areas of Gurgaon and Ambala district revealed more than 50 per cent of respondents (55% and 59.97%) had monthly family income Rs. <10,000/- . The educational and professional background of the selected female farm labourers is reported 39.4 and 35.6 per cent women were educated up to high school level and secondary school level respectively while remaining were educated up to primary school level. On the whole none of the female farm labourer was illiterate. The present results were in contrary to the observation made by Panigrahi and Sahoo (2011) and Shrinivasa et.al. (2014) that the studied farm women either illiterate or just primary level educated.

### Mean food intake of selected female farm labourers as per age

The mean food intake of selected female farm labourers as per age is presented in Table 2. The cereal consumption of 21-30 years and 31-40 years female farm labourers was 288.86 gm and 295.88 gm respectively. Consumption of pulses, green leafy vegetables, roots and tubers, other vegetables, milk and milk products, nuts and oil seeds, fats and oils, meat and meat products from both the age groups was near about same. Fruits and sugar and jaggery consumption was little bit more in 31-40 years age group. When noticed critically in comparison with ICMR recommendations the consumption of all the foods, was far below except sugars and jaggery. When observed statistically non-significant difference was observed between two age groups for all food groups. Thus the variation in consumption of different foods in different age group was just marginal. This may be due to family and physiological background.

### Per cent adequacy of food intake by selected female farm labourers as per age

The data regarding per cent adequacy of food intake by selected female farm labourers as per age is presented in Table 3. Among two groups percent adequacy was maximum for consumption of sugars and jaggery (157.16 and 166.00%) followed by cereals (80.23 and 82.18%) and fats and oils (63.76 and 67.20%) and pulses (54.36 and 56.4%). However percent adequacy of other food groups was less than fifty percent i.e. meat and

meat products (46.56 and 39.86 %), roots and tubers (41.66 and 42.54 %), milk and milk products (31.92 and 32.74 %), other vegetables (32.06 and 30.94 %), green leafy vegetables (22.96 and 22.12 %) and fruits (17.70 and 21.08 %).

### Nutrient intake of selected female farm labourers as per age

Nutrient intake of selected female farm labourers as per age is presented in Table 4. Mean intake of different nutrients in 21-30 years and 31-40 years was energy (1762.38 and 1791.47 kcal), protein (52.90 and 53.70 gm), fat (34.43 and 33.67 gm), calcium (445.19 and 448.24 mg), iron (15.37 and 15.47 mg), vit.C (37.63 and 42.05 mg) and  $\beta$ -carotene (1570.31 and 1489.86  $\mu$ g) respectively. It is revealed from the table that intake of different nutrient was better in higher age group (31-40 years) than lower age group (21-30 years). But non-significant difference was observed between all nutrients except vit C. When compared with recommended daily allowances except fat and Vit.C all other nutrient intakes were below than recommendation level.

### Percent adequacy of nutrient intake of selected female farm labourers as per age

Percent adequacy of nutrient intake of selected female farm labourers as per age is described in Table 5. It is revealed from the table that percent adequacy for different nutrients in 21-30 years and 31-40 years was energy (79.03 and 80.33%), protein (96.18 and 97.76 %), fat (137.72 and 134.68 %), calcium (74.19 and 74.70 %), iron (73.19 and 73.66 %), vit.C (94.07 and 150.12 %) and  $\beta$ -carotene (32.31 and 31.03 %). It is revealed adequacy of different nutrients also increased from lower age group (21-30 years) to higher age group (31-40 years). Percent adequacy for different nutrient ranged between 31.03 per cent to 137.72 per cent. Highest per cent adequacy was noted for fat intake and lowest percent adequacy was recorded for  $\beta$ -carotene intake. However percent adequacy for intake of energy, protein, calcium, iron and vit.C was more than 70 per cent among two age groups.

### SUMMARY AND CONCLUSION

Inadequate consumption was noted for all food groups except and jaggery when compared with ICMR recommended values among all selected female farm labourers. Especially the consumption of green leafy vegetables, roots, tubers, other vegetables, fruits milk and milk products was less. The adequacy was maximum for sugars and jaggery and minimum for fruits. When comparison was made between nutrient intake and RDA, it was noticed that all values were less than recommendation except fats. Whereas maximum adequacy was noted for fats and minimum for  $\beta$ -carotene.

### REFERENCES

1. Indian Council of Medical Research (1999). Nutrient requirement and recommended dietary allowance for Indians. An expert report of ICMR NIN, Hyderabad.
2. Jethi, R. and Chandra, N. (2013) Nutritional status of farm women in Hills of Uttarkhand. Indian Research Journal of Extension Education., 13 (3) : 92-97.
3. Kaur, M. and Kochar, G.K. (2009) Burden of anaemia in rural and urban jat women in Haryana state, India., Mal. J. nutrition., 15 (2) : 175-184.
4. Mittal, M. (2013) To assess the nutritional status and morbidity pattern non-pregnant non-lactating rural women of reproductive age group (18-40 years) International J. of scientific and Research Publication., 3 (19) : 1-46.
5. Mishra, P., Ahhuwalia, S.K., Garg, P.K., Kar, R. and Panda, G.K. (2012) The prevalence of anaemia among reproductive age group (15-45 years) women in a PHC of rural field practice area of MM medical college, Ambala, India. Journal of Women's Health Care., 1 (3) : 1-3.
6. Panigrahi, A. and Sahoo, P.S. (2011) Nutritional anaemia and its epidemiological among women of reproductive age in an urban slum of Bhubaneswar, Orissa. India journal of Public Health., 55 (4): 317-320.
7. Shrinivasa, B.M., Philip, R.R., Krishnapali, V.K., Suraj, A., and Sreelakshmi, P.R. (2014) Prevalence of anaemia among tribal women of reproductive age-group in Wayanad district of Kerala. International Journal of Health



and Allied Sciences. 3 (2) : 120-124.

**Table-1 Socio-economic background of selected female farm labourers (N=500)**

Sr.no.	Particular	Total (N=500)
1.	<b>Age Group (yrs)</b>	No. (%)
	21-30	250 (50)
	31-40	250 (50)
2.	<b>Area</b>	
	Rural	250 (50)
	Urban	250 (50)
3.	<b>Type of Family</b>	
	Joint	140 (28)
	Nuclear	360 (72)
4.	<b>Family Size(No.)</b>	
	4-6	421 (84.2)
	>6	79 (15.8)
5.	<b>Food Habit</b>	
	Vegetarian	275 (55)
	Non-vegetarian	225 (45)
6.	<b>Family Income (Rs. per month )</b>	
	Upto 6000	107 (21.4)
	6001-10000	293 (58.6)
	>10000	100 (20)
7.	<b>Educational level of subject</b>	
	Primary school education	125 (25)
	Secondary school education	178 (35.6)
	High school education	197 (39.4)

Figure in parenthesis indicates percentage

**Table-2 Mean food intake of selected female farm labourers as per age (N=500)**

Particular	21-30 yrs	31-40 yrs	Balanced Diet	t value
<b>Cereals(gm)</b>	288.86 ± 49.37	295.88±50.50	360	1.56 <sup>NS</sup>
<b>Pulses (gm)</b>	40.77±20.39	42.31±20.35	75	0.84 <sup>NS</sup>
<b>Green Leafy vegetables (gm)</b>	22.96±16.20	22.12±16.48	100	0.56 <sup>NS</sup>
<b>Roots &amp; Tubers (gm)</b>	41.66±38.72	42.54±30.13	100	0.28 <sup>NS</sup>
<b>Other Vegetables (gm)</b>	32.06±19.24	30.94±18.11	100	0.67 <sup>NS</sup>
<b>Fruits (gm)</b>	17.70±19.66	21.08±22.01	100	1.80 <sup>NS</sup>

<b>Nuts and Oil seeds</b>	10.95±6.73	10.42 ± 5.26	-	0.99 <sup>NS</sup>
<b>Milk and milk products (ml)</b>	95.78±29.20	98.22±28.98	300	0.93 <sup>NS</sup>
<b>Fats &amp; Oils (ml)</b>	20.16±9.69	19.13±6.99	30	1.37 <sup>NS</sup>
<b>Sugars &amp; Jaggery (gm)</b>	39.29±16.58	41.50±18.18	25	1.41 <sup>NS</sup>
<b>Meat and Fish (gm)</b>	13.97±21.96	11.96±21.47	30	1.03 <sup>NS</sup>

NS Non significant

**Table-3 Per cent adequacy of food intake of selected selected female farm labourers as per age (N=500)**

<b>Particular</b>	<b>21 – 30 yrs</b>	<b>31 – 40 yrs</b>
<b>Cereals(gm)</b>	80.23	82.18
<b>Pulses (gm)</b>	54.36	56.41
<b>Green Leafy vegetables (gm)</b>	22.96	22.12
<b>Roots &amp; Tubers (gm)</b>	41.66	42.54
<b>Other Vegetables (gm)</b>	32.06	30.94
<b>Fruits (gm)</b>	17.70	21.08
<b>Milk and milk products (ml)</b>	31.92	32.74
<b>Fats &amp; Oils (ml)</b>	67.20	63.76
<b>Sugars &amp; Jaggery (gm)</b>	157.16	166.00
<b>Meat &amp; Fish (gm)</b>	46.56	39.86

**Table-4 Nutrient intake of selected female farm labourers as per age (N=500)**

Particular	Energy (kcal)	Protein (gm)	Fat (gm)	Calcium (mg)	Iron (mg)	Vit.C (mg)	β – Carotene (µg)
<b>21-30 yrs</b>	1762.38 ± 262.74	52.90 ±8.57	34.43 ±8.85	445.19 ±86.00	15.37 ±3.52	37.63 ± 19.81	1570.31 ±920.60
<b>31-40 yrs</b>	1791.47 ±258.87	53.77 ±9.92	33.67 ±8.38	448.24 ±90.34	15.47 ±3.74	42.05 ± 24.21	1489.86 ±980.09
<b>RDA</b>	2230	55	25	600	21	40	4800
<b>‘t’value</b>	1.24 <sup>NS</sup>	1.04 <sup>NS</sup>	0.98 <sup>NS</sup>	0.38 <sup>NS</sup>	0.31 <sup>NS</sup>	2.21*	0.94 <sup>NS</sup>
<b>21-30 Vs31-40</b>							

NS Non significant  
\* Significant at 5%

**Table 5 Percent adequacy of nutrient intake of selected female farm labourers as per age (N=500)**

Nutrient	21-30 yrs	31-40 yrs
<b>Energy (Kcal)</b>	79.03	80.33
<b>Protein (gm)</b>	96.18	97.76
<b>Fat (gm)</b>	137.72	134.68
<b>Calcium (mg)</b>	74.19	74.70
<b>Iron (mg)</b>	73.19	73.66
<b>Vit.c (mg)</b>	94.07	105.12
<b>β – Carotene (µg)</b>	32.71	31.03



# Publish Research Article

## International Level Multidisciplinary Research Journal For All Subjects

Dear Sir/Mam,

We invite unpublished Research Paper, Summary of Research Project, Theses, Books and Book Review for publication, you will be pleased to know that our journals are

### Associated and Indexed, India

- \* International Scientific Journal Consortium
- \* OPEN J-GATE

### Associated and Indexed, USA

- EBSCO
- Index Copernicus
- Publication Index
- Academic Journal Database
- Contemporary Research Index
- Academic Paper Database
- Digital Journals Database
- Current Index to Scholarly Journals
- Elite Scientific Journal Archive
- Directory Of Academic Resources
- Scholar Journal Index
- Recent Science Index
- Scientific Resources Database
- Directory Of Research Journal Indexing

Golden Research Thoughts  
258/34 Raviwar Peth Solapur-413005, Maharashtra  
Contact-9595359435  
E-Mail-ayisrj@yahoo.in/ayisrj2011@gmail.com  
Website : www.aygrt.isrj.org