

# Understanding the Nutritional Status of Farm Women in Village Maddirala, Bhadradri District

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**Abstract:** Farmwomen have to perform both the duties of housewife and farming. This dual role entails heavy mental and physical efforts which can affect the nutrition status and dietary pattern of farm women. Main objectives of the study were to know the nutritional status of farmwomen. Study includes 100 Farm women were selected randomly from maddirala village, kothagudam district. A well designed and structured Questionnaire was used to collect data on General information and 3 day 24-hours Dietary Recall. Nutritive value was taken and calculated and compared with Recommended Dietary Allowances. The results of the study shows that out of 100 respondents 68% were having normal BMI. Average energy, protein, carbohydrate, fat, fibre, iron and calcium were 1271k.cals, 41gm, 205gm 27.8gm, 23gm, 7mg and 315mg which were not meeting the Recommended Dietary Allowances. The results revealed that except fat and fibre the remaining nutrients are not meeting the Recommended Dietary Allowances.

**Keywords:** Farm women, nutritional status and nutritional intake

## 1. Introduction

Women are nutritionally the most vulnerable next to young children in India. An overwhelming majority of women in rural area is associated with agriculture. Although women are food producers at farm and household level their own nutrition situation is not encouraging all over the developing countries including India. About two third of the manual labour in farming is constituted by rural women. Irrespective of their degree of affluence, they provide 14-18hr of productive physical labour every day in a wide variety of activities directly connected with agriculture, allied and domestic chores (Manju suman,2002).

Women invariably perform the duties of both employees and housewives. This dual roles entails heavy metals and physical effort which often leads to complete exhaustion of women due to over work. Good health is a requirement throughout life and vital to women in terms of their daily activities, but nutritional anaemia is a major problem for women in India.

Malnutrition is still prevalence at significant levels especially in rural areas and the most vulnerable are children, women is elderly especially of lower income group. According to the latest round of NFHS-3, 39% of rural women in the age group of 15-49 years suffer from chronic energy deficiency and 58% are anaemic (<http://www.unicef.org>).

To overcome these problems daily diet of the women should be nutritious. But health is crucial areas were no due attention has been paid for women. A majority of rural and tribal women suffer from anaemia which leads to low birth weight among babies (Jhamtani, 1995).

Health is fundamental to human progress. Women's health status effect their productivity and their by their roles in society and their own development. Nutrition is closely interlinked with health. Low nutritional status of women makes her more prone to several diseases. It has notifying significance in case of women, because they have to bear and rear children.

## Objectives

- 1) To assess the anthropometric measurements of the farm women.
- 2) To estimate the daily nutrient intake of farm women.

## 2. Methodology

Study includes a sample of 100 farm women from the Maddirala village of Bhadradri District.

The study was carried out for a period of two months. Questionnaire was used to obtain information related to anthropometric measurements and 24-hours dietary recall.

Mean was performed for 100 respondents for all the seven nutrients were calculated and then compared with the Recommended Dietary Allowances RDA.

Formula for mean:  $\bar{x} = \frac{\sum x}{N}$

Here,

$\sum$  represents the summation

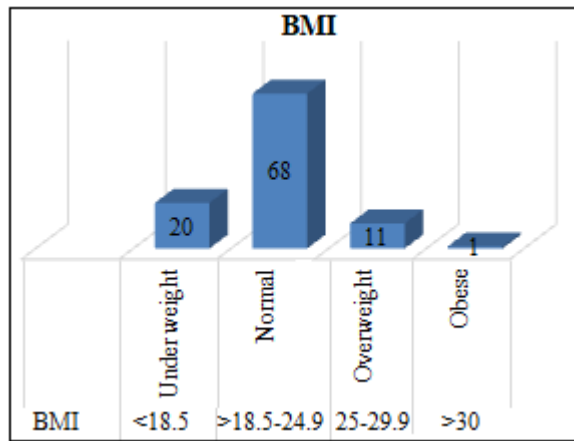
X represents scores

N represents number of scores.

## 3. Results and Discussion

### Anthropometry Measurements of the Respondents

Nutritional anthropometry is the tool concerned with measurement of physical dimensions such as height and weight, as well as the fat mass composition of the human body to provide information about a person's nutritional status.



From the above graph 1, it was observed that 20% are Underweight, 68% are Normal, 11% are Overweight and 1% is Obese.

#### Daily Nutrient Intake by the Respondents

Man needs a wide range of nutrients to perform various functions in the body and to lead a healthy life. These nutrients are the chemical substances which are present in foods, we eat daily. Below Table gives information about daily nutrient intake by the respondents.

S. No	Nutrient	Recommended nutrient intake (for moderate women worker)	Range	Mean $\pm$ SD
1	Energy (kcal)	2230	867-1598	1271
2	Protein(gm)	55	20-57	41
3	Carbohydrate(gm)		155-336	205
4	Fat(gm)	25	17-48	27.8
5	Fibre(gm)		10-35	23
6	Iron(mg)	21	4-30	7
7	Calcium(mg)	600	89-688	314.9

**Energy-** It is depicted from the table that energy consumption of the selected respondents ranged between 867-1591.34 kcal, whereas average energy consumption of these respondents was 1271 which is less than recommended intake. The calorie gap observed in present study might be mainly due to low calorie density of their diets which are largely in the form of cereals (rice), inferior grains etc. Because of their farming activity and from low income category. Present Findings are nearer to the findings of chitra (2015) Recommended energy intake for moderate woman worker is 2230kcal.

**Protein-** It is illustrated from the same table that protein intake of the respondents ranged between 20.89 – 57 gm while average protein intake was found to be 41.04 gm which is less than the recommended protein intake. Recommended protein intake is 55 gm for a moderate worker woman. The finding of the present study is in accordance with finding reported by Ravi (2017) et al. who noticed that protein intake of the respondents was not adequate.

**Fat -** It can be seen from the table that the fat intake of the respondents ranged between 17 – 48.63 gm while average fat intake of the woman was 27.8 gm which is slightly higher than the recommended intake (25 gm). As stated earlier, fat

provides palatability to the diet hence it is used widely for food preparation especially in the urban areas. In rural and tribal areas its use is limited due to high cost and less paying capacity of the poor people.

**Calcium-** It is clear from the table that the calcium intake of the women ranged in between 89 – 688 mg whereas its average intake was 314.9mg which was 52.4% of the recommended intake of calcium (600)mg. The finding of the present study is in accordance with finding reported by jyoshna (2017) et al. who noticed that calcium intake of the respondents was not adequate and very poor.

**Iron -** The iron intake of the selected respondents was found to be ranged between 4.32 – 30 mg. Average intakes was very poor as 7 mg which was 33% of the RDA (Recommended Dietary Allowances) iron intake (21 mg). It was found that in rural area the composite diet system is not followed. Considering iron requirements, availability of iron from the composite diet is more important than from the individual foods because of profound interaction between foods in influencing iron absorption. The low intakes of nutrient are related to iron deficiency signs. The result is in accordance with the observations of Murthy et al. (1989) and also with Mane et al. (1999). The finding also supports with Sunita Kumari (2000) whose observation is that almost all the respondents in the study were found to be anaemic.

**Fibre-** Recommended value of fibre is 25 grams. The fibre intake of the selected respondents was found to be ranged between 10-35gms, average intake was 23 gm so it fall under normal category. The finding also supports with Amanda (2017).

#### 4. Conclusion

The study concludes that most of the respondents were having normal BMI, except Fat and Fibre all the other five nutrients are not meeting the Recommended Dietary Allowances.

#### References

- [1] Chitra Bellukar M., 2015, Daily Food Intake and Nutrient Intake by the Farmwomen, International Journal of Scientific and Research Publications, 5(11):570-574.
- [2] Deepa Mishra, Rashmi Singh, 2017, A Study on Energy Balance of Farm Women, Act Scientific Nutritional Health, 1(1):7-10.
- [3] Jyoshna . E, Hemanth Kumar J, Raghuramireddy P, 2017, Assessment of Nutrition Education on Nutrient intake and Work Participation of Farm Women, Hind Agricultural Research and Training Institute, 6(4):48-51.
- [4] Marutheesha, A.M , B. Vijayalakshmi, D&C Preetham, S.M., 2018, Socio-Economic Characteristics, Food Habits & Dietary Intake of Rural Women in Bangalore, International Journal of Bioscience & Research, 8(1):125-130.
- [5] Shiva Bhandari, Jamuna Sayami, PukarThaapa, MatinaSayami, Bishnu Prasad Kandel, Megha Raj Banjana, 2016, Dietary Intake Patterns and Nutritional Status of Women of Reproductive Age in Nepal:

Findings from a Health Survey, Arch Public Health,74:2.

- [6] Soma Srivastava, Bhagawan Singh, 2014, Understanding Nutritional Situation of Farm women in Rural arid areas of Rajasthan: A Case Study, Journal of Agriculture and Life Sciences, 1(2):17-20

