## Research Article

# KNOWLEDGE ON NUTRITION OF RURAL WOMEN OF ASSAM

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**Abstract:** The study was carried out in the state of Assam, India with 270 randomly selected rural women of 3 districts, *viz.*, Tinsukia, Nagaon and Barpeta districts to find the existing knowledge level of respondents on nutrition. Majority of the respondents had medium level of knowledge on nutrition, namely Barpeta (67.78%), Nagaon (61.11%) and Tinsukia (61.11%). It was observed that Nagaon district had the highest number of respondents (23.33%) with low level of knowledge on nutrition in comparison to Barpeta (20.00%) and Tinsukia (20.00%). Among the three assessed districts, Tinsukia had the highest percentage of respondents (18.88%) having high level of knowledge on Nutrition.

Keywords: Rural women, Nutrition, Knowledge and Assam

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#### Introduction

Health and nutritional status of Indian women are worsening due to the prevailing culture and traditional practices in India. Indian women are generally vulnerable to poor nutrition, especially during pregnancy and lactation. It has been pointed out that the impact of nutritional status of the mother is more pervasive than the impact of other factors on birth weight [1]. It was observed that the dietary intake of rural pregnant women was lower than the recommended level. The incidence of anaemia was found to be highest among lactating women followed by pregnant women and adolescent girls [2]. Epidemiological studies pointed out that worldwide 50 percent of all pregnant women are anaemic, and at least 120 million women in less developed countries are underweight. Millions of women and adolescent girls around the world are affected by deficiency of calorie, protein, vitamins and minerals. Malnutrition, a serious health concern, threatens the survival of Indian mothers and their children. Adequate nutrition is essential for maintaining a healthy health condition of an individual, especially for women. Women are more prone to nutritional deficiencies than men. The two most common nutritional deficiencies in the women worldwide are iron deficiency and anaemia. Around 80% of the Indian pregnant women suffer from iron deficiency anaemia [3]. India has the highest number of under-weight children under five in the world and 70 percent of children are anaemic. The proportion of undernourished people in the overall population has fallen from 21.5% in 2004-06 to 17 percent in 2011-13 according to International Food Policy Research Institute (IFPRI) estimates [4]. Good health is a key criterion that contributes to human wellbeing and economic growth. Adequate nutrition for women would help them to serve as productive members of the society for developing the consequent health generation. The health conditions of rural women can be improved by educating and creating increased awareness on nutrition, and its needs among the rural women. The government also has an important role for improving the health condition of rural women by strengthening and expanding essential health services as well as frequent counselling on safe sex, proper hygiene practices for individual and community, organizing educational programme and creating awareness on nutrition for mother and child. Nutrition is a basic human need and a prerequisite to a healthy life. A proper diet is essential from the very early stages of life for proper growth, development and to remain active.

Food consumption, which largely depends on production and distribution, determines the health and nutritional status of the population. The major food issues of concern are insufficient/ imbalanced intake of foods/nutrients. The common nutritional problems of public health importance in India are low birth weight, protein energy malnutrition in children, chronic energy deficiency in adults, micronutrient malnutrition and diet-related non communicable diseases. A mother is the principle provider of the primary care that her child needs during the first five years of life. Nutritional awareness of mothers play an important role in the health of children aged 0-5 yrs. The type of care she provides depends to a large extent on her knowledge and understanding of some aspects of basic nutrition and health care. Mother's educational level, position, health and nutritional status is central to the quality of life and is a key ingredient of her child's health, nutritional status, behavioural and other aspects of child welfare in developing countries. Nationwide as well as micro studies clearly show that incidence of under nutrition among children fell monotonically with the maternal education [5,6].

#### **Materials and Methods**

The present study was carried in the state of Assam. Three parts of Assam had been included, namely Upper Assam, Middle Assam and Lower Assam for the study. Three districts viz., Tinsukia, Nagaon and Barpeta were selected randomly from the three parts of Assam. From the three districts, three subdivisions namely: Tinsukia subdivision from Tinsukia district, Nagaon subdivision from Nagaon district and Sorbhog subdivision from Barpeta district were selected randomly. One development block from each selected subdivision, one gaon panchayat from each selected block and three villages from each selected gaon panchayat were selected randomly. Finally, nine villages were considered for carrying out the study. Selection of respondents was done by equal distribution method. Thirty respondents in the reproductive age group (15 yrs-49 yrs) (according to WHO, reproductive age group is usually defined as 15-49 years or 12-49 years) were selected randomly from each village. Thus, there were two hundred seventy (270) numbers of respondents for assessing the existing knowledge of the respondents on nutrition. The data were collected personally by the investigator through personal interview method with the help of the prepared interview schedule.

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Table-1 Distribution of respondents based on overall existing level of knowledge on Nutrition, N= 270

Category	Score Range	Frequency	Percentage (%)	Mean	SD
Low	< 9.78	47	17.41		
Medium	9.78 – 17.51	184	68.15	13.65	3.87
High	> 17.51	39	14.44		

Table-2 Distribution of respondents based on existing level of knowledge on Nutrition (district wise) N= 270

Name of district	Category	Score Range	Frequency	Percentage (%)	Mean	SD
Barpeta (n=90)	Low	< 10.39	18	20.00	14.24	3.85
	Medium	10.39 - 18.09	61	67.78		
	High	> 18.09	11	12.22		
Nagaon (n=90)	Low	< 8.10	21	23.33	12.21	4.11
	Medium	8.10 - 16.32	55	61.11		
	High	> 16.32	14	15.56		
Tinsukia (n=90)	Low	< 11.28	18	20.00		
	Medium	11.28 – 17.68	55	61.11	14.48	3.20
	High	> 17.68	17	18.88		

The existing knowledge on nutrition was assessed by using a knowledge check developed by [5]. It consists of 56 statements on nutrition. As the scales had both positive and negative statements, rural women's responses were recorded on a two point continuum as correct and incorrect and scored as 1 (one) and 0 (zero) respectively. Each positive statement, if responded 'correct' and each negative statement if responded 'incorrect' was given 1 (one) score, and each positive statement if responded 'incorrect' and each negative statement if responded 'correct' was given 0 (zero) score. Based on the scores obtained by the respondents, they were categorized into three categories: viz., Low (< mean- SD), Medium (between mean + SD) and High (>mean + SD).

## Results and discussion Knowledge level of respondents regarding nutrition Existing level of knowledge on nutrition (overall)

The distribution of respondents according to their overall existing level of knowledge on nutrition is presented in the [Table-1]. It is revealed from the [Table-1], that majority of the respondents (68.15%) had medium level of knowledge on nutrition. It might be due to the fact that because of respondent's low educational qualification, lack of contact with extension personnel and lack of mass media exposure, they might not be able to have high level of knowledge.

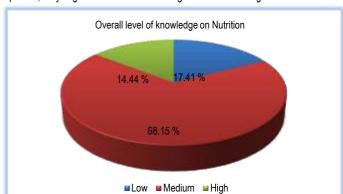


Fig-1 Distribution of respondents based on overall existing level of knowledge on Nutrition

### Existing level of knowledge on nutrition (district wise)

The distribution of respondents based on existing level of knowledge on nutrition (district wise) is presented in the [Table-2]. The data presented in [Table-2] shows that in the three assessed districts, majority of the respondents had medium level of knowledge on nutrition, namely Barpeta (67.78%), Nagaon (61.11%) and Tinsukia (61.11%). It was also observed from the [Table-2] that Nagaon district had the highest number of respondents (23.33%) with low level of knowledge on nutrition in comparison to the other two districts Barpeta (20.00%) and Tinsukia (20.00%). This might be due to the fact that, none of the respondents in Nagaon district had regular contact with extension personnel. Contact with extension personnel helps one to collect and gather information on nutrition and allied

subjects. The respondents of Nagaon district rarely contacted extension personnel and they rarely visited urban area. Low educational qualification might also be another reason for having highest number of respondents (23.33%) with low level of knowledge on nutrition. The data on [Table-2] also shows that among the three assessed districts, Tinsukia had the highest percentage of respondents (18.88%) having high level of knowledge on Nutrition. This might be due to the fact that the educational qualification of the respondents of Tinsukia district was higher as compared to other assessed districts, hence might possess more knowledge.

### Conclusion

The improvement in the overall economy at the macro level and concomitant improvements in purchasing power (though unevenly distributed) among households have not led to the expected levels of improvement in the nutritional and health status of Indians. The latest findings of the National Family Health Survey, NFHS-4 (2015-16) and recent surveys by the National Nutrition Monitoring Bureau have thrown more light on the growing problem of the 'double burden' of under-nutrition and over-nutrition. It is very obvious, that, there is an 'awareness and information deficit', among the rural sections of the population, about nutrition knowledge and good dietary practices and their linkage with good health. This deficit should be narrowed and eliminated by harnessing all traditional as well as modern technological vehicles of communication. It may be concluded that healthy lifestyle and high intake of nutritious food can provide good health throughout life to the humans. The poor nutrition and unawareness of health facilities during the childhood and reproductive age are the major factors responsible for the poor health status. Though government of India has been taking several efforts to improve the health status of the women, poverty, gender discrimination and low education in the population are the major problems associated with the implementation of appropriate interventions.

**Application of research**: Study of distribution of respondents according to their overall existing level of knowledge on nutrition

Research Category: Extension education

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Study area / Sample Collection: Tinsukia, Nagaon and Barpeta

Cultivar / Variety / Breed name: Nil

Conflict of Interest: None declared

Ethical approval: This article does not contain any studies with human

participants or animals performed by any of the authors.

Ethical Committee Approval Number: Nil

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