

Nutritional intake by the pregnant women

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ABSTRACT

A random sample of 300 pregnant women was selected. The sample of early pregnancy test (1st trimester) was selected for this study and till delivery they were observed. Among the selected 300 samples of pregnant women, 118 were from rural areas and 182 were from urban area. More per cent of the pregnant women was from urban area. There was significant difference in intake of nutrients by rural and urban women. Nutrient intake of urban women was comparatively higher than the rural sample.

Key words : Nutrient intake, Pregnant women, Pregnancy.

Pregnancy is a physiological condition in which the foetal growth is accompanied by intensive changes in maternal body composition and metabolism (Hyttén and Lietch, 1971). Pregnancy is a period of considerable physiological and nutritional stress, during which the maternal requirements of almost all the nutrients are greatly increased. Pregnant women are considered as a vulnerable group because of increased physiological demands. Diet during pregnancy is one of the most important factors in achieving a successful outcome of pregnancy in terms of healthy baby and maintenance of her own health, as the overall development of child is determined to a great extent by the type of nourishment it receives right from the conception.

Nutrition plays an important and special role in the course of pregnancy for the maintenance of sound maternal health. Hence, the requirement of nutrients for women during pregnancy increases significantly in order to meet the extra demands for rapid growth and development of foetus.

It is unfortunate to know that nutritional status of pregnant women in India is very poor as the diets are grossly deficient in supplying energy and other essential nutrients such as iron, vitamin A, B – complex vitamin and ascorbic acid.

This lacuna in the supply of different nutrients widens the gap between the actual intake and the recommended dietary allowances of nutrients in meeting the additional requirements of women during the course of pregnancy.

METHODOLOGY

A random sample of 300 pregnant women was selected. The sample of early pregnancy stage. (1st trimester) was selected for this study and till delivery they were observed. Data were stratified on the basis of

women's SES, living area and education.

The collected data were analyzed by using suitable statistical methods and the results were interpreted accordingly.

RESULTS AND DISCUSSION

Background information of the selected pregnant women dependent on their living area.

In case of the type of family, from rural area the majority of the pregnant women (72%) were found to have joint family, whereas from urban sample, 75 per cent pregnant women belonged to the nuclear type family and 25 per cent pregnant women belonged to the joint family.

In case of educational level, 36.44% of the pregnant women from rural area were Middle School educated, 28 per cent high school educated, 13 per cent were College educated, whereas 14 per cent were Primary educated and the remaining 8 per cent were illiterate. On the other hand majority of the pregnant women (60%) from urban area were College educated, 14 per cent were High School educated and Middle School educated and the remaining 4 and 6 per cent were Primary School educated and illiterate, respectively.

This result showed that majority of the respondents from urban area were College educated whereas from the rural area were Middle School educated.

In terms of occupation from the rural area, the majority of the respondents were in service or in their own business and home makers, while 11 per cent respondents were labour and one per cent of respondents were the skilled worker and only, one per cent of the respondents were in semiprofessional jobs. On the other hand from urban area majority of the 43 per cent respondents were in service or in their own business per

Table 1 : Background information of the selected pregnant women depending on the basis of their living area

Sr. No.	Particulars	Area percentage and no. of respondents	
		Rural (N=118)	Urban (N=182)
1.	Type of family		
	Joint	(28) 33	(25) 46
	Nuclear	(72) 85	(75) 136
2.	Religion		
	Hindu	(70) 83	(74) 134
	Muslim	(30) 35	(26) 48
3.	Educational level		
	Illiterate	(08) 10	(06) 12
	Primary	(14) 17	(05) 09
	Middle School	(36) 43	(14) 25
	High School	(28) 33	(14) 25
	College	(13) 15	(60) 110
4.	Occupation		
	Home makers	(75) 89	(37) 67
	Labourer	(11) 13	(05) 09
	Service / Business	(11) 13	(43) 78
	Skilled workers	(0.14) 01	(05) 09
	Semi-professional	(0.14) 01	(04) 08
	Professional	Nil	(06) 11
5.	SES group		
	Low	(48) 56	(24) 44
	Middle	(43) 51	(27) 49
	High	(09) 11	(49) 89
6.	Food habit		
	Vegetarian	(60) 71	(65) 118
	Non vegetarian	(40) 47	(35) 64
7.	Age in years		
	Below 20 years	(10) 12	(05) 09
	20-35	(90) 106	(95) 174

Figures in parenthesis indicate percentage

cent as labour and skilled workers and 6 and 4 per cent of the respondents were as professionals (lecturer, doctor) and 4% in semiprofessional jobs.

On the basis of above result it can be said that from rural area, large number of respondents were home makers and the remaining occupied as labourer where as from urban area more of the respondents were engaged in their own business and service. Nobody from rural are occupied the professional job but urban area respondents were also engaged in professional job. As the educational level increased, the occupation level also increased and as the occupation increased the SES status also increased.

It is clear from Table 1 that the majority of the respondents from the rural area belonged to low SES group where as majority of the respondents from urban

area belonged to high SES group.

In case of food habit, more per cent age (60) of the pregnant women was vegetarian and remaining 40 per cent were non vegetarian from rural area, respectively, where as from urban 65% were vegetarian and remaining 35 per cent of the respondents were non vegetarian.

From rural, area large number of the respondents (90%) were in the age group 20-35 years and remaining 10 per cent were in the age group below 20 years. The similar trend was observed for urban area *i.e.*, more per cent of the respondents (95%) were in the age group of 20-35 years and the remaining 4 per cent belonged to the age group < 20 years.

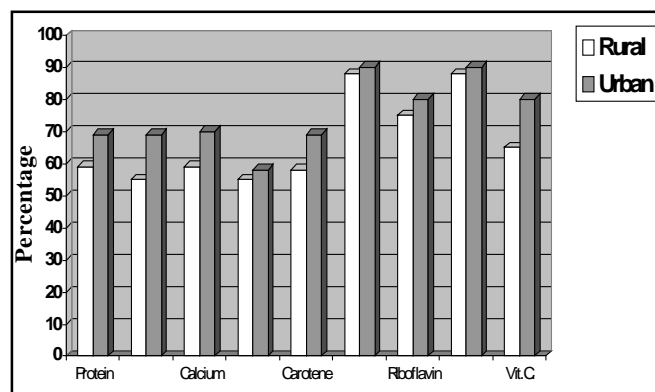
Table 2 focuses the mean per cent adequacy of daily nutrient intake by the selected pregnant women on the basis of living area (Fig. 1).

It was found that there was a significant difference in intake of nutrients by rural and urban women. The energy intake of urban women was 67.91 per cent which was comparatively higher than the rural sample.

The similar trend was also found for all the nutrients. Major differences were found in calcium, iron, carotene and Vit. C. intake. From rural area, calcium and iron

Table 2 : Adequacy of daily nutrient intake by the selected pregnant women on the basis of living area

Sr. No.	Nutrients	Mean per cent of nutrient intake	
		Rural	Urban
1.	Energy	52.77	67.91
2.	Protein	59.39	68.50
3.	Calcium	49.00	70.00
4.	Iron	46.00	58.00
5.	Carotene	48.00	69.00
6.	Thiamine	87.00	90.00
7.	Riboflavin	75.00	80.00
8.	Niacin	88.00	92.00
9.	Vit. C	60.00	81.00

**Fig. 1 : Mean per cent adequacy of daily nutrient intake by the selected pregnant women on the basis of living area**

consumption was only 49 and 46 per cent, respectively, far lower than the recommended dietary allowances.

Calcium intake of urban area sample was 70 per cent where as iron intake was only 58 per cent.

The findings of the present investigation were comparable with the results of Kaur *et al.* (1992) which revealed that the value of intake of calcium and iron by the suburban and rural expectant mothers were found to be short of recommended dietary allowances.

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