



A COMPARATIVE STUDY ON THE DIETARY PATTERN OF URBAN AND RURAL WOMEN IN MIZORAM

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Abstract: Traditional Mizo food is cooked in a simple manner, typically boiled, stewed, smoked, steamed, or fermented. However due to the influence and import of eatable good, many food habit have been modified. Mizos have adapted to and adopted practices in food preparation that were hitherto alien to them. In the study, the dietary pattern and diversity of food consumption in rural and urban women between 25 to 55 years of age was analyzed. The research was conducted within Aizawl District. The study observe a significance difference in the intake of non-vegetarian ($F=77.57$, $P=0.000$), nuts ($F=165.18$, $P=0.000$), oil ($F=144.64$, $P=0.000$), milk ($F=43.10$, $P=0.000$) and sugar ($F=54.66$, $P=0.000$) between rural and urban respondents at 1% level. The number of respondents who consume milk daily was more in urban areas (91%) than in rural areas (77%). Meat, egg and fish are consumed 2 to 4 times a week by the majority of urban respondents (62%) as well as half of the rural (50%) respondents.

INDEX TERMS - Rural, Urban, Food, Dietary, Non-vegetarian, Mizoram

I. INTRODUCTION

According to the World Health Organization (WHO), the definition of health is a state complete physical, mental and social well-being and not merely the absence of disease or infirmity. The health status of any community is influenced by the interplay of health consciousness of the people, socio-cultural, demographic, economic, educational and political factors. The common beliefs, traditional customs, myths, practices related to health and disease in turn influence the health seeking behaviour of autochthonous people (Balgir, 2004)

Mizoram is a mountainous region inhabited by Mizo. The great majority of Mizoram's population consists of several ethnic tribes. The food practices of the people before their exposure to different social and cultural elements are noted. Traditional Mizo food is cooked in a simple manner, typically boiled, stewed, smoked, steamed, or fermented. The only cooking oil available was when a pig was slaughtered and its fat preserved in the form of lard, which was then re-heated for frying purposes. Preservation of meat as well as certain vegetables was done through the method of smoking. With the forces of globalization becoming ever potent and more difficult to ignore, Mizos have adapted to and adopted practices in food preparation that were hitherto alien to them. Food is now spicier and richer; the increased intermingling with people from mainland India has resulted in openness to experimentation with other forms of food preparation.

There have also been studies on the status of women relating to their socio- cultural problems, their economic rights, their participation in management, their access to employment, food, health, etc. But these issues have not been properly focussed in relation to the tribal women. There are only a few studies on the status of tribal women in India (Mann, 1987; Vyas and Mann, 1988; Chauhan, 1990). The research attempt to assess the nutritional status (anthropometric measurements) and the dietary pattern of the women in Mizoram.

II. METHODOLOGY

The study was planned to collect information on the dietary pattern prevails among the women in Mizoram.

The research design followed in the present study is exploratory in nature. Exploratory research provides insights and comprehension of an issue or situation. The present study was conducted among urban and rural women of Aizawl district in Mizoram. Women who are natives of Mizoram, had been selected as the sample. The sample included women who are permanent residence of urban (Aizawl) and rural (Sawlung and Darlawn Village) Mizoram.

A random sampling method was adopted to select 200 women in the age group of 25 to 55 years (100 women from urban and 100 women from rural) in Aizawl district, Mizoram. A period of 1 month was taken for collection of data through questionnaire, 24 hours dietary recall and food frequency questionnaire.

The data collected were analyzed using Statistical Package for Social Sciences (SPSS version 13). The statistical techniques such as Simple frequency and Percentage, One-way ANOVA, “t” test and correlation were applied for the analyses of data.

III. RESULTS

The present study was carried out to assess the nutritional status of women in Mizoram. Data were collected from 100 women in urban area and 100 women in rural area. The data collected were analyzed using appropriate statistical tools. The results obtained are presented in this chapter along with the discussion of certain significant findings.

Table 1: Percentage distribution of respondents based on their Body Mass Index

Sl no.	BMI	Place of stay	
		Urban	Rural
1.	Less than 18.9 (Underweight)	4	6
2.	18.9 to 24.9 (Normal)	48	61
3.	25 to 30 (Overweight)	37	15
4.	More than 30 (Obese)	11	18
	Total	100	100

Table 2: Percentage distribution of respondent based on frequency of consumption of various foods

Sl. no	Food items	Daily		2 to 4 times a week		Weekly		Monthly		Rarely		Total
		Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural	
1.	Cereals	100	100	0	0	0	0	0	0	0	0	200
2.	Pulses	0	0	92	61	8	30	0	9	0	0	200
3.	Roots and vegetables	100	100	0	0	0	0	0	0	0	0	200
4.	Green leafy vegetables	0	0	72	68	28	32	0	0	0	0	200
5.	Fruits	0	0	94	53	6	41	0	6	0	0	200
6.	Milk and milk products	91	77	7	19	2	4	0	0	0	0	200
7.	Meat, egg and fish	1	0	62	50	37	31	0	19	0	0	200
8.	Nuts	1	0	63	41	31	23	5	26	0	10	200
9.	Oils and sugars	100	100	0	0	0	0	0	0	0	0	200
10.	Miscellaneous	84	62	12	21	4	7	0	4	0	6	200

Table 3: Influence of place of stay on frequency of consumption of cereals, pulses, green leafy, roots and tubers, vegetables and fruits

Variables	N	Place of stay	Mean	Std. Deviation	F-value	P-value
Cereals	100	Urban	26.61	1.94	206.37	0.000
		Rural	22.54	2.06		
Pulses	100	Urban	16.77	1.64	29.92	0.000
		Rural	15.51	1.91		
Green leafy	100	Urban	15.00	2.55	56.04	0.000
		Rural	11.66	3.66		
Roots and tubers	100	Urban	24.67	2.39	114.13	0.000
		Rural	20.08	3.56		
vegetables	100	Urban	38.86	4.23	69.15	0.000
		Rural	31.99	7.09		
Fruits	100	Urban	46.79	7.81	24.81	0.000
		Rural	39.79	11.67		

Table 3 give us a significance difference in the frequency of consumption of cereals ($F=206.37$, $P=0.000$), pulses ($F=29.92$, $P=0.000$), green leafy vegetables ($F=56.04$, $P=0.000$), roots and tubers ($F=114.13$, $P=0.000$), vegetables ($F=69.15$, $P=0.000$) and fruits ($F=24.81$, $P=0.000$) between rural and urban respondents at 1% level.

Table 4: Influence of place of stay on frequency of consumption of non-vegetarian foods, nuts, oil, milk and sugar

Variables	N	Place of stay	Mean	Std. Deviation	F-value	P-value
Non-vegetarian	100	Urban	33.42	3.39	77.57	0.000
		Rural	29.08	3.57		
Nuts	100	Urban	10.68	1.11	165.18	0.000
		Rural	8.42	1.35		
Oil	100	Urban	23.37	2.19	144.64	0.000
		Rural	19.09	2.78		
Milk	100	Urban	11.55	1.61	43.10	0.000
		Rural	9.96	1.80		
Sugar	100	Urban	8.29	0.96	54.66	0.000
		Rural	7.28	0.96		

Table 5: Percentage distribution of respondents based on nutrient intake

Nutrients	Place of stay	Intake (in percentage)			Total
		Normal RDA	Above RDA	Below RDA	
Energy	Urban	38	51	11	100
	Rural	27	70	3	100
Protein	Urban	20	78	2	100
	Rural	27	33	40	100
Fats	Urban	1	99	0	100
	Rural	3	96	1	100
Carbohydrate	Urban	35	65	0	100
	Rural	23	77	0	100

Table 6: Influence of place of stay on nutrient intake

Variables	Place of stay	N	Mean	Std. Deviation	F-value	P-value
Energy	Urban	100	2005.42	209.53	18.23	.000
	Rural	100	2133.03	213.03		
Protein	Urban	100	67.62	8.44	68.54	.000
	Rural	100	55.05	12.62		
Fat	Urban	100	44.67	8.25	49.15	.000
	Rural	100	37.23	6.69		
Carbohydrate	Urban	100	264.74	29.24	2.13	.146 (NS)
	Rural	100	270.38	25.25		

A majority of the subjects in urban (76%) and rural (57%) areas bought grains every week. A vast majority of the urban (98%) respondents bought pulses every week whereas among the rural group (67%) it was once in a month. Majority of the urban women bought fruits and vegetables, dairy products and eggs daily whereas the purchase of these items were done once in a week by the rural population. A vast majority of both rural and

urban respondents bought meat and oil and sugar every week. The mean number of days when fruits were consumed was almost same for urban and rural population (Table 2). There is a significance difference in the intake of non-vegetarian ($F=77.57$, $P=0.000$), nuts ($F=165.18$, $P=0.000$), oil ($F=144.64$, $P=0.000$), milk ($F=43.10$, $P=0.000$) and sugar ($F=54.66$, $P=0.000$) between rural and urban respondents at 1% level.

From table 6, it is evident that Place of stay had significantly influenced energy ($F = 18.236$, $P = 0.000$), protein ($F = 68.540$, $P = 0.000$) and fat ($F = 49.157$, $P = 0.000$) intake of the respondents, at 1% level. Majority of the urban as well as rural respondents consumed energy (urban – 51%, rural – 70%), fat (urban – 99%, rural – 96%) and carbohydrate (urban – 65%, rural – 77%) above the Recommended Daily Allowances. There is a significance difference in the intake of fermented foods ($F=13.72$, $P=0.000$), drinks ($F=35.72$, $P=0.000$), fast foods ($F=50.01$, $P=0.000$), traditional foods ($F=65.45$, $P=0.000$) and miscellaneous ($F=25.48$, $P=0.000$) between rural and urban respondents at 1% level.



IV. CONCLUSION

From the study it can be concluded that urban women consume more meat and its product and therefore has high intake of protein and fats. However, rural sample energy intake was much higher. The sample in the research were all non vegetarians, which is not surprising amongst Mizos. Many women in both urban and rural areas were found to be of normal weight but a considerable percentage in urban area were overweight. The frequency of consumption of various foods is higher among the urban women than the rural women. Major nutrient deficiency was not determined as both rural and urban had a high diverse consumption of vegetables and meat and meat product. The nutrient intake namely carbohydrates, protein, fat and energy for a considerable percentage of the respondents were above the Recommended Daily Allowance, but disparity still exists between urban and rural women in nutrients intake.

V. REFERENCES

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