

# Consumption Pattern and Constraints of Selected Crops among Rural and Urban Women



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**Abstract**

Kharif crops like bajra (pearl millet), maize and groundnut are considered as low cost crops and can be grown in varied climate of the country. The most widely grown millet is pearl millet, which is an important crop in India. Maize is the third most important crop after rice and wheat in India. Groundnut has witnessed a turnaround in consumption pattern-from a major oilseed for premium class consumers to a preferred choice for direct users.

**Keywords:** Consumption, Constraints.

**Introduction**

Most of the rural women consume these crops seasonally, while, urban women who know nutritive value, health benefits of it and are also aware about these crops, consume these whole of the year, women In U.P. consume these coarse cereals (bajra, maize, groundnut etc.) only in winters. Due to the psychological effect these have warm tendency, women consume these crops only in winters, while, in Rajasthan and Maharashtra, these crops are consumed whole of the year, due to less rainfall and high temperature and less fertile land. But, these crops should be consumed because of these health benefits. In whole of the world bajra and groundnut are best suitable and most important in conditions of post-menopause, anemia and heavy bleeding. According to the age group, some women, above the age of 50 years, sometimes have problem in digesting bajra and groundnut due to its richness in proteins, But if it is consumed frequently, body gets used to it and problem of digestion is also removed. In U.P. these crops are grown only in winters because wheat and rice are the major crops, So, rural people also store only wheat and rice. Farmers grow these crops less than other crops. They grow these crops only for winters or for feeding the animals.

**Methodology**

The study was conducted in Kanpur district, Two blocks Kalyanpur and Sarsaul and four localities (Arya Nagar, Vishnupuri, Govind Nagar and Ratanlal Nagar) were selected in this study. 200 sample size (1:1) rural and urban women were adopted. Dependent and independent variables such as age, occupation, food habits, nutrients consumption Pattern, organoleptic acceptability etc. were used. Statistical tools such as S.D, and Cr. were used.

**Results**

**Table 1**  
**Distribution of Women According to Occupation**

Occupation	Rural N <sub>1</sub> = 100	Urban (N <sub>2</sub> = 100)	Total
Farming	55 (27.5)	-	55 (27.5)
Business	-	9 ( 4.5)	9 ( 4.5)
Caste occupation	10 ( 5.0)	-	10 (5.0)
Service	5 ( 2.5)	23 (11.5)	28 (4.5)
House wife	30 (15.0)	68 (34.0)	98 (49.0)
Total	100 (50.0)	100 (50.0)	200 (100.0)
$\chi^2$	68.685***		P < 0.001

(Figures in parentheses indicate percentage of respective values)

The differences in food intake due to education and occupation, for most food groups, were simply additive and sometimes more than additive. The effect of education adjusting for occupation and the effect of occupation adjusting for education. Both indicators were consistently associated with similar dietary patterns.

**Table 2**  
**Consumption Pattern of Women**

Consumption	Rural			Urban		
	Bajra	Maize	Groundnut	Bajra	Maize	Groundnut
Daily	-	-	-	-	5 ( 2.5)	9 ( 4.5)
Weekly	-	3 ( 1.5)	12 ( 6.0)	1 (1.0)	8 ( 4.0)	22 (11.0)
Monthly	-	6 ( 3.0)	19 (9.5)	6 ( 3.0)	19 (9.5)	30 (15.0)
Seasonal	90 (45.0)	82 (34.0)	68 (34.0)	62 (31.0)	80 (40.0)	60 (30.0)

(Figures in parentheses indicate percentage of respective values)

Table 2 reveals that consumption pattern of women respondents, 45.0 per cent of rural and 31.0 per cent of urban women have taken bajra seasonal, whereas 41.0 per cent of rural and 40.0 per cent of urban women have taken maize seasonally. 9.5 per cent of rural and 15.0 per cent of urban women respondents have taken groundnut monthly while 1.5

per cent rural and 4.0 per cent of urban women were taking maize weekly. 6.0 per cent of rural and 11.0 per cent of urban women were taking groundnut weekly whereas 34.0 per cent of rural and 30.0 per cent of urban women were taking groundnut seasonally.

**Table 3**  
**Food Frequency of Women on Selected Crops**

Food Frequency	Rural					Urban				
	Wheat	Rice	Maize	Bajra	Groundnut	Wheat	Rice	Maize	Bajra	Groundnut
Once in a day	-	72 (36.0)	-	-	-	-	75 (37.5)	5 (2.5)	-	-
Twice in a day	8 (4.0)	-	-	-	-	12 (6.0)	21 (10.5)	-	-	-
Thrice in a day	90 (45.0)	-	-	-	-	90 (45.0)	-	-	-	-
Once in a week	-	18 (9.0)	1 (0.5)	-	8 (4.0)	-	-	4 (2.0)	-	18 (9.0)
Once in a month	-	2 (1.0)	4 (2.0)	-	12 (6.0)	-	-	7 (3.5)	-	7 (3.5)
Seasonal	-	-	95 (47.5)	90 (45.0)	80 (40.0)	-	4 (2.0)	85 (42.5)	70 (35.0)	75 (37.50)
Never	-	-	-	10 (5.0)	-	-	-	-	30 (15.0)	-

(Figures in parenthesis indicate percentage of respective values)

Food frequency of rural women, season wise, about the selected crops was found higher than urban women. Urban women, who are aware about these crops, have knowledge about these crops and also understand importance of these crops, consume it accordingly. But rural and urban women eat groundnut whole of the year like in festivals and in

fasts (Navratri, Janmashtmi, weekly fasts). Looking towards the importance, nutritive value, protein richness and maximum health benefits of these crops, women should consume these crops whole of the year in their food. People who have diseases, in which these crops are more helpful, should properly consume these crops.

**Table 4**  
**Knowledge of Nutrients Content of Bajra**

Nutrient content of bajra	Rural	Urban	Nutritive Value of bajra per 100 g
Fat (g)	60 (30.0)	70 (35.0)	Monosaturated - 0.4 Polysaturated - 1.2
Fiber (g)	80 (40.0)	80 (40.0)	3.1
Protein (g)	40 (20.0)	60 (30.0)	8.0
Carbohydrates (g)	55 (27.5)	65 (32.5)	57.0
Sodium (g)	2 (1.0)	10 (5.0)	5.0
Thiamin (mg)	1 (0.5)	6 (3.0)	0.3
Niacin (mg)	-	5 (2.5)	3.2
Magnesium (mg)	-	7 (3.5)	106.0
Zinc (mg)	-	8 (4.0)	2.2
Calcium (mg)	10 (5.0)	15 (7.5)	

(Figures in parenthesis indicate percentage of respective values)

5.0 per cent of rural and 7.5 per cent of urban women were known about the presence of calcium nutrients in bajra crop whereas urban women

respondents have little knowledge about other nutrients like thiamin, niacin and magnesium.

**Table 5**  
**Knowledge of Nutrients Content of Maize**

Nutrient content of maize	Rural	Urban	Nutritive Value of maize per 100 g
Carbohydrates (g)	29 (14.5)	60 (30.0)	9.0
Sugar (g)	15 (7.5)	30 (15.0)	3.2
Dietary fiber (g)	18 (9.0)	75 (37.5)	2.7

Fat (g)	1 (0.5)	10 (5.0)	1.2
Protein (g)	30 (15.0)	55 (27.5)	3.2
Niacin (mg)	2 (1.0)	32 (16.0)	1.7
Vitamin A (ug)	25 (12.5)	75 (37.5)	10.0
Vitamin B1 (mg)	8 (4.0)	50 (25.0)	15.0
Vitamin C (mg)	5 (2.5)	62 (31.0)	7.0
Iron (mg)	30 (15.0)	80 (40.0)	0.5
Magnesium (mg)	4 (2.0)	15 (7.5)	37.0
Potassium (mg)	2 (1.0)	8 (4.0)	270.0

(Figures in parenthesis indicate percentage of respective values)

Health benefits of corn are offered by presence of quality nutrients in it. Also, being rich in

phytochemicals, it provides protection against numerous chronic diseases.

Following are some of the health benefits of corn.

**Table 6**  
**Knowledge of Nutrients Content of Groundnut**

Nutrient content of groundnut	Rural	Urban	Nutritive Value of maize per 100 g
Calcium (mg)	25 (12.5)	82 (41.0)	93.00
Carbohydrate (g)	18 (9.0)	73 (36.5)	16.13
Copper (mg)	1 (0.5)	20 (10.0)	11.44
Fat (g)	15 (7.5)	90 (45.0)	49.24
Fiber (g)	20 (10.0)	70 (35.0)	8.50
Iron (mg)	9 (4.5)	50 (25.0)	4.58
Magnesium (mg)	2 (1.0)	55 (27.5)	168.00
Manganese (mg)	1 (0.5)	20 (10.0)	1.93
Phosphorus (mg)	5 (2.5)	45 (22.5)	376.00
Potassium (mg)	10 (5.0)	30 (15.0)	705.00
Zinc (mg)	2 (1.0)	20 (10.0)	3.27
Protein (g)	10 (5.0)	65 (32.5)	25.80
Sodium (mg)	-	12 (6.0)	18.00

The groundnut is also known by different names like earthnuts, goobers, goober peas, pindas, jack nuts, pinders, manila nuts and monkey nuts.

Throughout the world, they are known for their nutrition and health benefits.

**Table 7**  
**Constraints of Selected Crops**

Constraints	Rural			Urban		
	Bajra	Maize	Groundnut	Bajra	Maize	Groundnut
Traditional cause	22 (11.0)	21 (10.5)	39 (19.5)	23 (11.5)	20 (10.0)	32 (16.0)
Psychological effect	18 (9.0)	23 (11.5)	18 (9.0)	25 (12.5)	32 (16.0)	29 (14.5)
Unawareness	26 (13.0)	16 (8.0)	12 (6.0)	4 (2.0)	19 (9.5)	7 (3.5)
Problem in digestion	4 (2.0)	5 (2.5)	1 (0.5)	8 (4.0)	-	9 (4.5)
Unavailability in market	16 (8.0)	4 (2.0)	-	6 (3.0)	1 (0.5)	-

(Figures in parenthesis indicate percentage of respective values)

About 8.5 per cent of urban have faced problems in digestive system due to bajra, maize and ground nut while about 1.5 per cent of rural women have faced problem in digestion. Due to the psychological effect that these have warm tendency, women consume these crops only in winters.

#### Conclusion

Pearl millet is highly nutritious, non-glutinous and like buckwheat and quinoa, is not an acid forming food so is soothing and easy to digest. In fact, it is considered to be one of the least allergenic and most digestible grains available and it is a warming grain so will help to heat the body in cold or rainy seasons and climates. Maize contains around 11 per cent of protein and its protein is deficient in amino acids like tryptophan and lysine. Yellow maize is a good source of carotene for vitamin A, it also contains thiamine and folic acid in appreciable amounts. Corn grains consumed daily help to keep a check on the blood cholesterol level. Corn flour paste in water acts as an effective face pack to remove acne and other skin blemishes.

#### Recommendations

1. Bajra helps in lowering the cholesterol levels. This is due to presence of phytic acid and niacin.
2. Corn has been found to be helpful in treating kidney problems. Including renal dysfunction.
3. Groundnuts are good source of dietary protein compose fine quality amino acids that are essential for growth and development.

#### References

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