

# Dietary Assessment of Urban and Rural Pre- School Children of Srinagar Garhwal

## Abstract

A Preschool or early childhood years go from the child's second birthday to the beginning of the first grade in school. These are the years of rapid development and of slower growth than that of infants. There is vast difference in the food intake among Pre-school children is affected by income, availability of food, the family size, management of food and food habits. The total 100 Pre-school children (50 urban +50 rural) were selected for this study.

**Keywords:** Urban and Rural, Children

### Introduction

In India of the total population, Pre-school constitute 15 percent. Our nation walks on the tiny feet of these children. The quality of future life generation depends upon them but in India it is most neglected group.

The affect health and growth under nutrition and mal-nutrition are found all around the world. During this period, but they are prevalent more in some area than in others. Under nutrition is a condition resulting from inadequate food consumption.

Protein mal nutrition is found among Pre-school children in all the under developed countries. A severe form called Kwashiorkar, which is found among the time of weaning to about four years age. The children with nutrition failure also have disturb pattern of skelton development.

### Need

In India total population, Pre-school constitute 15 percent. Our nation walks on the tiny feet of these children. The quality of future life generation depends upon them but in india it is most neglected group. Under nutrition is a condition resulting from inadequate food consumption, in which the deficiency is quantitative rather than qualitative. In Pre-school children mal nutrition is almost universal among the children in low income and rural group at this age.

### Objectives

1. To see the dietary pattern and habits of the Pre-school children.
2. To assess their protein calory and iron intake from their total food intake.

### Hypothesis

There is no significant difference between the dietary assessment of urban and rural Pre-school children of Srinagar garhwal.

### Delimitation of the Study

1. The present study will be delimited upto urban and rural area of Srinagar garhwal.
2. The study will be confined to see the dietary assessment of among 3-5 age group of both the sex.
3. The study will consist of awareness of following aspects –
4. Protein intake
5. Energy intake
6. Iron intake

### Sample

For the study, the sample population of 3-5 age group of both the sex of urban and rural area though stratified random sampling was selected.

50 uban (25 boys+25 girls) and 5 rural (25 boys+5 girls) were selected from every segment of the population of study.

### Tools

Dietary pattern of the subject was observed by interview/oral



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questionnaire method.

#### Analysis of data

Food consumption level of pre school children was assessed by weighing method of diet survey. The total amount of energy, protein and iron consumed by each subject in one day was derived by referring to the food consumption table of Indian food stuff. Data analysis was done following standard statistics method by gupta (88). Statistics analysis

was viewed through the mean and its standard deviation for analysing the general trends in data. For comparing the studied parameter between sex and as well as the subject of rural and urban area. Analysing of various tests was undertaken, difference with in and between each group was tested through least significant difference value in all these tests, the significant level was kept constant at 5% ( $P < 0.05$ ).

**Table No. 1**  
**Distribution of Children on the Basis of Frequency of Type of Food**

S. No	Types of food	URBAN		RURAL	
		Girls	Boys	Girls	Boys
1	Vegetarian	8	10	13	15
2	Non- veg	9	5	9	7
3	Ova- veg	8	10	3	3
	Total	25	25	25	25

Table no. 1 shows that in urban area 8 girls and 10 boys were vegetarian and 9 girls and 5 boys were non- veg, while 8 girls and 10 boys were ova-veg. Whereas in rural areas the number of vegetarian

were more than urban, and 3 girls and equal no. of boys were ova-veg. The no. of non-veg girls was quite high in rural area.

**Table No. 2**  
**The Protein (gm)/ per Day Intake of the Urban and Rural Pre- School Children 10 Girls and 10 Boys each, Subject.**

S No.	URBAN	URBAN	RURAL	RURAL
	GIRLS	BOYS	GIRLS	BOYS
1	25.04	24.74	24.74	25.64
2	27.56	25.56	24.74	25.64
3	27.56	31.05	26.48	31.45
4	29.42	31.05	26.48	32.22
5	31.45	31.05	28.90	32.22
6	31.45	31.05	31.94	31.45
7	29.42	32.22	31.94	32.22
8	29.42	32.22	31.94	31.45
9	31.45	32.22	32.46	31.22
10	32.22	32.22	32.46	31.22
Mean	29.49	30.33	29.70	30.19
S.D	2.15	2.66	3.04	2.38
C.V	2.01	2.58	3.12	2.14

Table no. 2 shows that pre-school girls and boys in urban area get protein in ample amount. The mean protein intake in urban girls and boys was 29.49- 30.33 gm, respectively, which was satisfactory. In rural area the pre-school girls and boys also get

protein in ample amount. The mean intake of protein in rural girls and boys was 29.70- 30.19 gm respectively. Not much difference was found in protein intake by girls and boys in urban and rural area.

**Table No.3**  
**The Calory (Kcal) /day Intake of the Urban and Rural Pre- School Girls and Boys.**

S NO.	URBAN	URBAN	RURAL	RURAL
	GIRLS	BOYS	GIRLS	BOYS
1	1040	1020	1020	1046
2	1094	1056	1020	1046
3	1094	1205	1250	1214
4	1214	1205	1175	1456
5	1214	1205	1175	1196
6	1456	1456	1250	1214
7	1194	1456	1250	1456
8	1194	1456	1250	1214
9	1194	1205	1250	1205
10	1214	1456	1446	1205
Mean	1190.8	1272	1203.6	1225.2
S.D	106.5	162.33	122.18	131.45
C.V	102.47	120.45	109.01	113.57

Table no.3 depicts that 3 girls and 2 boys in urban area and 2 boys and equal no of girls in rural area were not getting normal value according to R.D.A. (1990), which is between 1175- 1600 Kcal. The table no.3 reveals that most of the boys leaved proper amount of energy intake below 1456 Kcal, the energy intake may be called below satisfactory.

**Table No. 4**

**The Iron (mg)/day Intake of the Urban and the Rural Pre- School Children 10 Girls and 10 Boys each, Subject.**

S No.	URBAN	URBAN	RURAL	RURAL
	GIRLS	BOYS	GIRLS	BOYS
1	11.5	11	14.0	12.1
2	13.0	12.1	14.0	12.1
3	13.0	14.97	14.8	15.0
4	15.0	14.97	13.9	15.6
5	15.0	14.97	13.9	14.94
6	16.5	16.50	15.0	15.0
7	14.0	16.50	15.0	16.5
8	14.0	16.50	15.0	15.0
9	14.0	14.97	15.0	14.94
10	15.0	16.50	16.8	14.94
Mean	14.11	14.89	14.74	14.70
S.D	1.31	1.82	0.82	1.43
C.V	1.41	2.05	0.13	1.01

Table no. 4 shows that iron intake in urban and rural pre- school girls and boys is satisfactory. The normal value according to R.D.A is 12-18 mg/day. Only 1 boy and 1 girl in urban area was below it. The mean difference in iron intake between girls and boys in both the area is quite negligible.

**Table No. 5**

**Daily Intake of Cereals, Pulses, Milk, Egg, Fruits and Vegetables of Urban and Rural Pre- School Children of 25 Girls and 25 Boys each, Subject.**

Food stuffs	Values	URBAN		RURAL	
		GIRLS	BOYS	GIRLS	BOYS
Cereals (gm)	Mean	66.16	70.28	60.16	66.16
	S.D	5.01	3.96	6.10	5.01
Pulses (gm)	Mean	35.6	38.0	36.1	38.5
	S.D	8.16	5.0	8.74	5.28
Milk (gm)	Mean	242	260	220	240
	S.D	44.55	30.59	42.45	28.59
Egg (gm)	Mean	56	62.66	56	60.60
	S.D	14.96	12.47	14.96	11.97
Fruits (gm)	Mean	19.2	158	110	140
	S.D	20.70	36.55	18.60	32.4
Vegetables (gm)	Mean	72	88	129.6	129.6
	S.D	25.32	20	26.81	26.81

Table No .5 shows that the values of daily intake of cereals, pulses, milk, egg, fruits and vegetables of urban girls was less than boys . The same pattern was also observed in rural girls and boys. The daily intake of green vegetables of the rural girls and boys was more than urban girls and boys.

#### Discussion

The average protein (gm)/day intake of the subjects (urban/rural) were within the normal range. The mean calory value of urban girls was less than that of boys and as well as that of the Rural girls and

boys. The level of iron (mg.)day intake of urban and the rural girls and boys was approximately same.

The mean values of the daily intake of cereals , pulses, Milk ,egg ,fruits and vegetables of the urban and rural girls were very close to each other ,whereas, the mean values of the urban and rural boys were higher than girls. But the daily intake of foods was very close the recommended dietary allowances (1990).

#### Suggestions

1. It is suggested that the parents should be made aware to the balance diet and nutritive value of foods.
2. The per day proper amount of protein, calory and iron should be given to pre-school children because it is the period of growth.

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