

# A comparative study to assess the knowledge regarding effects of junk food consumption between urban and rural area, among schoolchildren, Tirupati.

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**ABSTRACT:** *The aim of the study was to assess the knowledge on effects of junk food consumption between urban and rural areas schoolchildren, at Tirupati. The analysis of the study made based on findings obtained from descriptive and inferential statistical analysis. The study findings revealed that there was significant difference between urban and rural schoolchildren's knowledge and practices regarding effects of junk food consumption.*

## I.INTRODUCTION

**We are living in a world today where lemonade is made from artificial flavors and furniture polish is made from real lemons.”**

**Alfresh Enewman**

Healthy nutritious foods have been replaced by the new food mantra “JUNK FOOD”. Child hood period is a time of steady growth; good nutrition is a high priority. Eating junk food has become a trend. The children hate homemade healthy food. Junk food comprises of anything that is quick tasty, convenient and fashionable. It seems to have engulfed every age i.e., from a 2 year old toddler to a 60 year old grandma, every race seems to be enjoying it every chance they get. In addition, why not? It's delicious, it's filling, is really affordable, and readily available just any time of the day, being only a drive through phone call away “Plenty” fast food is all good tasting, except that it is not nutritionally balanced and therefore, unhealthy in the long run if consumed on a regular basis.

According to John Alm, Former President, Coca-Cola Atlanta Journal Constitution, May 5, 2003 (US) reported that.

- Nine out of 10 schools offer junk food to kids.
- One of every five calories in the American diet is liquid.
- Researchers calculate that for each additional soda consumed, the risk of obesity increases 1.6 times.
- The USDA supplies schools with the same commodity foods as prisons.
- More than 32% of youths are overweight and nearly 74% are unfit.
- About 19,000 public schools, 1 in every 5, sell branded food in the cafeteria.
- Teenagers' milk consumption decreased by 36% between 1965 and 1996, while soda consumption increased by more than 200%.
- Vending machines are in 43% of elementary schools and 97% of high schools.
- Only 29% of adolescents meet the recommended 60 minutes of daily physical activity.

- In 2003, the Centers for Disease Control declared obesity the most important public health issue in the United States.

In Delhi, the prevalence of overweight obesity in urban children is found to be increasing from 16% in 2002 about 24% in 2006. The overall prevalence of overweight varies from 7% to 24% and obesity from 2% to 8%, while in Chennai, the overall weight was 12. Percentage among the children's and 15.5% among the adolescents.

The situation is worse in case of children who from a very young age are hooked on fast food. The commonest scenario is a child who returns from school and plunks himself. In front of television, accompanied by a bowl of wafers or any other junk food. Making them change their food habits from fatty and sweet foods and develop taste for health promoting fruits and vegetables is a task easier said than done. Such children would grow up to be obese adults who have never felt the advantages of being a healthy weight to sum up, consuming fast food on a regular basis leads to many health hazards. However, bringing about changes in eating habits is not easy.

Consuming too much fast food not only turns a handsome guy into an unsightly obese man, but as Eric Schlosser points out in his book it is a big health hazard too. In addition, being physically inactive only adds to the problem obesity. Not many people who love fast food are ready to acknowledge that obesity is not simply an eye sore "It is a major risk factor for a large number of deadly diseases like hypertension, diabetes, high cholesterol, heart disease, and even many types of cancer.

Recent scientific studies have shown that high calorie foods; rich in fats, refined sugar and salt could reconfigure the hormones in the body in such a way that they make you crave for such foods and always leave you asking for more. In other words, fast food is somewhat addictive, you are hooked on to it and continue consuming it in an uncontrolled way inspired by knowing that it is unhealthy. The more you consume, the more difficult it is for you to opt for healthy foods.

In India even Chinese food sold in road side stalls is junk food, because they contain high amount of monosodium Glutamate (MSG) which is a flavor enhancer and this MSG is recognized as a health hazard if taken in large quantities. The evidence for this is described below.

Herbert M (1997) conducted a study to determine whether the subjects had, a statistical difference in the incidence of their specific symptoms after ingestion of monosodium glutamate (MSG) compared with placebo. The study selected 61 subjects. First 5 gm monosodium glutamate (MSG) was administered in random sequence. Subject who reached only to a single test agent underwent recalling in random sequence with placebo. The result revealed that 18 (29.5%) responded to neither placebo nor monosodium glutamate. Out of them 6 (9.8%) to both, 15 (24.6%) to placebo and 22 (36.1%) to monosodium glutamate. Total average severity of symptoms after ingestion of monosodium glutamate were greater than after placebo ingestion. The symptoms like headache, muscle tightness, numbness/tingling, general weakness and flushing occurred more frequently after monosodium glutamate ingestion. The study concluded that monosodium glutamate reproduced symptoms in alleged sensitive persons.

## II. EXPERIMENTAL WORK

A non-experimental study was conducted to assess the knowledge regarding effects of junk food consumption of between urban and rural among schoolchildren, at Tirupati.

**Research Design:** Comparative Research Design

**Setting:** The study is conducted at S.V.U. High School, Balaji Colony, Urban area, at Tirupati and Govt. High School, Chandragiri, Rural area, Chittoor District. Andhra Pradesh.

**Population:** ninth Class students studying in government high school, tirupati.

**Sample size:** The sample consists of 100, of which, 50 students from urban area, and 50 students from rural areas.

**Sample technique:** Simple random sampling technique.

**Criteria for sample selection**

- 9th Class students
- Students who are willing to participate in this study.
- Students who understands and speak Telugu.

The study is carried out by using structured questionnaire on effects of junk food consumption.

The questionnaire consists of three sections:

### Section-I

Consists of socio demographic data such as age, education, occupation, family income per month, religion, ordinal position of the child, number of siblings, type of family, place of residence, amount of pocket money.

### Section-II

It consists of ten multiple-choice questions related to knowledge on meaning, causes, sign and symptoms of junk food.

### Section-III

It consists of fifteen checklist questions related to knowledge on practices related to prevention of ill effects of junk foods.

Information Booklet consist of meaning, causes, sign and symptoms, advantages and disadvantages, prevention of ill effects of junk food.

### Score interpretation

Scoring key was prepared for section-I by coding the socio demographic data.

In section II and section III, each correct answer has a score of one mark and wrong answer carries zero. Thus, a maximum score of 10 was allotted to knowledge on junk food and maximum score of 15 was allotted to knowledge on practice on effects of consumption junk food.

The total score was 25

The scores were interpreted in the following manner.

< 50percentage - Inadequate knowledge.

50-75% - Moderately adequate knowledge

> 75% - Adequate knowledge

## III.RESULTS AND DISCUSSION

### Distribution of knowledge between Urban and Rural School Children on effects of junk food consumption

**TABLE-1**

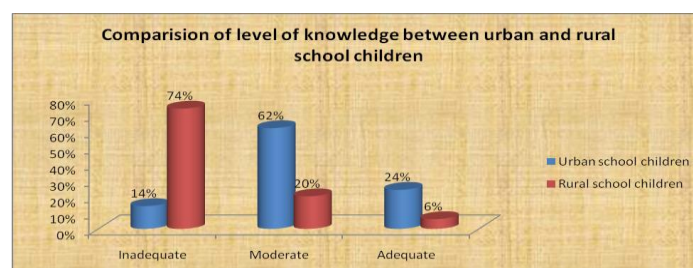
Level of knowledge between Urban & Rural School Children on effects of junk food consumption

n= Urban=50  
Rural=50

S.NO	Knowledge	Inadequate		Moderate		Adequate	
		F	%	F	%	F	%
1	Urban	07	14	31	62	12	24
2	Rural	37	74	10	20	3	6

Table 1 shows that 14% (7) of urban schoolchildren having inadequate knowledge 62% (31) were having moderately, 24% (12) were having adequate knowledge of effects of junk food consumption.

Among Rural School children, 74% (37) were having inadequate 20% (10) having moderate; 6% (3) were having adequate knowledge on effects of junk food consumption.



**Fig: 1 Percentage distribution of level of knowledge between urban and rural schoolchildren**

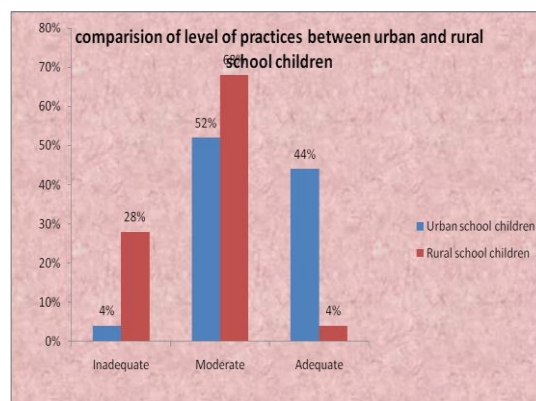
**TABLE – 2**

Distribution of level of knowledge on practices between Urban and Rural School Children on effects of junk food consumption.

n=Urban=50  
Rural=50

S.NO	Knowledge	Inadequate		Moderate		Adequate	
		F	%	F	%	F	%
1	Urban	02	04	26	52	22	44
2	Rural	14	28	34	68	02	04

Table 2 shows that 4% (2) of Urban Students were having in inadequate; 52% (26) were having moderate; 44% (22) were having adequate knowledge on practice regarding on effects of junk food consumption. Among Rural Students 28% (14) were having inadequate, 68% (34) were having moderate; 4% (2) were having adequate knowledge on practices on effects of junk food consumption.



**Fig; 2 Percentage distribution of level of practice between urban and rural schoolchildren**

**TABLE – 3**

**Comparison on knowledge and knowledge on practices between Urban and Rural School Children**

n = Urban=50  
Rural=50

S. N O	Variables	Urban			Rural			t-value
		M e a n	S D	M P	M e a n	S D	M P	
1	Knowledge	6.680	1.067	58.290	4.780	1.653	41.710	8.296**
2	Practice	11.200	1.442	56.225	8.720	1.844	43.775	8.305**
3	Overall knowledge & practice	17.880	1.915	56.979	13.500	2.602	43.021	11.526*

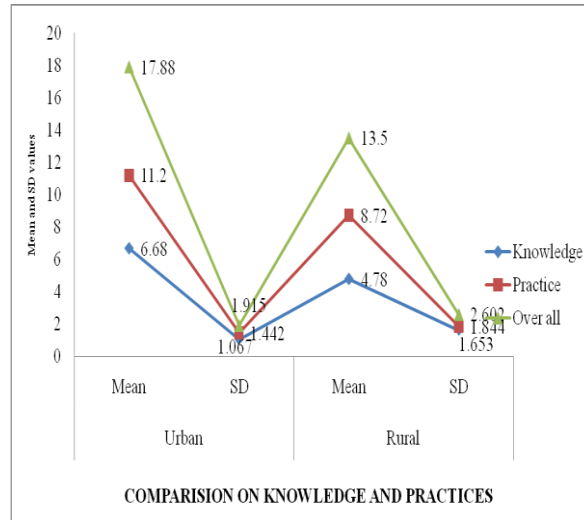
## Significance

\*\* = Significant at 0.01 level

\* = Significant at 0.05 level

NS = Not Significant

Table 3 Shows there is statistical significant difference of knowledge and knowledge on practices regarding effects of junk food consumption between Urban and Rural area school children at level  $P < 0.01$ .



**Fig: 3-percentage distribution of comparison of level of knowledge and knowledge on practice between urban and rural schoolchildren**

## CONCLUSION

The study findings revealed that there was significant difference between urban and rural schoolchildren's knowledge and practices regarding effects of junk food consumption.

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