

# **A Comparative Study of the Definition of Food made by the Rural and the Urban Secondary School Students**

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## **Introduction**

Bangladesh is a developing country and there is a tremendous need to obtain maximum benefit from educational investment. Nearly 110 million people inhabit in this deltaic land of 143, 998 square kilometers, of which eighty five percent live in rural areas. Since food is a basic factor for survival, it is essential that young people should learn in what ways food contributes to physical growth and how it influences their health. Adequate and clear knowledge about food is also essential for healthy living. The present study was designed according to Villavicencio (1981), where a standard definition was taken as reference. In Encyclopedia Americana (1957) the term food is defined as : A term used for the nutritive substances taken into the body of an organism for tissue building, to supply energy and to regulate the functions of the body. If looked into the contents of books in the secondary level, it is found that the term food is clearly

defined in books of class VI, VII, IX & X. But in the books of class VIII no information about food is available. Since the above mentioned definition is similarly provided in the books of secondary level, it is taken as a reference for the present study.

This study was carried out to assess the quality of definition of food made by the rural and the urban students from class VI to class X with the objectives firstly to compare the rural and the urban students quality of definition of food and secondly to identify the deficiencies among the rural and the urban students definition of food.

## **Materials and Methods**

The definitions made by the rural and the urban students from class VI to class X were evaluated according to the quality of definition based on above mentioned reference. The definitions were analysed as correct, partly wrong, incomplete, associative, negative, wrong, synonymic, tautological,

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and no response. To facilitate better understanding of this study some terms have been defined below :

### **Definition**

A definition is based on a correct standard definition given by the researcher after examination of internationally accepted scientific definitions.

### **Partly Wrong**

A definition is partly wrong when some elements are similar to the correct standard definition.

### **Associative**

An associative definition merely uses associations linked together to form a sentence but without the logical structures necessary in a definition.

### **Negative**

A negative definition defines a concept as the negation of its counterpart.

### **Wrong**

A wrong definition is one where no element of the definition given is similar to the correct standard definition.

### **Synonymic**

A synonymic definition is one using a different word for the same meaning.

### **Tautological**

A tautological definition is one that explains a concept with itself. (Secondary level is from class -VI to class-X, that is from age 11+ to 15+).

The percentage of frequency of response in each category out of the total number of categories for a class was calculated by taking mean of 3 rural and 3 urban schools separately for the respective classes. (Table-1).

The sample was taken from 3 rural and 3 urban secondary schools. Thirty students from each class of VI, VII, VIII IX and X of the six selected schools comprised the sample of students (a total of 900 student) for the study.

For data collection tests were administered in Bengali language during the normal school period. The students were asked to write a definition of the word food in their own words. The qualitative nature of the definition in respect to reference definition were analysed in order of correct, partly wrong, incomplete, associative, negative, wrong, synonymic, tautological and no response categories.

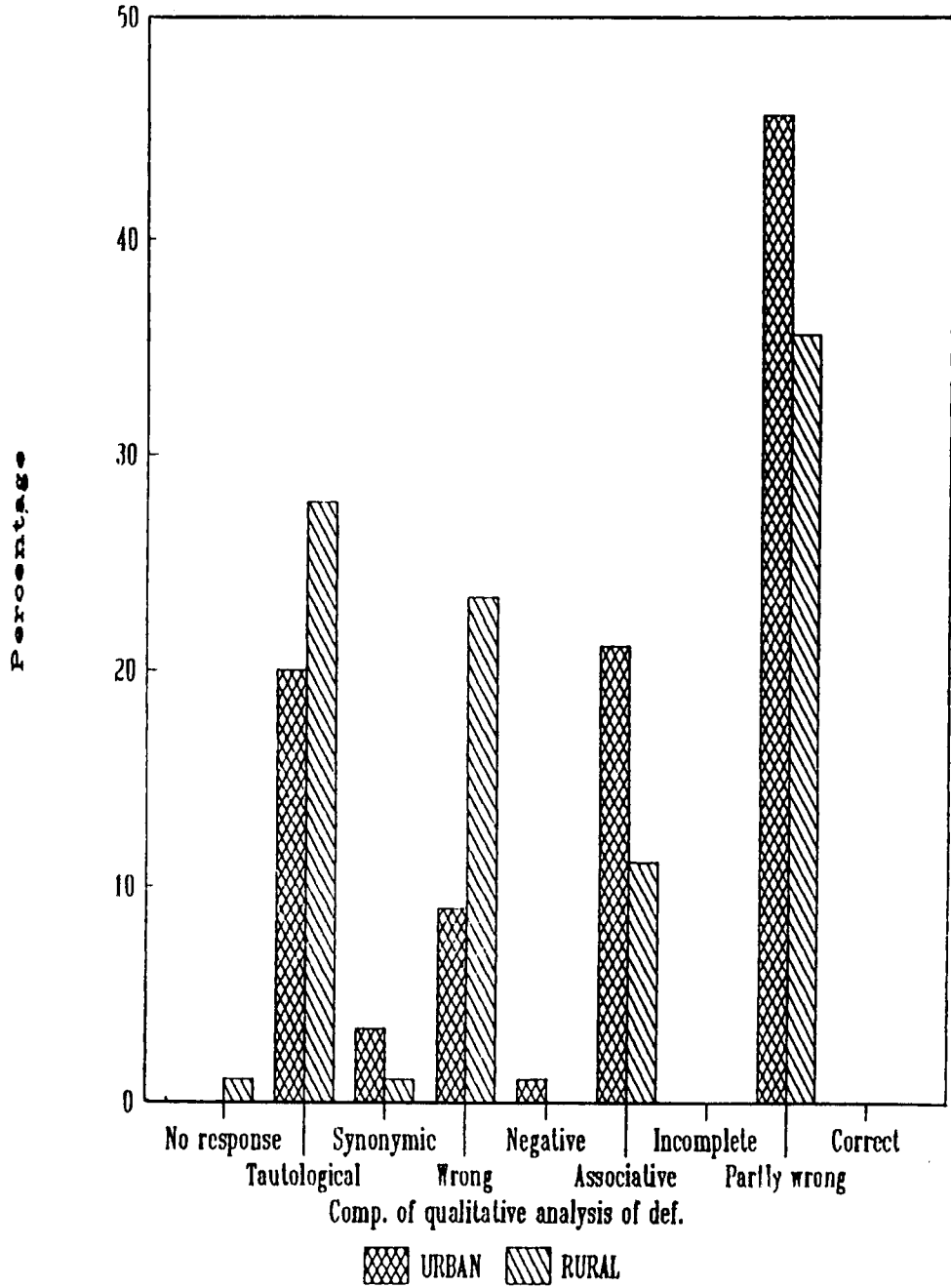
### **Results**

Following are the major findings of the study.

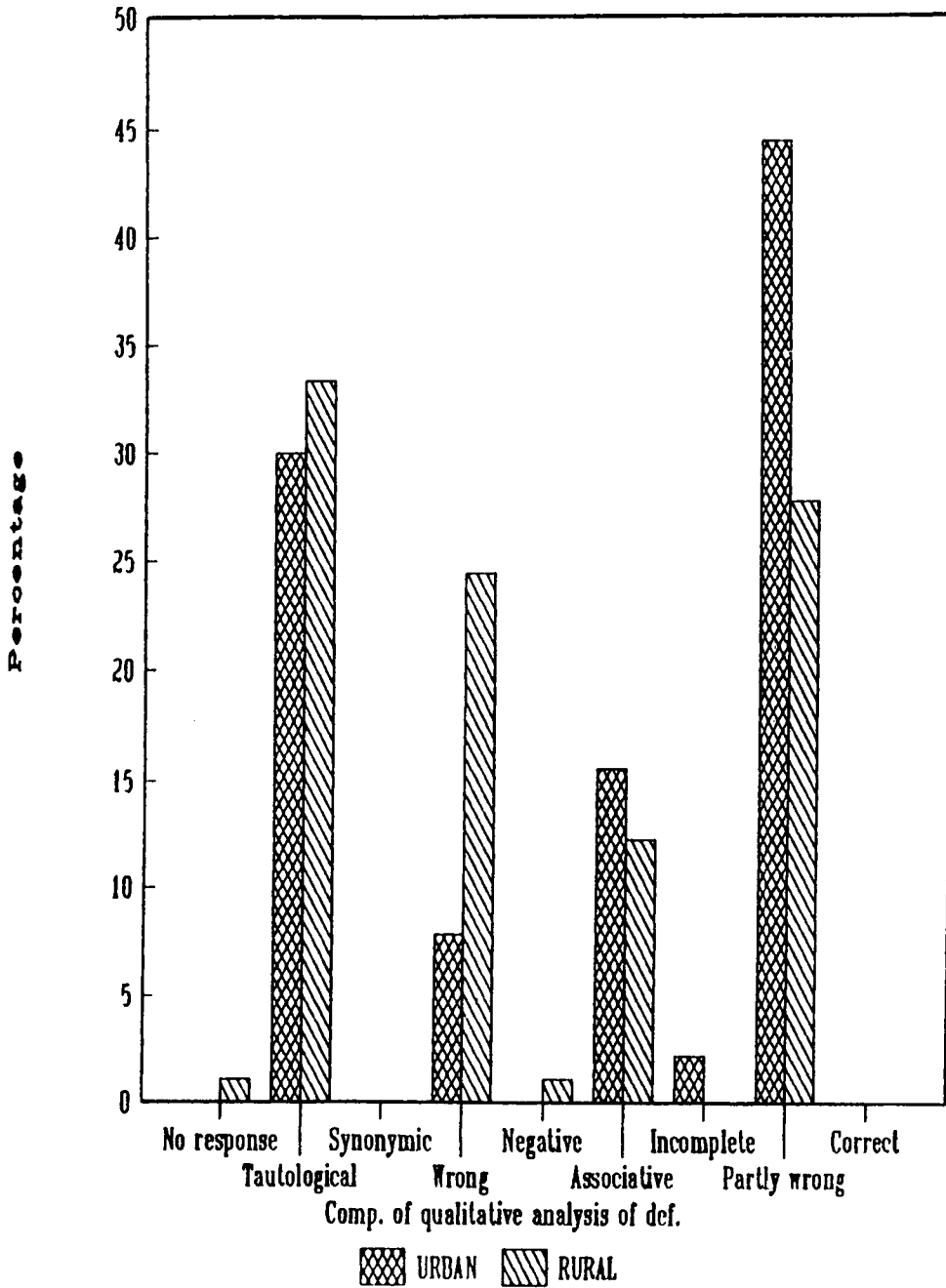
- a) Most of the definitions of both the rural and the urban students of class VI were partly wrong. A large percentage of rural definitions were of tautological, wrong and associative qualities. A considerable percentage of definition of urban students were associative and tautological in nature with some wrong and synonymic types. None of the definitions from rural and urban students was correct. (Fig-1).
- b) Among the class VII students the definition of the rural schools were mostly tautological and partly wrong types while that of urban students were partly wrong, tautological and associative qualities. There was no correct definition from both the groups. (Fig-2).
- c) Most of the definitions of both the rural and the urban students of class VIII were of incomplete quality. Definitions of the rural students were tautological and associative with some wrong types. A good number of the urban students definition were tautological, associative and synonymic qualities with a few wrong types. None of the two groups made negative, incomplete and correct definition (Fig-3).

**Table 1.** Quality of the definition of the term food.

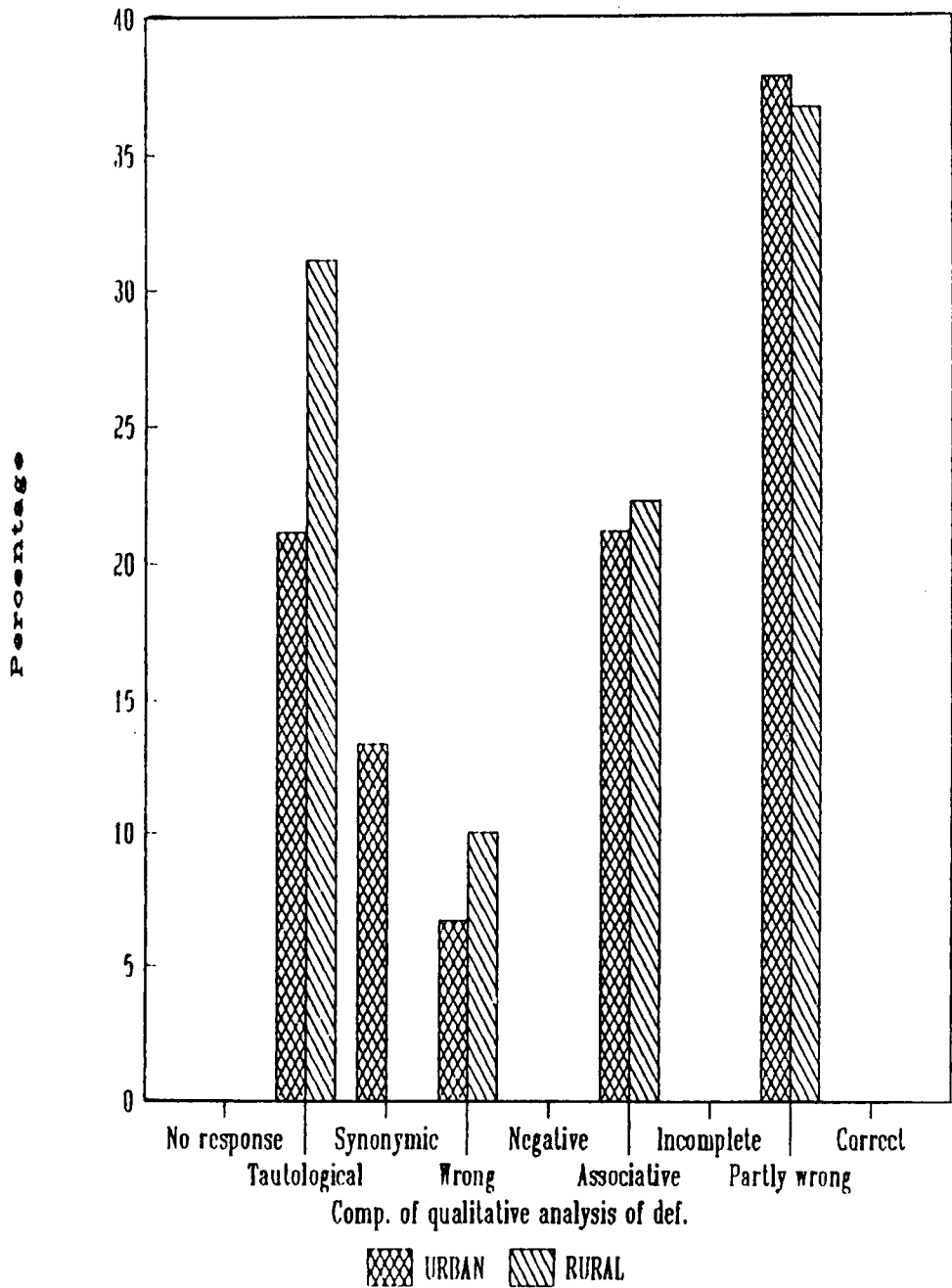
Quality of the definition made by the students (% of the students)										
class	Locality	Cor- rect	Partly wrong	Incom- plete	Asso- ciative	Nega- tive	Wrong	Syno- nymic	Tauto- logical	No res- ponse
VI	Urban	0	45.57	0	21.19	1.1	8.90	3.33	20	0
	Rural	0	35.57	0	11.13	0	23.33	1.1	27.77	1.1
VII	Urban	0	44.43	2.23	15.57	0	7.77	0	30.00	0
	Rural	0	27.70	0	15.23	1.1	24.47	0	33.33	1.1
VIII	Urban	0	37.80	0	21.10	0	6.67	13.33	21.10	0
	Rural	1	36.80	0	22.23	0	10.00	0	31.10	0
IX	Urban	0	61.10	0	7.73	2.23	5.57	6.67	15.56	1.1
	Rural	0	28.90	0	10.00	1.1	6.67	18.90	34.43	0
X	Urban	5.57	50.00	0	17.76	0	5.57	7.77	13.33	0
	Rural	0	41.10	0	13.33	1.1	10.0	8.90	25.57	0



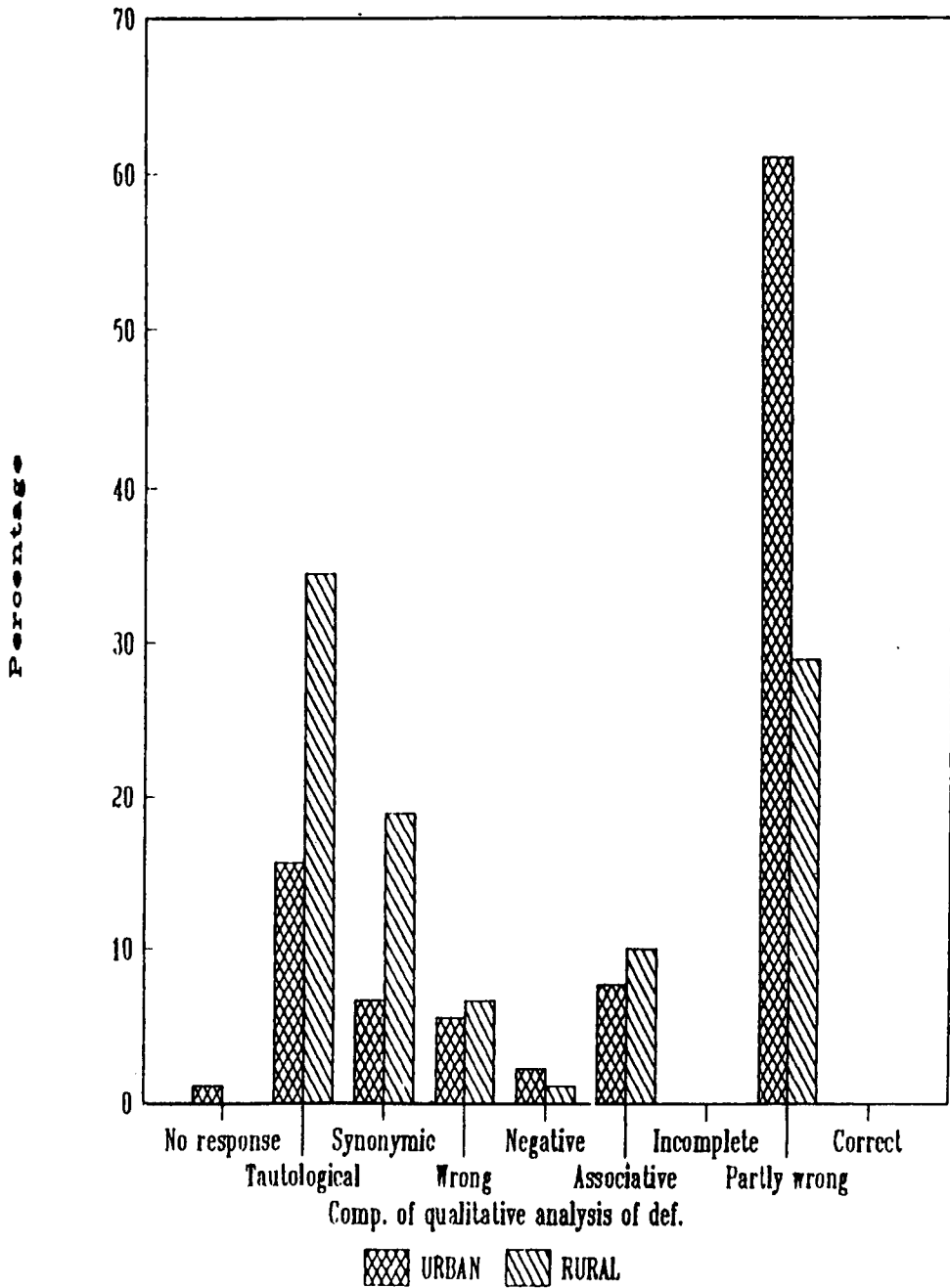
**Fig. 1** Quality of definitions made by class VI rural and urban students.



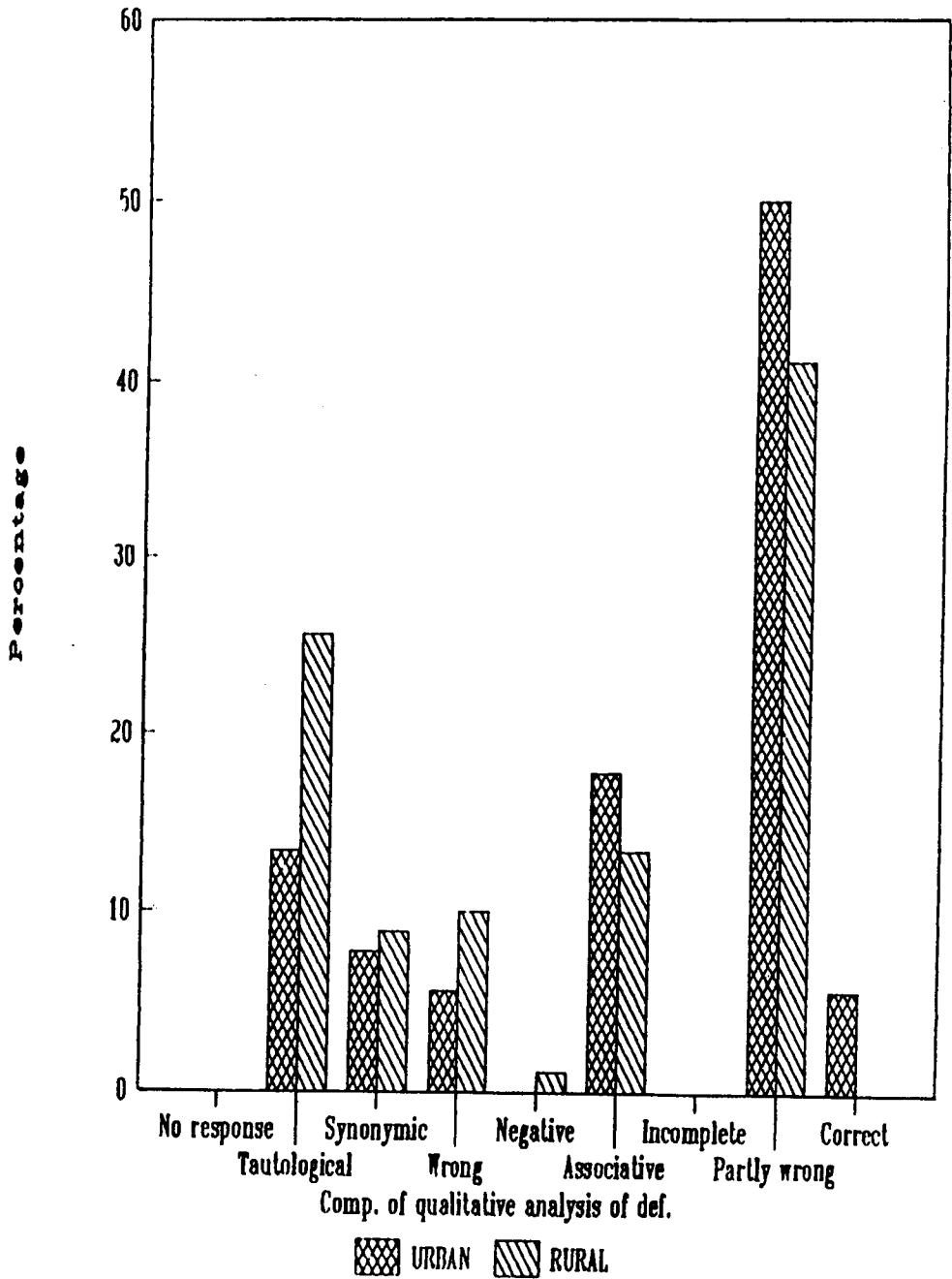
**Fig. 2** Quality of definitions made by class VII rural and urban students.



**Fig. 3** Quality of definitions made by class VIII rural and urban students.



**Fig. 4** Quality of definitions made by class IX rural and urban students.



**Fig. 5** Quality of definitions made by class X rural and urban students.



- d) Among the class IX students most of the definitions of both the rural and the urban students were of tautological and partly wrong qualities with some in the associative, synonymic and wrong types. There were very few negative definitions from both the groups with none in the correct and incomplete categories. (Fig-4).
- e) Most of the definitions from both rural and urban groups of class X were of partly wrong, while quite a number of the definitions were synonymic and wrong types. Some of the urban students could give correct definitions. (Fig-5).

### Discussion

The Bangladesh National Curriculum and Syllabus committee (1976) opined that the secondary schools are the only institutions that offer most promise of success in bringing about the proper concept of food in the rural and the urban areas. Present curriculum at the secondary level emphasized the formation of basic science concept to make the education functional in terms of national development efforts to improve quality of life of the people through promotion of health and nutrition. development of

agriculture, control of population and efficient use of resources. With the information given by the subjects, participating in the investigation, an attempt was made to determine what knowledge aspect regarding the concept of food is possessed by the rural and the urban students. The results from the investigation revealed that the rural and the urban students differ in the quality of definition in terms of classified categories. If looked into the difference in the deficiencies of definition of food among the rural and the urban students in the bar graph, it appears that there were little difference in the deficiencies of the rural and the urban students. In the analysis the qualitative nature of the definitions in respect to a reference definition were compared. This yielded an interesting insight into the epistemic structure of the test persons in regard to the definition of food. Though the rural population differed in the quality of school and home environment from those of the urban population it was obvious from the results that both the groups showed similar tendency in their quality of definition. Among many limitations towards improving the nutrition situation in this country, faulty dietary practices owing to the lack of proper knowledge about food and

how to remain better nourished within the means and circumstances available in a community or a family is the prime constraint under the present socio-economic structure prevailing in the country. Any improvement of nutritional status of the people must and first of all concentrate on educating the people by giving them correct knowledge of food.

### **Summary**

The quality of the definition of food made by the students of 3 rural and 3 urban secondary school of Bangladesh were tested and analysed by adopting methodology of Villavicencio (1981), where the test were administered by asking them to write a definition of the word food. It is found that the urban students could define in more logical manner than the rural students. But save for a very few of

the responses from class X students of the urban schools, none of the definition was fully correct from both rural and urban population. This clearly indicates that influence of curriculum in developing the correct concept of food among the students is inadequate. In order to overcome this deficiencies it is recommended that during teaching and training students should be provided with different types of activities such as experimenting, observing, reading etc. Daily life examples should be given to the students. All the secondary school teachers should be given to the students. By developing clear concept about things students will gain more knowledge. For achieving this goal the secondary school teachers should be qualified well trained and competent in their subject matter.

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