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Role of body weight and body figure in the determination of adolescent food habits

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ABSTRACT

Body weight showed non-significant difference for fast food and nutritional diet for 13-15 years old boys and girls adolescents. Body weight of boy's adolescent increased over normal body weight of 13-15 years. Whereas, lower body weight was observed in 16-18 boys adolescent and 13-15 years and 16-18 years girls where body weight was lower than normal body weight. The general body figure of boys and girls adolescent have nutritional diet except fast food and nutritional food habits in girls of 13-15 yrs and 16-18 yrs girls of nanus body figure respectively. Interestingly, girls of 13-15 yrs, had fast food in diet whose body figure was midget. The t-test indicated that boys and girls body figure had highly significant differences in their food habits in both age groups 13-15 yrs and 16-18 yrs.

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KEY WORDS : Adolescents, Body Figure, Body Weight.

Introduction

Now-a-days, interest is broadly growing public health concerns about weight, eating disorders and the linked continuum of health consequences. Body figure is a multidimensional assemble surrounding how we distinguish, think, feel, and act toward our body. Evidence that unhealthy body figure is associated with physical inactivity and plays a role in the development of eating disorders during adolescence[9]. Body figure is a multidimensional build which is central to emotional well-being in which the attitudinal component is in agreement with body size, a factor associated with confidence[3].

The physical changes also coincide with sensitive exposure and following comparisons to cultural principles of beauty. Other factors contributing to the complex relationship between weight status and body image include social influences, such as social comparison, fat talk, and weight-related maltreatment. Social comparison, which is the tendency to compare one's body or physique to that of others, is especially relevant among adolescents. Fat talk is associated with body dissatisfaction among adolescents. Presently, there is a lack of information referring to the association between body self-perception and eating patterns among overweight and body figure in adolescents. Therefore, this study was conducted to gather information which is needed for manipulative interventions to improve an effective nutrition, weight and body figure counseling for adolescents.

Methodology

This study was conducted in 400 adolescent boys and girls of 13 to 15 years and 16 to 18 years of age who were selected randomly from Gwalior, Morar and Laskhar for conducting this research work which represents the whole Gwalior City.

Variables: The independent variable (body figure) and dependent variable (weight) were used in samples under study in order to determine the adolescent's food habits.

(A) Body Figure: The present observation/ investigation was analyzed according to three types of body figure *i.e.* General, Midget and Sick.

(B) Body Weight: A weighing machine was used to take weight of the subject in kg. Weighing machine was placed on leveled ground and adjusted to zero before

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TABLE-1: Analysis of adolescent's food habit on the basis of their body weight

S.NO.	Body Weight (Kg)	Age Group							
		Boys				Girls			
		13-15 years		16-18 years		13-15 years		16-18 years	
		N F	F F	N F	F F	N F	F F	N F	F F
1.	30-32	4	1	1	1	1	2	1	1
2.	33-34	2	8	5	9	7	9	6	8
3	35-36	4	2	2	2	2	1	2	2
4.	37-38	1	6	9	11	5	12	10	10
5.	39-40	6	2	1	3	2	2	1	3
6.	41-42	2	8	6	9	5	7	5	12
7.	43-44	5	1	2	4	4	1	2	2
8.	45-46	3	7	8	13	9	9	5	2
9.	47-48	6	2	1	2	1	2	1	9
10.	49-50	2	10	4	1	1	6	-	1
11.	51-52	1	1	-	6	1	2	-	7
12.	53-54	1	1	-	-	3	7	-	-
13.	55-56	1	3	-	-	1	1	-	-
14.	57-58	1	1	-	-	4	1	-	-
15.	59-60	1	3	-	-	-	2	-	-
16.	61-62	1	1	-	-	-	-	-	-
17.	63-64	1	1	-	-	-	-	-	-
	Total	**42**	**58**	**39**	**61**	**46**	**64**	**33**	**57**

NF: denotes nutritional food, FF: denotes fast food.

measurement. The subject was made to stand erect without touching anything on the weighing balance with minimum clothing and weight was recorded in kg.

Data collection

All the 400 respondents were inclusively approached by the workers. By personal contact, all the respondents were contacted with the help of the structured schedule developed for the study. The statistical analysis was performed to calculate percentage, t-test, Arithmetic Mean and Standard[8].

Result and Discussion

Dietary habits, age and weight

Adolescent boys (13-15 yrs) whose body weight (kg) between 39-40 and 47-48 had maximum nutritious food habit followed by 43-44, 30-32, 35-36. Fast food habit was observed whose body weight was 49-50 (kg), 41-42

TABLE-2: Analysis of adolescents according to body figure

S.NO.	Category	Age Group							
		Boys				Girls			
		13-15 yrs		16-18 yrs		13-15 yrs		16-18 yrs	
		N F	F F	N F	F F	N F	F F	N F	F F
1.	General	17	32	22	27	19	20	14	25
2.	Midget (nanus)	15	10	10	10	17	19	16	8
3	(Weak) Sick	10	16	7	24	10	25	3	24
	Total	**42**	**58**	**39**	**61**	**46**	**64**	**33**	**57**

and 33-34. At the age of 16-18 yrs, adolescent boys had nutritious food habit whose body weights were 37-38 and fast food habit at the 45-46 (kg) (Table-1). Adolescent girl's weight (80%) stopped at their weight at their adolescent age[5]. Body weight of boy adolescents increased by 8.90% over normal body weight of 13-15 years. Lower body weight was observed in 16-18 boys adolescent and 13-15 years and 16-18 years girls where body weight was lower than normal body weight by -12.23, -4.39 and -10.78 % respectively.

Eating patterns, physical activity and attempts to change weight among adolescents occurred during adolescent age and also increased fast food consumption related to younger age and unmarried belonged to lower income of family[4,6]. The need of good nutrition is essential for maintaining a nutritional status that enables us to maintain health of adolescents.

Dietary habits, age and body figure

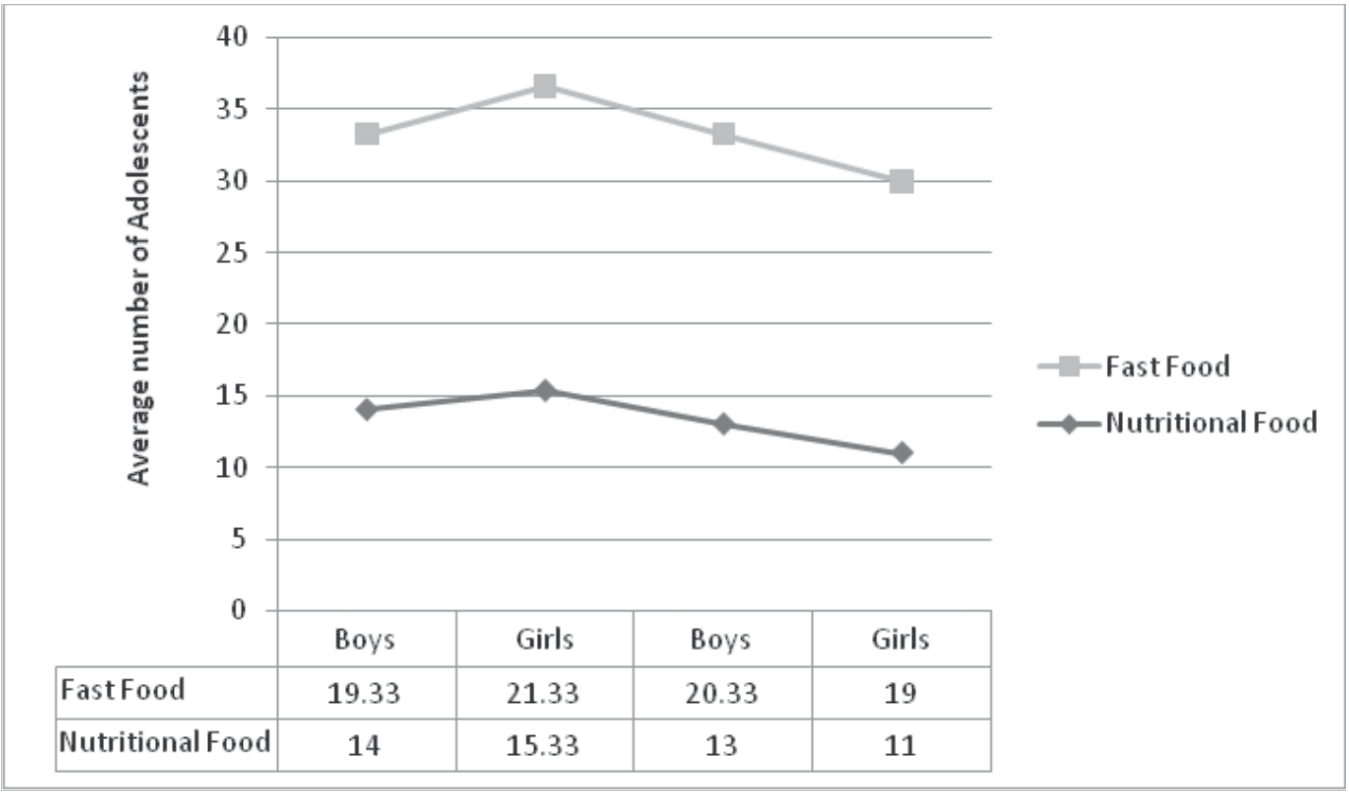
Body figure also influences the food habit of adolescents (Table-2). The general body figure of boys and girls adolescents have nutritional diet except fast food and nutritional food habits in girls of 13-15 yrs and 16-18 yrs girls of nanus body figure respectively. Interestingly, girls of 13-15 yrs, had fast food in diet whose body figure was midget (Fig. 1) .The t-test indicates that boys and girls body figure had highly significant differences in their food habits in both age group 13-15 yrs and 16-18 yrs (Tables 3 and 4).

Nutritional habits, body image and knowledge about nutrition and teen attitudes regarding overweight obese people and dieting[1], found that students knowledge of food, obesity and the danger of excessive diets were insufficient which support the finding of present study. Youth Risk Behavior Surveillance indicates that only 18.4% of adolescents met these physical activity guidelines[2]. In this study, the majority (ranging from 66.85 to 80.4%) of adolescents in the current study did not daily consume breakfast, fruit, vegetables and milk, while a considerable proportion frequently showed unhealthy

TABLE-3: Statistical Analysis of Adolescents of 13-15 years on the basis of body figure

S. No	Adolescent	Age Group				t value	df	Significance
		13-15 years						
		Nutritional food		Fast Food				
		Mean	Standard Deviation	Mean	Standard Deviation			
1.	Boys	14.0	3.61	19.33	11.37	2.92	98	HS
2.	Girls	15.33	4.73	21.33	3.21	7.93	108	HS

HS:denote highly significant at 0.01 level



	Boys	Girls	Boys	Girls
Fast Food	19.33	21.33	20.33	19
Nutritional Food	14	15.33	13	11

Fig.1 : Adolescents food habits according to body figure

dietary habits which led to under midget and weak (sick) body figure in adolescents. The consumption of fast food is not related to increased body weight[7].This confirms the findings of present study; where fast food did not effect in the enhancement of body weight, whereas nutritional food had significant role in boy weight increase in both age group (13 to 15 years and 16 to 18 years).

Conclusion

The present study revealed that fast food did not effect in the enhancement of body weight. Moreover, nutritional food had significant role in boy weight increase in boys and girls adolescents. Girls of 13-15 yrs, had fast food in diet whose body figure was midget. Boys and girls body figure had highly significant differences in their food habits in both age group 13-15 yrs and 16-18 yrs.

TABLE-4 : Statistical Analysis of Adolescents of 16-18 years on the basis of body figure

S. No	Adolescent	Age Group				t value	df	Significance
		16-18 years						
		Nutritional food		Fast Food				
		Mean	Standard Deviation	Mean	Standard Deviation			
1.	Boys	13.0	7.94	20.33	9.00	4.16	98	HS
2.	Girls	11.0	7.00	19.00	9.54	4.20	88	HS

HS: denote highly significant at 0.01 level.

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