

# A STUDY ON EFFECT OF LIFE STYLE HABITS ON OBESITY IN SCHOOL GOING CHILDREN

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**Abstract:** The incidence of childhood obesity has been increased alarmingly for the past three decades. To know the influence of life style habits in school going children on obesity and to create awareness for practicing healthy lifestyle. A questionnaire was circulated among 200 students between 10-14 years of age in a private school after taking permission from the authorities. 190 children participated in the study. 23 questions were asked which included the habits like eating chocolates, sleeping in the afternoon, playing outdoor or indoor, family history of obesity, mode of transport etc. Two image based questions were included to know their interests towards playing outdoor games or indoor videogames and liking towards junk food or fresh vegetables. The response was evaluated and represented graphically.

**Key Words:** Obesity, lifestyle habits, schoolchildren, junk foods, videogames.

## 1. INTRODUCTION:

Obesity is a condition where fat is accumulated in excess in various parts of the body. There has been a significant rise in the prevalence of obesity across the world. Globalization may be considered as one of the factors that have led to the increased incidence of obesity in India affecting all age groups. The highest prevalence rates of childhood obesity have been observed in developed countries, however, its prevalence is increasing in developing countries as well <sup>[1]</sup>. Studies show that childhood obesity is emerging out to be an epidemic. Obesity and overweight has increased more dramatically in economically developed countries and in urbanized populations <sup>[2]</sup>. Healthy life style from childhood definitely can prevent the development of obesity in the future of the individual. Because obesity is difficult to treat, public health efforts need to be directed towards prevention <sup>[3]</sup>. Several studies across the world conclude that the prevalence of childhood obesity due to unhealthy lifestyles is increasing at an alarming rate <sup>[4, 5, and 6]</sup>. As primary prevention is the best way to reduce the incidence of obesity, the present study was designed to discuss the results with the study group and give them valuable advice to follow a healthy lifestyle.

## 2. MATERIALS AND METHODS:

After obtaining required permission from the management, a self administered questionnaire (annexure-1) was circulated among 200 school children of a private school in Visakhapatnam. The questionnaire had 23 questions focusing on the lifestyle habits of the individual. The questions were explained and they were asked to fill with most appropriate answers. 190 forms were received. The results were tabulated and plotted graphically. Percentages were calculated to evaluate the answers. The report was discussed with the students under the supervision of the management. They were explained about the importance of primary prevention of leading healthy life style. The adverse effects of future obesity were taught to them. Significance of complete planned food, timing of food, physical exercise, sleeping habits were discussed in detail.

## 3. RESULTS:

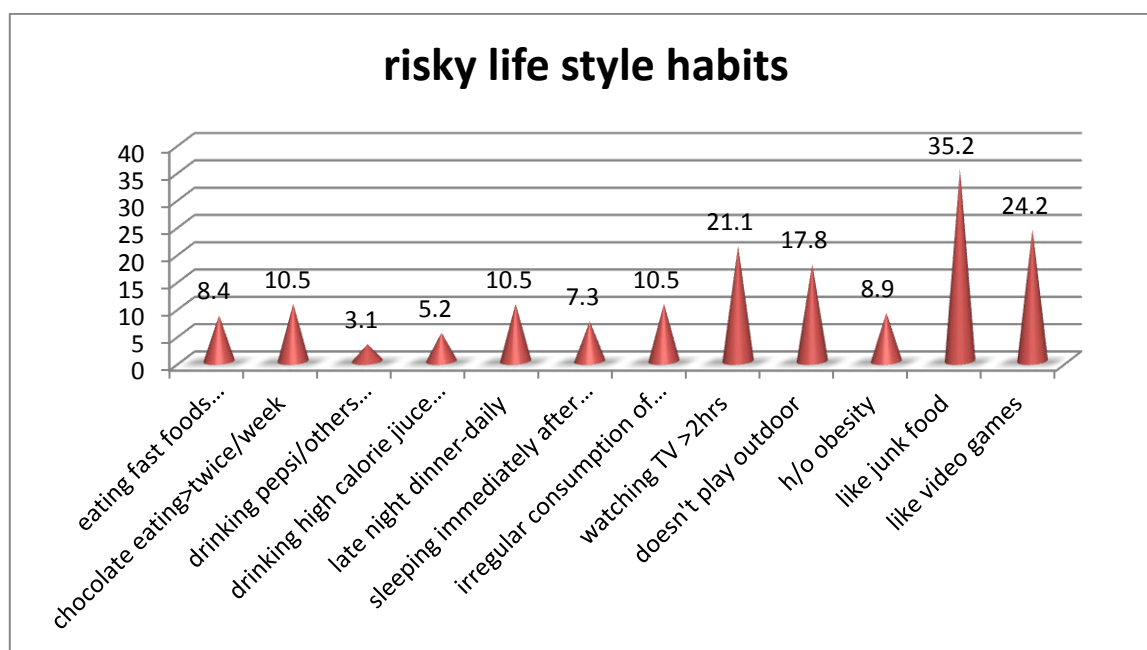
The following results were obtained from the study.

Q No.	Parameter	Options	Number	%
1	Age	10-14 yrs	190	
2	Gender	boys	110	57.89
		girls	80	42.11
3	Type Of Family	nuclear	154	81.05
		joint	36	18.95
4	Eating Fast Foods	donot eat	23	12.11
		once/week	110	57.89

		twice/week	41	21.58
		>twice/week	16	8.42
5	Chocolate Eating Habit	don't eat	12	6.32
		occasional	91	47.89
		once daily	56	29.47
		twice daily	11	5.79
		>twice daily	20	10.53
6	Drinking Pepsi/Carbonated Beverages	occasional	146	76.84
		once daily	26	13.68
		twice daily	12	6.32
		>twice daily	6	3.16
7	Drinking Badam Milk/Sugary Fruit Juice	occasional	108	56.84
		once daily	52	27.37
		twice daily	20	10.53
		>twice daily	10	5.26
8	Eating Snacks In Between Meals	no	102	53.68
		yes	88	46.32
9	Sleeping In Afternoon/Evening	no	154	81.05
		yes	36	18.95
10	Late Night Dinners	no	89	46.84
		occasional	81	42.63
		yes	20	10.53
11	Duration Of Sleep	>8hrs	171	90.00
		<8hrs	19	10.00
12	Time To Sleep After Dinner	immediately	14	7.37
		after 1/2hr	78	41.05
		after 1hr	53	27.89
		after >1hr	45	23.68
13	Consumption Of Fresh Fruits & Vegetables In A Week	irregular	20	10.53
		once	32	16.84
		twice	48	25.26
		>twice	90	47.37
14	Arriving at School	walk	16	8.42
		bicycle	10	5.26
		common transport	112	58.95
		own transport	52	27.37
15	Playing Sports/Games	yes	156	82.11
		no	34	17.89
16	Watching TV	<1hr	92	48.42
		1-2 hrs	58	30.53
		>2hrs	40	21.05
17	Playing Outdoor	1/2 hr	46	24.21
		1/2-1 hr	45	23.68
		>1hr	65	34.21
		doesn't play	34	17.89
18	Playing Indoor	1/2 hr	74	38.95
		1/2-1 hr	44	23.16
		>1hr	43	22.63
		doesn't play	29	15.26
19	Food Habits	vegetarian	77	40.53
		non-vegetarian	113	59.47
20	Family H/O Diabetes Or Hypertension	yes	37	19.47
		no	153	80.53

21	H/O Obesity For Parents	yes	17	8.95
		no	173	91.05
22	Likes	vegetables	123	64.74
		junk food	67	35.26
23	Likes	outdoor play	144	75.79
		video games	46	24.21

Graph 1: showing percentage of risky life style habits



#### 4. DISCUSSION:

Obesity is considered as a serious public health concern due to be increasing prevalence<sup>[7]</sup>. Many studies show that childhood obesity has become a global epidemic<sup>[8, 9, and 10]</sup>. The present study is designed to analyze the prevalence of childhood obesity through a questionnaire. One such study was done in Port Said city<sup>[11]</sup>. Students' response was evaluated and represented graphically. A good number of the students were found to practice healthy lifestyle habits. But there are also a considerable number of answers which reflect risky lifestyle habits that cannot be ignored. 35.2% of the students marked the option for their liking towards junk foods and 24.2% of the pupils selected to play video games as their interest. 21.1% of the students watch TV for more than 2 hrs daily which can be considered as unhealthy lifestyle. Apart from these answers remaining replies for risky lifestyle habits were less than 10%. The authors appreciated the management for creating awareness and inculcating good lifestyle habits for their school children.

#### 5. CONCLUSION:

The questionnaire based study was done school children of 10-14 years age group to understand the risk of developing obesity due to unhealthy lifestyle habits. A considerable number of answers reflected the risky lifestyle habits. The report was discussed with the study group and the importance of primary prevention of obesity by following healthy lifestyle habits was explained.

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### **Annexure-1**

1. Age:                      2. Gender:
3. Nuclear family or Joint family
4. Frequency to eat fast foods: (tick the correct option)  
a. donor eat              b. once/week              c. twice/week              d. more than twice/week
5. Habit of eating chocolates: (tick the correct option)  
a. doesn't eat              b. occasional              c.. Once daily              d. Twice daily              e. more than twice
6. Drinking habit of Pepsi/thumsup/sprite/any other carbonated drinks: (tick the correct option)  
a. occasional              b. once daily              c. twice daily              d. more than twice
7. Drinking habit of sugary fruit juices/badam milk/any other energy drinks: (tick the correct option)  
a. Occasional              b. once daily              c. twice daily              d. more than twice
8. Do you have a habit of eating sweets/snacks in between meals:  
No                              Yes (if yes, how many times a day):-
9. Do you sleep in the afternoon/evening ?              Yes              No
10. Do you have late night dinners: (tick the correct option)  
a. No              b. occasional              c. daily
11. Please mention the time at which you sleep and wake up daily-
12. Do you have sound sleep at nights ?

13. At what gap of time do you go to sleep after dinner?(tick the correct option)  
 a. immediately      b. ½ an hour after dinner      c. 1hr after dinner      d. more than 1hr after dinner
14. Frequency of consumption of fresh fruits and vegetables in a week:(tick the correct option)  
 a. irregular      b. once      c. twice      d. more than twice
15. How do you come to school?(tick the correct option)  
 a. walking      b. cycle      c. common transport      d. own transport
16. Do you play sports/games: (tick the correct option)      - Yes      - No
17. How much time do you watch television daily? (tick the correct option)  
 a. less than 1 hr      b. 1-2 hrs      c. more than 2 hrs
18. How much time do you play outdoor? (tick the correct option)  
 a. 30 min      b. 30 min-1hr      c. more than 1 hr      d. doesn't play
19. How much time do you play indoor? (tick the correct option)  
 a. 30 min      b. 30 min-1hr      c. more than 1 hr      d. doesn't play
20. Type of food you take---vegetarian or non-vegetarian
21. Does anyone in your family have Diabetes or Hypertension?      - No      - Yes (if yes, specify)
22. Does anyone of the parent is obese or overweight?      -No      - Yes (if yes, specify)
23. From the following, which food you like the most?



24. Tick the option which you like to play the most.

