

Evils of Watching Television on Catching Weight

V. Bhavani¹, Dr N. Prabhavathy Devi²

¹Dietician, ESIC Medical College and Hospital, KK Nagar, Chennai

²Assistant Professor, Queen Marys College, Chennai

Corresponding Author: V. Bhavani

ABSTRACT

The present study explored the impact of television watching habits on eating pattern among Chennai youngsters. The youngsters nowadays spend more time in gadgets especially television viewing. While watching Television, they are prone to be immobile and practice sedentary pattern, moreover they tend to consume junk foods which in turn increases the body weight and BMI. This scenario is very common among youngsters of the metropolitan city like Chennai. Thus 1000 college students (500 male and 500 female) were selected by stratified sampling and random sampling method. A standardized, pre-tested Interview schedule was used to collect the required information about the subjects. The interview schedule consists of television watching habits of the subjects and the questions on type of food consumption while watching television. The obtained data was subjected to coding using Microsoft excel; statistical analysis using SPSS version 20.0 and the results were interpreted. Majority of the participants (77%) watch TV for more than 2 hours in a day. About 67.7% of the participants had the habit of eating while watching TV. 25% participants consumed packet foods. About 22.6% and 10.6% participants preferred fried snacks and cool drinks respectively. Calorie dense foods namely packet foods and fried foods were consumed more by overweight subjects than others, whereas underweight subjects were reported to consume more cool drinks. Thus the purpose of the research is to study the impact of television viewing habit on eating pattern among Chennai youngsters.

Keywords: *Television, Junk foods, calorie dense food, BMI, Gadgets, Overweight*

INTRODUCTION

Watching Television (TV) represents a condition during which many habitually eat, irrespective of hunger level. several epidemiological and laboratory studies have linked television watching to both increases in acute food intake, and subsequent weight gain and adiposity. ^[1]

Researchers have proposed that time spent viewing TV may lead to obesity by one or a combination of the following mechanisms: (i) decreased physical activity (ii) increased energy intake (iii) increased sedentary behavior (iv) exposure to food advertising and (v) reduced sleep time. ^[2]

The marketing strategies used in TV commercials may lead to misconceptions about the nutritional value of the foods and are often more focused on psychological and emotional needs rather than hunger and other food characteristics. ^[3] TV viewing has been shown to coincide with extra calorie intake during viewing. As reported by Gerbner et al., 'One thing viewers do while watching is eat'. Moreover, while watching TV one is exposed to an increasing number of advertisements of food high in fat, sugar and salt, whereas food items such as fruit and vegetables are seldom advertised. ^[4]

Several studies have documented the increased intake of snack foods and calories among adolescents who watch more television. The relationship with fruit and vegetable consumption is, however, less clear. For example, Lowry et al found strong associations between TV viewing and eating insufficient fruit and vegetables for white student. ^[5]

Students who report watching more TV are more likely to consume sweets and/or soft drinks containing sugar on a daily basis. This may be because they eat sweets or drink soft drinks more often while they are watching TV or as a result of the advertisements they see when watching TV. [3]

Television viewing offers a surplus of time for food consumption, and a few studies have found that high levels of TV viewing were associated with reduced nutritional quality in the diet of school-aged children. Coon et al found that a large proportion of the foods eaten during TV viewing were of low nutritional value, [6] and Blass et al showed that TV viewing during meals increased energy intake. [7]

The American Academy of Pediatrics recommends limiting children's total media time (including TV viewing) to no more than 2 hours of quality programming per day [8]

Boys are more likely to watch TV than girls. In countries where age differences were found, 13-year-olds generally report watching more than 15-year-olds, with the 15-year olds watching more than 11-year-olds. Throughout childhood, TV dominates media usage and increased access to TV accompanies increased TV watching. It is now common to see more TVs in the home; additionally, young people are more likely to eat meals while watching the TV, to have TVs in their bedrooms and to have access to

videocassette recorders and DVD players. When adolescents are between the ages of 14 and 18 years, music media increases at the cost of TV viewing. [9]

MATERIALS AND METHODS

In the present study, stratified sampling and random sampling method was adopted. The research type of the present study is Descriptive type. About 1000 college students (500 male and 500 female students) in the age group of 19-22 years from Government and Government aided Arts and Science colleges were selected using the above methods. The study was conducted in the area of Chennai, India. Ethical clearance was obtained from Universal Ethics board to conduct the study. Permission from college authorities was obtained to conduct the study. The selected students were briefed about the purpose of the study and written consent was obtained from them. A standardized, pre-tested Interview schedule was used to collect the required information about the subjects. The interview schedule consists of television watching habits of the subjects and the questions on type of food consumption while watching television. A pilot study was conducted among the subjects to check the reliability and validity of the interview schedule. The obtained data was subjected to coding using Microsoft excel, statistical analysis using SPSS version 20.0 and the results were interpreted.

RESULTS AND DISCUSSION

Table -1: Television watching habits

Television watching Habits	Male N=500	Female	Total	Chi-square	P value
Yes	430 (55.8)	340 (44.2)	770 (77)	45.737	<0.001**
No	70 (30.4)	160 (69.6)	230 (23)		
Total	500 (50)	500 (50)	1000 (100)		

The above table reported the TV watching pattern of the participants. It is clearly reported that majority of the participants (77%) watch TV for more than 2 hours in a day. Among them, 55.8% were male and 44.2% were female. A study done by Mohamad Nidal (2017) showed that more

than two-thirds of study participants were spending 3 to 4 hours in watching TV, using the internet or play station. About 70% participants were spending 3 or more hours daily in watching TV, using the internet or play station. [10]

Table-2: Eating while watching Television

Eating while watching Television	Male	Female	Total	Chi-square	P value
Yes	314(60.2)	207(39.8)	521(67.6)	12.791	<0.001**
No	116(46.5)	133(53.4)	249(32.4)		
Total	430	340	770		

The present study also showed that about 67.7% of the participants had the habit of eating while watching TV. Among them, about 60.2% and 39.8% were male and female respectively.

Table -3: Type of food while watching TV

Type of food while watching TV	Male	Female	Total	Chi square	P value
Packed food	100 (76.9)	30 (23.1)	130 (25)	116.624	<0.001**
Fried food	68 (57.6)	50 (42.4)	118 (22.6)		
Nuts	24 (53.3)	21 (46.7)	45 (8.6)		
Fruits	24 (88.9)	3 (11.1)	27 (5.2)		
Cool drinks	53 (96.4)	2 (3.6)	55 (10.6)		
Meals	4 (10.8)	33 (89.2)	37 (7.1)		
Whatever available	41 (37.6)	68 (62.4)	109 (20.9)		
Total	314 (60.2)	207 (39.7)	521 (100)		

The current data demonstrated type of food consumed while watching TV. From the above table it is revealed that 25% participants consumed packet foods. About 22.6% and 10.6% participants preferred fried snacks and cool drinks respectively. About 8.6% and 5.2% chooses nuts and fruits respectively and about 7.1% participants consumed meals while watching TV and 20.9% reported that they eat whatever available while watching TV.

Table-4: Effect of TV Watching on BMI

	BMI Categorization						Chi –square level	P value
	CED	Underweight	Normal	Overweight	Obese	Total		
Yes	23 (3) [50]	178 (23.1) [75.1]	339 (44) [77.2]	193 (25.1) [82.4]	37 (4.8) [85.5]	770 (100) [7.7]	25.825	<0.001**
No	23 (10) [50]	59 (25.7) [24.9]	100 (43.5) [22.8]	41 (17.8) [17.5]	7 (3) [15.9]	230 (100) [23]		
Total	46 (4.6) [100]	237 (23.7) [100]	439 (43.9) [100]	234 (23.4) [100]	44 (4.4) [100]	1000 (100) [100]		

Table-5: Effect of type of food consumption while watching TV on BMI

	BMI Categorization						Chi- square level	P value
	CED	Underweight	Normal	Overweight	Obese	Total		
Packet foods	3 (2.3) [27.3]	24 (18.5) [20.3]	48 (36.9) [23.8]	40 (30.8) [26.1]	15 (11.5) [40.5]	130 (100) [25]	72.371	<0.001**
Fried foods	3 (2.5) [27.3]	18 (15.3) [15.3]	35 (29.7) [17.3]	45 (38.1) [29.4]	17 (14.4) [45.9]	118 (100) [22.6]		
Nuts	0 (0) [0]	15 (33.3) [12.7]	22 (48.9) [10.9]	8 (17.7) [5.2]	0 (0) [0]	45 (100) [8.6]		
Fruits	1 (3.7) [9.1]	5 (18.5) [4.2]	13 (48.1) [6.4]	8 (29.6) [5.3]	0 (0) [0]	27 (100) [5.2]		
Cool drinks	1 (1.8) [9.1]	20 (36.4) [16.9]	24 (43.6) [11.9]	7 (12.7) [4.5]	3 (5.5) [8.1]	55 (100) [10.6]		
Meals	2 (5.4) [18.2]	7 (18.9) [5.9]	22 (59.5) [10.9]	5 (13.5) [3.2]	1 (2.7) [2.7]	37 (100) [7.7]		
Whatever available	1 (0.9) [9.1]	29 (26.6) [24.6]	38 (34.9) [18.8]	40 (36.6) [39.2]	1 (0.9) [2.7]	109 (100) [20.9]		
Total	11 (2.1) [100]	118 (22.6) [100]	202 (38.8) [100]	153 (29.3) [100]	37 (7.1) [100]	521 (100) [100]		

Note: Values within () denote row percentage; Values within [] denote column percentage
 ** denote 1% level significance

The current study states that about 83% of overweight subjects reported to watch television for more than two hours per day. This shows television watching is one of the causative factors for increased BMI.

The study conducted by *khan (2016)* described that among all sedentary behaviors, watching television for a longer period was the most predictive of obesity and diabetes risk. ^[11] A study conducted by *Basu (2016)* pointed out an association of watching television and using computer for a long time with high BMI. ^[12]

The present study stated that calorie dense foods namely packet foods and fried foods were consumed more by overweight subjects than others, whereas underweight subjects were reported to consume more cool drinks. It is interesting to note that participants with normal BMI consumed meals during television watching. Consumption of fruits intake is found to be less in overweight subjects, whereas it is reported to be more among participants with normal BMI.

A study conducted by Pearson et al, 2011 showed that the relationship between sedentary activities with unhealthy dietary habits would be because of the reason that adolescents are likely to consume soft drinks and junk foods while watching TV. ^[13]

SUMMARY AND CONCLUSION

Spending time in front of gadgets like Television has become a common phenomenon in today's world. Our study concludes that consumption of junk and other energy dense food is more during watching television which leads to increased BMI. Thus it is essential to educate both the children and parents regarding the ill effects of eating and TV Watching. Students should not be allowed to eat while watching TV, in such cases there should be encouraged to eat healthy choices like fruits, salads, sprouts. Both school and college students should be motivated to perform physical activities

instead of spending time with gadgets. Chronic sedentary activities with consumption of energy dense food increase the chances for non-communicable diseases. Thus, this transition phase highly essential for change of lifestyle habits for a healthy life. College students are the future pillars of the nation, constant encouragement regarding Healthy lifestyle should be initiated to the college students to prevent non-communicable diseases.

REFERENCES

1. Colin D. Chapman ., Victor C. Nilsson., Hanna Å. Thune., Jonathan Cedernaes., Madeleine Le Grevès., Pleunie S. Hogenkamp., Christian Benedict., Helgi B. Schiöth. (2014). Watching TV and Food Intake: The Role of Content, PLoS One , vol 9, iss 7
2. Rael Cox., Helen Skouteris., Leonie Rutherford., Matthew Fuller- Tyszkiewicz. (2012). Television Viewing, television content, food intake, physical activity and BMI: A cross sectional study of preschool children aged 2- 6 years
3. Carine A Vereecken., Joanna Todd., Chris Roberts., Caroline Mulvihill., Lea Maes. (2005). "Television viewing behavior and associations with food habits in different countries", *Public Health Nutrition*, vol 9 iss 2, pp 244–250
4. Gerbner, G., Morgan, M. (1982). "Programming health portrayals: what reviewers see, say and do: Television and Behaviour, Ten years of scientific progress and implication for the eighties US Govt printing press office, pp 291-307.
5. Lowry, R., Wechsler, H.(2002). TV Viewing and its association with overweight, sedentary lifestyle, and insufficient consumption of fruits and vegetables among US high school students: difference by races, ethnicity, gender. *Journal of School Health*, vol 72 issue 10, pp 413-21
6. Coon, KA., Goldberg J., Rogers BL., Tucker KL. (2001). "Relationships between use of television during meals and children's food consumption patterns", *Pediatrics*, vol 107
7. Blass, EM., Anderson DR., Kirkorian HL., Pempek TA., Price I., Koleini MF. (2006).

- “On the road to obesity: Television viewing increases intake of high-density foods”, *Physiol Behav*, vol 88, pp 597-604.
8. AAP, Children, adolescents and television pediatrics. (2001), Vol 107, iss 2, pp 423-6
 9. Saelens, BE., Sallis JF., Nader PR. (2002). “Home environmental influences on children television watching from early to middle childhood”. *Journal of Developmental and Behavioral Pediatrics*, vol 23, iss 3, pp 127-32.
 10. Mohammad Nidal Khabaz., Marwan Abdul Rahman., Abdullah Gari. (2017). “Dietary Habits, lifestyle pattern and obesity among young Saudi University students”. *Journal of Pakistan Medical Association*, vol 67, iss 10, pp 1541-1546.
 11. Khan ZN., Jameel, N., Khalil. (2016). “Explaining Nutritional status, physical activity and BMI of Pakistani teens”. *International Journal of Res Medical Sciences*, vol 4, pp 3563-9.
 12. Basu, M., Sarkar, K., Shahbabu B., Ray S. (2016). “Patterns and determinants of overweight and obesity among Medical students in Kolkatta”. *Int J. Pharma Sciences Res*, vol 7, pp 377-86.
 13. Pearson, N., Bladdle. (2011). “Sedentary Behaviour and dietary intake in children, adolescents and adults. A systematic Review”, *American Journal of Preventive Medicine*, vol 1, issue 2, 178-188

How to cite this article: Bhavani V, Devi NP. Evils of watching television on catching weight. Galore International Journal of Health Sciences & Research. 2019; 4(4): 50-54.
