Effect of Junk Food on Obesity Status of School Children

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Abstract – A healthy diet is very essential to get sufficient nutrients and also to maintain good and disease free health style. Nutrients include protein, carbohydrates, fats, water, vitamins and minerals which helps with our day to day activities by providing essential energy. Change in lifestyle and eating habits among children affected the nutritional status and also created many health problems including obesity. Junk food became popular among children due to its attractive appearance, taste, convenience, low cost, availability and easy to consume. Several studies proved that junk food causes health problems like obesity, heart disease, hypertension and even cancer. Keeping this in mind the present study was designed to find the obesity status of junk food habitual and non-habitual students. The study was carried out on 40 boys of residential school children between the age group of 11 to 14 of Gwalior city who have equal duration of physical activity of two hour a day. The result reveals that the boys who are habitual of junk food comes under obesity and overweight category while non-habitual comes under normal or underweight category.

Key Words – Junk Food, Obesity & School Children

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INTRODUCTION

Children require proper dietary habit without which they will face severe health consequences like obesity, diabetes, high blood pressure and even cancer. Junk food became the favourite food among school children. Junk food contains trans-fat, sugar and high calorie with less nutrients. It has been noticed that children do not clearly understand the health consequences of junk food consumption and they prefer it more due to variety of reasons including convenience, taste, availability, price, even-though it causes obesity and other health problems (Fleck,2014). Regular intake of junk food cause children to become addictive which further leads to complications like overweight and obesity.

Excess consumption of junk food leads to obesity which likely to increase the risk of diabetes, high blood pressure and other heart diseases. During the digestion process after the consumption of junk food the pancreas has to work continuously to secrete large amount of insulin to prevent blood sugar spikes. Restricting the consumption of junk food is one way to keep cholesterol low, prevent obesity and other cardiac diseases (A, 2014).The school going students are becoming more addictive to junk foods and studies shows that they are less aware of the health risks due to the consumption of junk food. Even the teachers are less bothered about the health status of their students. The present study was aimed to find out the impact of junk food habits on obesity status of school going children.

METHODOLOGY

A cross-sectional study was conducted in Gwalior city. After taking permission from education office, one of the boarding school where physical activities are equal to all students has been selected. A sample of 40 school going children (boys), aged 11 to 14 years were selected as a samples. The Selection of sample was done on the basis of Junk-food eating habit.

Junk Food Questionnaire

General dietary habits were collected using pre tested Junk food questionnaire. On the basis of questionnaire, students were categorized as Junk Food Habitual (H) and Junk Food Not Habitual (NH). Anthropometric Measurements Anthropometry is one of the most basic tools for assessing nutritional status, whether over-nutrition or under nutrition. There are several methods available to measure body fatness and body thinness. Amongst all measurements height and weight based measurements are the most commonly and practical tools used in community surveys, for assessing nutritional status. Height was measured without

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footwear by using anthropometer to nearest 0.1 cm and while measuring height subjects were asked to look straight. The student stood straight with heels, buttocks and back touching the vertical limb of the wall. Portable weighing machine was used to measure weight of children without shoes and wearing minimum necessary clothes. It was recorded to the nearest 0.5 kg (R.Kashyap, 2014).

BMI

The value of Body mass index (BMI) was calculated. Body mass index was determined using the body weight (kg) and height (M) measurements using the following formula.

BMI = Body weight (kg) / Height (m) 2

Table-I : BMI Reference chart

BMI	WEIGHT STATUS
Below 18.5	Underweight
18.5 to 24.9	Normal
25.0 to 29.9	Overweight
30.0 and above	Obese

RESULT

Table-II: Group Statistics

	Groups	N	Mean	Std. Deviation	Std. Error Mean
Variables	1.00	20	29.7250	1.79323	.40098
	2.00	20	19.7600	2.13132	.47658

TABLE-II The data in the table summarizes the descriptive statistic (mean, standard deviation, and standard error) for the junk food habitual and junk food non habitual variables. The mean value of junk food habitual is 29.7250 whereas junk food non habitual is 19.7600. The standard deviation are 1.79323 and 2.13132 respectively.

Table-III: Independent Samples Test

		Levene's test for equality of variance		t-test for equality of means				
		F	Sig.	t	df	Sig. (2-tailed)	Mean difference	Std. Error difference
variables	Equal variances assumed	1.020	.319	16.000	38	.000	9.96500	.62282
	Equal variances not assumed			16.000	36.920	.000	9.96500	.62282

*Level of significant at 0.05.

Table 3 provides the answer for the research question. The significant level of .000 proves that there is a significant difference between the junk food habitual and junk food non habitual students.

DISCUSSION OF FINDINGS

The school going students are becoming more habitual to junk food. The parents and teachers are least bothered about the growing junk food habit of their children. Consumption of junk food causes serious health issues and most of the children are unaware of it. The result of this study proves that the junk food habitual children are more prone to obesity than those who are non-habitual.

Previous study by Shubha Devi on junk food consumption among secondary levels students of chitwan suggests that junk foods are consumed on a regular basis by school children because of the taste and influenced advertisements. More than half of the students are unaware of the health risks and most students fall under obese category and have serious health issues (Devi, 2017).The study done by Bhaskar Rajeev on the health problems related to the consumption of junk food shows that junk food might cause serious health problems like heart disease, high cholesterol, lack of concentration, diabetes, dental problems, kidney diseases, cancer and obesity especially among the school children who are more habitual to junk food (Rajeev, 2012).

CONCLUSION

This study concludes that the regular consumption of junk food causes obesity and other health problems among school children which can cause further problems in later age. Several studies carried out by researchers on school children of various places shows the same result. The study recommends that awareness classes should be conducted in each institution giving knowledge to all the teachers, parents and students regarding the harmful health problems due to the consumption of junk food and also about the healthy dietary practices.

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