



## CONSUMPTION OF JUNK FOOD BY SCHOOL GOING CHILDREN IN ROHTAK DISTRICT, HARYANA: A CROSS-SECTIONAL STUDY

**Dr. Ginni Agrawal**

Junior Resident-Department of Community Medicine, Pt.B.D.Sharma PGIMS, Rohtak

**Dr. Piyush Jain\***

Junior Resident- Department of Forensic Medicine, Pt.B.D.Sharma PGIMS, Rohtak \*Corresponding Author

**Amit Kumar Mital**

Senior Resident-Department of Paediatrics BPS GMC, Khanpur Kalan, Sonapat, Haryana

### ABSTRACT

**BACKGROUND:** Consumption of energy dense food with high sugar/fat/salt content and low nutrient value in terms of protein/fibre/vitamin/mineral content constitute Junk Food which invites various health problems. High consumption of JF is associated with increased risk of obesity, diet-related noncommunicable-diseases (hypertension/diabetes/dyslipidaemia/metabolic-syndrome/cancers/etc) indicating burgeoning health concerns in the near future for children.

**OBJECTIVE:** Young generation is getting addicted to JF indicating a serious public health problem; hence this study was conducted to find the prevalence and determinants of JF consumption among school going children of Rohtak district.

**MATERIAL AND METHODS:** A cross-sectional study was conducted among 200 children, selected randomly, studying in a government school of district Rohtak, Haryana, by using semi-structured self-administered questionnaire. Data was analysed using SPSS-Software.

**RESULTS:** High prevalence (84.5%) of JF consumption during the last 24-hours among school children (Mean age= 13.40±1.79years) was found, out of which 53.85% were males and 46.15% were females. JF intake was found to be higher among males (p=0.01). The most popular JF item was chips (68.05%) followed by soft-drinks (66.86%), chocolate (56.80%), bakery-products (46.75%) and others (25.44%). However, 64.50% children were consuming 2 or more JF items in the last 24-hours of the survey. The study found that the JF was consumed mainly as snacks from shops outside the school after the school-hours.

**CONCLUSION:** There is need to initiate nutrition interventions to reduce the high intake of JF by educating children regarding the possible health consequences. The formation of laws to regulate the marketing and advertising JF around school premises may help in reducing the consumption of JF among children.

### KEYWORDS :

#### INTRODUCTION:

Food is very essential for growth and development. Good food is the right kind of food which is healthy; containing natural substances that body needs for development and to stay healthy. Food that can be served ready to eat fast refers to fast food. Consumption of energy dense food with high sugar/ fat/ salt content and low nutrient value in terms of protein/ fibre/ vitamin/ mineral content constitute Junk Food. The terms fast food and junk food can be used interchangeably.

Nutrition transition is the shift in dietary consumption and energy expenditure that coincides with economic, demographic, and epidemiological changes. Specifically the term is used for the transition of developing countries from traditional diets high in cereal and fibre to more Western pattern diets high in sugars, fat, and animal-source food. India is experiencing "nutrition transition" characterized by increasing consumption of junk/ fast food. The double burden of undernutrition and overnutrition in developing countries is a public health challenge.

High fat and sugary products being addictive in nature attract children over healthy foods. The ready availability, taste, commercial marketing strategies, and peer pressure makes junk food popular among children and adolescents.

High consumption of junk food is associated with increased risk of obesity, diet-related non-communicable-diseases (hypertension/ diabetes/ cardio-vascular disease/ dyslipidaemia/ metabolic-syndrome/depression/ cancers) indicating burgeoning health concerns in the near future for children. Young generation is getting addicted to junk food indicating a serious public health problem; hence this study was conducted with the aim to find the prevalence and

determinants of junk food consumption among school going children of Rohtak district, Haryana.

#### METHODOLOGY:

A cross-sectional study was conducted among 200 children, selected randomly by the purposive sampling method, studying in a government school of district Rohtak, Haryana, using a semi-structured self-administered questionnaire. Data was entered in MS Excel sheet and analysed using SPSS-Software.

#### RESULTS:

High prevalence (84.5%) of JF consumption in the last 24-hours among school children was found. (Mean age=13.40 ± 1.79 years). Out of 200 study participants 169 were the total subjects who had taken junk food in the last 24-hours, of which 53.85% were males and 46.15% were females (Table-1).

Junk food intake was found to be higher among males (p=0.01). The most popular junk food items were chips (68.05%) followed by soft-drinks (66.86%), chocolate (56.80%), bakery-products (46.75%) and others (25.44%) (Table-2).

However, 64.50% children out of 169 junk food consumers were consuming 2 or more junk food items in the last 24-hours of the survey (Table-3). The study found that the JF was consumed mainly as snacks from shops outside the school after the school-hours.

**Table-1: Distribution of the study subjects according to the junk food intake in the last 24-hours**

Gender	Frequency (N= 169)	Percentage (%)
Male	91	53.85%

Female	78	46.15%
Total	169	100%

**Table-2: Junk food items consumed in last 24-hours.**

S.no.	Items	Frequency (N=169)	Percentage (%)
1.	Chips	115	68.05%
2.	Soft-drinks	113	66.86%
3.	Chocolate	96	56.80%
4.	Bakery products	79	46.75%
5.	Others	43	25.44%

\*(Multiple response)

**Table-3: Distribution of the study subjects according to the junk food consumption.**

Items consumed in last 24-hours	Frequency (N=200)	Percentage (%)
Single junk food item consumed	60	30%
2 or more junk food items consumed	109	54.5%
None	31	15.50%
Total	200	100%

### DISCUSSION:

High prevalence (84.50%) of junk food consumption among school going children was found in the study. It was observed that the junk food was consumed mainly as snacks from shops outside the school during evening time after the end of school and there was no school canteen in the school premises.

Studies conducted by Koteka et al, Singh et al and Gupta et al also reported high junk food consumption<sup>(1) (2) (3)</sup>. Food items such as chips, soft-drinks, chocolates, bakery products-pastries, ice-creams or other junk food items such as samosa, kachori, gol-gappe, pakode, etc were mainly consumed by the school going children. Kotecha et al, reported higher consumption of junk food items (56%) such as chocolates, pastries and sweets and soft drinks (39%) by school students in the last 24 hours.<sup>(1)</sup> Consumption of junk food items such as chocolate (28%), bakery items (14%), and ice cream (35%) by school going children was also found in the study by Singh et al.<sup>(2)</sup> Harrell et al, likewise reported that soft drinks consumption was daily among 30% of their study population i.e. school going children.<sup>(4)</sup>

In the present study 54.5% subjects were consuming 2 or more junk food items in the last 24 hours. Likewise, Gupta et al also found that majority (78%) of the children consumed one junk food item in the last 24 hours and 22% children were consuming 2 or more junk food items in the last 24 hours of the survey.<sup>(4)</sup>

High consumption of fried foods and sugary drinks has been observed to be significantly associated with high body mass index and weight status in children. In addition, diets with high amounts of junk food have overall low quantity of nutrients.

Hence, high consumption of junk food can contribute to the "double burden of malnutrition," undernutrition, and overnutrition occurring simultaneously.

### CONCLUSION:

High prevalence of junk food consumption among school going children was observed. The attracting advertisements are largely responsible for the mind make up of children to consume junk food. Multinational companies are attracting the new customers by attractive and aggressive marketing strategies.

School administrator along with parents has a responsibility to educate the children about junk food. There is need to initiate nutrition interventions to reduce the high intake of junk

food by educating children, their parents and teachers regarding the possible deteriorating health consequences of junk food with external support of researchers and public health educators. This may help in inculcating the practice of consumption of healthy foods from young age.

The formation of laws to regulate the marketing and advertising junk food around school premises may help in reducing the consumption of junk food among children.

### REFERENCES:

1. Kotecha PV, Patel SV, Baxi RK, Mazumdar VS, Shobha M, Mehta KG, et al. Dietary pattern of school going adolescents in Urban Baroda, India. *J Health Popul Nutr.* 2013;31:490-6.
2. Singh M, Mishra S. Fast food consumption pattern and obesity among school going (9-13 year) in Lucknow district. *Int J Sci Res.* 2014;3:1672-4.
3. Gupta A, Kapil U, Singh G. Consumption of junk foods by school-aged children in rural Himachal Pradesh, India. *Indian J Public Health.* 2018;62:65-7.
4. Harrell M, Medina J, Greene-Cramer B, Sharma SV, Arora M, Nazari G. Understanding eating behaviors of New Dehli's youth. *J Appl Res Child.* 2016;6:8.