



## Effectiveness of Structural Teaching Program on Knowledge Regarding Effect of Junk Food on Mucosal Layer of GI Tract

N. Sivasubramanian<sup>1</sup>, B. Mahalakshmi<sup>1</sup>, Patel Bharvi<sup>2</sup>, Patel Nikhil<sup>3</sup>, Patel Preyashi<sup>3</sup>, Patel Vibha<sup>3</sup>,  
Patel Vishva<sup>3</sup>, Patel Zalak<sup>3</sup>

<sup>1</sup> Professor, Nootan College Of Nursing, Sankalchand Patel University Visnagar, Gujrat-384315

<sup>2</sup> Nursing Tutor, Nootan College of Nursing, Sankalchand Patel University Visnagar, Gujrat-384315

<sup>3</sup> Nootan College of Nursing, Sankalchand Patel University

**ABSTRACT:** Junk food refers to fast food which are easy to make and easy to consume. Junk food also called HFSS- High fat, sugar and salt. Various type of junk food that available in market. Junk food is more popular because of experience of great test and easy transportation. It causes a lot of harmful effects on mucosal layer of GI tract and also effect on the body like obesity, diabetes, heart disease, and skin cancer. This study identified that 66.66% had an inadequate knowledge, 33.33% had moderate knowledge none of them had Adequate knowledge for pre experimental group. The study results shows that the pre-test mean value is 14.2 and pre-test SD is 3.36. The post-test mean value is 23.53 and post-test SD is 2.44. The mean difference is 9.33. The calculated 't' value is 12.30 is higher than the table value 1.69. The structural teaching program is very effective for improving students' knowledge regarding effect of junk food on GI tract.

**KEYWORDS:** Effectiveness, Knowledge, Structural Teaching Program.

### BACKGROUND OF STUDY

Fast food generally refers to food that people instead to consume quickly either on or off site. Junk food that contains little or no protein, vitamins or mineral but is rich in salt, sugar and fats and high in energy. Consuming junk foods might stop the adolescents from taking healthy meals either at college or at home. The practice of high consumption of junk foods like maggi noodles, burgers, pao – bhaji, sandwiches, hot dogs, patties, pastries, pop – corn, potato chips, carbonated drinks, biscuits, muffins, toast, kulcha – channa, samosa, chocolates etc have become common feature of adolescent's diet throughout the world. Besides many health problems junk food affects digestive system, mostly mucosal layer of GI Tract which is the first part to come in contact after consumption. Knowledge is one of the most effective tools of changing the food habits without affecting their sentiments. Knowledge regarding the importance of balanced diet, harmful effects of junk foods on health and mucosal layer of GI Tract will help to curb the junk food addiction and improving their nutritional status. It should be suggested that there is a need to focus on knowledge which will facilitate the intake of healthy junk foods like fermented foods, wheat noodles by adding lots of vegetables, sprouted pulses, sprouted tikki, vegetable samosa & cutlets, wheat and multigrain bread. The aim of this study was known about the knowledge of junk food effect on health in GNM students.

### METHODOLOGY

Quasi-experimental design, with non-probability purposive sampling method was used. The sample consisted of 60 nursing students and information was collected regarding effect of junk food on mucosal layer of GI Tract using the structured knowledge questionnaire. Structured teaching programme was implemented and post-test was conducted after 7 days to find the effectiveness.

### RESULTS

The results have been organized and presented in following headings:

**Table 1:** Sample frequency and percentage distribution based on demographic characteristics:

Sr.no	Variable	Category	Frequency	Percentage
1.	Age	16-18 year	26	43.3%
		19-20year	34	56.7%



2.	Gender	Male	23	38.3%
		Female	37	61.7%
3.	Income	5000-10,000	11	18.3%
		10,000-15000	22	36.7%
		15000-20000	27	45%
		20000 to above	0	0
4.	Religion	Hindu	45	75%
		Muslim	7	11.7%
		Christian	5	8.3%
		Others	3	5.0%
5.	Residency	Urban	25	41.7%
		Rural	35	58.3%

The above table reveals that majority 34(56.7%) respondents belongs to the age group of 18-19 years, rest 26(43.3%) respondents belongs to the age group of 16-17 years. The above table depicts that majority 37(61.7%) respondents were Females, rest 23(38.3%) were Males. The above table depicts that majority of respondents 27(45%) had family monthly income between 15,001-20,000, 22(36.7%) respondents had monthly family income between 10,001-15,000 11(18.3%) had family income between 5,000-10,000. The above table depicts that majority 45(75.0%) respondents were Hindus, 7(11.7%) respondents were Muslims, 5(8.3%) respondents were Christians and remaining 3(5.0%) were of other religions. The above table shows that 35(58.3%) respondents were from rural areas, 25(41.7%) respondents were from urban areas.

**Table 2:** frequency and percentage distribution of pre and post-test level of knowledge among 1<sup>st</sup> year GNM students.

Sr.no	Level of knowledge	Pretest		Post test	
		Frequency	Percentage	Frequency	Percentage
1.	Inadequate	20	66.66%	0	0%
2.	Moderate	10	33.33%	8	26.66%
3.	Adequate	0	0%	22	73.33%

Table 2 shows frequency and percentage distribution of pre-test and post test scores of experimental group that in the Pre-test 20(66.66%) in Inadequate knowledge, 10(33.33%) were in moderate knowledge, 0(0%) in Adequate knowledge. Where as in post-test 0 (0%) in Inadequate knowledge, 8 (26.66%) in moderate knowledge and 22(73.33%) in Adequate knowledge.

**Table 3:** Mean, SD, Mean difference and ‘T’ value of pre-test and post-test level of knowledge among nursing students.

Df =n-1(30-1) =29.

Parameters	Mean	SD	MD	‘t’ value	Table ‘t’ Value	Level of significance
Pre test	14.2	3.36	9.33	12.30	1.69	S
Post test	23.53	2.43				

Table 3 shows that the average pre-test score on the level of knowledge among Nursing students. Pre-test mean is 14.2 and SD is 3.36. And the post-test mean is 23.53 and SD is 2.44. The ‘t’ value was 12.30 when compared to table value (1.69) it was high. This shows that there is significant (at p <0.05 level) different between pre-test and post test scores on the level of knowledge among Nursing students. It shows that structure teaching program has effective in improve knowledge regarding junk food effect on mucosal layer of GI tract in Nursing students.

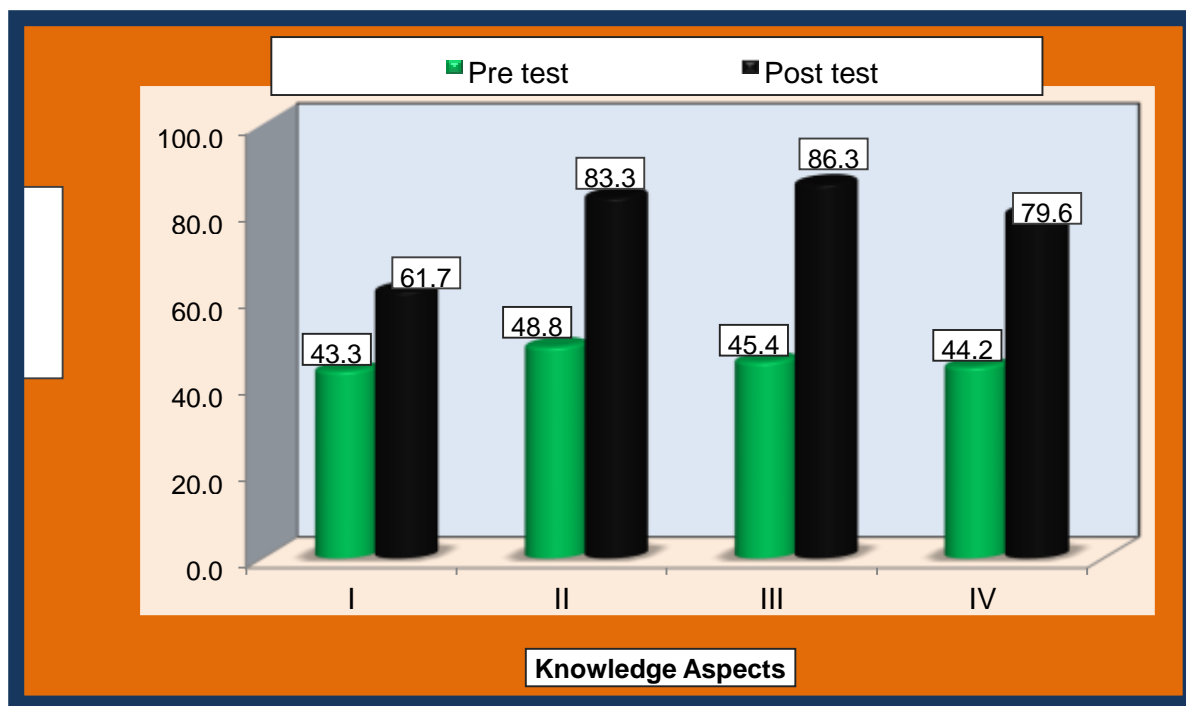


Figure 1. Mean Pre-test and Post-test Knowledge scores on effect of junk food on mucosal layer of GI Tract.

The overall mean score in the pre-test was 44.8%, SD 12.6% and post-test mean 78.0%, SD 10.4 with an enhancement of mean 33.2% and SD 8.6%. The statistical paired ‘t’ test indicates the enhancement in the mean knowledge scores is found to be significant at 0.05 level for all the aspect under the study.

Association between Demographic variables and Pre-test Knowledge level on Effects on Junk food on mucosal layer of GI tract

N=60

S. N	Variable	Category	Frequency	Level Knowledge		Of	Df	Table Value	Chi square	Significant
				Moderate	Adequate					
1.	Age	A. 16-18	8	5	3	1	3.84	7.16	S	
		B. 19-20	22	3	19					
2.	Gender	A. Male	7	4	3	1	3.84	4.32	S	
		B. Female	23	4	19					
3.	Income	A. 5000-10,000	8	3	5	3	7.81	4.95	NS	
		B. 10,000-15000	9	4	5					
		C. 15,000-20,000	5	1	4					
		D. 20,000-above	8	0	8					
4.	Religion	A. Hindu	29	7	22	1	3.84	2.89	NS	
		B. Muslim	1	1	0					
5.	Residency	A. Urban	12	6	6	1	3.84	5.56	S	
		B. Rural	18	2	16					



## DISCUSSION

Eating junk food has become a trend. The adolescent hate homemade healthy food. Junk food injurious to health. Junk food are not healthy and have various ill effects. Junk food are also laced with colours which are often in edible Carcinogenic and harmful to the body. Their effects can emerge after many years. Junk foods are often eaten instead of regular food which is not good for health. Junk food is a classic example of unbalanced diet and besides obesity can raise other health concerns like indigestion, cardiac disease, diabetes, high cholesterol, high blood pressure.

Junk food contain chemical carcinogens irritants as additives or preservatives, high cholesterol. Discussion with expert and review of literature helped to realise providing effective education on the knowledge regarding effect of junk food on mucosal layer of GI tract is essential to enhance the healthy eating pattern of adolescent Nursing students.

## CONCLUSION

The main aim of study was to assess the existing knowledge of Nursing students on effect of junk food on mucosal layer of GI tract to conduct structural teaching program regarding effect of junk food on mucosal layer of GI tract and to evaluate the effectiveness of structural teaching program among Nursing students.

The following conclusion were drawn on basis of the finding of the study.

- 1) The pretest knowledge score majority among Nursing students was found to be inadequate and post test knowledge score is enhanced
- 2) There was significant enhancement in knowledge of Nursing students after conducting structural teaching program on effect of junk food on mucosal layer of GI tract.
- 3) There was significant association between posttest knowledge score and selected socio demographic variables such as age, gender, and residency exposure to information at 0.05 level
- 4) The finding of study revealed that there was No significant association between posttest knowledge score and few selected socio demographic variables such as income and residency at 0.05 level

## REFERENCES

1. Junk food- impact on health.may -2012 Journal of drug delivery and therapeutic-2(3) Doi-10.22270/jddt.v2i3.123
2. January 2020, Muller journal of medical sciences and research 11(2):47. Doi 10.4103/mjmsr.mjmsr\_10\_20
3. October 2009: public Health Nutrition 12(10):1767-74. Doi- 10.1017/ s1368980008004394
4. Effect of junk food & Beverages on adolescent's Health – A review article , January- 2013 Doi- 10.9790/1959-0162632
5. Narine S. Yegiyani & Rachel L. Bailer (2016) food as risk : How Eating Habits and food knowledge Affect Reactivity to picture of junk food and Healthy food. Health communication. 31:5,635642, Doi- 10.1080/10410236.2014.987098
6. Steyn Np, Labadarios D, Nel JH, factors which influence the consumption of street foods and fast foods in South Africa- a national survey, Nutr J. 2011;10:104- published 2011 Oct – 4, mDoi- 10.1186/1475- 2891- 10- 104.
7. Aksari Majabadi H, Solhi M, Montazeri A, et al. Factors influencing fast- food consumption among adolescents in Tehran: A Qualliative study, Iran Red crescent med J. 2016;18(3): e23890, published 2016 mar- 6. Doi- 10.5812/ircmj.23890

*Cite this Article: N. Sivasubramanian, B. Mahalakshmi, Patel Bharvi, Patel Nikhil, Patel Preyashi, Patel Vibha, Patel Vishva, Patel Zalak (2022). Effectiveness of Structural Teaching Program on Knowledge Regarding Effect of Junk Food on Mucosal Layer of GI Tract. International Journal of Current Science Research and Review, 5(11), 4120-4123*