



Assess the level of knowledge and attitude regarding effects of junk food among adolescents in selected school, Patna.

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Abstract: “Research is seeing what everybody else has seen and thinking what nobody else has though”.

Albert szent Gyorgyi

“Assess the level of knowledge and attitude regarding effects of junk food among adolescents in selected school, Patna.”

Introduction

“Junk food” is a term given to food that is high in calories but low in nutrition content. In adolescence, both boys and girls undergo several physical and psychological changes which make them to become partly responsible for their own health and welfare.

Junk food has no or less nutritional value and irrespective of the way they are not healthy to consume Andrew F. Smith’s encyclopaedia of junk food, “junk food is define as those commercial products which have little or no nutritional value but do have plenty of calories, salt and fats. “Junk food is a type of mass produced food designed for commercial resale and with a strong priority placed on speed of service, versus other relevant factors Merriam Webster (1951).

According to WHO report, 40000 deaths occur per year in world due to excessive intake of junk food. It has been found that India’s over weight rates increase by 20%. Now in India is in the grip of an obesity epidemic expert say the trends need to be immediately arrested by restricting food advertisement and making food labeling clearer. World adolescent population is 1200million person in 10- 19 year of age, or about 19% of the total population of serious nutritional challenges. There has been an increase in the consumption of junk food among school aged children (SAC) possibly leading to obesity & diet related consequences related to consumption of junk food.

Now, In Modern days, both the parents are working so they can not able to spend their time to children. This is the main reason for the poor unhealthy habits of children. Junk food does not provide the essential nutrients like vitamin, Protein, Fibers. Even they can very much sufficing feel weakened adolescents. Junk food is prepared with rich amount of oil so, they feel drowsy and fail to concentrate. Junk food may cause poor concentration in adolescents these foods can affect digestive system of Adolescents like- constipation and its effects can emerge after many years, there food can cause hyperactivity and learning disabilities.

Objectives

1. Assess the level of knowledge and attitude regarding the effects of junk food among adolescents.
2. Find out the association between knowledge and attitude regarding the effects of junk food and socio-demographic variables

Methodology

The research design adopted for the present study was descriptive and study was conducted in selected school Patna, Bihar. Sample of the study were adolescents available in selected school Patna at the time of data collection, Probability simple random sampling technique was used to select sample. The sample size of the present study were 400 adolescents. Data was collected by using self-structured knowledge questionnaire and attitude scale. Reliability of the tool was done after conducting pilot study among 40 adolescents Kendriya Vidyalaya Danapur Cantt by using split-half method for knowledge questionnaire and Cronback's alpha for attitude scale with the value of 'r' was 0.79. Hence, the tool was found to be reliable.

Results

The study reveals that maximum 49% adolescents were having upto 12 years age, mostly 59.25% adolescents were Male. Majority of adolescents 21.5% were in 8th standard. Mostly 47.25% Fathers were graduates, maximum 57% Fathers were having Government job. Majority 46.75% Mothers were graduates, maximum 82.25% Mothers were homemaker. Highest Family income per month was above Rs.30,000. Mostly 48% adolescents were having Joint family, majority of adolescents 96.25% were from an urban area. Maximum 93.25% adolescents were Hindus, majority 43% adolescents were having Source of information from Mass media.

The findings of the study shows that 2.5% is Inadequate, 35.5% is Moderately adequate and 62% of knowledge level is Adequate.

The study also shows that 19.5% is Moderately favorable and 80.5% of adolescents have favourable attitudes.

Conclusion

The present study reveals that among 400 samples, majority of them (62%) have adequate knowledge and 80.5% have favourable attitude regarding effects of junk food among adolescents.

Key words:-

Knowledge, Attitude, Affect, Junk food, Adolescents



I. INTRODUCTION

Food is an essential component of human life since it provides the body with fuel and acts as a defence mechanism against disease.¹ Food is necessary for energy, growth, repair, and for health. Our health depends on what we eat daily. Food is any substance consumed to provide nutritional support for the body. It is usually of plant or animal origin & contains essential nutrients such as carbohydrates, fats, proteins, vitamins or minerals. Fast food refers to food that can be served ready to eat. The term fast food and junk food are often used interchangeably.¹⁶

The National Institutes of Health says that junk food is a cheap, quick, and easy alternative to home-cooked meals.¹ Great taste, attractive appearance along with advertising has played a role in attracting people particularly adolescent to the selling joints unfortunately the current world's adaptation to a system of consumption of fast food has resulted in several adverse effects on health. The energy density of fast food had been found to be more than twice the recommended daily allowance for children. Experts therefore attributed the current childhood obesity led to increasing in life threatening condition particularly non communicable disease in developing countries. Dental cavities are another common ailment in school children can result due to dense sugar content in junk food.²

According to the World Health Organization (WHO), almost one out of five children and adolescents aged (5–19) years old are overweight and obese, accounting for over 340 million “victims” of the obesity pandemic globally, while in Europe this figure is expected to rise by 1.3 million (each year) during the next few years.³

"Junk food" generally refers to foods that contribute lots of calories but are of limited nutritional value. Junk foods are usually commercially prepared and packaged, like candy bars, chips, snack cakes, cheese puffs, and cookies. With worldwide marketing and advertisement in 21st century "junk food" has gone global. It can be seen almost everywhere in grocery and convenience stores, fast-food restaurants, on television usually looking very appealing. (Magee, 2007). Junk food contain substantial amounts of trans fat, added sugars, salt and are high in energy but contribute only few micronutrients to the diet (Rangan et al., 2008; “This Is Your Body on Fast Food - The Washington Post,” 2018). Consumption of poor-quality diet including junk food is associated to a higher risk of obesity, heart disease and stroke, digestive issues, diabetes, cancer, and early death (“This Is Your Body on Fast Food - The Washington Post,” 2018).⁴

Adolescents are nutritionally vulnerable considering their soaring nutritional requirements for growth, eating habits and their susceptibility to environmental influences (World Health Organization, 2005).⁴

As working parents do not have much time for preparing the meals to their children, very few school and university students carry with them homemade food, and most of the students remain with no alternative option except taking junk food (Das, n.d.; “Junk Food Affects Students’ Health-374929,” 2019). It is more likely that students who eat extra junk food may suffer from health issues. Junk food can have a detrimental effect on levels of energy and mental well-being and also keeps adolescents at higher risk of chronic diseases (“Junk Food Affects Students’ Health-374929,” 2019; World Health Organization, 2005).⁴

Consumption of large quantities of junk food is associated with a drastic reduction in the consumption of nutritious foods such as milk, fruits and vegetables (Laxer & Janssen, 2014). High revenues, rapid urbanization, free home delivery, mouthwatering commercials and foreign cuisines have led to growing trend in the consumption of junk food (Mandoura et al., 2017 The important contributing factors to junk food consumption are nuclear family, working mother, socioeconomic status, and easy access to the fast-food shop, food taste and quick service in the shop (Das, n.d.). In the last three decades, junk food intake among teenagers has increased by fivefold. This is because of its good taste, easy access, affordable cost, variety of choices, taste (Stuckler et al., 2012). A rise in the intake of junk food is a global phenomenon with the prevalence rate of around 70% (Rouhani et al., 2012; WHO, 2003). Among all age groups and particularly in young adults, it is considered an emerging major public health problem (Bauer et al., 2009; Rouhani et al., 2012).⁴

Junk foods have low in roughage, protein, minerals but high in carbohydrate and saturated fat, salt and sugar. It is usually taken as a replacement for well balance diet. It is stated that junk foods are that foods which are low in nutrient and high in every things else especially fat, sodium, carbohydrates etc. Using up of junk foods has become almost a global concerning issues, as more and more people are tempted by it day in and day out irrespective of demographic characters. Junk foods have no or very less nutritional value and irrespective of the way they are marketed, they are not healthy too. However, consumption of junk foods has been seen as a fashion in today's society. More and more people have been using it but especially children are highly persuaded by it which is seen in increasing trend. It is a culture of today's society that majority of adolescence are usually gathering with friends and spend their leisure time in using junk food. Nutritional knowledge is one factor that influences the diet behavior of teenagers, since fast food consumptions of the teenagers has become a serious issue which may lead toward obesity in many countries. It may lead to chronic diseases like obesity diabetes mellitus cardiac problems, liver problems, and hypertension and so on Teen- age are at menace for nutritional problem both from a physiological and a psychological stance. Hence, to know how students are fascinated by junk foods has assumed importance in recent times. There is also strong relationship between soft sweetened drinking and diabetes according to brooks.

According to findings of Brook's study one 12ounce sugar, sweetened soft drink per day increase risk of type 2 diabetes by 22%, a one 12ounce daily increment in sugar sweetened or artificially the development of type 2 diabetes (hazards ratios, 1.22 and 1.52 respectively). A study carried out by Bista, 2011 in Kritipur among 36 secondary schools depicted that 56% of public schools and 70% private schools had daily snack practices. Among 160 students, 47.32% had taken snacks from their school canteen, 30.43% had carried tiffin from their home and 8.69% had carried from shops, 8.69% from other different places. Majority of respondents from private schools 41.25% have noodles items as their main food as snacks in schools. Majority of adolescents consume over half diet as quickly available, highly processed, empty calories foods, high carbohydrate containing not just in schools but also at home. It is well known that today's children are the tomorrow's citizens so there is dire need to address the issues affecting their health. Good food is a high priority for growth and development. Furthermore, it is more important in childhood and adolescents since it is peak growing age.

Therefore, adolescents must understand what they eat, how food affect, how they mature, feel and perform. Junk foods are mainly made up by using a lot of saturated fats, sugar and chemical preservatives which are harmful after digestion and release a lot of toxins into the body. Likewise, it lacks vitamins, fiber and minerals which are necessary to have good health and immunity to fight diseases. Healthy intake behaviors in childhood are actually very important. It helps to avert malnutrition, growth retardation, and other nutrition related problems in children. The present situation sparkles light on many adult diseases, have their origins in childhood and teens. This is due to lack of awareness regarding junk food lifestyles. So, there is dire need to assess knowledge of adolescents so that intervention can be initiated to boost adolescents knowledge.⁴

II. NEED OF THE STUDY.

According to WHO junk foods are high in energy low in nutrient content and high in fat (That is some even contain trans-fats) snack foods that contain added sugar. Junk food is given to that can be prepared and served very quickly. The term junk food was recognized in a dictionary by **Merriam Webster in 1951**. Junk food is easily accessible to adolescents because it is quick convenient and usually inexpensive. Junk food is delicious, affordable and readily available any time of the day, being only a drive through phone call away. emerge after many years, these food can cause hyperactivity and learning disabilities.⁵

Now, In Modern days, both the parents are working so they can not able to spend their time to children. This is the main reason for the poor unhealthy habits of children. Junk food does not provide the essential nutrients like vitamin, Protein, Fibers. Even they can very much sufficing feel weakened adolescents. Junk food is prepared with rich amount of oil so, they feel drowsy and fail to concentrate. Junk food may cause poor concentration in adolescents these foods can affect digestive system of Adolescents like-constipation and its effects can emerge after many years, there food can cause hyperactivity and learning disabilities.⁶

Nagamanagr RV et.al (2023), conducted Food is a part of Indian culture, species and flavours are the main identities of the Indian food system; over the period India has been started adopting western culture, it takes into the consumption of junk food that is very attractive and easily available.³³

D Jeya Beulah, (2023), conducted a comparative study to assess the knowledge and practice regarding junk food and its harmful effects on life-style among adolescents samples were chosen through convenient sampling technique using self-administered questionnaire. Majority (62% had good knowledge, 17% had excellent knowledge, 16% had moderate knowledge and only 5% had poor knowledge in urban adolescents were as adolescents from rural school 49% had moderate knowledge, 36% had well and 9% had poor knowledge. Also, there is a significant difference between in knowledge and practice scores of adolescents from urban and rural schools.³⁴

P. Meena et.al (2023) conducted a descriptive cross-sectional study to assess the knowledge on hazards of junk food among adolescents. The study is conducted among 30 adolescents by using purposive sampling techniques. The study shows that 15(50%) had moderate level of knowledge, 8(26.07%) had inadequate knowledge and 7(23.33%) had adequate knowledge regarding health hazards of the fast food consumption among adolescents. The mean score of knowledge score was 8.50-2.86. The median score was 9.0 with minimum score of 4.0 and maximum score 13.0.³⁵

Fakhira Aet.al (2021) conducted, Fast food and junk food are becoming popular because they are fast, widely available, easy to obtain, and have good taste. However, eating habits by consuming fast food or excess junk food will have a bad impact on health, both for children, adolescents, and adults. Junk food can increase the risk of several diseases, such as obesity, diabetes, hypertension, and blood lipid disorders or dyslipidemia. In addition, fast food for a long time will also affect dental health. Fast food that has a high sugar content can cause dental caries or cavities.³⁶

Adolescents comprise approximately one-fifth of the world's population and most of them (84%) live in the developing countries. The world health organization ranks obesity and overweight among the six leading causes of death world- wide.³⁷

Commercials for junk food are mostly targeted on young children and teenagers. Although junk food is bad for health, but most of the American and people among all over the world enjoy it on a daily basis. **July 21 is celebrated as “National junk food day”**. Junk food is the food that lacks of having dietary fabric protein, vitamins and other minerals.³⁸

Now a days, the number of junk food restaurants and their advertisements are being promoted everywhere. Our neighbourhood, internet, television and other social websites promote their items. In the globalization process interaction and integration among people, companies and government started world wide. Globalization helps in free flow of food culture from one country to another country. Junk food expansion is the result of Globalization. Junk food is the food that is high in calories but low in nutritional content. Junk food is not good for health because it contains high amount of fat or sugar. Eating a poor quality diet, high in junk food creates a high risk of obesity, depression, heart disease, cancer and early death. Junk food is not healthy food for everyone. The consumption of junk food is harmful for every age group.³⁸

Junk food consumption and its consequences has become a major public health concern globally because of its deteriorating health consequences and surging prevalence. So, it is much needed to **“Assess the level of knowledge and attitude regarding the effects of junk food among adolescents in selected school, Patna.**

III. METHODOLOGY

Research approach:

For the present study quantitative approach was adopted to assess the level of knowledge and attitude regarding the effects of junk food among adolescents in selected school of Patna.

Research design:

Non-experimental descriptive research design was adopted to conduct the final study.

Research study setting:

The present study was conducted among Adolescents of selected school of Kendriya Vidyalaya, bailey road for main study and Kendriya Vidyalaya, Danapur Cantt is selected for pilot study. Kendriya Vidyalaya, baily road is located 1 kilometre away from IGIMS College of nursing and Kendriya Vidyalaya Cantt is located 7.6 kilometre away from IGIMS college of nursing. For present study adolescents (6th standard to 12th standard) were selected by using Simple Random Probability sampling technique

POPULATION AND SAMPLE

The accessible populations were the adolescents who were studying 6th standard to 12th standard from selected school. Sample of the study were adolescents of selected school and Simple random sampling technique was used by means of lottery method to select a sample. Total 400 samples were selected.

RELIABILITY OF TOOLS:

The reliability of the tool is confirmed by split half method for knowledge questionnaire and Cronbach's alpha for Attitude scale

Reliability of the tool was done after conducting pilot study among 40 adolescents of Kendriya Vidyalaya Danapur Cantt. by using Cronbach's alpha test. As the acceptable range of split half for knowledge questionnaire is equals to 0.7. the tool was found reliable because 'α' value of attitude scale was 0.82 for adolescents of Kendriya Vidyalaya and the Knowledge questionnaire is also reliable, its value is 0.79.

$$\alpha = \frac{R}{R-1} \left(1 - \frac{\sum \sigma_I^2}{\sigma_X^2} \right)$$

Description :

R = Number of items

σ_I^2 = variant items

σ_X^2 = total score variant

Cronbach's alpha acceptable range

Cronbach's alpha	Internal consistency
$\alpha \geq 0.9$	Excellent
$0.9 > \alpha \geq 0.8$	Good
$0.8 > \alpha \geq 0.7$	Acceptable
$0.7 > \alpha \geq 0.6$	Questionable
$0.6 > \alpha \geq 0.5$	Poor
$0.5 > \alpha$	Unacceptable

Method of data collection: Data collection procedure was carried out after providing participant information sheet (PIS) form to the adolescents which was last for 5 minutes followed by Vulnerable age group Participant Informed Consent and Assent Form (PICAF) was taken from parents/guardian. which was also last for 5 minutes, before starting data collection followed by the filling of the demographic and knowledge questionnaire for 26 minutes, there are 18 minutes given for attitude scale. Time given for each question is 1 minute. Total 54 minutes given to the respondents for complete the knowledge and attitude questionnaire.

DESCRIPTION OF THE FINAL TOOL:

Section-I A

Demographic variables: Deals with 12 items of Demographic data of adolescents-age, gender, area of residence, religion, education, father's education, occupation of father, mother's education, mother's occupation, type of family, family income, source of information.

SECTION-I B

Self- Structured Knowledge questionnaire: Tool-I consists of multiple choice questions, 14 items of knowledge questionnaire (section I-b). Score of one (1) will be given to each correct answer and zero (0) to wrong and left out answer.

- Maximum score = 14
- Minimum score = 0

Knowledge	Score	Percentage
Inadequate	0-04	<30%
Average	05-09	30-70%
Adequate	10-14	>70%

SECTION- II:

Deals with self- structured Likert's 5 points to scale to assess the attitude of adolescents regarding effects of junk food. It comprises 18 statements regarding effects of junk food out which 12 are positive statements and 6 are negative statements.

Positive statements: 1,2,3,4,5,6,7,8,9,10,11,12

Negative statements: 13,14, 15,16,17,18

Scoring keys: Attitude of adolescents regarding effects of junk food

Criteria	Positive Statement (1-12)	Negative Statement (13-18)
Strongly agree	5	1
Agree	4	2
Neutral	3	3
Disagree	2	4
Strongly Disagree	1	5

(NOTE: Reverse scoring was done for negative statements)

- Maximum score = 90
- Minimum score = 0

SCORING INTERPRETATION:

Attitude	Score	Percentage
Unfavorable	0-29	< 33%
Moderately Favorable	30-59	34-65%
Favorable	60-90	>66%

IV. RESULTS AND DISCUSSION

The study reveals that maximum 49% adolescents were having upto 12 years age, mostly 59.25% adolescents were Male. Majority of adolescents 21.5% were in 8th standard. Mostly 47.25% Fathers were graduates, maximum 57% Fathers were having Government job. Majority 46.75% Mothers were graduates, maximum 82.25% Mothers were homemaker. Highest Family income per month was

above Rs.30,000. Mostly 48% adolescents were having Joint family, majority of adolescents 96.25% were from an urban area. Maximum 93.25% adolescents were Hindus, majority 43% adolescents were having Source of information from Mass media . The findings of the study show that 2.5% is Inadequate, 35.5% is Moderately adequate and 62% of knowledge level is Adequate. The study also shows that 19.5% is Moderately favorable and 80.5% of adolescents have favourable attitudes.

Knowledge regarding Effects of junk food with respect to demographic variables

The significant difference between the mean knowledge scores regarding the junk food was tested using the inferential statistics of Analysis of variance (ANOVA) and the Independent t test. In this section the average Knowledge regarding Effects of junk food among adolescents in selected school is analyzed with respect to demographic variables “Age in years, Gender, Class of adolescents, Education of the father, Education of mother, Occupation of father, Occupation of mother, Type of family, Family income, Religion of adolescent, Place of residence, Source of information”.

Null Hypothesis: H₀: There is no significant difference between the mean knowledge score regarding the junk food

TABLE 4.3.1 TEST FOR MEAN KNOWLEDGE SCORES – T TEST

		Overall knowledge		t	p
		Mean	SD		
Gender	Male	9.73	2.40	2.16	0.032*
	Female	10.25	2.23		
Area of Residence	Urban	10.12	2.26	5.30	0.001**
	Rural	7.87	2.38		

TABLE 4.3.1A TEST FOR MEAN KNOWLEDGE SCORES – ANOVA TEST

		Overall knowledge		ANOVA	p
		Mean	SD		
Age (In Years)	Up to 12	9.53	2.42	6.45	0.002**
	13-15	10.26	2.35		
	16-18	10.57	1.68		
Class	6 th standard	9.29	2.76	3.49	0.002**
	7 th standard	9.32	2.54		
	8 th standard	9.92	2.13		
	9 th standard	9.24	2.17		
	10 th standard	10.29	2.47		
	11 th standard	10.79	2.23		
Father's education	Post-Graduate	10.47	2.12	5.51	0.001**
	Graduate	10.04	2.22		
	Secondary School	9.38	2.62		
	Primary School Education	8.41	2.55		
	No Formal Education	8.38	2.67		
Occupation of father	Agriculture	10.00	2.26	0.359	0.838
	Government job	9.97	2.27		
	Private job	9.98	2.19		
	Unemployed	9.21	3.47		
	Self-employed	9.90	2.71		
	Post-Graduate	10.04	2.64		

Mother's education	Graduate	10.09	2.23	3.42	0.009**
	Secondary School Education	10.20	2.02		
	Primary School Education	9.08	2.73		
	No Formal Education	8.63	2.65		
Occupation of mother	Homemaker	10.02	2.32	0.649	0.584
	Government job	9.61	2.68		
	Private job	9.76	2.33		
	Self-employed	9.44	2.04		
Type of family	Joint family	9.63	2.44	3.09	0.027*
	Nuclear family	10.32	2.26		
	Extended family	9.40	1.72		
	Others	9.86	0.90		
Family income (Monthly in Rs)	Less than 10,000	8.82	2.87	4.01	0.008**
	10,000 - 20,000	9.59	2.22		
	21,000 - 30,000	9.90	2.16		
	Above 30,000	10.20	2.29		
Religion of adolescents	Hinduism	9.98	2.33	3.24	0.040*
	Islam	9.87	2.36		
	Others	7.00	2.16		
Source of information	Mass media	10.05	2.16	0.693	0.557
	Family and friends	9.87	2.36		
	Health care professionals	9.62	2.59		
	Others	10.26	2.79		

*Significant

Attitude regarding Effects of junk food with respect to demographic variables

The significant difference between the mean attitude scores regarding the junk food was tested using the inferential statistics of Analysis of variance (ANOVA) and the Independent t test. In this section the average Attitude regarding Effects of junk food among adolescents in selected school is analyzed with respect to demographic variables "Age in years, Gender, Class of adolescents, Education of the father, Education of mother, Occupation of father, Occupation of mother, Type of family, Family income, Religion of adolescent, Place of residence, Source of information".

Null Hypothesis: H₀: There is no significant difference between the mean attitude score regarding the junk food

TABLE 4.3.2 TEST FOR MEAN ATTITUDE SCORES – T TEST

		Overall attitude		t	P
		Mean	SD		
Gender	Male	65.63	7.21	1.17	0.245
	Female	66.53	8.13		
Area of Residence	Urban	66.07	7.71	0.664	0.507
	Rural	65.13	6.14		

TABLE 4.3.2A TEST FOR MEAN ATTITUDE SCORES – ANOVA TEST

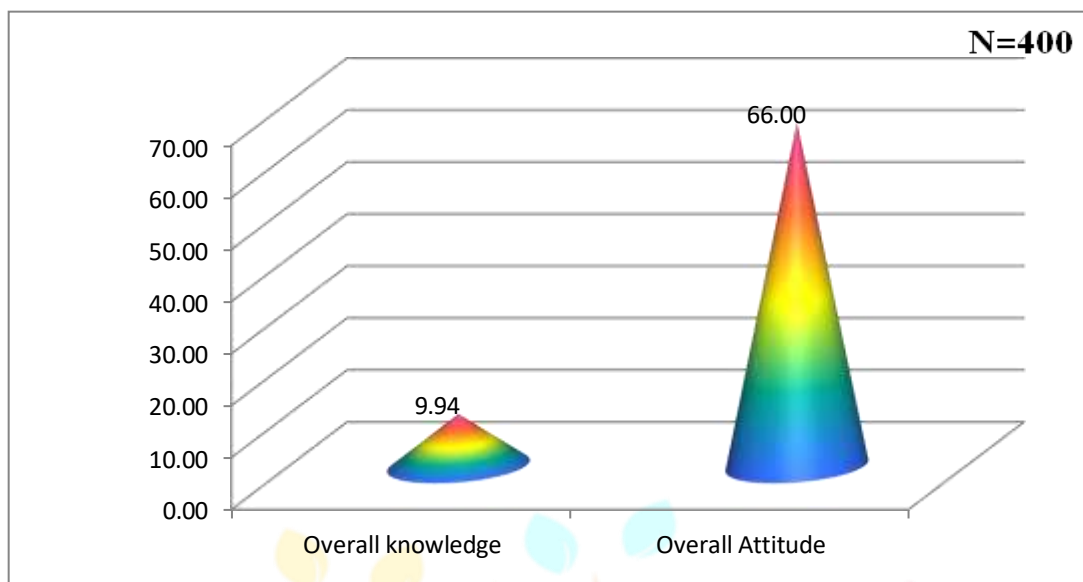
		Overall attitude		ANOVA	p
		Mean	SD		
Age (In Years)	Up to 12	64.54	8.01	7.53	0.001**
	13-15	67.24	7.22		
	16-18	67.92	5.94		
Class	6 th standard	61.80	9.62	5.45	0.001**
	7 th standard	66.49	6.73		
	8 th standard	64.50	8.04		
	9 th standard	63.93	7.84		

	10 th standard	67.89	6.85		
	11 th standard	66.28	5.92		
	12 th standard	68.54	6.30		
Father's education	Post-Graduate	66.14	7.41	0.857	0.490
	Graduate	65.99	7.63		
	Secondary School	66.68	7.83		
	Primary School Education	63.18	7.88		
	No Formal Education	64.13	7.26		
Occupation of father	Agriculture	64.50	5.14	2.19	0.070
	Government job	66.14	7.50		
	Private job	64.78	7.78		
	Unemployed	66.00	7.11		
	Self-employed	68.76	7.93		
Mother's education	Post-Graduate	66.15	7.26	1.37	0.243
	Graduate	66.09	7.30		
	Secondary School Education	66.90	7.81		
	Primary School Education	64.18	8.87		
	No Formal Education	63.68	7.19		
Occupation of mother	Homemaker	66.30	7.48	1.22	0.303
	Government job	64.69	7.05		
	Private job	65.65	7.86		
	Self-employed	63.44	10.22		
Type of family	Joint family	65.05	7.84	2.24	0.083
	Nuclear family	66.97	7.36		
	Extended family	67.00	7.00		
	Others	64.29	6.10		
Family income (Monthly in Rs)	Less than 10,000	63.88	9.57	1.38	0.247
	10,000 - 20,000	65.15	7.54		
	21,000 - 30,000	66.52	6.81		
	Above 30,000	66.35	7.50		
Religion of adolescents	Hinduism	66.09	7.63	0.419	0.658
	Islam	64.87	7.80		
	Others	64.00	2.45		
Source of information	Mass media	66.97	7.06	3.41	0.018*
	Family and friends	64.82	7.70		
	Health care professionals	64.80	6.61		
	Others	68.16	10.34		

*Significant

TABLE 4.3.3 OVERALL KNOWLEDGE AND ATTITUDE

	N	Mean	SD	SE
Overall knowledge	400	9.94	0.12	2.34
Overall Attitude	400	66.00	0.38	7.60

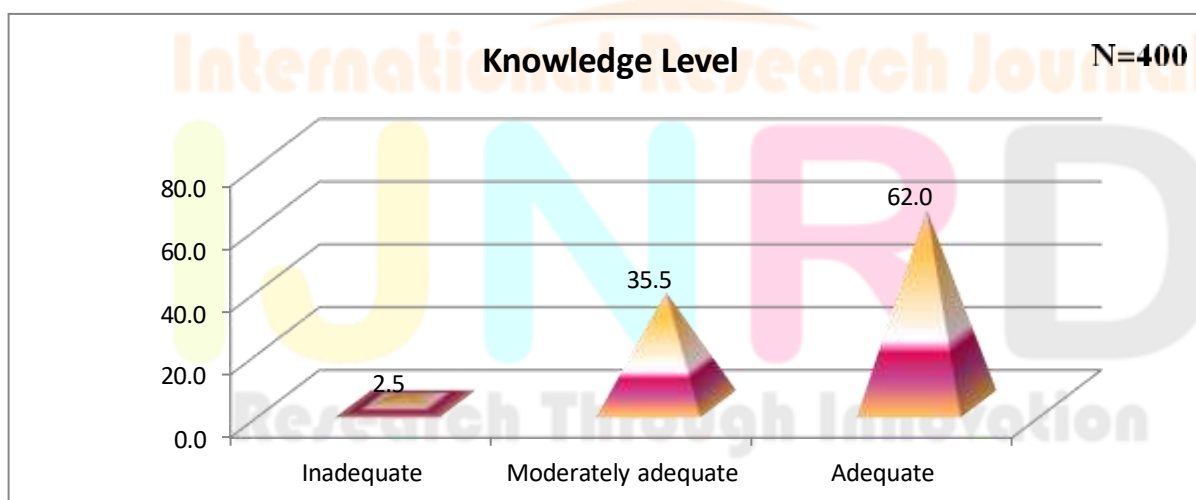


Relationship between the Knowledge and attitude regarding junk food

The Relationship between the Knowledge and attitude regarding junk food was calculated using Karl Pearson’s Coefficient of Correlation method and the results were given in Table 4.3.4.

TABLE 4.3.4 RELATIONSHIP BETWEEN THE KNOWLEDGE AND ATTITUDE

Correlation	Attitude	
Knowledge	0.309	Highly significant



RECOMMENDATIONS

- On the basis of the findings of the study, the following recommendations have been made:
- A similar study can be replicated on a large sample to generalize the findings.
- A similar study can be conducted to find the differences in the knowledge level of the adolescent on the basis of various institutional settings such as government and private institutions, state board and matriculation school.
- A similar study can be conducted to find differences in the knowledge level of the adolescent studying in the schools located in urban and rural area.
- A similar study can be conducted to find differences in the knowledge level, attitude and practice.

CONCLUSION

The present study reveals that among 400 adolescents majority of them have (62%) adequate knowledge and (80.5%) favourable attitude regarding effects of junk food.

LIMITATIONS

1. Adolescents willing to participate.
2. Adolescents present at the time of data collection.
3. Adolescents of age group between 12-19 years studying in a Kendriya Vidyalaya school, Patna.

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