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A SURVEY STUDY TO ASSESS THE DIETARY PATTERN AMONG ADOLESCENTS

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ABSTRACT

Food pattern is very essential for proper growth and development of adolescents, during this period adaptation of healthy dietary patterns reflects on their physical, psychological balance of the adolescents. A study assessed to determine the food pattern among 150 adolescents aged between 13 to 20 years. A study setting is selected High school at vijayapur district. A quantitative survey study was conducted by using self administered questionnaires among 150 adolescents. Nearly 56 % of boys and 44% girls participate in the study. Majority 74% of adolescents belongs to the nuclear family and 36% belong to joint family. Regarding dietary pattern many of 25% adolescents are skipping morning breakfast.46% of adolescents favorite food is chats instead of using fruits and vegetables, 41% and 35% adolescents are enjoying in eating chats and pizza. 44% of adolescents are eating outside food more than 3 times per week.53% of adolescents are drinking cold drinks and only 35% are drinking fruit juice and others are using tea, coffee. The study concludes that many of the adolescents are not practicing the healthy dietary pattern so there is essential to implement awareness programmes on dietary pattern.

Keywords: Dietary Pattern, Adolescents, Obesity, Junk Foods

1. INTRODUCTION

The word 'adolescence' is derived from the Latin verb 'adolescere', which means "grow to maturity." Adolescence is a grey area in the spectrum of life falling between childhood and adulthood. It is an age of transition when an individual experiences rapid growth and development, both physical and psychological and changes from being a child to an adult .WHO defines adolescents as persons in the age-group of 10 to 19 years. In India, there are an estimated 190 million adolescents comprising over one-fifth of the entire population. The development of healthy eating habits is important as the rapid physical growth in adolescence is associated with increased nutritional needs. Various studies on diet and nutrition intake of adolescents and young adults in the developed world have shown that their diets are often high in fats and refined carbohydrate. Adolescence is also a period of increased vulnerability to obesity. Lack of physical activity and outdoor sports, along with the consumption of fatrich 'junk' foods, is the major cause of obesity among the affluent population.

2. MATERIALS AND METHODS

A descriptive study was conducted among 150 adolescents in selected high school at vijayapur district. The samples are selected based on the inclusion and exclusion criteria. The permission is obtained from the higher authorities of the school, the purpose of the study is explained to the samples and consent form is taken. Institutional ethical clearance is taken from the institution.

Self administered questions are used to assess the dietary pattern among adolescents .the questions are prepared in local language that is in kannada. The 18 questionnaires are prepared to collect data of socio demographic data and also related to dietary pattern of adolescent girls. In which the questions were asked on the types of foods consumed in the last 24 hours (recall method), consumption of breakfast, and their habit of skipping meals.

3. RESULTS

The data is collected from 150 adolescents in three different high schools at vijayapur district, Karnataka, India. Among 50 adolescents 29% are in the age group of 14 yrs, 35% adolescents are in 15 yrs of age group and 32% belongs to 16 years of age. Nearly, 56% are boys and 44% are girls participated in this study. 74% of adolescents are living in joint family and 36% adolescents are living in nuclear family.

Results related to dietary pattern of adolescents are 72% of adolescents are eating food per day 3 times.63% of adolescents are skipping their morning breakfast only 30% adolescents are having their morning food. The adolescents are taking morning breakfast 36% and 46% they are taking bakery items and chats, chocolates and 12% and 13% of the adolescents are eating fruits and vegetables in their dietary pattern which is very less in their diet, the favorite food and most enjoyable food of adolescents are chocolates, bakery products and pizza very less number of adolescents used to eat homemade food. 35% and 32% adolescent use to drink cold drinks and tea, coffee and very less are drinking fruit iuice. As per this study most of adolescents are eating maggi as snacks that are 38%.

Many adolescents are eating outside food instead of eating healthy and homemade food according to this data 82% of adolescents are eating outside food less than 3 times per week, and 18% of adolescents are eating more than 3 times. 28% of adolescents are replacing the dinner by eating evening snacks, 55% are replacing for sometimes.

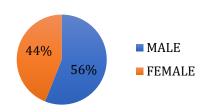
The following data and pie diagram reveals all the results.

Age in years	Frequency	Percentage (%)
14	1	0.6
15	44	29
16	53	35
17	52	32

The above table shows that distribution of adolescents on age group.

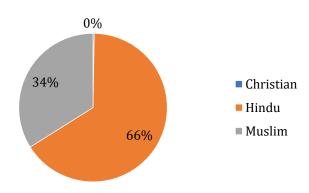
GENDER	Frequency	Percentage (%)
Male	84	56
Female	66	44





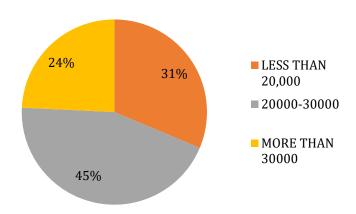
Religion	Frequency	Percentage (%)
Christian	4	0.26
Hindu	96	64
Muslim	50	33

RELIGION



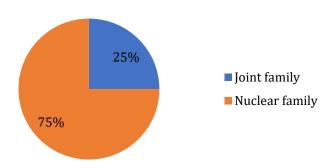
FAMILY INCOME	Frequency	Percentage (%)
LESS THAN 20,000	47	31
20000-30000	67	44
MORE THAN 30000	36	24

Family income



Type of family	Frequency	Percentage (%)
Joint family	38	25%
Nuclear family	112	74%

Type of family



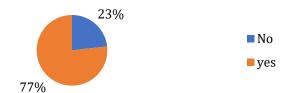
How Many Times Do You Eat Per Day	Frequency	Percentage (%)
2 times per day	15	0.1%
3 times per day	108	72%
4 times per day	20	13%
5 times per day	07	0.05%

Distribution od adoloscents based on numer of times eating

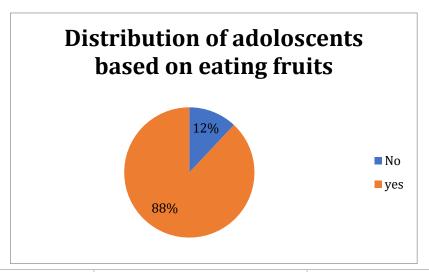


DOYOU EAT BREAKFAST	Frequency	Percentage (%)
No	25	16%
yes	125	84%

Distribution Of Adoloscents Based On Eating Breakfast



DO YOU EAT FRUITS	Frequency	Percentage (%)
No	18	12%
yes	132	88%



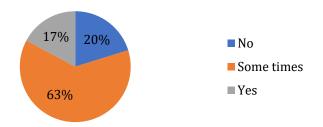
DO YOU EAT VEGETABLES	Frequency	Percentage (%)
No	35	23%
yes	115	77%

Distribution of adoloscents based on eating vegetables



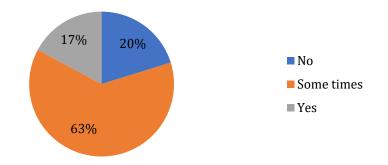
WHAT IS YOUR BREAKFAST	Frequency	Percentage (%)	
Bread jam	20	13%	
Cooked food	94	63%	
Restaurant food	36	24%	

Distribution of adoloscents based on type of eating breakfast

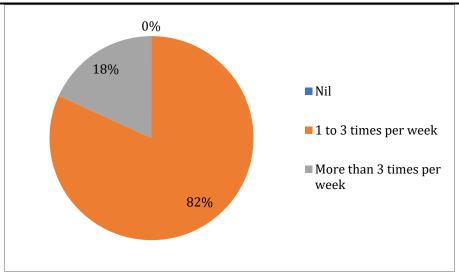


WHICH IS YOUR FAVOURITE FOOD?	Frequency	Percentage (%)
BAKERY FOOD	41	26%
Homemade food	63	40%
Restaurant food	46	34%

Distribution of adoloscents based ontheir favorite food

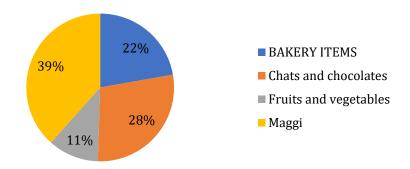


HOW MANY TIMES DO YOU EAT OUTSIDE FOOD	Frequency	Percentage (%)
Nil	01	0.006%
1 to 3 times per week	122	81%
More than 3 times per week	27	18%

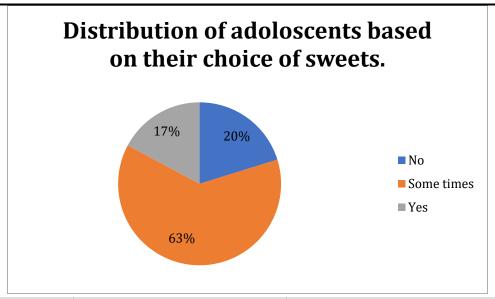


CHOICE OF SNACKS	Frequency	Percentage (%)
BAKERY ITEMS	34	22%
Chats and chocolates	42	28%
Fruits and vegetables	17	11%
Maggi	57	38%

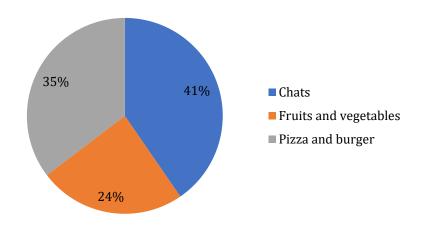
distribution of adoloscents based on their Choice Of Snacks



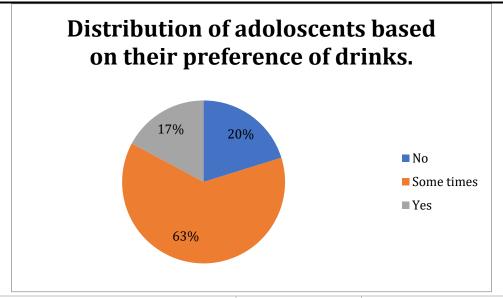
CHOICE OF SWEETS	Frequency	Percentage (%)
Bakery sweets	64	45%
Chocolates	53	36%
Home made	27	19%



WHICH FOOD DO YOU ENJOY	Frequency	Percentage (%)
Chats	60	41%
Fruits and vegetables	37	24%
Pizza and burger	53	35%

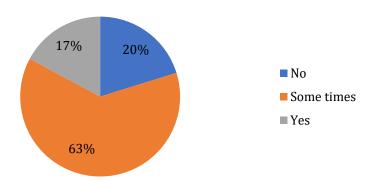


WHAT DO YOU PREFER TO DRINK	Frequency	Percentage (%)
COFFEE AND TEA	48	32%
Cold drinks	53	35%
Fruit juice	59	39%



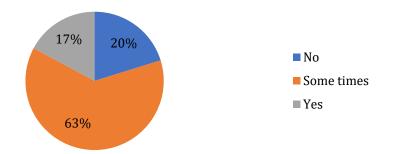
DO YOU REPLACE MEALS BY REPLACING OTHER FOOD	Frequency	Percentage (%)
No	25	16%
Some times	83	55%
Yes	42	28%

Chart Title



DO YOU SKIP BREAKFAST	Frequency	Percentage (%)	
No	31	20%	
Some times	93	62%	
Yes	26	17%	

Distribution of adoloscents depending upon skipping breakfast



4. DISCUSSION

This study showed that adolescent's dietary pattern is not much healthy where there is no sufficient micronutrients are not there in their diet, and also less fruit and vegetable are consumed by them and the many adolescents are taking outside food, bakery products, maggi, chocolates etc...

In Nepal, a study among school children revealed that fast foods (ready-to-eat snacks, chips, etc.) were referred by more than two-thirds of them and that advertising influenced preferences in 80%13. A study by Punjab Agricultural University, Ludhiana, on consumption pattern of fast foods among teenagers found that fast foods are most commonly consumed between regular meals14. A study on the diet and nutritional status of adolescent tribal population in nine states of India found that the mean intake of all the foodstuffs, especially the income-elastic foods, such as pulses, milk and milk products, oils and fats, and sugar and jiggery, was lower than the recommended levels of Indian Council of Medical Research (ICMR)15. Another study of the dietary pattern, nutrient intake, and growth of adolescent girls in urban Bangladesh noticed that a substantial proportion of girls did not consume eggs (26%), milk (35%), or dark-green leafy vegetables (20%).

5. RECOMMENDATIONS

Based on the study findings the recommendations are like health education programmes and awareness programmes can be used to improve the knowledge and attitude perception of adolescents to adapt healthy dietary pattern. Complication like anemia, deficiency disorders, malnutrition and under nutrition conditions we can prevent.

There is need of nutritional counseling by health care workers and teachers, parents while the adolescents can fulfill the knowledge of nutrition in home, schools areas

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CONFLICT OF INTERESTS

None.

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REFERENCES

- Tiwari P, Srivastava JK, Tiwari V, Gupta M. Nutritional status and dietary pattern of government school going adolescents of Lucknow city with reference to recommended dietary allowances- ICMR 2024, India. Clin Epidemiol Glob Health [Internet]. 2024;29(101757):101757. Available from: https://linkinghub.elsevier.com/retrieve/pii/S2213398424002549
- Sethia S, Gupta M, Gupta P, Gupta S, Singh D. A study to assess dietary pattern among school-going adolescents of central India. J Med Sci Res [Internet]. 2022;5(3):355. Available from:https://jmisr.researchcommons.org/cgi/viewcontent.
- Researchgate.net. [cited 2024 Dec 11]. Available from: https://www.researchgate.net/publication/365879923_Descriptive_Study_on_Dietary_Pattern_and_Health_Status_of_Adolescents_from_Rural_Bengaluru
- Resesearchgate.net. [cited 2024 Dec 11]. Available from: http://resesearchgate.net/publication/260519230_Dietary_Pattern_of_Schoolgoing_Adolescents_in_Urban_Bar oda_India
- Kaushik JS, Narang M, Parakh A. Fast food consumption in children. Indian Pediatr 2011;48:97-101.
- Sharma I. Trends in the intake of ready-to-eat food among urban school children in Nepal. SCN News 1998;16:21-2.
- Sadana B, Khanna M, Mann SK. Consumption pattern of fast foods among teenagers. Appl Nutr 1997;22:41-5.
- Rao KM, Balakrishna N, Laxmaiah A, Venkaiah K, Brahmam GNV. Diet and nutritional status of adoles- cent tribal population in nine states of India. Asia Pac J Clin Nutr 2006;15:64-71.
- Kaushik JS, Narang M, Parakh A. Fast food consumption in children. Indian Pediatr 2011;48:97-101.
- Sharma I. Trends in the intake of ready-to-eat food among urban school children in Nepal. SCN News 1998;16:21-2.
- Sadana B, Khanna M, Mann SK. Consumption pattern of fast foods among teenagers. Appl Nutr 1997;22:41-5.
- Rao KM, Balakrishna N, Laxmaiah A, Venkaiah K, Brahmam GNV. Diet and nutritional status of adoles- cent tribal population in nine states of India. Asia Pac J Clin Nutr 2006;15:64-71.5. Kaushik JS, Narang M, Parakh A. Fast food consumption in children. Indian Pediatr 2011; 48:97-101. 13. Sharma I. Trends in the intake of ready-to-eat food among urban school children in Nepal. SCN News 1998; 16:21-2.
- Sadana B, Khanna M, Mann SK. Consumption pattern of fast foods among teenagers. Appl Nutr 1997; 22:41-5.
- Rao KM, Balakrishna N, Laxmaiah A, Venkaiah K, Brahmam GNV. Diet and nutritional status of adolescent tribal population in nine states of India. Asia Pac J Clin Nutr 2006; 15:64-71.
- Ahmed F, Zareen M, Khan MR, Banu CP, Haq MN, Jackson AA. Dietary pattern, nutrient intake and growth of adolescent school girls in urban Bangladesh. Public Health Nutr 1998; 1:83-92.
- Malhotra A, Passi SJ. Diet quality and nutritional status of rural adolescent girl beneficiaries of ICDS in North India. Asia Pac J Clin Nutr 2007; 16(Suppl 1):8-16