Vol 4 Issue 8 May 2015

ISSN No : 2249-894X

Monthly Multidisciplinary Research Journal

Review Of Research Journal

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RNI MAHMUL/2011/38595

ISSN No.2249-894X

Review Of Research Journal is a multidisciplinary research journal, published monthly in English, Hindi & Marathi Language. All research papers submitted to the journal will be double - blind peer reviewed referred by members of the editorial Board readers will include investigator in universities, research institutes government and industry with research interest in the general subjects.

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ISSN 2249-894X

Impact Factor :3.1402(UIF)

Volume - 4 | Issue - 8 | May - 2015

Available online at www.ror.isrj.org

FOOD PREFERENCE AND DIETARY INTAKE OF COLLEGE STUDENTS IN HARYANA COLLEGE





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Short Profile

Deepika Dawar has an excellent academic record. She is gold medalist in B.Sc. Home Science and holds a meritorious position in M.Sc (Foods and Nutrition).She has a keen interest in research work and has an passion for extending her services for community welfare and health.

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ABSTRACT:

The present study was conducted on 120 college students (18-23 years). The main aim of the study was to explore the food preferences and dietary intake of college students pursuing their bachelor and master degree in an affiliated college in Haryana. Majority of the respondents (70%) were in the age group of 18-20 years and out of the total 91.66 per cent were Hindus. About 65 per cent of the respondents were in normal range

of BMI. Most of the respondents were pure vegetarian. More than half of the respondents, (60%) skipped meal with substitutes. The reported reason for skipping meal by 40 per cent of subjects was shortage of time. Eating habits of one third respondents were not influenced by any other person but stated to be their own personal liking. Snacks were the most preferred type of skipped meal substitute of the respondents (40%) and for 33.33 per cent, the source of procuring these snacks was college canteen. Regarding nutritional awareness, 50 per cent of subjects believed skipped meal substitutes selected are high in calories, fats, and salt. Taste dominated their selection criteria and the habit of snacking developed by frequent repetition. Preferred snacks of the students were found to be biscuits, chips and fried savories such as samosa or pakoras. Majority of the respondents (93.33%) preferred soft drinks for beverage consumption followed by tea (83.33%).

KEYWORDS

Dietary pattern, college students, skipped meal substitutes, Snacking preference.

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INTRODUCTION:

College life is an important stage for adolescents, as at this time their behavior is conducive to change. College age students experience a transitional phase called "emerging adulthood where they learn autonomy in many areas that influence long term health status. Time of transition, such as leaving home and increased decision making power while still being financially dependent define many in emerging adulthood .In addition they are exposed to stress and lack of time, posing a barrier to adoption of healthy practices despite being equipped with knowledge, Although behaviors' of students are considered a temporary part of life, however unhealthy habits learnt during this period generally persists in the adult life.

Food habits among college students are impacted by factors like cost of food, knowledge of foods, time of food preparation, family structure and culture .Lifestyle changes around the world indicate a shift towards dietary preferences which are predominated by processed foods and a considerable decrease in fresh foods specifically fruits and vegetables. One explanation for this is because eating healthy on average costs more. College students are taking fast food both occasionally and regularly and therefore facing obesity and related health complications, resulting increased health care cost. These diseases have been strongly associated with unhealthy dietary habits, including inappropriate nutrition, caffeine oversize, skipping meals and snacking between meals. Among the behavioral factors, fast food consumption exerted the largest influence on higher level of obesity. Fast food usually sold at eating establishments for quick availability or take out has become popular among young population in recent years. Fast food is dense in calorie, high saturated trans fat, sugar and lacking of fibers. The college student's population is a unique group that requires specific attention of dietetics or nutritional expert as using academic institutions to provide nutrition information about healthy choice is not enough to influence their positive dietary choices. Thus to understand the dietary pattern of youth students this study was undertaken so that effective behavior change interventions' could help them to adopt healthy dietary practices

METHODOLOGY:

The present study was conducted with the **aim to study food preferences and dietary intake of college students pursuing their bachelor and master degree in a university affiliated college in Haryana**. The sample consisted of **120 students**. All of the selected students were well informed of the study aims and verbal constant was taken for their participation in the study. **Observation cum interview schedule** was prepared to collect data regarding: general information, dietary pattern, snacking habits, meal substitute preference and consumption. A semi structured questionnaire was prepared by the investigators and pretested on 15 respondents. General information included information regarding age, sex, religion, education and family structure. Dietary habits included the information regarding their food habits, pattern of consumption and skipping of meal and fasting pattern. Snacking habits included snacking pattern like time of taking , preferences , sources of procurement, belief about meal substitute and development of snacking habit, Preferences for snacks, fruits and beverages included consumption of sweets and savory food items, fruits, beverages their type, quality and frequency . The weight and height of subjects were measured by the investigators.

Weight was measured after removal of shoes and height was measured without shoes in the standing

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position with the shoulders in relaxed position. BMI was calculated as weight (in kgs) divided by height in meters squared (in m2) and it was classified using WHO classification.

RESULTS AND DISCUSSION:

S.No	Age Group	Ν	Percentage (%)
1	1 18 -20 years		70
2	21 -23 years	36	30
	Sex		
1	Male	24	20
2	Female	96	80
	Religion		
1	Hindu	110	91.66
2	Sikhs	8	6.66
3	Christian	2	1.66
	Educational Qualification		
1	Pursuing Graduation	78	65
2	Pursuing Post Graduation	42	35
	Family Type		
1	Joint	36	30
2	Nuclear	84	70
	No of family members		
1	Less Than 4	12	10
2	4 -6	72	60
3	More Than 6	36	30

Table-1: Distribution of Respondents According to General Information

N depicts the number of respondents

Table 1 illustrates that, majority (70%) of the respondents were in the age group of 18-20 years and 80 per cent of the respondents were females and 20 per cent of males. Majority (91.66%) of them were Hindu by religion. Almost 65 per cent of the respondents were pursuing graduation in college. Majority of them belonged to nuclear family structure having 4 to 6 members in the family

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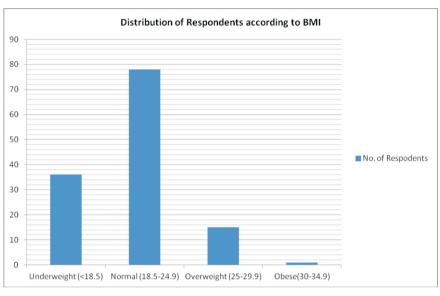


Figure 1: BMI of Subjects

Majority (65%) of the respondents was having normal BMI (78 students). The overall prevalence of overweight and obesity was 12.5 per cent (15 students) and 2.5 per cent (1 student) respectively. There were no students in the obese 2 and obese 3 categories.

S.No	Eating Habits	Ν	Percentage (%)
1	Vegetarian	68	56.66
2	Non Vegetarian	28	23.33
3	Ova Vegetarian	24	20
	Meal Regularity		
1	Taking all three meals	20	16.66
2	Skipping meal with substitute	72	60
3	Skipping meal without substitute	28	23.33
	Reason for skipping meals		
1	Food not tasty	36	30
2	Shortage of time	48	40
3	To be sociable	34	28.33
4	Health factors / habit	2	1.66
	Skipped meal substitute consumption		
1	1 day / week	22	35
2	2 day / week	78	65
	Factors affecting the dietary pattern		
1	Economic factor	6	5
2	Peer group	24	20
3	Personal liking	36	30
4	Fun & entertainment	20	16.66
5	Availability	8	6.66
6	Impulsive response to advertisements	26	21.66
	Fasting		
1	yes	42	35
2	Natatall	50	49.22

Table 2: Distribution of Respondents According to Dietary Pattern

2	Not at all	58	48.33
3	Occasionally	20	16.66

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Table 2 indicates that, majority of the respondents (56.66%) were pure vegetarians while 23.33 per cent were non vegetarians and only 20 per cent were ova vegetarians. Meal regularity pattern revealed only 16.66 per cent of the respondents were consuming 3 meals regularly, while majority of the respondents (83.33%) skipped meals either due to the food not being tasty (30%), shortage of time(40%) or to be sociable(28.33%). It was found that, of the respondents (48%) consumed skipped meal substitute more than 2 times a week. When asked about factors affecting the dietary pattern personal liking was found to be the response of maximum students (30%) followed by impulse response to advertisements (21.66%), peer group (20%), fun and entertainment (16.66%). Majority of the respondents (48.88%) did not practice fasting while 35% regularly practiced fasting and 16.66% were occasional fasters.

S.No	Eating meal substitute in between meals interfere	Ν	Percentage
	with your regular meal		(%)
1	Yes	92	76.66
2	No	28	23.33
	Preferred time of taking meal substitute		
1	Between Breakfast & lunch	24	20
2	Between lunch & evening tea	52	42.33
3	Between tea & dinner	44	36.66
	Type of skipped meal substitute		
1	Junk food	42	35
2	Snacks	48	40
3	Beverages	18	15
4	Fruits	12	10
	Sources of procuring meal substitute		
1	College canteen	40	33.33
2	Cafeteria	20	16.66
3	Home Prepared	28	23.33
4	Street vendor	32	26.66
	Is their sufficient variety to make choice		
1	Yes	84	70
2	No	36	30
	Skipped meal substitute are		
1	High in calories, salt . taste	60	50
2	Low in calories, nutritious & healthy	44	36.66
3	Low in nutritive value	16	13.33
	Eating Meal substitute habit developed as an		
1	Automatic action	50	41.66
2	Frequent repetition	70	58.33

TABLE 3: Distribution of Respondents According to Meal Substitute/Snacking Habit

Table 3 revealed that, regular meal pattern of majority of the respondents (76.66 %) was affected by snacking habits while 23.33 per cent remained unaffected. Out of the total, 43.33 per cent of the respondents preferred snacks between lunch and evening tea while 36.66 per cent between evening tea and dinner and 20 per cent between breakfast and lunch. Regarding preferences for the

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type of skipped meal substitute majority (40%) preferred snacks followed by junk food (35%), beverages (15%) and fruits (10%) respectively. Source of procuring meal substitute for majority of the respondents (33.33%) was college canteen followed by street vendor (26.66%), home prepared (23.33%) and cafeteria (16.66%) respectively, Around 70 per cent of the respondents were satisfied with the variety available to make sufficient choices while 30 per cent were not. Half of the respondents believed that skipped meal substitute are high in calorie , salt and taste ; while 36.66 per cent believed them to be low in calorie , nutritious and healthy and 13.33per cent considered them to be low in nutritive value . In 58.33 per cent of respondents eating meal substitute habit developed through frequent repetition while in 41.66 per cent as an automatic action.

S.No	Consumption of Junk food	Ν	Percentage (%)
1	Yes	102	85
2	No	18	15
	Type Of Snack		
1	Samosa	28	23.33
2	Bread Pakora	32	26.66
3	Burger	14	11.66
4	Sandwich	16	13.33
5	Pastry	24	20
6	Noodles	18	15
7	Aaloo Chaat	12	10
8	Biscuit	68	56.66
9	Namkeen	52	43.33
10	Any other	8	6.66
	Quantity Of Snack		
1	One	74	61.66
2	Two	20	16.66
3	Three and above	16	13.33
	Frequency Of Snack		
1	Alternative day	35	29.16
2	Daily	42	35
3	Weekly	21	17.5
4	Occasionally	12	10

Table 4: Snack and Junk Food Consumption Pattern Among Respondents.

Table 4 indicates that, majority of the respondents (85%) consume junk food. Many respondents consume more than one snack at a time. The biscuits, namkeen, bread pakora and samosa are highly preferred snacks. A large number of students consume fast foods daily (42%) or on alternate days (35%). This high level of consumption of unhealthy foods by youth is a matter of concern for nutritionists and must be addressed urgently and effectively by parents, teachers and society.

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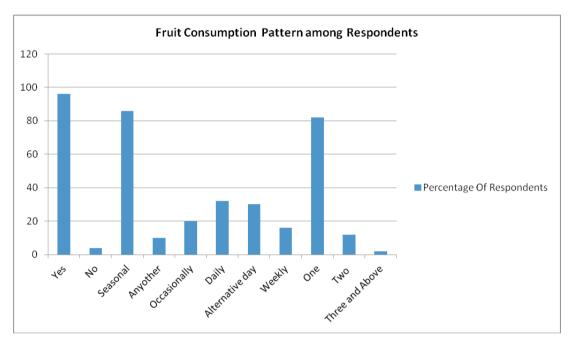


Figure 2: Fruit Consumption Pattern

Figure 2 indicates that, majority of the respondents (96%) consume fruits while only 4% of the respondents do not consume fruits at all. Majority (86%) consumed seasonal fruit while only 32 % of the respondents were taking fruit daily.

Sr No.	Type of beverage	Ν	Percentage (%)
1	Теа	100	83.33
2	Coffee	84	70
3	Soft drink	112	93.33
4	Nimbu paani	40	33.33
5	5 Alcoholic Beverages		3.33
6 Any other		22	18.33

Table 5 : Consumption Pattern of Beverage	ges Among Respond	ents
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Table 5 depicts that, majority of the respondents (93.33%) were consuming soft drinks followed by tea (83.33%), Coffee (70%), Nimbu paani (33.33%), while only 3.33% of the respondents were having alcoholic beverage. Many subjects consume more than one beverage in a day.

CONCLUSION:

It is a known phenomenon, these days that, majority of the students skip meals and consume junk food. The prevalence of underweight, overweight & obesity in college students are very prevalent.. Their dietary habits in general are poor. Dietary habits have a great influence on morbidity and mortality in life and due to the cumulative effect of adverse factors throughout life of an individual, it is particularly important during college age to adopt a healthy dietary practice. Students must be

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made well aware of the negative effects associated with eating unhealthy foods though they cherish eating junk foods and have a habit of skipping meals. Specific health education programs, dietary guidelines and effective public awareness campaigns could be initiated to address the unhealthy lifestyle of college students and improve their health.

REFERENCES:

1.Eyre H, Kahn R, Robertson RM. Preventing cancer, cardiovascular disease, and diabetes: a common agenda for the American Cancer Society, the American Diabetes Association, and the American Heart Association. Diabetes care 2004; 27:1812-24.

2.Laska N, Larson NI, Neumark-Sztainer D, Story M. Dietary patterns and home food availability during emerging adulthood: Do they differ by living situation? Public Health Nutr. 2010;13(2):222-228.

3. Musaiger, A., Hassan, A., Obeid, O. (2011). The Paradox of Nutrition- Related Diseases in the Arab Countries: The Need for Action. International Journal of Environmental Research and Public Health, 8, 3637-3671

4.Nelson MC, Story M, Larson NI, Neumark-Sztainer D, Lytle LA. Emerging adulthood and college-aged youth: An overlooked age for weight-related behavior change. Obesity (Silver Spring). 2008;16(10):2205-2211.doi: 10.1038/oby.2008.365.

5.R W Jeffery and S A French. Epidemic obesity in the United States: are fast foods and television viewing contributing? American Journal of Public Health. Feb 1998, 88(2):277-280.

6.Racette SB, Deusinger SS, Strube MJ, Highstein GR, Deusinger RH. Weight changes, exercise, and dietary patterns during freshman and sophomore years of college. J Am Coll Health. 2005;53(6):245-251. doi: 10.3200/JACH.53.6.245-251.

7.Sajwani AR, Shoukat S, Raza R, Sheikh MM, Rashid Q, Siddique MS, et al. Knowledge and practice of healthy lifestyle and dietary habits in medical and non-medical students of Karachi, Pakistan. J Pak Med Assoc 2009;59(9):650-5.

8.Silliman K, Rodas-Fortier K, Neyman M. A survey of dietary and exercise habits and perceived barriers to following a healthy lifestyle in a college population. Californian J Health Promot 2004;2(2):10-9.

9.Velazquez CE, Pasch KE, Ranjit N, Mirchandani G, Hoelscher DM. Are adolescents' perceptions of dietary practices associated with their dietary behaviors? J Am Diet Assoc. 2011;111(11):1735-1740. 10.Webb E, Ashton CH, Kelly P, Kamah F. An update on British medical students' lifestyles. J Med Educ

1998;32:325-31.

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