

Influence of socio-economic status on adolescents eating behaviour

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■ **ABSTRACT :** The study was conducted on food habit, nature and type of food intake along with frequency of food group taken by adolescents in urban area of Muzaffarnagar (Uttar Pradesh). One hundred adolescents were purposely selected from different schools and colleges of Muzaffarnagar. The information was gathered with the help of “questionnaire-cum-interview technique “. Interview questionnaire contained comprehensive questions related to present study. The data were presented in tabular form .The study revealed that more than half of overall adolescents (68%) were vegetarian, but only 4 per cent adolescents used to consume proper diet regularly. The food habit was associated with socio-economic status (SES) of the family. All food groups were preferred by high socio-economic status (HSES). They showed high consumption of green vegetable (90.9%), grind pulse (60.5%), cereals (51.5%), medium fat and spice (87.8% and 72.7%) and low consumption of tea (36.4%), whole pulses (39.4%), root and fibrous vegetables (6.06% and 3.03%). High difference was also found between preferences of intake of food. There were 65 per cent, 78 per cent, 58 per cent adolescents who preferred intake of hot food, occasionally eat junk food, like to eat traditional food on special occasion. It was seen that adolescents of the high socio-economic group were far better than the adolescents of middle socio-economic group and to maintain nutritional status of adolescents of middle socio-economic group. They should be trained to make a right food habit about their meal consumption pattern. So, they can adopt healthy eating pattern and life style.

■ **KEY WORDS:**Socio-economic status, Adolescents, Food habit, Vegetarian, Eggitarian, Food consumption

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Adolescence (age 10-19 year) is one of the most challenging periods in human development .Physical and psychological changes are taking place and many important issues arise that influence the nutritional well being of adolescents. Young people are assuming responsibility for their own eating habit, health attitudes and behaviour. In fact, attitude plays an important role in the adoption and maintenance of a variety of health and nutritional habits. Nutritional needs are higher in adolescent stage than at any other stages in the life cycle.

Adolescents are usually open to new idea; they show high curiosity and interest. Many habits acquired during adolescence will last for a life time. Furthermore, with increasing age, adolescents personal choices and preferences gain priority over eating habits acquired in the family and they have progressively more control over what they eat when and where (Thomas, 1991; Shepherd and Dennison, 1996;

Spear *et al.*, 1996).Eating behaviour of younger children is highly influenced by their parents. Will power of parents get supremacy over the will power of younger children . In adults, it may be more difficult to modify already well established eating pattern and life style.

Changes in life style, including food habit are often more obvious among urban adolescents (Ahmed *et al.*, 1998). Considering all these aspects, the present study was fabricated to explore food habit, nature and type of food intake along with frequency of food groups taken by the adolescents residing in urban areas of Muzaffarnagar district of Uttar Pradesh.

■ RESEARCH METHODS

A sample of randomly selected 100 adolescents boys and girls from 8 randomly selected schools and colleges of Muzaffarnagar district of U.P. state was studied. Out of this

67 adolescents were from Middle Socio-economic group (MSEG) and 33 adolescents were from high socio-economic group (HSEG) families. Their age ranged between 13 years to 19 years. The information was gathered on the basis of sex, age and socio-economic status with the help of questionnaire-cum-interview technique. Various questions related to aims and objectives of the study were included in the questionnaire. The collected data were tabulated and analyzed to calculate frequency, mean and percentage.

■ RESEARCH FINDINGS AND DISCUSSION

The results have been presented under four broad headlines - socio-economic status of the selected adolescents, Food habit of adolescents, Frequency of intake of food group in daily meal and nature of food preference.

Socio economic status of the selected adolescents :

Prior to discussion on the main findings of the study, it will be appropriate to have deep insight about the profile of the respondents so that the finding of the study can be best interposed in the right perspectives. The data presented in Table 1 indicated that the age of respondents ranged between

10-19 years. Most of the adolescents (44%) belonged to the age group 17 -19 years which fell under late adolescent stage. With regard to literacy, 24 per cent of the adolescents were High School pass out, 36 per cent were Intermediate and 40 per cent were graduate. The family income of 67 per cent respondents was Rs.3000-6000 per month, 33 per cent respondents family income ranged between Rs. 6000 -12000 per month but none of respondents belonged to low monthly intake (Rs. 0-3000 per month range). Majority of the respondents (66%) belonged to nuclear family, while remaining 34 per cent were from joint family.

Food habit of adolescents :

Studies from several countries showed that adolescents food habit and meal pattern were associated with family socio-economics status (Ahmed *et al.*, 1998). Table 2 illustrates food habit of the adolescents according to their socio-economic status. It was observed that more than half of the total adolescents (68%) were vegetarian followed by eggitarian (27%) and non - vegetarian (5%). According to socio-economic status more than half of respondents (70.1%) were vegetarian and followed by, non-vegetarian (7.5 %), eggitarian (22.4%)

Table 1: Socio-economic attributes of respondents in the city under study

Socio-economic attributes		Respondents (No.)	Percentage
Age	Early adolescent(10-13)	14	14
	Middle adolescent(14-16)	42	42
	Late adolescent(17-19)	44	44
Education	High School(10)	24	24
	Intermediate(10+2)	36	36
	Graduation(10+2+3)	40	40
Monthly income	Low(0-3000Rs.)/month	-	-
	Middle(3000-6000Rs.)/ month	67	67
	High(6000-12000Rs.)/ month	33	33
Family type	Nuclear	66	66
	Joint	34	34

Table 2 : Food habit of adolescent according to their socio-economic status

		Socio-economic status					
		Middle		High		Total	
		No.	Percentage	No.	Percentage	No.	Percentage
Food habit	Vegetarian	47	70.10	21	63.6	68	68
	Non-vegetarian	5	7.50	-	-	5	5
	Eggitarian	15	22.40	12	36.4	27	27
Meal intake pattern	2 times a day (<i>i.e.</i> skipping breakfast)	32	47.76	14	42.2	46	46
	3 times a day	32	47.76	18	54.5	50	50
	4 times a day	3	4.50	1	3.03	4	4

from middle socio-economic status. whereas from high socio-economic groups, 63.6 per cent respondents were vegetarian and remaining 36.4 per cent of respondents were non-vegetarian.

In general, adolescents in the most countries have three meals (Siega-Riz *et al.*, 1998; Cruz, 2000). Owing to urbanization and the change of lifestyle, the meal pattern of adolescents have its own characteristics, breakfast skipping, dieting and snacking are important problems of adolescents worldwide (Shaw, 1998; Cruz, 2000; Rolland-Cachera *et al.*, 2000; Samuelson, 2000). Present study showed that 50 per cent of the total respondents take meal 3 times a day, 46 per cent of the total respondents take meal 2 times a day (*i.e.* skipping breakfast) only 4 per cent of the total respondents take meal 4 times a day. The percentage of adolescents skipping breakfast was higher in middle socio-economic status (47.76%) than in high socio-economic status (42.2%). Majority of the respondents in both the groups were skipping meals due to lack of time and breakfast was the main skipped meal. This finding was comparatively lower than that reported by a

Chinese study in which 83.6 per cent of university students consumed regular meals, with 79 per cent of them took at least three times per day (Sakamaki *et al.*, 2005). Another study reported that 61.4 per cent of Lebanese university students had regular meals daily (Yahia *et al.*, 2008).

Frequency of intake of food group in daily meal :

This study provided a unique opportunity to assess the prevalence of nutrition related factors in a large and diverse adolescent population and examine their relationship with a range of socio-economic, health promoting and health compromising behaviour. Major concerns identified included the high rate of inadequate consumption of cereals, pulse, vegetables, dairy products and unhealthy eating practice. Food items consumption were entirely different in two socio-economic status of the adolescents as revealed in Table 3.

There were overall 58 per cent, 54 per cent, 77 per cent, 51 per cent, 80 per cent and 62 per cent of the adolescents who frequently took of food groups *i.e.* both cereal (wheat and rice), grind pulses, green vegetable, tea beverage, medium

Table 3 : Frequency of intake of food group in daily meal of adolescents

Food group	Socio-economic status						
	Middle		High		Total		
	No.	Percentage	No.	Percentage	No.	Percentage	
Cereals	Wheat	16	23.9	10	30.3	26	26
	Rice	8	11.9	2	6.16	10	10
	Any one of the	3	4.5	3	9.8	6	6
	Both above	40	59.7	18	54.5	58	58
Pulses	Whole	32	47.76	13	39.4	45	45
	Grind	34	50.74	20	60.5	54	54
	Both	1	1.47	1		1	1
Vegetable	Green	47	70.1	30	90.9	77	77
	Root	13	19.4	2	6.06	15	15
	Fibrous	4	5.97	1	3.03	5	5
	Other	3	4.5			3	3
Beverage	Tea	39	58.2	12	36.4	51	51
	Milk	18	26.9	17	51.5	35	35
	Juice	1	1.5	2	6.1	3	3
	Other	9	13.4	2	6.1	11	11
Fat	Low	11	16.4	2	6.1	13	13
	Medium	51	76.12	29	87.8	80	80
	High	5	7.1	2	6.1	7	7
Spices	Low	20	29.85	6	18.18	26	26
	Medium	38	56.7	24	72.7	62	62
	High	9	13.4	3	9.09	12	12

fat and medium spice, respectively. More than half of the respondents (59.5%) from middle socio-economic status against (54.5%) from high socio-economic status used both wheat and rice in their diet. 60.5 per cent high socio-economic groups against 50.74 per cent middle socio-economic groups preferred grind pulses in their daily meal. 70.1 per cent respondents from middle socio-economics group preferred green vegetable whereas 90.9 per cent respondents from high economics groups preferred green vegetable. More than half (58.2%) middle socio-economic status adolescents against 36.4 per cent high socio-economic status adolescents preferred tea beverage. On the other hand less half (35%) of all adolescents drank milk most often. The difference between adolescents from high socio-economic status and middle socio-economic status was large (51.5% vs 26.9%). Low intake of milk was more common among adolescents from middle socio-economic status. According to socio-economic groups more than half of high socio-economic groups (87.8%) against middle socio-economic groups (76.12%) preferred medium fat. 56.7 per cent from middle socio-economic groups preferred medium spice as compared to 72.7 per cent from high socio-economic status.

Adolescents from high socio-economic status were most aware about intake of food groups in their diet. Adolescents with a high socio-economic status tend to show high consumption of green vegetable, grind pulses, milk, medium fat and spice and low consumption of cereals and tea, whole pulses, root and fibrous vegetables.

Nature of food preference :

Food preferences play a critical role in influencing food

choice and intake. Table 4 revealed that nearly 65 per cent of the total respondents preferred to eat hot food. High difference was found between respondents from both socio-economic status *i.e.* 30.3 per cent in high socio-economic status and 56.7 per cent in middle socio-economic status preferred to eat hot food.

Snacking is a well established eating pattern amongst adolescents. Socio-economic status was positively associated with preference of junk food occasionally (73%) followed by monthly (19%), weekly (8%). The percentage of adolescents who preferred junk food occasionally from high socio-economic status and middle socio-economic status was 78.8 per cent and 70.15 per cent, respectively. Only 6.06 per cent respondents of high socio-economic status preferred junk food weekly. Whereas a study in Chandigarh revealed that 58.8 per cent of the adolescents preferred fast food items over regular meals (Puri *et al.*, 2008).

In regard to consumption of food on special occasion, nearly half of overall respondents (58%) preferred traditional food on special occasion followed by non-traditional food (33%), both traditional and non-traditional food (9%). According to socio-economic status, 64.2 per cent respondents of middle socio-economic status against 45.45 per cent from high socio-economic status liked traditional food on special occasion.

Taste also affects the intake of food. 54.4 per cent respondents of high socio-economic status increased their intake of food according to their taste whereas 57.6 per cent decreased their intake of food if food was not according to their taste.

		Socio-economic status					
		Middle		High		Total	
		No.	Percentage	No.	Percentage	No.	Percentage
Nature of food	Hot	38	56.7	27	30.3	65	65
	Cold	5	7.5	2	6.16	7	7
	Any type	24	35.8	4	9.8	28	28
Junk food intake frequency	Weekly	6	8.96	2	6.06	8	8
	Monthly	14	20.9	5	15.2	19	19
	Occasionally	47	70.15	26	78.8	73	73
Intake of food on special occasion	Traditional	43	64.2	15	45.45	58	58
	Non-traditional	20	29.9	13	39.39	33	33
	Both	4	5.97	5	15.15	9	9
Intake of food on taste preference				Like			
	Normal	47	70.1	15	45.45	62	62
	High	20	29.9	18	54.4	38	38
				Dislike			
	No intake	31	46.3	14	42.4%	45	45
	Medium	30	44.8	19	57.6%	49	49
	High	6	8.96			6	6

Conclusion :

If a comparison is made between the high socio-economic status and middle socio-economic status of Muzaffarnagar adolescents, it was seen that adolescents of the high socio-economic group were far better with respect of their food habit than their adolescents of middle socio economic group .The percentage showing the consumption of food stuff, nature and preference of food in their diet was better. It can be concluded that to maintain nutritional status of adolescents of middle socio-economic group they should be trained to make a right food habit about their meal consumption pattern. So, they can adopt healthy eating pattern and life style.

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