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Pattern of Meal Consumption of Girl Adolescents in Kollam

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Abstract:
The pattern of meal consumption of adolescents were studied among 450 girls in different geographic areas of Kollam through stratified sampling. Non-vegetarian diet regime was followed by 92.7% of girls and 99.2% of urbanites had 4 meals - a - day. Lunch was the main meal for 70.7% of urbanites. The main meal eaten by adolescents had statistically significant associations with their demographic characteristics including locality of domicile (□2 = 12.423, p = 0.002, df = 2), type of educational institution (□2 = 21.934, p = 0.000, df =1), stream of study (□2 = 6.486, p = 0.039, df = 2) and academic status of father (□2 = 10.176, p = 0.038, df = 4). Traditional cereal based food items were eaten for breakfast by adolescents from varied localities of domicile on school days (80.2%) and holidays (92.7%). Non-traditional food items which were prepared commercially were consumed for breakfast by urbanites only. A notable 6.6% of rural adolescents and 9.9% of coastal adolescents restricted their breakfast, even on holidays to just a coffee or tea. The evening meal for adolescents from all localities was noted as bakery foods on school days (52.2%) and holidays (57.1%). Rice and curries was eaten as dinner by 97.3% of adolescents on school days. A significant 78.9% of urbanites took less than five minutes to eat breakfast while 69.9% of them ate lunch in more than 20 minutes of time. All the adolescents were satisfied regarding the meals consumed.

Key Words: adolescents**,** adolescent girls, adolescent meal, meal consumption, meal consumption pattern, meal pattern, consumption pattern.

INTRODUCTION

Adolescence is a unique stage of human development and extremely influential stage for future health and so adequate nutrition during this phase is necessary for attaining ideal physical and cognitive development, and also for laying the foundation of good health (World Health Organisation, 2022). Adolescence provide a strategic window of opportunity to mold and solidify good eating and lifestyle habits (Agofure et al, 2021). Good food habits in adolescence is known to establish lifelong patterns and prevent future health problems. Therefore, this study was perceived with the objective of understanding the pattern of meal consumption of girl adolescents. It was envisaged to gather insights into the pattern of meal consumption of girl adolescents so that involvement of their families and communities could be encouraged to promote nurturing environments that would support healthy dietary behaviours.

RELATED STUDIES

Singh et al (2022) in their study done on the school going adolescents in Madhya Pradesh found that majority of adolescents consumed regular meals such as chapati (84 per cent), rice (79 per cent), and dal (74 per cent). Green leafy vegetables were consumed relatively less (60 percent) than the other vegetables (67 percent). More than half of them (50 percent) consumed calorie dense foods like cake, chocolates, burger, pastries, pizza and beverages. Meals were consumed regularly by the adolescents while 5.26 percent of them skipped meals three to four times a week.

Rathi et al (2017) in their study in Kolkata on the food consumption patterns of adolescents aged 14-16 years found that adolescents had poor dietary intakes. More than one quarter of them reported not consuming vegetables (30 percent) and eating three or more servings of energy rich foods were reported by 70 percent of them. Not consuming any serving of fruits were noted in 45 percent of them while 47 percent reported consuming high energy beverages in three or more servings. Adolescent girls were noted to consume more nutritious diets when compared to boys.

Lakshmi (2021) in her study on adolescents found that the percent adequacy of food intake of adolescents were deficient in green leafy vegetables, fruits, milk and milk products. It was also noticed that more than half of them consumed chat items like panipuri and bhelpuri which were sold by street vendors on a weekly basis (54.3 percent). More than one quarter of them were noted to consume Chinese foods such as noodles and Maggie on a daily basis.

Vijayalakshmi et al (2022) in their study on adolescents aged 13-15 years from rural North Bengaluru found that the food habits of 56 percent of adolescents were non-vegetarian and 44 percent were vegetarian. Majority of 86 percent of them consumed three meals daily while 14 percent had only two meals daily. Adolescent girls were noted to skip more meals than boys the reasons being shortage of time (37.5 percent) and dislike for a particular food (37.5 percent).

MATERIALS AND METHODS

Four hundred and fifty higher secondary school going girl adolescents from different geographic areas of the district of Kollam in Kerala were selected as the samples of the study through stratified sampling technique. Primary data was collected using a questionnaire. The data was analysed statistically using SAS and SPSS software and the results were interpreted. Significance was verified statistically at the value of $p \leq 0.05$ and the results are presented.

RESULTS

1. Demographic characteristics

Demographic characteristics includes the socio- economic and family characteristics, of a person, all of which is known to significantly influence their dietary behaviour. Wang et al (2024) opines that socio - economic characteristics has a deterministic part in health and is linked with dietary patterns. The demographic characteristics of the adolescent girls is given in Table 1.

Table 1- Demographic characteristics

Demographic characteristics		**Total N=450**	**Locality of domicile**		
			Urban N=123	**Rural N=256**	**Coastal N=71**
Religion followed	Hinduism	237(52.7)	60(48.8)	140(54.7)	37(52.1)
	Christianity	113(25.1)	33(26.8)	61(23.8)	19(26.8)
	Islam	100(22.2)	30(24.4)	55(21.5)	15(21.1)
Family type	Nuclear	370(82.2)	100(81.3)	213(83.2)	57(80.3)
	Joint	80(17.8)	23(18.7)	43(16.8)	14(19.7)
Family size	4 members	366(81.3)	103(83.7)	208(81.3)	55(77.5)
	5 members	38(8.5)	14(11.4)	19(7.4)	5(7.0)
	6 members	46(10.2)	6(4.9)	29(11.3)	11(15.5)
Birth order	First born	290(64.4)	86(69.9)	158(61.7)	46(64.8)
	Second born	151(33.6)	35(28.5)	93(36.3)	23(32.4)
	Third born	9(2.0)	2(1.6)	5(2.0)	2(2.8)

Income category	Low income category	142(31.6)	33(26.8)	49(19.1)	60(84.5)
	Middle income category	249(55.3)	51(41.5)	187(73.1)	11(15.5)
	High income category	59(13.1)	39(31.7)	20(7.8)	0(0.0)
Source of family income	Regular Paid work	314(69.8)	103(83.7)	196(76.6)	15(21.1)
	Casual work	89(19.8)	0(0.0)	43(16.8)	46(64.8)
	Self- employment	47(10.4)	20(16.3)	17(6.6)	10(14.1)

Percentage is given in parenthesis

The religion followed by 52.7% of girl adolescents from all the localities of domicile was Hinduism. The family of 82.2% of them were nuclear in type and 81.3 % had 4 members in their families. A significant 64.4% of adolescents were noted to be first borns. A majority of 73.1% of rural and 41.5 % of urban adolescents were from middle income category. A noteworthy 31.7% of urban adolescents also were from high income category, but none of the coastal adolescents were from this income category. Regular paid job was the source of family income for adolescents of 83.7% from urban and 76.6 % from rural areas while casual work was the income source of family for 64.8% of coastal adolescents.

Pattern of meal consumption

Dietary patterns that are vital in promoting health and wellbeing is usually established in adolescents (Sinai, et al, 2021) and contribute to their health as they are linked to improved nutritional intakes, larger dietary diversity and healthier food choices. The pattern of meal consumption of adolescents is shown in Table 2.

Table 2- Pattern of meal consumption

Pattern of meal consumption		**Total N=450**	**Locality of domicile**		
			Urban N=123	**Rural N=256**	**Coastal N=71**
Kind of meal consumed	Non vegetarian	417(92.7)	112(91.1)	236(92.2)	69(97.2)
	Vegetarian	33 (7.3)	11(8.9)	20(7.8)	2(2.8)
Daily meal configuration	Three meals	151(33.6)	1(0.8)	114(44.5)	36(50.7)
	Four meals	299(66.4)	122(99. 2)	142(55.5)	35(49.3)
Major meal consumed	Lunch	258(57.3)	87(70.7)	134(52.3)	37(52.1)
	Dinner	192(42.7)	36(29.3)	122(47.7)	34(47.9)

Percentage is given in parenthesis

Non - vegetarian diets were consumed by a massive 92.7 % of adolescents from all the localities. The daily meal configuration revealed that 99.2 % of urban and 55.5% of rural adolescents consumed four meals daily, though not well balanced, whereas three meals were consumed by 50.7% of adolescents from coastal areas. Lunch was eaten as the major meal by 70.7% of urban adolescents and 52.3 % of rural and 52.1% of coastal adolescents. This may be due to schools having long lunch breaks enabling adolescents to relish consuming lunch in the company of friends. This finding is consistent with the opinion of Ruddock et al (2021) that individuals eat more while eating in the company of friends and family. Suwalska and Bogdanski (2021) has similarly observed that eating is greatly influenced by other people's presence, even if it is primarily controlled by hunger and satiety. Relation between selected demographic characteristics of the girls and the major meal consumed is shown in Table 3.

Table 3- Relation between selected demographic characteristics and the major meal consumed

Characteristics		Total N=450	Main meal consumed		□2 value	p value	df
			Lunch	Dinner			
Locality of domicile	Urban	123(100.0)	87 (70.7)	36(29.3)	12.423	0.002 **	2
	Rural	256(100.0)	134(52.3)	122(47.7)			
	Coastal	71(100.0)	37(52.1)	34 (47.9)			
Type of educational Institution	Government	334(100.0)	170(50.9)	164(49.1)	21.934	0.000 **	1
	Non -government	116(100.0)	88(75.9)	28(24.1)			
Stream of study	Science	120(100.0)	75(62.5)	45(37.5)	6.486	0.039 *	2
	Commerce	178(100.0)	89(50.0)	89(50.0)			
	Humanities	152(100.0)	94(61.8)	58(38.2)			
Academic status of father	Middle school	63(100.0)	29(46.0)	34(54.0)	10.176	0.038 *	4
	Matriculation	109(100.0)	57(52.3)	52(47.7)			
	Graduation	197(100.0)	115(58.4)	82(41.6)			
	Post - graduation	56(100.0)	39(69.6)	17(30.4)			
	Professional course	25(100.0)	18(72.0)	7(28.0)			

Percentage is given in parenthesis **Significant at1percent level*Significant at 5percent level

Test of significance was done to find the association between the demographic characteristics and the major meal consumed by the girl adolescents. Table 3 revealed that the locality of domicile (□2 = 12.423, p=0.002, df=2) and type of educational institution (□2 = 21.934,p=0.000,df=1) were related to the major meal consumed, statistically significant at 1% level. Urban adolescents (70.7%) and those learning in non-government institutions (75.9%) had lunch as the major meal. The stream of study (□2 = 6.486, p = 0.039, df = 2) and academic status of father (□2 = 10.176, p=0.038, df = 4) were related to major meal consumed statistically significant at 5% level. Adolescents studying Science (62.5%) and whose fathers were professional course graduates (72.0%) had lunch as the major meal in larger proportions. A direct linear relationship was noted between academic status of father and the major meal consumed. The percentage of adolescents that consumed lunch as the major meal increased with higher academic qualification of father. This could probably be because of fathers with higher educational status insisting their daughters to eat a filling lunch, as education makes an individual more receptive to health messages and positively modify their diet behaviours. In the same vein, Maryjoy et al (2020) has observed that parental education level differentially affects and significantly determines the healthy eating behaviours of their children.

4. Configuration of meals consumed

Many health-related habits formed in adolescence tend to last into adulthood (Daly et al, 2022). Healthy dietary habits are essential for sustaining optimal health and well-being and wise dietary decisions are indispensable to attaining a healthy life. The configuration of meals which denotes the food components within a meal display the qualitative value of food consumed. The configuration of meals eaten by girl adolescents on both holidays and school days is shown in Table 4.

Table 4- Configuration of meals eaten

Meal	Configuration of meals eaten	Total N=450		Urban N=123		Rural N=256		Coastal N=71	
		School day	Holiday	School day	Holiday	School day	Holiday	School day	Holiday
Breakfast	Traditional breakfast food items	361 (80.2)	417 (92.7)	103 (83.7)	114 (92.7)	202 (78.9)	239 (93.4)	56 (78.9)	64 (90.1)
	Commercially prepared foods	12 (2.7)	9 (2.0)	12 (9.8)	9 (7.3)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Coffee/Tea only	77 (17.1)	24 (5.3)	8 (6.5)	0 (0.0)	54 (21.1)	17 (6.6)	15 (21.1)	7 (9.9)
Lunch	Rice and curries	394 (87.6)	450 (100.0)	87 (70.7)	123 (100.0)	236 (92.2)	256 (100.0)	71 (100.0)	71 (100.0)
	Food items of breakfast	56 (12.4)	0 (0.0)	36 (29.3)	0 (0.0)	20 (7.8)	0 (0.0)	0 (0.0)	0 (0.0)
Evening meal	Bakery foods	235 (52.2)	257 (57.1)	98 (79.7)	123 (100.0)	107 (41.8)	117 (45.7)	30 (42.3)	30 (42.3)
	Home - made snacks	28 (6.2)	31 (6.9)	0 (0.0)	0 (0.0)	25 (9.8)	25 (9.8)	5 (7.0)	5 (7.0)
	Rice and curries	34 (7.6)	0 (0.0)	24 (19.5)	0 (0.0)	10 (3.9)	0 (0.0)	0 (0.0)	0 (0.0)
	Coffee/Tea only	153 (34.0)	162 (36.0)	1 (0.8)	0 (0.0)	114 (44.5)	114 (44.5)	36 (50.7)	36 (50.7)
Dinner	Rice and curries	438 (97.3)	417 (92.7)	118 (95.9)	94 (76.4)	251 (98.0)	254 (99.2)	69 (97.2)	69 (97.2)
	Food items of breakfast	12 (2.7)	33 (7.3)	5 (4.1)	29 (23.6)	5 (2.0)	2 (0.8)	2 (2.8)	2 (2.8)
Total		450 (100.0)	450 (100.0)	123 (100.0)	123 (100.0	256 (100.0)	256 (100.0)	71 (100.0)	71 (100.0)

Percentage is given in parenthesis

Traditional breakfast items of Kerala which are cereal based dishes were largely eaten for breakfast on school days by 80.2% of adolescent girls and on holidays by 92.7% of them from all the localities of domicile. However, the breakfast eaten by 9.8% of urbanites on school days and 7.3% of them on holidays were ready to eat food items like cornflakes, chocos and muesli featuring a westernized way of eating breakfast. Nevertheless, this trend was confined to the urban areas only. A hot beverage drink like coffee or tea alone was consumed for breakfast by less than a quarter of rural and coastal girls (21.1% each) and 6.5 % of urban girls on school days. Breakfast termed as the most significant meal of the day was restricted to a serving of coffee or tea even on holidays by 6.6% of rural and 9.9% of coastal adolescents. This result is distressing as lack of a substantial breakfast would affect their general well-being and academic performance.

Regarding lunch consumed by girl adolescents from all localities of domicile, 87.6% of them consumed the customary lunch of rice and curries as their noon meal on school days. A little more than a quarter of the urban girls (29.3%) had their breakfast food items for lunch too. This was partly due to the need of carrying to school lunch boxes that are lighter in weight and also because some of them had to depart from their homes early in the morning for tuitions while the lunch was yet to be prepared at home.

A huge majority of 92.2 % of rural girls and all coastal girls consumed rice and curries for lunch on all school days, while all of them from all localities of domicile ate rice and curries for lunch on holidays. With regard to evening meal, half of the girls from all localities of domicile were noted to be eating bakery foods on school days (52.2 %) and holidays (57.1 %). Bakery foods were eaten by all urban girls on holidays and 79.7 % of them on school days. This trend of urban girls consuming significant quantities of bakery foods regularly may put them at risk for obesity in the future thus calling for the need to stop this tendency. Availability of ample healthy food options in one's surroundings is known to promote good eating behaviours. Therefore, healthy food choices with adequate dietary diversity may be offered in the meal settings of adolescents by bringing back our classic homemade, low-fat snacks cooked by dry roasting and steaming methods. Active promotion should also be made to encourage local bakeries to sell low-calorie snacks. A notable 19.5% of urbanites ate the customary lunch of rice and curries as their evening meal on school days, but they too ate bakery foods on holidays. Home - made snacks were eaten as evening meal even in non - urban areas by a small proportion of 9.8% of rural and 7.0 % of coastal adolescents on both school days and holidays.For the evening meal, a noteworthy proportion of girl adolescents from coastal (50.7 %) and rural areas (44.5 %) had only a serving of coffee/tea on both school days and holidays.Dinner of adolescents from all localities of domicile were noted to be rice and curries for 97.3% on school days and 92.7 % on holidays. A significant 23.6 % of urbanites ate traditional breakfast food items for dinner on holidays. The pattern of meal consumption of adolescents were seen to be not in alignment with the specified dietary guidelines and hence needs to be closely watched and corrected as food habits are moulded during the crucial adolescent years, considerably impacting a persons' nutritional status and long term health (Lakshmi, 2021).

5. Time spent on consuming meals on school days

Behaviours that promote health are shaped during adolescence (Tabrizi et al, 2024). Meals should be consumed by taking adequate time and focusing on what is eaten so as to aid better digestion, hydration and enjoyment in terms of taste, texture and smell. A meal should be eaten normally by spending at least 20 to 30 minutes.

The time spent by adolescent girls to consume meals on school days is shown in Figure 1.

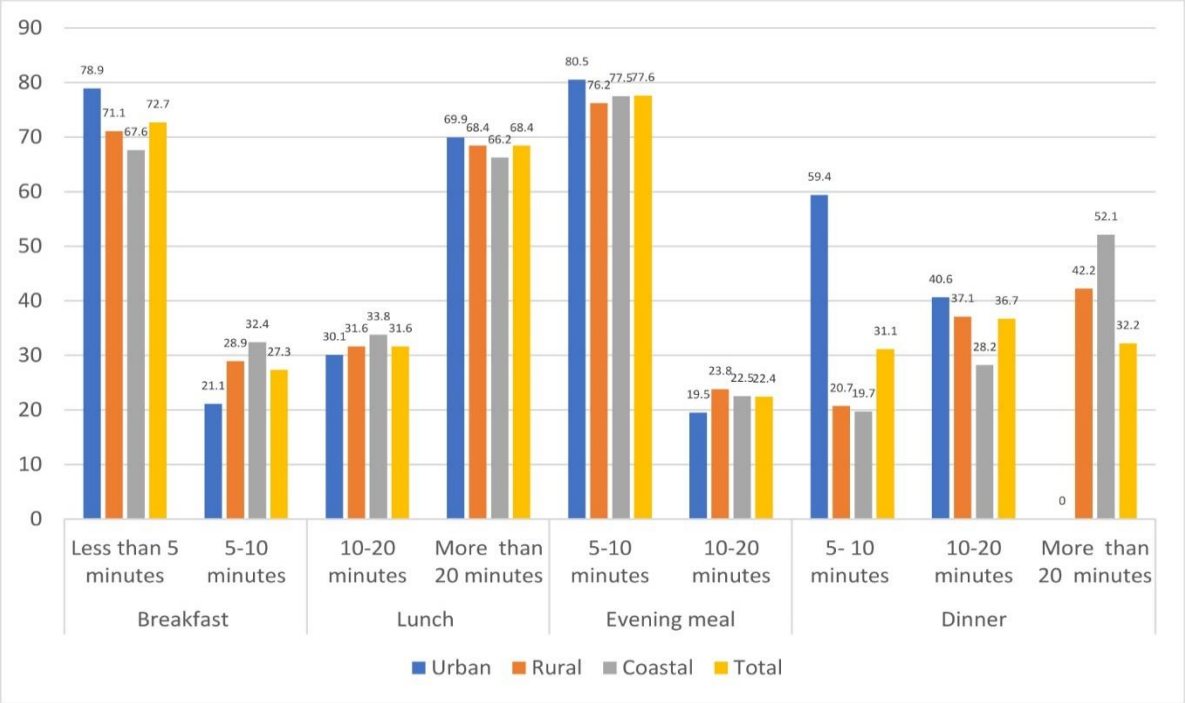

FIGURE 1

TIME SPENT TO CONSUME MEALS ON SCHOOL DAYS

The time spent on eating breakfast was revealed from Figure 1 to be less than 5 minutes by 78.9% of urban adolescents indicating that these girls had to hurry through the first meal of their day, in view of leaving home for school early in the morning. A noteworthy 69.9 % of urban girls ate their lunch utilizing more than twenty minutes of time.

This may be due to these girls eating lunch at school in the company of their friends in a relaxed way fully utilizing the long lunch interval given to them. A huge 77.6 % of adolescents from all localities consumed their evening meal within a time span of 5-10 minutes. This was chiefly due to these girls having to rush through the evening meal to reach the tuition centres after school time or to pursue their academic responsibilities from home. Even though evening meals were consumed after school hours, only 22.4 % from all localities were consuming this meal in an enjoyable manner engaging 10-20 minutes of time.

Dinner was eaten by more than one third of adolescents (36.7 %) from all localities in a time span of 10-20 minutes. A significant 59.4 % of urbanites spent 5 - 10 minutes of time on eating dinner. A notable 42.2 % of rural and 52.1 % of coastal girls ate their dinner spending more than 20 minutes, whereas none of the urbanites did so. These findings provide a clear picture of how the study habits and lifestyle of adolescents are changing in the modern times.

6.Satisfaction regarding the meals consumed

Food has a significant impact on an individual's health (Guine, et al, 2023) and many factors influence and interact in a complex manner to shape an individual's meal consumption pattern. Meal satisfaction, which is identified as a significant factor determining meal consumption, was evaluated by assessing the satisfaction level regarding the meals consumed. The satisfaction regarding all the meals consumed by girl adolescents is shown in Table 6.

Table 6- Satisfaction regarding meals consumed

Meal consumed	Level of satisfaction	Total N=450	Locality of domicile		
			Urban N=123	Rural N=256	Coastal N=71
Breakfast	Dissatisfied	173(38.4)	42(34.2)	105(41.0)	26(36.6)
	Not decided	42(9.4)	9(7.3)	28(10.9)	5(7.0)
	Satisfied	235(52.2)	72(58.5)	123(48.1)	40(56.4)
Lunch	Dissatisfied	109(24.2)	23(18.7)	62(24.2)	24(33.8)
	Not decided	91(20.2)	26(21.1)	60(23.4)	5(7.0)
	Satisfied	250(55.6)	74(60.2)	134(52.4)	42(59.2)
Evening meal	Dissatisfied	93(20.7)	36(29.3)	42(16.4)	15(21.1)
	Not decided	51(11.3)	24(19.5)	15(5.9)	12(16.9)
	Satisfied	306(68.0)	63(51.2)	199(77.7)	44(62.0)
Dinner	Dissatisfied	93(20.7)	28(22.8)	56(21.9)	9(12.7)
	Not decided	89(19.8)	8(6.5)	65(25.4)	16(22.5)
	Satisfied	268(59.5)	87(70.7)	135(52.7)	46(64.8)

Percentage is given in parenthesis

Majority of the girls from all localities of domicile expressed satisfaction with the meals they ate. A significant 52.2 % expressed satisfaction for breakfast, 55.6 % for lunch, 68.0 % for evening meal and 59.5 % of them for dinner.

Table 7 gives the relation between selected demographic characteristics of the girl adolescents and their satisfaction regarding meals.

Table 7- Relation between selected demographic characteristics and satisfaction regarding meals

Characteristics		Breakfast		Value	Lunch		Value	Evening meal		Value	Dinner		Value
		Mean	SD		Mean	SD		Mean	SD		Mean	SD	
Locality of domicile	Urban	3.24	0.94	F= 1.578 (0.207)	3.41	0.79	F= 1.271 (0.282)	3.22	0.87	F= 10.383 (0.000) **	3.48	0.84	F = 3.020 (0.050) *
	Rural	3.07	0.94		3.28	0.83		3.61	0.75		3.31	0.81	
	Coastal	3.20	0.95		3.25	0.94		3.41	0.82		3.52	0.71	
Type of educational Institution	Government	3.17	0.94	t= 1.256 (0.210)	3.31	0.85	t= 0.045 (0.964)	3.55	0.80	t= 3.468 (0.001) **	3.33	0.81	t = 2.535 (0.012) **
	Non - government	3.04	0.96		3.31	0.82		3.25	0.83		3.55	0.77	
Income category	Low income category	3.17	0.94	F= 0.240 (0.787)	3.36	0.85	F= 0.578 (0.561)	3.51	0.80	F= 3.309 (0.037) *	3.40	0.78	F = 1.158 (0.315)
	Middle income category	3.14	0.94		3.31	0.83		3.51	0.82		3.35	0.82	
	High income category	3.07	0.96		3.22	0.85		3.22	0.81		3.53	0.80	
Academic	Middle school	3.33	0.90		3.29	0.85		3.68	0.71		3.22	0.87	
	Matriculation	3.00	0.98		3.23	0.87		3.48	0.83		3.31	0.81	

Status of father	Graduation	3.12	0.94	F= 1.456 (0.215)	3.36	0.83	F= 0.513 (0.726)	3.50	0.79	F= 2.917 (0.021) *	3.42	0.80	F = 1.879 (0.113)
	Post Graduation	3.23	0.93		3.30	0.83		3.21	0.85		3.54	0.74	
	Professional course	3.20	0.91		3.40	0.76		3.28	0.94		3.60	0.76	
Academic Status of mother	Middle school	3.25	0.92	F= 0.425 (0.790)	3.24	0.85	F= 0.726 (0.574)	3.72	0.67	F= 3.402 (0.009) **	3.33	0.84	F = 1.749 (0.138)
	Matriculation	3.09	0.96		3.28	0.87		3.40	0.88		3.25	0.85	
	Graduation	3.11	0.95		3.33	0.84		3.45	0.80		3.46	0.76	
	Post Graduation	3.17	0.94		3.44	0.75		3.41	0.82		3.50	0.79	
	Professional course	3.13	0.99		3.13	0.83		2.88	0.99		3.50	0.93	
Employment status of father	Regular paid work	3.11	0.95	F= 0.383 (0.682)	3.33	0.83	F= 0.270 (0.763)	3.44	0.82	F= 6.846 (0.001) **	3.40	0.82	F = 0.228 (0.796)
	Casual work	3.21	0.94		3.26	0.89		3.72	0.67		3.34	0.77	
	Self employment	3.15	0.96		3.30	0.83		3.21	0.91		3.40	0.83	
Employment status of mother	Regular paid work	3.19	0.93	F= 2.182 (0.089)	3.35	0.81	F= 0.516 (0.671)	3.44	0.83	F= 5.135 (0.002) **	3.42	0.81	F = 0.270 (0.847)
	Casual work	3.21	0.94		3.26	0.89		3.70	0.70		3.34	0.77	
	Self employment	3.23	0.96		3.39	0.84		3.06	0.93		3.42	0.85	
	No occupation	2.93	0.96		3.26	0.86		3.49	0.80		3.36	0.83	
Total		3.14	0.94		3.31	0.84		3.47	0.81		3.39	0.81	

Percentage is given in parenthesis
*** Significant at 1 percent level*
** Significant at 5 percent level*

The satisfaction level was collected from the adolescents on a five point scale separately for all meals consumed in a day. The responses were converted to values assigning the value of 1 for 'very dissatisfied', 2 for 'dissatisfied', 3 for 'not decided', 4 for 'satisfied' and 5 for 'very satisfied'. The satisfaction value for the girl adolescents were calculated and the mean satisfaction value was found out. It was revealed that the adolescents were satisfied with all meals consumed showing average satisfaction values greater than the theoretical value of 3. The average satisfaction values were 3.14 for breakfast, 3.31 for lunch, 3.47 for evening meal and 3.39 for dinner.

One way ANOVA test (F test) and Student 't' test ('t' test) was conducted to find out the difference in the level of satisfaction in the meals consumed by adolescents in relation to demographic characteristics. F test was conducted for categories above 2 and 't' test was conducted in the case of two categories. Statistical relation significant at 1% level was noted between satisfaction of evening meal and locality of domicile (F=10.383, p = 0.000) type of educational institution (t= 3.468, p=0.001) academic status of mother (F=3.402, p=0.009) employment status of father (F=6.846, p=0.001) and employment status of mother (F=5.135, p=0.002) whereas the income category of family (F=3.309, p=0.037) and academic status of father (F=2.917, p=0.021) were significant at 5 percent level.

The satisfaction of evening meals were noticed to be higher in rural adolescents (3.61 $\pm$ 0.75) those learning in government schools (3.55 $\pm$ 0.83) those with fathers or mothers having middle school

education (3.68 ± 0.71 and 3.72 ± 0.67 respectively) and those having fathers or mothers occupied with casual work (3.72 ± 0.67 and 3.70 ± 0.70 respectively). Satisfaction of dinner was statistically related significant at 1% level to the type of institution (t= 2.535, p=0.012) and significant at 5 percent level to the locality of domicile (F=3.020, p=0.050). The satisfaction of dinner was noted to be high among coastal adolescents (3.52 ± 0.71) and those learning in non- government schools (3.55 ± 0.77). This may be due to that majority of the coastal adolescents were having 3 meals a day and so, dinner which was eaten much after lunch was experienced to be more satisfying.

Adolescents learning in non-government institutions rush through their evening meals after school before they hurriedly go to tuition centres. They become sufficiently hungry from this hasty eating in the evening to have a satisfying dinner at the end of the day.

CONCLUSION

The pattern of consumption of meals that strongly influences the physical and emotional health of the adolescent girls do not comply with recommended dietary standards regardless of their locality of domicile. Adolescence, being the vital phase when food intake patterns are established influencing their life long well - being, it is imperative to prioritise healthy dietary practices thereby laying the foundation for improved life quality and positive health outcomes. Therefore, nutritional campaigns and counselling may be carried out among these adolescents to ensure better nutrition practices and sustainable nutritional health.

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