The Challenges of Food Habits of Adolescent Children in Chennai City

Dr. R. Balasubramaniyan & Ms. D. Bhuvaneswari

Abstract

Adolescence is the period of human life which occurs between 13 – 20 years of age. It is the period of psychological and emotional transition between childhood and adulthood. At a transitional stage of human development it represents the person of adolescence. Healthy eating during adolescent period is important because body changes require nutritional and dietary needs.

Adolescent children tend to eat more meals away from home because of increase in appetite and desire to have junk foods. Sometimes they eat wrong kind of foods and also at their wrong time. During the adolescent period eating habits plays a central role in shaping food choices, diet quality and weight status. Parents play a powerful role in children's eating behaviour by making food available to them.

The objectives of the study include: 1.To examine whether fast food consumption and breakfast skipping are associated with weight gain during the transition period from childhood to adulthood. 2. To identify general dietary patterns among the school children in the study area. 3. To assess home dietary habits and nutritional knowledge levels of adolescence school children in study area. 4. To estimate the Stunted, Wasted and Underweight category among school going children in the study area. 5. To suggest measures to overcome problems such as stunted, wasted and underweight of respondents in the study area.

Methodology: The study is based on primary data. The information relating to adolescent period of school-going children was collected from leading schools in Chennai city. The first school is located at Thiruneermalai and the second one is located at Thiruverkkadu in Chennai City. A total of 50 respondents consisting of school going children (boys and girls) of the adolescence age (13 – 18) years represents the sample size of the study. Each school represents 25 respondents of school going children.

Major findings of the study suggest that about 42 percent of school going children are having underweight problem in Chennai city. About 2 percent of school going children is affected with overweight problem in the study area. Further, the study reveals the fact that about 20 percent of respondents have opined lack of time as one of the main reason for skipping meal.

Key words: Stunted, Wasted, Underweight, Obese and Food habits.

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Introduction

Health is basically defined as "a state of complete physical, mental and social well-being and not merely the absence of disease of infirmity". One also considers health as a basic and dynamic force in everyone's daily lives, influenced by circumstances, beliefs, culture and social and physical environments. Health is a unity within the mind, body, and spirit, which is unique to each person. The level of wellness or health is, in part determined by the ability to deal with and defend against stress. Health is on a continuous with movements between a state of optimum well being and illness premature death, which is defined as degrees of disharmony. It is determined by physiological, socio-cultural, and developmental stage aspects. During the last two decades there has been a major alternation in life style and activity pattern among all segments of population, with the ready availability of cooking gas, piped water supply and labour saving gadgets and ready transport which led to a substantial reduction in the physical activity pattern and energy expenditure especially in middle and upper income group. However, the dietary intake has not undergone any reduction; in fact ready availability of fast foods and junk foods, ice creams and other energy rich food items at affordable costs have resulted in increased energy consumption of these by all members of the family. All these have led to increasing energy intake over and above the requirement especially among urban and rural affluent population and consequent obesity in these segments of population. Nutrition and health education to convince the population about the need for restricting energy dense food intake and increasing exercise so that energy balance is maintained are being taken up.

Adolescence

Adolescence is the period of human life which occurs between 13 – 20 years of age. It is the period of psychological and emotional transition between childhood and adulthood. At a transitional stage of human development it represents the person of adolescence. Health eating during adolescent period is important because body changes require nutritional and dietary needs. Adolescent children tend to eat more meals away from home because of increase in appetite and desire to have junk food. Sometimes they eat wrong kinds of food and also at the

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wrong time. During the adolescent period eating habits play a central role in shaping food choices, diet quality and weight status. Parents play a powerful role in children's eating behaviour by making food available to them.

Conceptualization of Obese, Underweight, and Stunted and Wasted

Obesity

Obesity is defined as a generalized accumulation of excess adipose tissue in the body leading to more than 20 percentage of the desirable weight. Obesity is determined by measuring both the height and weight of the child. A child or adolescent person is considered obese if he/she is significantly over the ideal weight for his/her height. Usually obesity is due to positive energy balance. The intake calories are more than the expenditure of calories.

Underweight

Underweight is defined as any weight in less of the ideal range. It is a very common nutritional disordering which there is less accumulation of body fat, which results individual having less than the 20 percent of their ideal body weight. Underweight also occurs due to inadequate diet in proteins and the person who never take rest.

Stunted and Wasted

Stunting growth is a reduced growth rate in human development. It is a primary manifestation of malnutrition in early childhood, including malnutrition during fetal development brought on by the malnourished mother. The wasted children are too thin for their height, which may result from inadequate recent food intake or a recent illness.

Results and Discussion

1. Age Structure of the Respondents

Table 1 presents the Age structure of the student's studying in two leading schools in Chennai city. It shows that only one respondent placed under the age group of 13 and 14 has no health problems. But on the other hand, the majority of the 20 respondents in the age group of 15 where 16 percent of the students were found to be underweight, 2 percent of the students were

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obese. Likewise 18 respondents in the age group of 16 years (20 percent) were found to be underweight. Similarly in the age group of 17, out of 10 respondents 6 percent of the students were underweight. The same values are given in figure 1.

Table: 1

Age Structure of the Respondents

Age	No of Respondents	Body Mass Index (Percentage)			
		Stunted	Wasted	Underweight	Obese
13	1	-	-	0	0
14	1	-	-	0	0
15	20	-	-	16	2
16	18	-	-	20	0
17	10	-	-	6	0
Total	50				

Source: Primary survey, 2012

Figure: 1
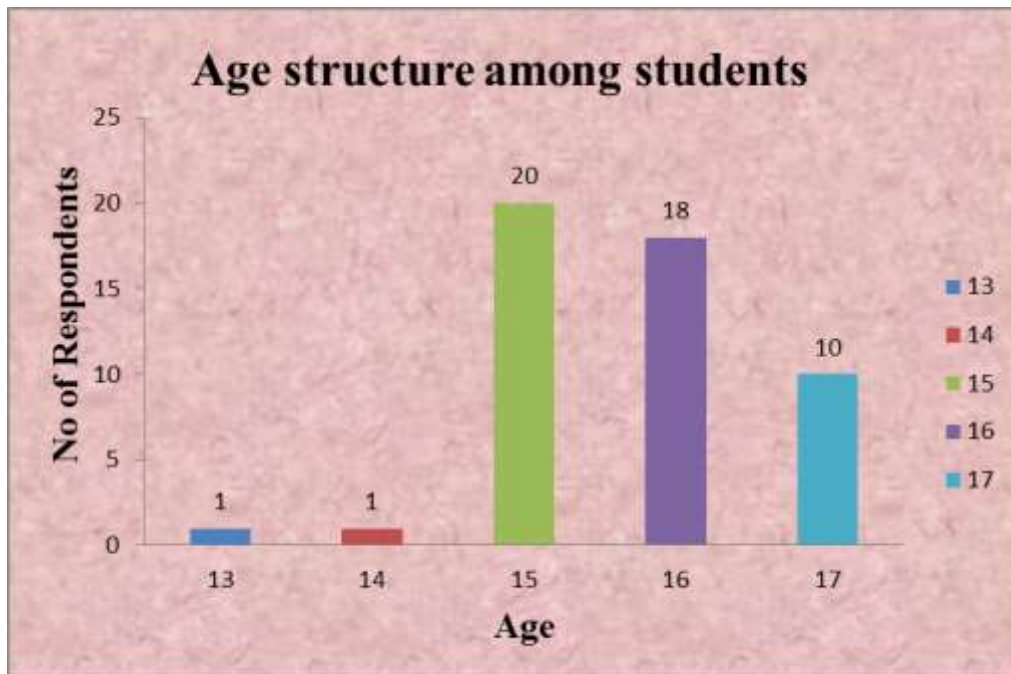
Source: Primary survey, 2012

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2. Education Level and BMI of Respondents

Table 2 pinpoints the education levels and BMI of the respondents which indicate that out of 25 respondents belongs to the category of education 8th to 10th standard, 16 percent of the students were found to be underweight, 2 percent of the students were obese. Similarly out of the 25 respondents in the category of the educational level of 11th to 12th standard, majority of the students that is 26 percent of the students were underweight and nobody found in the obese category.
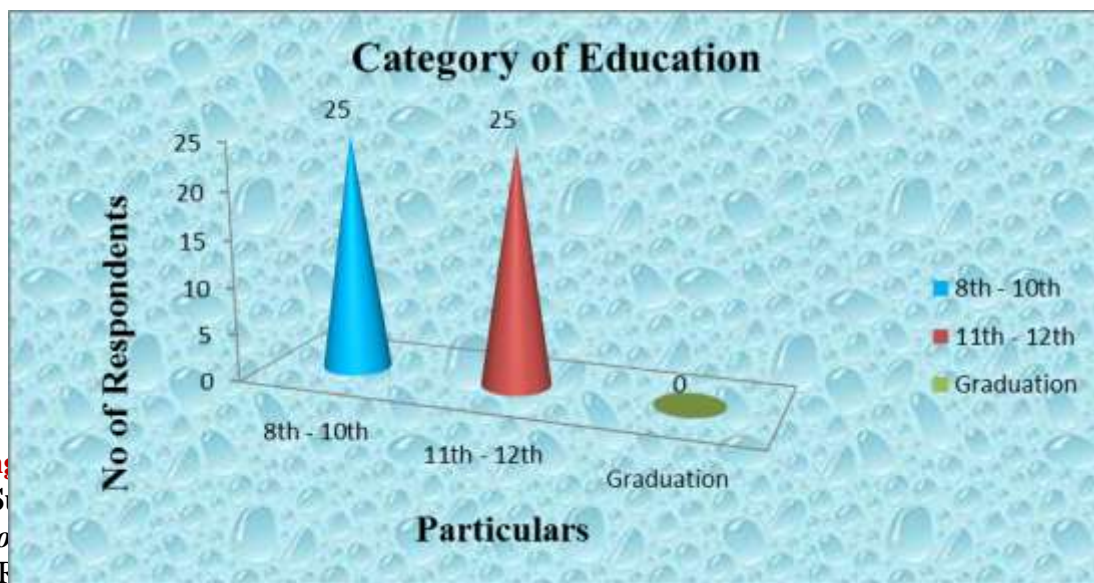
Table: 2

Education Level and BMI of Respondents

Particulars	No of Respondents	Body Mass Index (Percentage)			
		Stunted	Wasted	Underweight	Obese
8th - 10th std	25	-	-	16	2
11th – 12th std	25	-	-	26	0
Graduation	0	-	-	0	0
Total	**50**				

Source: Primary survey, 2012

Figure: 2

3. Types of Family of the Respondents

Table 3 captures the types of family of the respondents. It shows that 41 respondents belong to nuclear family and 9 respondents come under the category of joint family. Among the nuclear family 32 percent of the respondents are underweight and only 8 percent of the respondents are having underweight problem under joint family. Therefore the study reveals the fact that students belonging to nuclear family are significantly having underweight problem than the joint family.
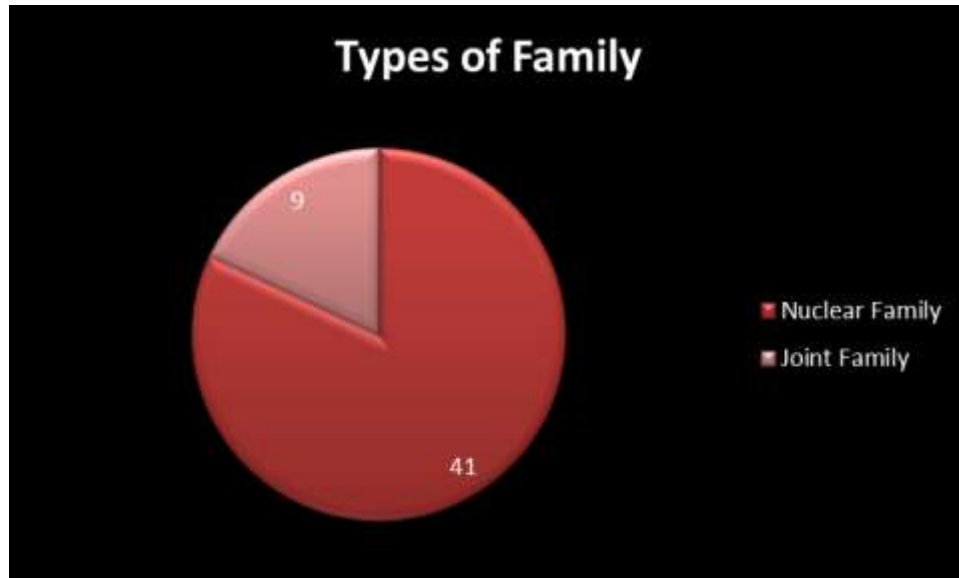
Table: 3

Types of Family of the Respondents

Particulars	No of Respondents	Body Mass Index (Percentage)			
		Stunted	Wasted	Underweight	Obese
Nuclear Family	41	-	-	32	2
Joint Family	9	-	-	8	0
Total	**50**				

Figure: 3

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Types of Family

9 · Nuclear Family
41 · Joint Family

Source: Primary survey, 2012

4.   **Parents' Occupation of the Respondents**

Table 4 underscores with regard to parents occupation, a majority of 25 respondent parents were doing business, 24 respondent parents were working as an employee and 1 respondent parent is a professional. Among the employees 20 percent of the respondents were underweight, and 20 percent were fall in underweight in business category and 2 percent of the respondents were in obese category.
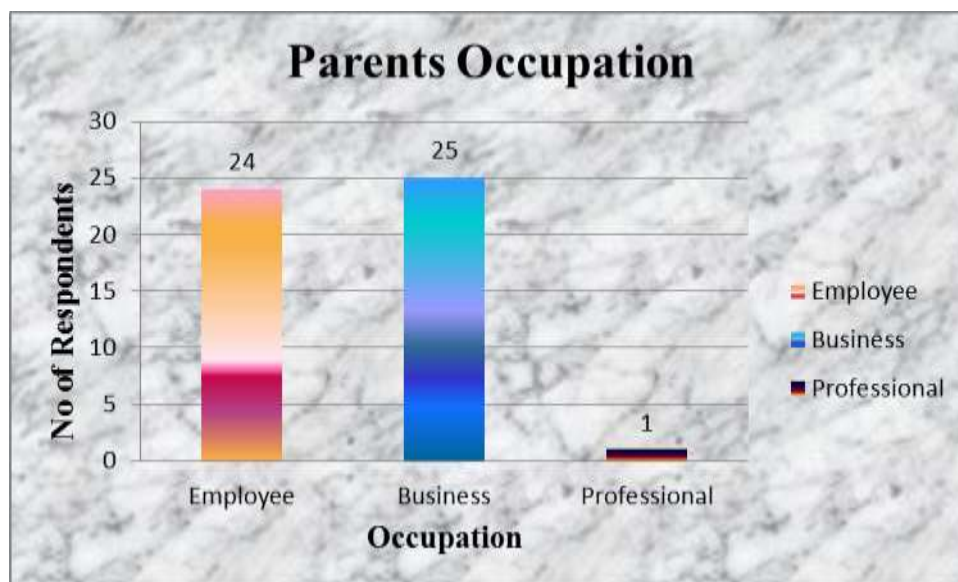
Table: 4

Parents' Occupation of the Respondents

Particulars	No of Respondents	Body Mass Index (Percentage)			
		Stunted	Wasted	Underweight	Obese
Employee	24	-	-	20	2
Business	25	-	-	20	0
Proffessional	1	-	-	2	0
Others	0	-	-	0	0
Total	**50**				

Source: Primary survey, 2012

Figure: 4

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Parents Occupation

Source: Primary survey, 2012

5. **Annual Income of the Family**

Table 5 shows that the annual income of the family. It was observed that the majority of the (37) respondents were underweight and 2 percent are obese belong to the category of low income groups. In the middle income groups 13 respondents were found to be underweight and nobody in the obese category. Out of 50 respondents nobody in the high income groups.

Table: 5

Annual Income of the Family

Particulars	No of Respondents	Body Mass Index (Percentage)			
		Stunted	Wasted	Underweight	Obese
Below Rs.50,000	37	-	-	28	2
Rs. 50,001-Rs. 3,00,000	13	-	-	14	0
Above Rs. 3,00,000	0	-	-	0	0
Total	**50**				

Source: Primary survey, 2012

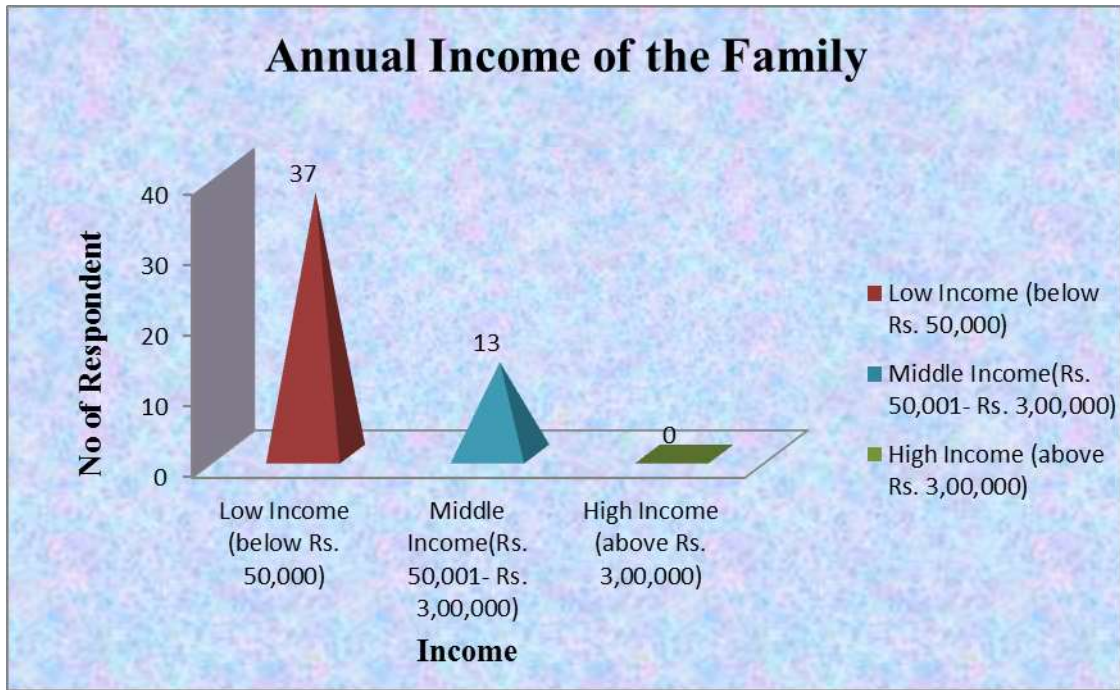**Language in India** www.languageinindia.com **ISSN 1930-2940** 13:4 April 2013
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Figure: 5

Source: Primary survey, 2012

6. **Eating Pattern of the Respondents**

Table 6 shows that the eating pattern of the students it was found that among the total respondents 12 respondents was vegetarian and 38 respondents were non-vegetarian. Out of the 50 respondents 8 percent were underweight in the vegetarian eaters. The majority of the 34 percent of the students were under underweight category and 2 percent were belong to obese in the non-vegetarian eaters.

Table: 6

Eating Pattern of the Respondents

Particulars	No of Respondents	Body Mass Index (Percentage)			
		Stunted	Wasted	Underweight	Obese

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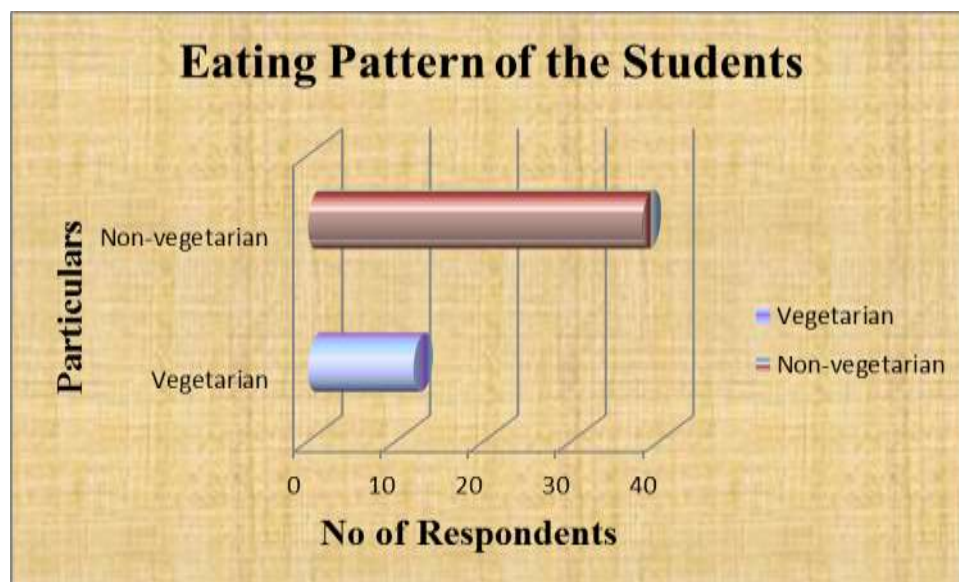**C. Subburaman, Ph.D. (Ed.)** *Health and Medical Care Services: Claims on National Resources*
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Vegetarian	12	-	-	8	0
Non-Vegetarian	38	-	-	34	2
Total	**50**				

Source: Primary survey, 2012

Figure: 6

Source: Primary Survey, 2012.

1. **Reasons of the Respondents for Skipping Meals**

Table 7 shows that the reasons for skipping meal of the students indicate that out of 50 respondents 5 respondents were dieting, 1 respondent opined on fasting and feeling bored and others, 9 respondents were dislike for food and 10 respondents were opined lack of time. Therefore, the table 7 clearly shows that 10 percent of the students who belongs to underweight category because of lack of time, 8 percent belongs to dislike for food and 2 percentage of the students were obese, 2 percent of the students were under dieting and feeling bored and 20 percent of the respondents who were in underweight showed no reasons for skipping meal.

Table: 7
Reasons for Skipping meals of the Respondents

Particulars	No of Respondents	Body Mass Index (Percentage)			
		Stunted	Wasted	Underweight	Obese
Dieting	5	-	-	2	0
Fasting	1	-	-	0	0
Dislike for food	9	-	-	8	2

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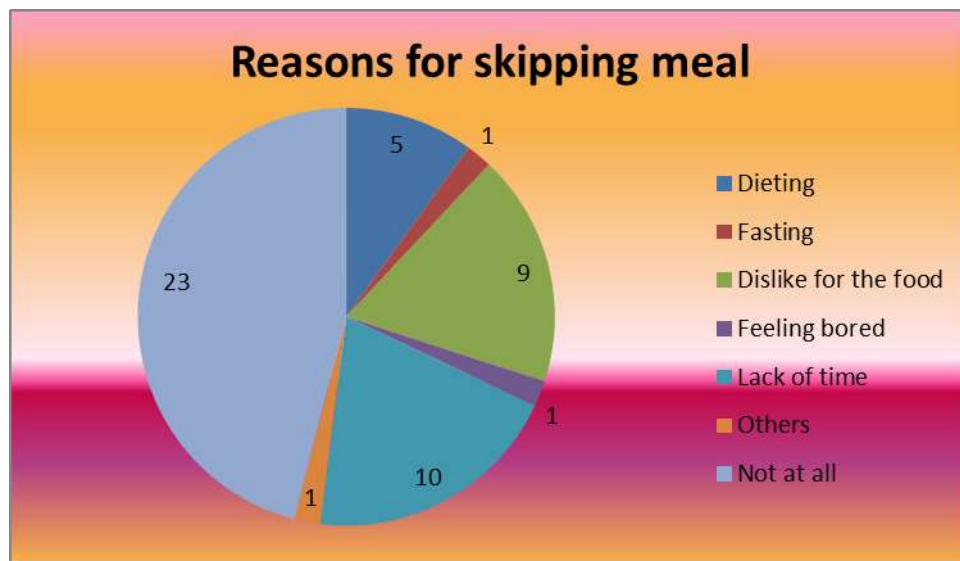**C. Subburaman, Ph.D. (Ed.)** *Health and Medical Care Services: Claims on National Resources*
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Feeling bored	1	-	-	2	0
Lack of time	10	-	-	20	0
Others	1	-	-	0	0
Not at all	23	-	-	20	0
Total	**50**				

Source: Primary survey, 2012

Figure: 7

Source: Primary survey, 2012

2.   Type of Food Habits

Table 8 underscores the kind of food habits among the respondents. It was found that among the total respondents of 50, it inferred about 2 percent of students have taken fast food, 1 percent of the students were consuming Take-away food that is restaurant or mess, and the majority of them 47 percent were consumed homemade foods. The majority of respondents about 38 percent were under underweight category took homemade food and 2 percent of students come under obese because of the same reason. Only about 4 percent of the students were placed under underweight category because of consuming fast food.

Table: 8

Type of Food Habits

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Particulars	No of Respondents	Body Mass Index (Percentage)			
		Stunted	Wasted	Underweight	Obese
Homemade	47	-	-	38	2
Ready to cook	0	-	-	0	0
Fast food	2	-	-	4	0
Take-away	1	-	-	0	0
Total	**50**				

Source: Primary survey, 2012

Figure: 8

Null Hypothesis Ho: Fast food consumption and Breakfast skipping are independent of each other.

Alternate Hypothesis H1: Fast food consumption and Breakfast skipping is dependent.

Table: 9

Summary results of Chi-Square Test

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Statistic	Value	df	Sig
Test of Independence	0.553	1	0.05
Test of Independence	1.024	1	0.05
Total	**1.577**	**2**	

Table 9 presents the summary results of the Chi-Square test. The calculated value of chi-square (0.553 & 1.024) is less than the given tabulated value (which is 3.84), so we accept the null hypothesis Ho. Thus the fast food consumption and breakfast skipping is independent.

Conclusion

The discussion carried out in this paper on "The Challenges of Food Habits of Adolescence children in Chennai City" is based on the primary data. The study considered certain variables such as stunted, wasted, underweight and obese of children in the age group of 13 – 20 years. The study suggests that about 42 percent of school going children are having underweight problem in Chennai city. About 2 percent of school going children is affected with overweight problem in the study area. Further, the study reveals the fact that about 20 percent of respondents have opined lack of time as one of the main reason for skipping meal. The analysis the nutritional status of the student's proved the good and poor aspects in the study area. The significant proportion of the health problems faced by the respondents based on their consumption of non-vegetarian food. We conclude that most of the students affected by underweight because of high or low Body Mass Index (BMI) (overweight and underweight).

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