



Impact Of Eating Pattern On Health Status Of Adolescent Girls

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Abstract:

Adolescence is characterized by an exceptionally rapid rate of growth with developmentally appropriate psycho-social changes. Objective of the study titled 'Impact of Dietary Pattern and Health Status of Adolescent Girls' was to elicit information regarding the socio-economic profile, food habits, dietary practices and health condition of the respondents. By random sampling 150 samples, aged 12-16 years were selected from three schools in Madurai district of Tamil Nadu. Structured questionnaire was formulated to elicit information. Study shows three-fourth (78%) of the adolescent girls was non-vegetarians, 13 per cent vegetarians and 7 per cent was ova- vegetarians. That 89 per cent of them were irregular in their meal intake, 56, 34 and 10 per cent skipped breakfast, dinner and lunch respectively. 97 per cent consumed fried foods, 91 per cent fast-foods, 64 per cent consumed snacks twice a day, nearly one- third of them consumed thrice a day. That 99 per cent preferred hotel foods, 91 per cent fast foods, home - made foods were preferred by 27 per cent. Compared with the ICMR recommendation food allowances were in deficit except for fats and oils and sugar and Jaggery. Green leafy vegetables and Milk and milk product intake was very little among the respondents reflecting on their health majority were experiencing, hair fall, and acne. Bleeding gums and nail breaking reported by 23 per cent and 14 per cent, few were experiencing constipation (9%), dental carries (9%) and cramps (6%). Based on World Health Organization (2003) classification 26 per cent was under nourished. Data reads 9 and 3 per cent in grade I and grade II obesity. Lack of knowledge on dietary requirements, had resulted in moderate anemia among respondents. This evokes the importance of nutrition education for adolescent girls focusing on anemia, healthy choices in eateries to enhance their health.

Key words: Eating pattern, Snack consumption, Adolescence, Health status, BMI

1.Introduction

Adolescence, characterized by an exceptionally rapid rate of growth with developmentally appropriate psycho-social changes. World health organization (WHO) defines adolescence both in terms of age (spanning the age between 10 and 19 years) and in terms of a phase of life marked by special attributes. These attributes include physical growth and development, social and psychological maturity but not all at the same time (Prabakaran, 2003). During adolescence an individual's total nutrient need reach their highest point in their life cycle. Healthy eating is important at this stage of life not only because of the nutritional needs but also because habits are formed early in one's life will most likely carry into adulthood. Teenagers are typically fond of eating 'junk' foods not only for its taste but because of peer group habits it can also lead to overweight if the adolescent girls lifestyle is unhealthy. Both under nutrition and over nutrition in young people are increasing problems in both developing and developed countries. Skipping meals especially breakfast has become a fashion among the adolescence. It is also increasing as the employed women who are unable to attend to their adolescent girls due to work pressure and lack of time, creates an atmosphere for their adolescence to skip their breakfast. The consequences of which are dreadful during adult life. Adolescents may represent a window of opportunity to prepare nutritionally for a healthy adult life by preventing or postponing the onset of nutrition related chronic diseases in adulthood.

1.1.Objectives

- To study about the food habits and dietary practices of the respondents.
- To gather health related information of the respondents.
- To analyze the data regarding the eating pattern and health condition of the adolescent girls.

2.Design Of The Study

The area of study was chosen as Parasuraman Patti which is a panchayat block in the sub- urban area of Madurai. Based on the random sampling method about 150 samples from three schools were selected. A well structured questionnaire was formulated to assess the nutrition knowledge, dietary practices and gather general information from the adolescent girls. The Questionnaire was formulated with more of specific information and multiple choice questions to avoid skipping of questions by the samples and also to make it easy, attractive and interesting for them.

2.1. Findings

2.1.2. Dietary Practices And Eating Habits Of Respondents

Food habits	Percentage of the respondents (n=150)
Non-Vegetarian	79
Vegetarian	13
Ova-Vegetarian	7
Total	100

Table 1

Three-fourth (78%) of the adolescent girls was non-vegetarians, 13 per cent vegetarians and 7 per cent was ova- vegetarians. In a similar study Puri (2008) reported that in rural schools, 56.7 per cent of students were vegetarian in comparison to 70.8 per cent in urban and 72.3 per cent in private schools.

Meal intake pattern	Percentage of the respondents (n=150)
Irregular intake	89
Regular intake	11
Total	100

Table 2: Meal Intake Patterns of the respondents

Meal intake pattern depicts that 89 per cent of the adolescent girls were irregular in their meal intake and a few (11%) were exhibiting a regular intake of their meal.

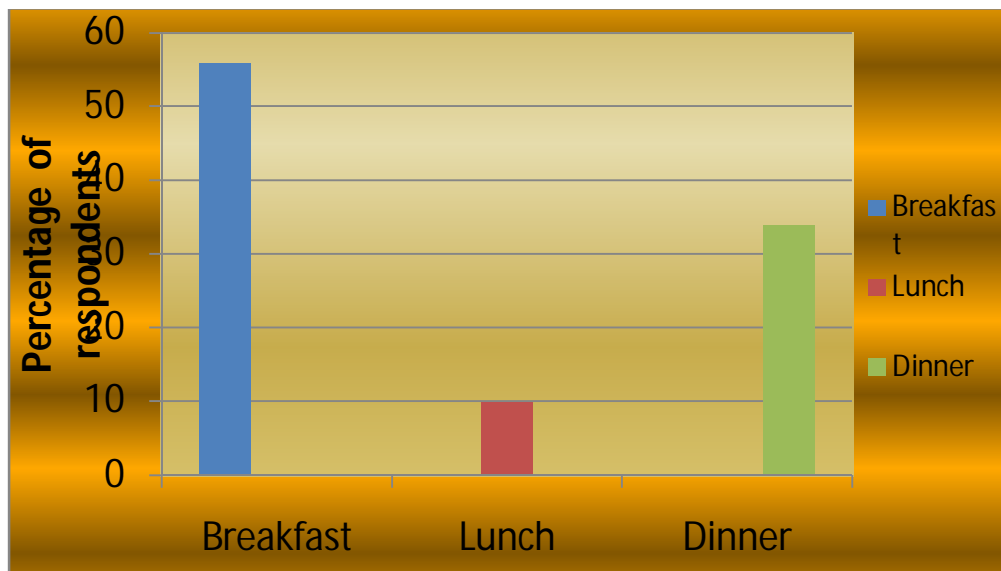


Figure 1: Details on Skipping of Meals

Details on Skipping of Meals interprets that majority (56%) of the respondents skipped their breakfast, 34 per cent skip dinner and 10 per cent skipped their lunch though not on a regular basis. Almost all the adolescent girls do skip any one of their meal the reasons of which are varied.

2.2.Reasons For Skipping Of Meals

Reasons are varied for meal skipping by the selected adolescent girls of which majority (59%) skipped their meals as they were weight conscious, 46 per cent stated lack of time as the reason for skipping meals, 45 per cent due to dislike of food and a negligible (8%) had referred loss of appetite as a reason for meal skipping.

2.3.Details On Type Of Snack Consumption

The data is revealing in that all (100%)of the respondents was sweet lovers, 97 per cent consumed fried foods, 91 per cent fast-foods, 85 per cent ready-to-eat foods,73 per cent bakery foods, 71 per cent consumed pulse foods and only few (24%) showed preference for chat items.

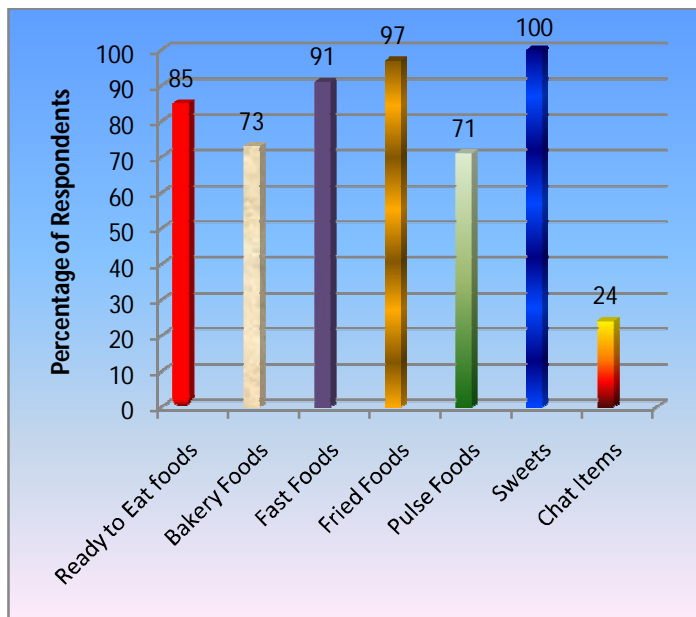


Figure 2

Frequency of Snack consumption	Percentage of the respondents (n=150)
Twice	64
Thrice	30
More than thrice	6
Total	100

Table 3: Frequency of Snack Consumption

It is projected that majority (64%) of them consumed snacks twice a day. Nearly one-third of them consumed thrice a day and only a few (6%) of them consumed more than thrice in a day.

Preference of food	Percentage of the respondents (n=150)*
Hotel food	99
Fast foods	91
Home made	27
Street foods	19

Table 4: Preference of types of food

** Multiple responses*

Data above shows that 99 per cent of them preferred hotel foods, 91 per cent preferred fast foods, home - made foods were preferred by 27 per cent and street foods preferred by only 19 per cent of the respondents.

2.4. Intake Of The Nutrients By Weighment Survey

The food consumption studied through the weighment survey. It reveals that the energy consumption ranged from 1013 – 1528 k cal. The computed mean consumption of calories was 1155 K Cal, which did not satisfy with the ICMR recommendation. The

mean protein, fat, iron, calcium, retinol and vitamin C intake by the respondents were 39gm, 33gm, 7mg, 318mg, 310 mcg and 38mg respectively.

3. Health Status And BMI Categorization Of Adolescent Girls

3.1. Health Status Of Adolescent Girls

Health status shows that majority (62%) were experiencing fatigue in day to day activities; hair fall was reported by 65 per cent, acne problem by 53 per cent of the adolescent girls. Cold was a constant occurrence among 45 per cent of respondents, bleeding gums and nail breaking was reported by 23 per cent and 14 per cent of the respondents. Few of them were experiencing constipation (9%), cramps (6%) and dental carries (9%). A very few of them (7%) had reported that they had breathing problems.

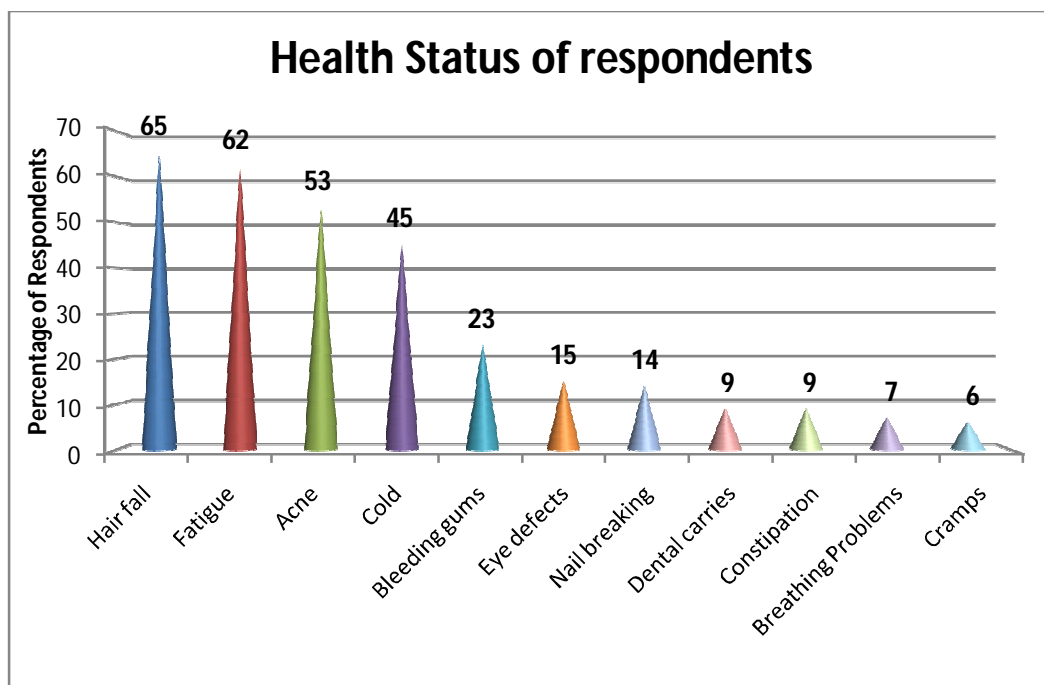


Figure 3: BMI Wise categorization of Adolescents

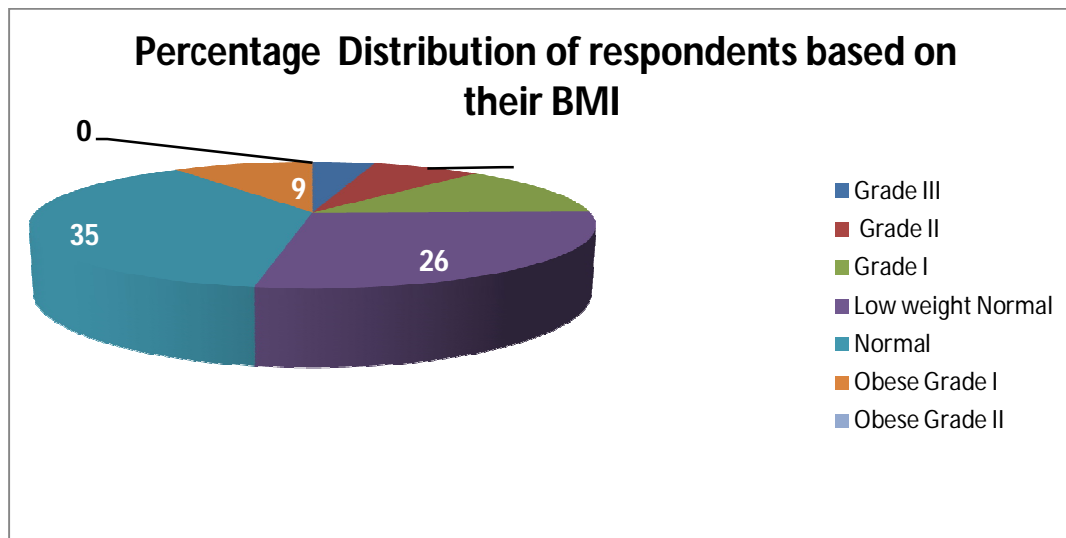


Figure 4

The body mass computed from the recorded height (cm) and weight (kg) of the respondents found to range from 15.6-35. According to the WHO (2003) classification 26 per cent were found to be under nourished (<18.5) and one third (35%) of the respondents fell into the normal category. Among the respondents 9 per cent were found in grade I and a few (3%) in grade II. Their variation in BMI owes to the physical activity and food consumption pattern of the adolescent girls.

4.Conclusion

The diets of the respondents were deficit in all the nutrients with exemption of fat. Calorie, protein, iron, calcium, retinol and vitamin-C content of the diet of the respondents were much low when compared to the recommended allowances. It is shown that the intake of iron was below inadequate according to the nutrient adequacy ratio. It is also evident that the intake of energy, protein, calcium, and retinol were marginally inadequate when compared to the recommended ICMR recommendations. The health status data showing that majority were experiencing fatigue, hair fall, acne, Common cold, bleeding gums and nail breaking. Few of them were experiencing constipation, cramps and dental carries. A very few of them had reported that they had breathing problems. These data evidently proves that health of the adolescent girls has undergone a drastic dip due to their improper and non- nutritious eating pattern. Thus nutrition education and intervention programs are the need of the hour to improve their nutrition knowledge for better living.

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