



Review article

CHANGING SCENARIO OF NUTRITIONAL HABITS IN PRE-ADOLESCENTS STAGE

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Over Nutrition

Processed Food

Abstract

Healthy mind lives in a healthy body is a universal accepted fact. Proverbs '*HEALTH IS WEALTH*' are perhaps known to everybody. And a healthy body is the result of balanced and nutritious diet. Today, in this era of technology people are not focusing over their health, the technology has made people easy going. Even pre-adolescents have become choosy and their eating habits are more or less being based on taste and not on nutrition values. Even the timings of the meals are purely based on their convenience. Actually the need of the hour is healthy foods to meet their growth demands. A child needs heavy protein diet for rapid growth and an elderly person needs food rich in minerals and roughage. A youth, teen-age and pre-teen's food should contain variety of nutrition. Even though pre-adolescents are become more independent and have their own food decisions and choices. But, they need to focus on healthy food on a particular time to meet their growth demands. Sustaining good nutrition during the course of a child's pre-adolescent years is important for their health and wellbeing. To maintain healthy balance, pre-adolescents should take their regular meals; daily physical activity and exercise should be a part of their routine, and eating a vast variety of nutritional foods.

Introduction

All living beings need food to survive. For better health a person should intake a balanced diet as it protects us from diseases and gives a healthy life and also keeps our brain healthy and sound. Balanced diet means the diet which contains all nutrients in adequate quantity. Carbohydrates,

proteins, vitamins, fats, minerals, roughages and water are the main nutrients. These nutrients provide energy, materials for growth and development, and also help in metabolism. In every age stage of life food requirement is vary and depends on their physical activities. Each and every diet of day should be nutritious. Healthy and

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nutritional food leads a healthy life. And “*a healthy mind lives in a healthy body*”.

Nutrition

After in taking of food, utilization of the nutrients of food by our body is called nutrition. Nutrition is the process by which we receive the food which is necessary for growth and health. It includes food intake, absorption, assimilation, metabolism, and excretion. It increases disease resistance power in our body. Well nutrition is the base of life. In every age stage of life; human beings require differ kinds of nutrients. As in childhood when a child’s body grows rapidly, heavy protein diet is required, at elderly age calcium and food rich on fiber should include in diet as well as in the age of adolescents and pre-adolescents a balanced and nutritional diet should be taken regularly.

A food must contain following kinds of nutrients:-

- Protein
- Carbohydrates
- Fats
- Minerals and Vitamins
- Roughage and Water

Proteins are called body building food, carbohydrates and fats are known as energy giving food, vitamins and minerals are protective food, roughage and water maintains the digestion and absorption of food. So in all stage of life these all nutrients are required in different manner but Growth during pre-adolescence is faster than at any other time. Good nutrition during this age is required to meet the demands of physical and

intellectual growth and development, provide adequate stores of energy.

Thus, nutrition is a critical part of health and development. Better nutrition is related to improved nursing, juvenile and protective health, stronger immune systems, safer pregnancy and childbirth, lesser hazard of non-communicable diseases (such as diabetes and cardiovascular disease), and long life. Healthy youngsters cram better. People with sufficient nutrition are more productive and can create opportunities to gradually break the cycles of poverty and appetite.

Most of the time it is observed that parents focus on children to fulfill their nutritional requirement; a well-planned diet chart followed by mothers in the family. Elderly person needs and seeks attention so they are also focused by family members but pre-adolescents are usually neglected in current scenario due to their own food habits developed through difference in taste and availability of many food items. But, in fact a pre-teen needs more nutrients as well as well-balanced diet. As in this age they face many physical, emotional, hormonal, and intellectual changes so, well nutritional diet can keep them away from the cycle of malnutrition, poverty and increased risk of various chronic diseases during adulthood

Pre-adolescent:-

“Pre-adolescence and Pre-tween is the age –stage of human development following early childhood and preceding adolescence. It commonly ends with the beginning of puberty” (Cox & Demmitt, 2003)

Preadolescents’ development is quickened and lopsided (California State Department of

Education, 1987; Kellough & Kellough, 2008; Manning, 2012; Scales, 1991, 2010; Wiles, Bondi, & Wiles, 2006).

Preadolescence is a particular time of human growth and progress arranged among children and adolescents. During this remarkable period of life preadolescents, 10 to 15 year-olds, experience rapid and vast formative changes. Intellectual capacity and responding to the one of kind formative aspects of young people is important among the basics of medium level education. In preadolescence, the adolescent body practices more developmental variations than at some other time with the exception of from birth to two years of age.

According to W.H.O (World Health Organization) the time and pace of changes in height, weight and body structure can vary greatly between and among pre-adolescents. Some important changes are as follows:-

Changes in height

- 15-20% of adult height is expanded during pre-adolescence.
- Growth gush starts later in boys than girls and has higher peak of swiftness than in girls.

True growth can be slowed in pre-adolescence if diet is severely restricted in energy.

Changes in weight

- 25-50% of fully-grown ideal weight is gained during pre- adolescence.
- The timing and amount of weight gain can be greatly affected by energy intake and energy expenditure.

Scenario:-

In present study the word scenario refers to an outline of situations and predicted sequences of events of preadolescent's changed food habits and their impact. The researcher is talking about the requirement a balanced diet and possibility of required nutrition.

Healthy:-

Healthy means positive condition of body and mind; if a person has strong immune power, disease free physique, stress free mind, positive attitude and aptitude towards every situation of life is well defines the word 'healthy'.

Malnutrition:-

It is a condition that results from eating a diet in which nutrients are either not enough or are too much such that the diet causes health problems such as kwashiorkor, marasmus, thyroid, and night-blindness.

Under nutrition:-

It denotes insufficient intake of energy and nutrients to meet a pre-adolescent's to maintain good health. It causes repetition of infectious disease. It affects more to the height and weight of victim.

Over nutrition:-

In this form of nutrition intake of nutrients is more than required amount for proper growth and development. It causes obesity, increase in height and weight.

Processed food:-

In this study it is said that mostly preadolescents use processed food due to many reason such as they are living away from their parents for the purpose

of study or their parents have job in any other locality. Processed food means the food which has been altered in some way during preparation, contains refined ingredients with artificial substances and little nutritional value.

Pre-adolescents and nutrition:-

In the age of pre adolescents when human body and mind grows rapidly they need a high and rich nutritional diet (Table 1).

Table 1: shows recommended dietary allowances (RDA) for selected nutrients during pre-adolescence

Nutrients	Girls		Boys	
	11-14 yrs.	15-18 yrs.	11-14 yrs.	15-18 yrs.
Energy (kcal)	2200	2200	2500	3000
Protein (g)	46	44	45	49
Iron (mg)	15	15	12	12
Calcium (mg)	1200	1200	1200	1200
Zinc (mg)	12	12	15	15
Vitamin A (µg RE)	800	1000	800	1000
Vitamin D (µg)	10	10	10	10
Vitamin C (mg)	50	60	50	60
Folic acid (mcg)	150	180	150	200

(Source:-Food and Nutrition Board, National Academy of Science National Research Council)

The human body requirements are more for calories during early adolescence than at any other time or age of life. As per the survey of Healthy Children Organization in January, 2016 it is brought in to notice that: -

- **Young and healthy boys have need of an average of 2,800 calories every day.**
- **Young and healthy girls require an average of 2,200 calories each day.**

Hence, pre-adolescence is an essential time for developments in height as well as in weight of a human body. So there is a strong necessity of all kinds of nutrients should be considered in the diet of children in this stage which is most likely to disturbed by unhealthy lifestyles of the families.

Scenario of consumption of nutrition by pre-adolescent

The prevalence of childhood obesity is on the rise, and the beginnings of disordered eating can be present in children at this stage (Centers for Disease Control and Prevention, January 2018)

Morbid intakes of food items and deficiency in required physical workout during adolescence results into earlier beginning of atherosclerotic cardiovascular diseases (CVDs) worldwide in which plaque deposited in the walls of arteries, narrowing the gap due to which blood flow blocked. Between Urban Indian adolescents, occurrence of these threat factors of CVD appeared to be high (BMC Public Health. 2017).

The frequent consumption of energy-dense, nutrient-poor foods and sugar-sweetened beverages and the omission of a variety of healthy foods from pre-adolescents and their daily diets puts them at risk of developing chronic diseases (Neha Rathi, Lynn Riddell, and Anthony Worsley' Aug, 2017).

Through a study over eating habits of adolescence and pre- adolescence it is concluded that the prevalence of under- weight was found to be common among the adolescents irrespective of gender (Dr. Sithara Balan, July, 2017).

Adolescents attending private secondary schools in Kolkata show frequent consumption of energy-dense, nutrient-poor foods and sugar-sweetened beverages and the omission of a variety of healthy foods from their daily diets puts them at risk of developing chronic degenerative diseases. (Nutrition Journal volume 16, Article number: 50; 2017)

Unhealthy eating habits like eating too much, not eating enough, or restricted eating can be bad for your teenage child's health and wellbeing, now and in the future. But with healthy eating habits in adolescence, your child can mostly avoid these risks. (Risks of unhealthy eating habits in

teenagers, raisingchildren.net.au, The Australian parenting website)

Adolescent food habits often run counter to the special nutritional needs of the age of pre adolescents. Suggestions for nutrient supplements are offered, with particular emphasis on fulfilling the unique needs of the obese, athletic, or pregnant teenager. (Nutritional Concerns During Adolescence D D Marino, J C King, 2016)

A preadolescent should do physical activities ≤ 60 minutes/day, focus on quantity and quality of meals and snacks, and should eat more and more fruits, vegetables, dairy food products, cereals, whole grains & pulses as well as less fast food, sweetened beverages, junk food & processed food (The University of Chicago recommended in 2013)

“An unhealthy proportion of their diet is composed of energy-dense foods that are high in fat (such as red and processed meats), refined sugar (such as refined grains and SSBs), and/or salt.”(Dawn M Holman & Mary C White June, 2011)

Nowadays, we are observing that pre-adolescents are more self-determining, self-interested and have their own decisions on food intake and choices. Many pre-adolescents practiced and following their peer groups which are exposed to many lifestyles under the environment received by them from home, family, neighbors even other modes of internet, TV, and social media. They are also exposed to national and international cuisines through cooking sites, street food, restaurants and hotels which will gradually enhance their frequent hungriness towards these foods instead of balanced diet as per their requirements. During this period of pre-adolescent, when they find their peer group is

more inclined towards junk food and tasty food rather than healthy food then they demand the same food items at home otherwise influence the eating behavior of each otherwise they may likely to start skipping meals or possibly under-eating or over-eating. Mostly pre adolescents skip their breakfast, eat processed food and give preference to junk food and fast food. They tend to fall short of interest for fruits, vegetables and whole grain consumption.

Though breakfast is a best supplement for disease free and healthy life but preadolescent skip this due to their school timings. Skipping of breakfast is common in pre adolescents and seems to be connected with other life style factors that may be harmful to health. Breakfast is a central part of an overall protective scheme marked at reducing disease risk by augmenting the health of adolescents. This scheme should include a healthy diet, better physical activity.

Brunch, lunch and dinner habits on regular interval of time are more likely to have better practices in terms of providing sufficient amount required nutrients in relation to quality, quantity of micronutrients, and macronutrients, roughage and fibers intakes that more frequently support with up-to-date dietary recommendation.

Researcher observation during the period of collecting data about the girl child diminishing in height especially the girl belonging to families of low SES, affecting the nutrition, unavailability of Lower economic families cannot afford to cater nutrition (or better nutrients) to the adolescent girl child at such they are becoming weak and of lesser height. However, the girl children belonging to well to do families are exceptions in most of cases.

Processed food, junk food, fast food and readymade food is low in nutrition and affects negatively. Poor nutrition leads to reduce concentration towards studies, hair fall, low stamina, depression or poor posture, indigestion which is a main cause of pimples and obesity. Lack of concentration results poor performance and unexpected outcomes. The child consequences inward dissatisfaction and sometimes step forward for suicide.

Suggestions for pre-adolescents and their stakeholders: -

- Breakfast is must, so take it regularly.
- Dry & sprouted cereals can be taken in the school or on the way to school.
- Fresh juices and fruits should be included in meal especially in breakfast.
- Eat healthy and nutritional food.
- Exercise should be a part of daily routine.
- Eat when the hunger is felt not when desired.
- Avoid junk food, fast food, processed food, and readymade food.
- Meal should be taken regular on fix time.
- Parents should pay extra focus and attention on balanced diet of their children.
- Guidance and counseling should give by the teachers.

Conclusion

So, through this article we can conclude that skipping of breakfast, consumption of unbalanced and low nutritional diet is common among the pre-adolescents irrespective of gender and locale. It

also address towards their unhealthy status. Pre-adolescents should be given proper awareness about the significance of hale and hearty life style and its effects in their upcoming life. The prospectus of the pre-adolescents should clearly focus on the well nutritional eating habits and life styles, and this should be provided to them at the very initial stages of development and growth, right from the period of pre-school. The breakfast at should be a part of their daily routine on proper time. Every meal should be taken in required quantity and quality to maintain healthy and sound physique.

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