



## Overview of Nutritional Status of the Adolescent girls in Bangladesh

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### Abstract

Nutritional status of the adolescent girls is one of the sensitive indicators in Bangladesh. In fact; nutritional status is very crucial for health, economy and the sustainable development of Bangladesh. As nutritional assessment adolescent is one of the key times for progressive achievement of biological maturity and cognitive development. The shortage of adequate quality and quantity of food is a main reason of nutrition problems for adolescent's boys and girls, it means malnutrition. Malnutrition is one of the major problems for adolescent girls in Bangladesh. Their socio-economic situation, consumption pattern, food habit are affecting their health and nutrition as well as their cognitive development and during motherhood. The adolescent girls are suffering from any kind of diseases and their morbidity rate is very high, mainly because of their malnutrition. Nutritional education programs need to be implemented to improve the nutritional status as well as suitable approaches need to be designed to improve their present condition and studies elaborately in the future.

**Keywords:** Socioeconomic Status; Nutritional Status; Malnutrition; Adolescent; Food Habit

### Introduction

In Bangladesh poverty is one of the major obstacles on the road towards sustained development. Here poverty makes a vicious cycle of malnutrition through prevailing food insecurity. The challenges of food security in Bangladesh are manifold. In spite of considerable socioeconomic progress over last couple of years, Bangladesh still has the third largest number of poor people after China and India, a segment of which is chronically malnourished, suffering from silent disaster [1]. Such large-scale malnutrition results in preventable sufferings, diseases and losses of productive potential of the tolling mass. Food security is now the most threatening issue for the overall improvement of people; particularly of the vulnerable groups of people. As food security does not only consider the food availability to a family but also the food accessibility by all individual belonging in the family [2]. But in our country an adolescent girl/boy often get deprived of special care and required food due to lack of social awareness [3]. Moreover, girl adolescents are in much worse condition as they are subjected to gender discrimination [4]. Their imbalance work load, contribution to household tasks and extra food requirement are often neglected.

### Why adolescent need more nutrition

Nutrition is one of the most important factors influencing the quality of human life. Nutritional status is one of the significant health indicators to evaluate a country's health standard and morbidity pattern [5]. According to FAO 2002, 799 million people in the developing country were chronically undernourished in 1998 - 2000 [6]. This problem is most prevalent among the vulnerable groups of the population particularly those residing in socio-economically depressed semi-urban areas [3].

It is known that the adolescence stage of lifespan is one of the key stages of physical growth and development. In general, specific and several unique changes occur in an individual during this time. Growth occurs in skeleton, in the muscle, and in almost every system and organ of the body in adolescence except the brain and the head [7]. During adolescence, more than 20% total growth in stature and up to 45% of adult bone masses are achieved, and weight gained during the period contributes about 50% to adult weight [8]. Accelerated growth during adolescence places increased demand on energy, protein, and other nutrients. Tempo of growth during adolescence is slower in undernourished populations [9].

Protein deficiency has been shown to reduce growth during adolescence [10]. It is very well known that for the wellbeing of society, adolescents are the important stage of life and adolescents are the future generation of any country. In most developing countries the adolescent's nutritional needs are very essential and critical but also neglecting adolescents than other groups of people like children and women. Fulfill of nutrition demands of adolescents could be the important step towards breaking the cycle of intergenerational malnutrition, chronic diseases and poverty as well.

#### Documented Data: Nutritional status of the adolescent girls

One of the previous studies reveals about adolescent nutritional status in developing countries that stunting in adolescence is 32% in India, 36% in Bangladesh and 47% in Nepal, and their body mass index (BMI) is lower than other, such as in India 53%, in Bangladesh 50%, and in Nepal 36% respectively [11]. Other surveys have shown that 25 - 27% of adolescent girls are anemic in Bangladesh (hemoglobin < 12 g/dl) [12,13], almost 30% are iron deficient (serum transferring saturation [TS] < 15%) and more than 50% of school going children are vitamin A-deficient [14,15]. One of the Bangladesh National Nutrition Survey (1995 - 96), illustrates that average per-capita energy intake by village adolescent girls is almost 95% of their Recommended Dietary Allowance (RDA) for age [16]. Research estimates that protein, iron, and calcium are most important nutrients for growth and development in adolescence. In Bangladesh nearly 60% of school going adolescent girls aged between 10 - 16 years consumes protein, iron, and calcium just about 75% of the Recommended Dietary Allowance (RDA) for age [15]. The high prevalence of chronic energy and micronutrient deficiencies of today's adolescent girls is directly linked to the health status of the next generation and hence their overall quality. One of the previous studies of Bangladesh National Nutrition Survey, 1998 reveals that adolescent girls consume fewer calories than adolescent boys and they consume 8% fewer at ages 10 - 12 years, 18% fewer at ages 13 -15 years and 28% fewer at ages 16 - 19 years. Similarly, compare with the adolescent girls and adolescent boys aged 13 - 17 years in term of energy requirements, boys consume just enough calories but girls in the same age group have less consumption of 4% calorie meet their need. Urban adolescent girls have more deficiencies in calorie intake than compared with rural girls [17]. According to World Health Organization (WHO), more than 25% of adolescent girls in developing countries are anemic and the International Centre for Research on Women (ICRW) studies documented that the high rates of deficiency of anemia 55% in India 42% in Nepal, in Cameroon 32%, and Guatemala 48% [18]. Another survey in Tangail region in Bangladesh showed that more than 31% and 9% of adolescent girls are suffering from anemia in joint and nuclear family, respectively [19].

#### Documented Data: Socio-economic condition of the adolescent girls

Nearly half of the married women in Bangladesh have at least one child and another 14% have more than one child before the age of 19 years [20]. Further, maternal mortality rates for 15 to 19 years old in Bangladesh are twice as high as that for 20 to 24 years old [21]. In a society such as Bangladesh where the first pregnancy is likely to occur before adolescence is completed, physical growth, mental and sexual development of girls during adolescence may have critical effect on their capacity to carry successful pregnancies.

#### Conclusion

Bangladesh is a developing country. Alike other developing countries malnutrition in adolescence period is a serious problem in Bangladesh. Lack in nutritional balance intake food along with minimum physical activities and pitiable socio-economic situation of the adolescent girls may be affected their future unexpected problem during motherhood and hamper their cognitive development. The nutritional status of the adolescent girls should not be over looked and nutrition education programs need to be implemented to improve the nutritional status. Suitable approaches should be designed to improve their nutrition and studies elaborately in the future.

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