

# To assess the knowledge about health and nutrition among late adolescent college girls in Varanasi district of U.P.

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■ **ABSTRACT** : Study was conducted to assess knowledge about health and Nutrition among late adolescent girls in Varanasi district, Uttar Pradesh, India. A cross-sectional descriptive study was carried out in urban colleges of Varanasi district from October 2010 to September 2011. Random sampling was used to select the requisite number of girls. A total no. of 100 college going late adolescent girls between 17 to 19 years of age were interviewed and anthropometric measurements were recorded for assessing the nutritional status. Nutrition and food intake were closely related to nutritional status and health of an Individual. The mean weight in all age groups showed significant difference with the ICMR mean weight for respective ages except in ages 18 and 19 years girls. The mean height showed significant difference with the ICMR means height 154.75cm, S.D:1.80 for respective ages 17, 18, and 19 years in college girls. Overall prevalence of thinness was found. Body Mass Index of selected college going late adolescent girls (28%) were under weight 54 per cent were normal and 18 per cent were overweight. Prevalence of deficiency disorder was also found like vitamin A, vitamin C, vitamin D and lack of awareness about health and nutrition was also found among them. The nutritional status of an individual is often the results of many interrelated factors. It is influenced by the adequacy of food both in terms of quality and quantity. A large majority of the population of adolescents girls suffer from malnutrition, under nutrition. A survey was done on 100 subjects and data were analyzed. Analysis showed result that there was less knowledge about health and nutrition so they suffered from under nutrition. It can be said that proper knowledge of health and nutrition helps in promoting good nutritional status.

■ **KEY WORDS** : Adolescents girls, Nutritional assessment, Knowledge, Health, Nutrition

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Adolescence is a transitional stage of physical and mental human development generally occurring between the puberty and legal adulthood but largely characterized as beginning and ending with the teenage stage. According to Erik Erikson's stages of human development, for example, a young adult is generally a person between the ages of 20 and 40, whereas an adolescent is a person between the ages of 13 and 19. Historically, puberty has been heavily associated with teenagers and the onset of adolescent development. Adolescence is a time of moving from the immaturity of childhood into the maturity of adulthood. The poor nutritional status of adolescents resulted in poor maternal health. In millennium development goals our

government has decided to improve maternal health till 2015. In this context, this paper presents the nutritional status and knowledge about health and nutrition among adolescents college girls. Adolescence is characterized by the growth spurt, a period in which growth is very fast. During this time, physical changes affect the body's nutritional needs, while changes in one's lifestyle may affect eating habits and food choices. Adolescent nutrition is therefore, important for supporting the physical growth of the body and for preventing future health problems. All parents should therefore, pay particular attention to the nutritional needs of their teenagers. Nutrition is an integral component of health and wellbeing of an individual. Good nutrition enables one to lead a socially

and economically active life and it improves the quality of life as evidenced through enhanced nutritional status of the population groups, better work efficiency rate, reduced mortality and morbidity rate by raising the standard of living. According to WHO (2006) adequate nutrition of any individual is determined by the factors like adequate availability of food in terms of quantity as well as quality and also on the ability to digest, absorb and utilize the food which can be hampered by infection and by metabolic disorders. The World Health Organization defines health as a “state of complete physical, mental and social wellbeing and not merely the absence of disease or infirmity”. Nutrition is essential for adolescent girls because any nutritional deficiency experienced during this critical period of life can have an effect on the future health of the individual and their offspring. For example, failure to consume an adequate diet at this time can result in delayed sexual maturation and delayed or retarded physical growth. The rapid physical changes of adolescence have a direct influence on a person’s nutritional needs. Adolescence is a time to prepare for the nutritional demands of pregnancy and lactation that girls may experience in later life. Under-nutrition negatively affects adolescent girls by:

- Affecting their ability to learn and work at maximum productivity;
- Increasing the risk of poor obstetric outcomes for teen mothers;
- Arresting the healthy development of future children;
- Affecting sexual maturation and growth:

It is also a well established fact that children born to short, thin women are more likely themselves to be stunted and underweight (low weight for age). What is more worrying therefore, is that the negative effects of adolescent malnutrition persists throughout a woman’s reproductive life. Dietary reference intakes (DRIs) developed by the National Health and Medical Research Council of Australia (NHMRC) provides current quantitative estimates of nutrient intakes to be used for planning and assessing diets for healthy people, including adolescents. The important nutrients that need to increase during adolescence include energy, protein, calcium and iron. Caloric and protein requirements are maximum, increased physical activity, combined with poor eating habits and other considerations, e.g. menstruation and pregnancy, contribute to accentuating the potential risk for adolescents of poor nutrition. It is important to evaluate women’s life cycle by various segments of nutrition values. Good nutrition and a realistic attitude play important roles in helping to maintain her life cycle. The main nutrition problems affecting adolescent populations worldwide include under nutrition, iron deficiency and anemia, iodine deficiency, vitamin A deficiency, calcium deficiency and other specific nutrient deficiencies like zinc, foliate and obesity. Like other

developing countries of the world, malnutrition remains a major public health problem in India. The major nutritional problems in the country include low birth weight babies due to poor maternal nutrition, protein energy malnutrition and anemia across various groups of population and geographic areas. Health and nutrition of the girls of today will affect the health and survival of the future generation. Adolescent girls are the mothers of tomorrow and no edifice can be built on a foundation which is so weak (WHO).

### Objectives :

- To know about awareness of health and nutrition among late adolescent college going girls.
- To impart health and nutritional knowledge among them.

### RESEARCH METHODS

Assessment of nutritional knowledge of the late adolescent college girls from 17 – 19 years of age was made. The data were collected from the girls studying in colleges for women located in Varanasi district. One hundred girls were selected through simple random sampling technique. In this study, socio-demographic profile (age, education and occupation of parents, family income and size), anthropometric measurements (height, weight and BMI) were considered for investigation.

There are a few simple ways by which we can know the nutritional status of an individual.

These procedures are:

- By measuring physical growth;
- By recognizing nutritional deficiency diseases.
- By assessing health and nutrition knowledge through self structured interview schedule.

### RESEARCH FINDINGS AND DISCUSSION

Fig.1 shows that 78 per cent respondents were conscious about their health, while 22 per cent respondents were not conscious about their health.

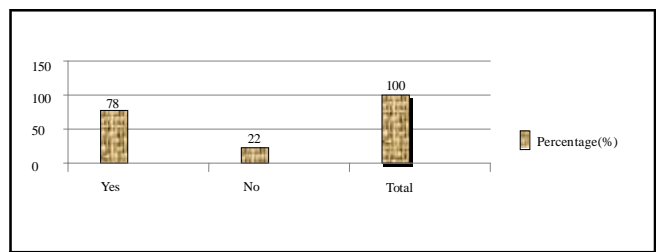


Fig. 1 : Consciousness of respondents about their health

Fig. 2 shows 16 per cent respondents considered balance diet is a diet which contains heavy meal, 40 per cent respondents considered balance diet is that which contains all nutrients, 33 per cent respondents considered balance diet

as a diet which contains all essential nutrients according to the specific requirements of an individual while 11 per cent respondents had no idea about it.

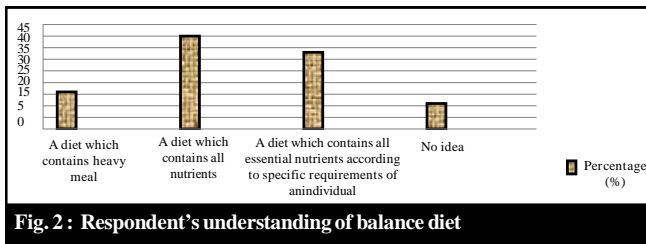


Fig. 2 : Respondent's understanding of balance diet

Fig. 3 shows the knowledge of food groups among the respondents, About 16 per cent respondents had knowledge about food group, 38 per cent respondents has partial knowledge, while 46 per cent respondents had no idea about it.

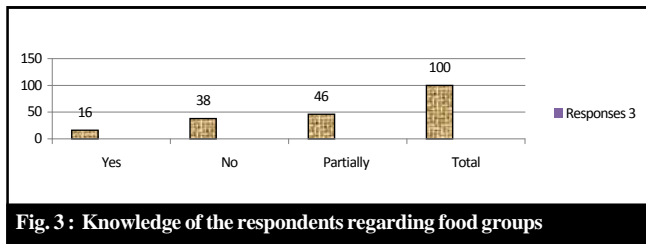


Fig. 3 : Knowledge of the respondents regarding food groups

Fig. 4 shows that 56 per cent respondents were taking 3 meals in a day while, 44 per cent respondents were taking 4 meals in a day.



Fig. 4 : Number of meals taken in a day by respondents

Fig. 5 shows that 47 per cent respondents considered Kwashiorkor as a deficiency diseases of protein, 5 per cent respondents considered Marasmas as a deficiency disease of protein and 31 per cent respondents considered Kwashiorkor and Marasmas both as a deficiency disease of protein, while 17 per cent respondents had no idea about it.

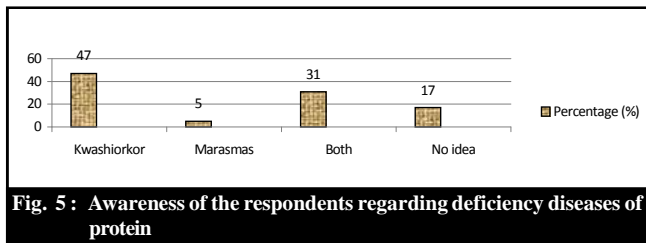


Fig. 5 : Awareness of the respondents regarding deficiency diseases of protein

Fig. 6 shows that 69 per cent respondents considered night blindness as a deficiency disease of vitamin A, 08 per cent respondents considered colour blindness as a deficiency disease of vitamin A, 17 per cent respondents considered night blindness and colour blindness both as a deficiency diseases of vitamin A while 06 per cent respondents had no idea about it. From Varanasi (U.P.) Singh and Mishra (2001) status of adolescent girls of a slum community and rural areas, respectively. Shahabuddin *et al.* (2000) made the investigation on adolescent nutrition in a rural community in Bangladesh.

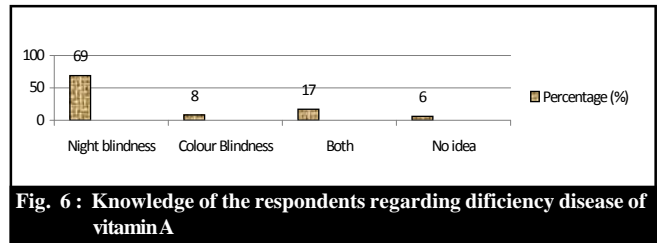


Fig. 6 : Knowledge of the respondents regarding deficiency disease of vitamin A

**Conclusion :**

A study were undertaken to assess the knowledge about health and nutrition among late adolescent college girls. After the study, the results were found that nutrients taken by the respondents were not appropriate because they were much less than the recommended requirements. Respondents were suffering from several deficiency diseases due to their desireress of remaining slim and trim that was also responsible for deficiency diseases among adolescent girls. To remain slim and trim they were involved in daily exercise and dieting. Some adolescent girls were suffering from several deficiency diseases such as dental problems, eye sight problem, gastro-intestinal tract problem (constipation, gastric, etc.) The study results were found that maximum number of respondents had partial knowledge about nutrients sources but not its function and deficiency diseases. The analysis showed the result that there was less knowledge about health and nutrition so they suffered from under nutrition. To conclude, it can be said that proper knowledge of health and nutrition helps in promoting good nutritional status.

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