INTRODUCTION

Children are the most valuable asset of any nation, as the nation walks on the tiny feet of its children. School going children, our future citizens form an important segment of the Indian population. According to Census India (2011) the total population of India is 1,210,193,422 (about 1.21 billion), out of which the 0-14 years group forms 31.1 per cent (362,874,979). The number of girls (0-14 yrs) is 172,799,553. The website http://www.right-to-education.org (Anonymous 2012) stated thus; “The right of girls to education is one of the most critical of all rights because education plays an important role in enabling girls and women to secure other rights. It is the single most powerful way to lift people out of poverty. Education plays a particularly important role as a foundation for girls’ development towards adult life.” Over the past few decades the Indian government has been taking keen interest in improving literacy rate on the whole, and girls’ literacy in particular. The number of primary schools in India, in the year 2008 was 0.664 million and the number of upper primary schools was 0.219 million (National Informatics Centre, 2008).

The “right to food” and “right to education” are among the fundamental rights of every Indian citizen. The Secretariat, Right to Food Campaign (2008) under the heading “SUPREME COURT ORDERS ON THE RIGHT TO FOOD, A Tool for Action, August 2008” highlights relevant Articles of the Indian Constitution and the views of the National Human Rights Commission (NHRC) given in the proceedings of the hearing held on 17th January, 2003. The same is reproduced below:-

“Article 21 of the Constitution of India guarantees a fundamental right to life and personal liberty. The expression ‘life’ in this Article has been judicially interpreted to mean a life with human dignity and not mere survival or animal existence. In the light of this, the state is obliged to provide for all those minimum requirements which must be satisfied in order to enable a person to live with human dignity, such as education, health care, just and human conditions of work, protection against exploitation, etc. In the view of the commission, the Right to food is inherent to a life with dignity…..”

Although it is well recognized that good nutrition is indispensible to a healthy mind and body, a large proportion of the country’s school children have inadequate food, mainly on
account of economic reasons. About 37.2 per cent of our families live below the poverty line (Mandal 2010). Moreover, due to cultural reasons, girls in many Indian families are served less food than boys. A hungry child cannot be attentive in school. Children are vulnerable to growth retardation as a result of malnutrition. Morbidity and mortality are high among the malnourished. In addition, such children tend to have low I.Q. and impaired cognitive ability which affect their school performance and productivity in later life.

There are three important documents which provide a background of the Mid Day Meal Scheme (MDM). These are: (i) Groundswell for mid day meal scheme (India Together 2004), (ii) Mid Day Meals: A Primer (Anonymous 2005) and (iii) National Programme of Nutritional Support to Primary Education (India, Ministry of Human Resource Development 2006). Accordingly the major nutritional deficiencies affecting young children, based on findings of various national bodies/committees (NNMB, NIN, ICMR, TFM etc) are (i) protein–energy malnutrition (ii) iron deficiency anaemia (iii) vitamin A deficiency, and (iv) iodine deficiency disorders. In 2002, The NNMB, NIN and ICMR reported the percentage of school going children (6-9 years) in the categories of mild, moderate and severe underweight as 31.9, 54 and 8.6 respectively and in the 10-13 year age group 18.2, 47.8 and 30.1 respectively. Nutritional anaemia due to iron and folic acid deficiency is widely prevalent among young children and adolescents. About 67.5 per cent children under five years and 69 per cent adolescent girls suffer from anemia. Report of the Task Force on Micronutrients (TFM) indicated prevalence range of 14 per cent to 96 per cent in different parts of the country, based on surveys carried out during 1981 to 1996. Vitamin A deficiency affecting growing children is also a public health problem in the country. Vitamin A is important for promoting growth of child, and building immunity and resistance to diseases. The deficiency contributes to diarrheal diseases, respiratory infections, measles etc. Iodine deficiency during childhood, the period of maximum growth, can result in loss of I.Q. points and poor physical and mental growth and development. On an average, the prevalence of total goiter among 6-12 year old Indian children is about 4 per cent and no state in the country is free from iodine deficiency disorders (IDD). Out of 321 districts surveyed, 260 have more than 10 per cent prevalence of IDD. Even mild deficiencies of micronutrients (vitamin A, iron, folic acid, zinc etc.) affect growth, development and immunity.
The Central Government, under the Department of School Education and Literacy, Ministry of Human Resources Development launched the National Programme of Nutritional Support to Primary Education (NP-NSPE) in the year 1995, with a view to enhancing enrollment, retention and attendance and simultaneously improving nutritional levels among children. Retention of girls in schools in particular and gender equity are among important objectives. This centrally sponsored scheme became commonly known as the mid day meal (MDM) programme. The MDM in schools today is one of the most important welfare programmes of the country which contribute to the “right to food” and “right to education”. As per the Supreme Court directions, November 28, 2001, primary school going children are entitled to a nutritious cooked mid day meal. The Central Government spends more than ₹ 9000 crores per year to implement the scheme in the country. Initially it was launched in 2408 blocks in the country for children of classes I-V of government aided and local body schools. In 2002 it was extended also to children studying in centers run under the Education Guarantee Scheme (EGS) and Alternative and Innovative Education (AIE) scheme. The Central assistance under the scheme consisted of: (a) free supply of food grains@ 100 grams per child per school days, and (b) subsidy for transportation of food grains up to a maximum of ₹ 50 per quintal. Later in 2004, the National Advisory Council ordered the state governments/Union Territories to implement the mid day meal scheme by providing every government assisted primary schools with prepared mid day meal for a minimum of 200 days. Provision for construction of kitchen sheds were made and funds were allotted to meet conversion costs of food grains into cooked mid day meals. The NP-NSPE prescribed in the year 2004 a norm of 300 Kcal and 8-12g protein for each child’s MDM (class I to V); and nothing specific was prescribed regarding micronutrient content. In the year 2006, the NP-NSPE was revised with a higher norm for Kcal (ie. 450 Kcal), protein 12g ; and micronutrients like iron, folic acid, vitamin A etc. indicated as “adequate” (quantities of micronutrients not specified). Objectives of the programme were revised as: (i) improving the nutritional status of children in classes I-V in government, local body and government aided schools, and EGS and AIE centers, (ii) encouraging poor children, belonging to disadvantaged sections, to attend school more regularly and help them concentrate on classroom activities and, (iii) providing nutritional support to children of primary stage in drought-affected areas during summer vacation.
The National Programme of Nutritional Support of Primary Education has been reported as the largest school nutrition programme in the world, covering nearly 12 crores children in more than 9.5 lacs primary schools. However, recent reports (Kumar, 2007) show that MDM has been extended till class VIII in compliance of orders issued by the government to add junior high schools of Basic Shiksha Parishad, the aided schools as well as madarsas. Uttar Pradesh has been a late starter in providing hot cooked mid day meal for the school children. It was only on October 2, 2004 that the scheme became fully operational in the state. In a publication which gave an introduction about the scheme, the Mid Day Meal Authority (2011) reported that 1.86 crore of children in primary school were entitled to free cooked mid day meals in the year 2007-08 across the 70 districts of the state (the number of districts presently is 75). Hindustan Times, (2007) stated that in Allahabad the MDM for classes VI-VIII became effective in the year 2007, to benefit an additional 2000 children, based on the findings that school attendance and health status of students in the district improved due to the MDM. The most vital task for the education imparting agencies is to ensure achievement of cent percent enrollment of the children in their schools and improving their standards of learning inside schools. On a later date The Times of India, (2007) contained a positive remark about MDM. It read thus: “mid day meal being one of the ambitious projects of the state government to encourage literacy especially in rural area has got special attention from the Allahabad district authorities; and it has been decided to involve parents regarding the quality and quantity of the food served in the scheme.”

Data based on MDM related researches are negligible in literature. The findings of research studies about the impact of MDM on nutritional status and school attendance of children (girls in particular) would be of great use in strengthening/ modifying the existing practices and policies related to the scheme. Literature suggests that a widespread ignorance on nutrition and other health related aspects exists among beneficiaries, parents, school personnel and the public in general. There is thus an urgent need to find out the existing knowledge and attitudes / opinion of beneficiaries as well as their parents and school personnel about the MDM and to counsel them on matters such as children’s nutritional requirements, sources of nutrients, preventive / control measures of nutritional deficiencies and benefits of MDM.
The present research study was undertaken with the following objectives:

1. To assess the nutritional status of girls in schools which serve mid day meal and to compare the same with that of non–beneficiaries.

2. To find out the nutritional contribution of mid day meal towards the recommended dietary allowances of the school girls.

3. To find out the school attendance of girls with and without mid day meals.

4. To find out the knowledge and attitudes/opinion of beneficiaries, parents and school personnel about mid day meals.

5. To develop a set of nutrition communication material for nutrition counseling of mid day meal beneficiaries, parents and school personnel.