INTRODUCTION
“Children are the most precious human resources and they deserve the best possible upbringing. Any nation, which neglects them, would do so as its peril.”

(Panigrahi, 1999)

According to international law, a ‘child’ means every human being below the age of 18 years. This is a universally accepted definition of a child and comes from the United Nations Convention on the Rights of the Child (UNCRC), an international legal instrument accepted and ratified by most countries.

(Jacquelynne S. Eccles, 1999)

The years between 6 and 14—middle childhood and early adolescence—are a time of important developmental advances that establishes children’s sense of identity. During these years, children make strides toward adulthood by becoming competent, independent, and self-aware and involved in the world beyond their families.

1.1 SCHOOL AGE CHILDREN

Middle Childhood or Late Childhood (6 to 11 years)

The middle years of childhood from about age 6 to about age 11 are often called the school years. School age children are those 5 to 12 years of age. School is the central experience during this time—focal point for physical, cognitive, and psychosocial development. This stage of life also refers as ‘Late Childhood’. Late childhood extends from the age of
six years to the time the individual becomes sexually mature. At both its beginning and end, late childhood is marked by conditions that profoundly affect a child’s personal and social adjustments.

The beginning of late childhood is marked by the child’s entrance into first grade – compulsory at six years. For most young children, this is a major change in pattern of their lives, even when they have had a year or more of experience in some pre-school situation. Entrance into first grade is a milestone in every child’s life; therefore, it is responsible for many of the changes that take place in attitudes, values and behavior.

During the last year of childhood, marked physical changes take place and these also are responsible for changes in attitudes, values and behavior as this period draws to a close and children prepare physically and psychologically for adolescence.

Parents, educators and psychologists apply various names to late childhood and these names reflect the important characteristics of the period. To many parents, late childhood is the troublesome age, the sloppy age and the quarrelsome age. Educators call late childhood the elementary school age and a critical period in the achievement drive-a-time when children form the habits of being achievers, under achievers or over achievers. To psychologists, late childhood is the gang age and the age of conformity, also frequently called creative age and play age.

**Physical and Cognitive Development in Late Childhood**

School age children grow about 1 to 3 inches each year and gain about 5 to 8 pounds or more annually, doubling their average body weight. Girls retain some what fatty tissues than boys. Girls at about 10 to 12 years (pre-adolescence), begin a growth spurt and gaining about 10
pounds per year whereas in boys growth spurt start at 12 or 13 years (Ellis, Abrams and Wong, 1997).

Physical growth follows a predictable pattern although variations do occur. Body builds affects both height and weight in late childhood. The ectomorph, who has a long, slender body, can be expected to weigh less than a mesomorph, who has a heavier body. Children with mesomorphic builds grow faster than those with ectomorphic or endomorphic builds and reach puberty sooner (Tanner, 1978).

Good health and good nutrition are important factor in the child’s growth and development. The better the health and nutrition, the larger children tend to be, age for age, as compared with those whose nutrition and healths are poor.

To support their steady growth and constant exertion, children need, on average 2,400 calories every day—more for older children and less for younger ones. Their breakfast should supply 1/4 of a day’s calories, which must include a varied diet including plenty of grains, fruits and vegetables, which are higher in natural nutrients and high level of complex carbohydrates. The daily protein intake should be about 28 grams for 7 to 10 years and fat intake should be no more than 30% of total calories. It was found that the placid children grow faster than those who are emotionally disturbed, though an emotional disturbance has a greater effect on weight than on height (Tanner, 1978).

Bright children tend to be heavier and taller than those who are average or below average in intelligence. Laycock and Caylor (1964) have explained, “The gifted child probably comes from a home where all the children grow bigger because of better nutrition and health care.”
Introduction

When the child enters into late childhood, he reached to the concrete operational stage (Piaget’s theory) where he becomes less egocentric and can use thinking to solve actual problems.

Middle childhood is marked by several types of advances in learning and understanding. During this period, in school and where ever they spent time children acquire the fundamental skills considered to be important by their culture, such as reading and arithmetic. Skills of self-awareness also develop dramatically in middle childhood. For instance, children develop a notion of how one goes about learning and they discover that strategies such as studying and practicing can improve learning and performance. They become more able to retrieve information and use it to solve new problems or cope with new situations. Both of these skills require the ability to reflect on what one is doing and what one wants to accomplish and the ability increases dramatically during childhood. Children begin to plan consciously, coordinate actions, evaluate their progress and modify their plans and strategies based on reflection and behavior.

Finally, alongside their increasing ability to reflect on themselves, children also develop the ability to take the perspective of others. They come to understand that others have a different point of view and different knowledge than they have, and they come to understand that these differences have consequences for their interactions with other people. Through their growing understanding of other people’s behavior and through their grasp of written material, children take in information that builds their knowledge base and stretches their reasoning capacities. The basic mental capacity for all these skills is in place at a very young age but it is during middle or late childhood that these abilities become salient and conscious (Selmon, 1980).
Early Adolescence (11 to 14 years)

In this period biological and psychological changes occur. Early adolescence stage begins with the onset of puberty i.e. period of physical development accompanied by dramatic increase in the levels of many hormones (Gorman, 1995). Few developmental periods are characterized by so many changes at so many different levels as early adolescence, when children face the biological transformations of puberty, the educational transition from elementary to secondary school, and the psychological shifts that accompany the emergence of sexuality.

Adolescence was once labeled a time of stum and drag or strom and stress. It is now understood that most youngsters pass through this developmental period without undue stress, although may do experience difficulty. For example, between 15% and 30% of young people dropout of school before completing high school; adolescents have the highest arrest rate of any age group; and increasing numbers of adolescents consume alcohol and other drug on a regular basis (Burt et al. 1998). Some researchers believes that it is the combination of so many changes occurring simultaneously that makes early adolescence problematic for many young people’s (Eccles et al. 1993 and Simmons and Blyth, 1987).

The pre-adolescence is the time of assimilation because 10 to 13 years old are assimilating an enormous physical, social and intellectual experience. They are more or less at a continuous stage of disequilibrium.

The individual status is vague and there is confusion about the roles of individual during transitional period. The early-adolescent at this time is neither a child nor an adult. If they behave like children, they are told to “act their age” and if they try to act like adults, they are often accused of being “too big” and are reproved for their attempts to act like
adults on the other hand, the ambiguous status of today’s pre-adolescents may be seen as advantageous, because it gives time to try out different life styles and decide what patterns of behavior, values and attitudes meet their needs.

**Developmental Changes in Early Adolescence (Physical & Cognitive)**

Compared to children under age 10, teenagers are given new opportunities to experience independence outside of the home. They spend much more unsupervised time with peers which (compared to adult-child relationships) are relatively equal in terms of interpersonal power and authority (Higgins and Parsons, 1983 and Eccles et al. 1993).

The most important cognitive changes during early adolescence relate to the increasing ability of children to think abstractly, consider the hypothetical as well as the real consider multiple dimensions of a problem at the same time, and reflect on themselves and on complicated problems (Keating, 1990 and Piaget and Inhelder, 1973). There is also a steady increase in the sophistication of children’s information processing and learning skills, their knowledge of different subjects, their ability to apply their knowledge to new learning situations, and their awareness of their own strengths and weaknesses as learners (Bjorklund, 1989 and Siegler, 1986). These higher-order cognitive abilities help adolescents regulate their learning and behavior better to accomplish more complicated and elaborate tasks.

The physical changes associated with the transition of early adolescence are marked. When the hormones controlling physical development are activated in early puberty, most children undergo a growth spurt, develop primary and secondary sex characteristics, become fertile, and experience increased sexual libido. Girls begin to experience
these pubertal changes earlier than boys (by approximately 18 months), so girls and boys of the same chronological age are likely to be at quite different points in physical and social development between the ages of 10 and 14.

The varied timing of pubertal development also creates different psychological dilemmas for early-maturing girls versus early-maturing boys. Early maturation tends to be advantageous for boys, enhancing their participation in sports and their social standing in school. It can be problematic, however, for girls. Early-maturing girls are the first individuals in their cohort to begin changing and the resulting female physical changes (such as increasing body fat) do not fit the valued image of the skin, androgynous fashion model (Simmons and Blyth, 1987 and Petersen, 1988).

1.2 MID DAY MEAL SCHEME (MDMS)

Primary school children (6 to 14 years) form about 20% of the total population. Free and compulsory education up to the age of 14 years is the constitutional commitment. It is estimated that about 40% of children dropout of primary school. National Nutrition Monitoring Bureau (NNMB) surveys (2000) indicate that about 70% of these children are undernourished and there is about 30% deficit in energy consumption and over 75% of the children have dietary micronutrient deficit of about 50%.

Nutrition support to primary education is considered as a means to achieve the objective of providing free and compulsory universal primary education of satisfactory quality to all the children below the age of 14 years by giving a boost to universalisation of primary education through increased enrolment, improved school attendance and retention and promoting nutritional status of primary school simultaneously with
children from all castes and communities eating together, it is also a means of bringing about better social integration.

The National Program of Mid Day Meal in schools, the largest school feeding program in the world, cover nearly 9.70 crore children studying at the primary stage of education in class I-V in 9.50 lakhs government (including local body) and government aided schools and the centres run under Education Guarantee Scheme (EGS). The program was extended with effect from 01.10.2007 to children in the upper primary stage of education (class VI-VIII) in 3,479 Educationally Backward Blocks (EBBs).

(Annual Planning Commission, GOI, 2007)

Mid Day Meal Scheme (MDMS) was started as a centrally sponsored scheme on 15 August 1995, aimed at improving the nutritional status of poor children and at ensuring better school enrolment and to boost universalisation of primary education.

On 28th August 1995, the Hon’ble Supreme Court passed the order to the State Government / Union Territories to implement the Mid Day Meal Scheme by providing every child in every government and government aided primary schools with a prepared mid day meal with minimum content of 300 calories of energy and 8-12 gm of protein each day of school for a minimum of 200 days. From 1st September 2004 cooked meal is being served to the beneficiaries. From 2006 the food being served has been enriched by raising the 450 calories and 12 gm of protein in primary schools. In upper primary schools, it is 700 calories and 20 gm of protein (Wizarat, 2009).
Introduction

Brief History of Mid Day Meal Scheme (MDMS)

Free Mid Day Meals for school students were first introduced in a Japanese private school in the late 1800s, Brazil in 1938 and in United States in 1946 with evidently satisfactory results. Both Japan and U.S.A. boost 100% adult literacy and even Brazil which (like India) is classified as a medium income nation by the UN development Program has attained 87.3% literacy according to United Nation Development Program (UNDP) and Human Development report (2003) as against India’s 58%. Comments of the Global feeding Report of the World Food Program (2001) said that “school feeding program often double enrolment within a year and can produce a 40% improvement in academic performance in just two years. Children who take part in such program stay in school longer and the expenses are minimal.”

In India, the scheme was first introduce in the southern state of Tamil Nadu way back in 1956, has proved remarkably successful in improving school enrolment in that state. Though partially launched in 1956, the MDMS was given full shape and form by the state’s actor turned Chief Minister the M.G. Ramachandran in 1982 since then its efficient state wide implementation has valued Tamil Nadu into the ranks of the most literate state of Indian Union (adult literacy: 73.5%), an attribute which has endowed this southern state (population 62 million) with a shower of benefits including a stable population, steady industrialization and perhaps the best physical and social infrastructure in the country. Where in Uttar Pradesh (population 160 million), Maharashtra (96 million), Bihar (82 million) and West Bengal (80 million) are yet to introduce the free mid day meal scheme with in their jurisdiction (Parikh and Yasmeen, 2004).
The mid day meal is a popular school lunch or school meal program. This program is also known as “noon-meal program”. As the name indicates, the children attending elementary sections of school are the chief beneficiaries. Supply of one supplementary meal is the main purpose of this program. The reason why the mid day meal scheme was started was that the home diets of these children are often inadequate from the nutritional point of view. Many children especially in rural areas, come to school partly hungry and some even on an empty stomach, trekking long distances. They will therefore, hardly be able to concentrate on the studies and benefits from the education, which is being provided at great cost to the exchequer. About 1500,000 schools in Uttar Pradesh are covered by the mid day meal scheme and over 18.6 million students are enrolled under the scheme (Dreze and Kingdom, 2001).

The Mid Day Meal Scheme has both health and educational objectives which are as follows:

(a) To improve nutritional status and the attentiveness of school children attending primary sections (I-V classes).

(b) To improve school enrolment and attendance on one hand and to reduce dropout rate on the other.

Apart from the above clear cut objectives, this feeding program, when run in conjunction with nutrition/health education program, is expected to increase awareness among children about balanced diets, good eating habits and personal hygiene and their importance in maintaining good health. Also, the facts about good nutrition taught to children are expected to reach the parents and thus improve the food habits of the entire family. Thus, the purpose is not only to improve nutritional status of children but also to attract more poor to school and
Introduction

sustain their interest in learning so that dropout rates are lowered and school attendance improves.

Among the poor, there is often not enough food at home, and most schools in developing countries lack canteens and cafeterias. School meals are a good way to channel vital nourishment to poor children and having a full stomach also help them to concentrate better on their lessons. Children under 18 constitutes 42% of India’s population on an average, between 2000 and 2005, of every hundred rupees spent by union government only three paisa was spent on child protection, while the share of the child health was forty paisa followed by child development forty-five paisa and elementary education 1 rupee and 50 paisa (Raina, 2008).

According to the Centre for Equity Studies Survey, New Delhi (2003), the approximate cost to state government of providing cooked meals for 200 days a year (as stipulated by Supreme Court) is a mere one rupee per day per capita because the central government provide grains and cereals from the rotting 65 million tonnes food grains mountain stored in the makeshift godowns of the public sector Food Corporation of India (FCI). Therefore, for instance, it would cost the Uttar Pradesh government a mere Rs.300 crore per year to provide mid day meal scheme to all primary (up to class V) school children. And if all the estimated 150 million children enrolled in government primary and secondary schools across the country are provided free mid day meals (as in the US), the additional expenditure incurred (including the cost of central government, transportation and state government costs) at Rs.3 per student per day for 200 days, would aggregate Rs.9000 crore annually – an 11% increment of the national education outlay of Rs.80,000 crore (Parikh and Yasmeen, 2004)
Introduction

Prevailing Scenario of Mid Day Meal Scheme (MDMS)

There is a long history of feeding programs in schools around the world. These programs are perished on expectations of significant gains in schooling and nutritional outcomes, in developing country contexts particularly; school meals are thought to exert a powerful incentive that increases school participation. Additionally they are to think to help in addressing problems of under nutrition among school children through nutritional supplementation. It is also expected that indirectly these programs will lead to improved levels of learning through various channels by boosting attendance, by reducing classroom hunger and thus improving concentration, and by improving the children’s over all levels of nutrition (and there by productivity).

The evidences, however, of the impact of school feeding programs on several of these outcomes is rather thin while there is evidence that school feeding does indeed improve the immediate nutritional intake of children (Jacoby, 2002 and Afridi, 2005) and school participation rates (Afridi, 2007 and Dreze and Goyal, 2003), the effect of these programs on learning, cognitive skills, on longer term nutritional status, is not clear. For example, Kremer and Vermeersch (2004) find some evidences of improved learning but only in schools with experienced teachers while Adelman et al. (2008) find an impact on test scores but only for children between 11 to 14 years and not for younger children.

Due to various logistical and financial problems these programs had languished but for a few notable expectations. The reasons for this lack of sustainability of the programs might have been: (1) they were not based on an agreed national policy fully backed by the central and state governments and (2) that they were mostly implemented as isolated
bureaucratic operations with no meaningful involvement of the community on the one hand and with no serious attempt to integrate these program as an element of a comprehensive efforts towards the upgradation of the entire school system (Nutrition Foundation of India (NFI), 2003).

The general lack of establishment enthusiasm toward Mid Day Meal Program (MDMP) is influenced by the widely held belief that the provision of cooked meals disrupts classroom process some media reports suggest that teachers spend too much time supervising culinary operations to the detriment of academic time tables. Dreze and Goyal (2003) acknowledges this apprehension while dismissing it as exaggerated “sensitisation of teachers about positive aspects of the scheme is very important. The majority of teachers fear classroom disruption and worry that it will take up too much of their time. Greater awareness of the benefits of mid day meal program would help to overcome such fears.”

The critical importance of decentralizing the mid day meal program to the maximum possible degree has impacted itself upon the educate of the Union HRD Ministry in New Delhi. The ministry is currently proposing the constitution and involvement of independent self-help groups (SHGs) in the form of mother’s groups in every school offering the scheme. The main work is at the micro level. The more we involve government machinery, the more difficult it becomes to supervise because this is a program which needs micro management at the grass root level. Village Education Committees (VECs) and village panchayats have to assume responsibility of ensuring the MDMS work in their local schools (Parikh and Yasmeen, 2004).
Organizational Structure of Mid Day Meal Scheme

Under the Department of Basic education there is a MDMS cell in headquarter, Lucknow. Director of MDM look after MDMP. He/she is assisted by Additional Director, Deputy Director, and four Assistant Additional Director. In each District, District Magistrate is a Nodal Officer is responsible for implementation of MDMP. The grass root level head teacher will look after proper implementation of the program.

Implementation of Mid Day Meal Scheme

The Chief Secretary of U.P. government has formed district and block level taskforce under the leadership of District Magistrate (DM) and Sub-Divisional Magistrate (SDM) for frequent and effective supervision of MDMS. The taskforce comprises officers from education department as well as from other department also. The inspection undertaken by the members of the taskforce are closely monitored. Each member of the taskforce has to randomly visit at least five schools falling in his jurisdiction and monitor implementation of MDMS. If MDM providing agency like Gram Pradhan, NGOs fail to achieve their goals, the District Magistrate is authorized to replace them by local Self-Help Groups (SHGs).

Coverage and Beneficiaries

In the light of SSA, children in classes I-VIII could be included as beneficiaries of the program. Before 01.10.2007, the main beneficiaries of the program were children between 6 to 14 years attending elementary primary schools. The program was extended, with effect from 01.10.2007 to children in the upper primary stage of education (classes VI-VIII) in 3,479 Educationally Backward Blocks (EBBs) (Mid Day Meal Handbook of Supreme Court, 2008).
Possible Benefits of Mid Day Meal Scheme

Mid Day Meal Scheme seeks to provide for each school child roughly a third of the daily nutrient requirement in the form of a hot fresh cooked meal. It is sometimes argued that in the case of children of poor households, the school meal may become a substitute rather than a supplement for the home meal. It is also possible that since the meal supplies only one third of the dietary requirements, and that too for 200-250 days in a year, it may not be possible to demonstrate significant improvement in the nutritional status of the child. Even if this be so, it is important to note that it is not merely the long-term effects of the school meal on the nutritional status but its short term effects on better attention, memory and learning that is important. A hungry child is a poor learner lacking in concentration. A mid day meal is an important instrument for combating classroom hunger and promoting better learning. Mid day meal could thus be a means for not only promoting school enrolment but also better learning in school. The purpose of Sarva Shiksha Abhiyan (SSA) will thus be very well served by mid day meal.

Mid day meal could be a valuable means in inculcating good dietary habits and promoting personal hygiene not only to pupils, but also to the parents and the community.

Mid day meal could create employment opportunities for poor women of the village. Mid day meal could serve the important purpose of improving school enrolment and attendance especially enrolment of girls thus contributing gender equality, with mid day meal, it will be easier for parents to persuade their children to go to school and for teachers to retain children in the classrooms. It could foster sound social
behavior among children and dispel feelings of differences between various castes.

Most importantly mid day meal could trigger all round development of the entire school system leading to better infrastructures in schools, better teaching facilities, a school health service and community involvement.

### Table 1.2.1 Children Availing MDMS as on 30.09.2007

<table>
<thead>
<tr>
<th>Types of student</th>
<th>Boys</th>
<th>Girls</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCs</td>
<td>20,04,213</td>
<td>18,76,647</td>
<td>38,80,860</td>
</tr>
<tr>
<td>STs</td>
<td>39,742</td>
<td>33,743</td>
<td>73,485</td>
</tr>
<tr>
<td>OBCs</td>
<td>31,45,192</td>
<td>30,24,958</td>
<td>61,70,150</td>
</tr>
<tr>
<td>Minority</td>
<td>6,14,351</td>
<td>5,91,579</td>
<td>12,05,930</td>
</tr>
<tr>
<td>Others</td>
<td>11,76,647</td>
<td>12,52,949</td>
<td>24,29,596</td>
</tr>
<tr>
<td></td>
<td>69,80,145</td>
<td>67,79,876</td>
<td>1,37,60,021</td>
</tr>
</tbody>
</table>

(Dr. Kausar Wizarat, 2009)

### 1.3 NUTRITIONAL STATUS

Nutrition may be defined as the science of food and its relationship to health. Nutrition is the science that deals with digestion, absorption and metabolism of food, i.e. the utilization of food in the body. It may be defined as “the science that interprets the relationship of food to the functioning of living organism”. It includes the uptake of food, liberation of energy, elimination of wastes and all the processes of synthesis essential for maintenance, growth and reproduction (Pike and Brown, 1984).
Nutrients are organic and inorganic complexes contained in food. These are the constituents in food that must be supplied to the body in suitable amounts. These are proteins, carbohydrates, fats, minerals, vitamins, water and roughage.

Nutritional status is the balance between the intake of nutrients by an organism and the expenditure of these in the processes of growth, reproduction and health maintenance. Nutrition status is the condition (state) of health of an individual as influenced by the utilization of nutrients in his body. It can be defined as the level of nourishment in an individual (Sunita and Jain, 2005) height, weight, height-for-age, BMI-for-age.

Assessment of Nutritional Status

The nutritional status of an individual is often the result of many interrelated factors. It is influenced by the adequacy of food intake both in terms of quantity and quality and also by the physical health of the individual. The assessment of nutritional status involves various techniques, these are as follows:

1. **Clinical examination:** It involves looking for the changes (clinical signs/symptoms) in the body which are indicative of a particular deficiency.

2. **Anthropometric measurement:** It simply refers to the measurement of body size like height, weight, skinfold, head circumference, arm circumference etc.

3. **Biochemical assessment:** It deals with measuring the level of essential dietary constituents (nutrients) concentration metabolite in the body fluids (blood and urine normally) which is helpful in evaluating the possibility of malnutrition.
(4) **Assessment of dietary intake:** It involves a systematic inquiry into the food supplies and food consumption of individuals and population over a period of time. Besides these techniques there are various others like vital statistics, 24-hour recall method etc.

**Determinants of Nutritional Status**

The two major determinants of growth performance of individual and population are (1) their inherited genetic potential for growth, and (2) the availability of those inputs, which are essential for the given genetic potential to find full expression.

Although nutritional status of a nation is closely related to food adequacy, but even more importantly interrelated to its inter and intra household distribution, level of poverty, status of women, access of people to health, education, drinking water, hygiene, sanitation, awareness and other social services. It was observed that the nutritional status of children is influenced by a number of developmental efforts.

Several studies have reported that a large section of children especially in urban India, are suffering from varying grades of malnutrition (Verma et al. 1998; Agarwal et al. 1998; Bhasin et al. 1990). These studies revealed that Protein Energy Malnutrition (PEM), anemia, vitamin A deficiency and iodine deficiency continues to affect the health of the school children. Indian school children, who constitute about 25 to 27% of the population, suffer more from stunting caused by PEM (Verma et al. 1998; Bhave et al. 2001; Goyal and Chavan, 1993).

**Stages of Nutrient Deprivation and Identification Methods**

The sequence that affects nutrient deprivation of body and tissues store and the development of different stages (clinical, sub-clinical) of malnutrition present a continuum from the early to late stages. The sub-
clinical stages and clinical signs of deficiency categorized by Wasantwisut et al. (2000) are summarized as follows:

(1) Nutritional deficiency is usually initiated by an inadequate dietary intake of one or more nutrients resulting from either a low content in indigenous food sources or the preserve of exogenous factors that interfere with ingestion, absorption and metabolism of the nutrients. These stages of nutritional deficiency usually can be identified by dietary assessment.

(2) When inadequate intake persist, the tissue store become gradually depleted in the nutrients, resulting in low levels in certain body fluids and tissues (tissues desaturation) and in the activity of nutrient dependent enzymes. Often these changes can be detected by biochemical test.

(3) Following nutrient depletion of body fluids and tissues, functional changes occur, leading to clinical deficiency signs. Therefore, clinical assessment may readily detect the late or severe stages of nutritional deficiencies, for example, angular stomatitis for riboflavin deficiency and the lesions or xerophthalmia for vitamin A deficiency etc.

(4) Finally moderate to severe form of malnutrition are possible chronic imbalances of protein and energy in the body can be identified by anthropometric indices such as weight-for-age, height-for-age, weight-for-height and BMI-for-age, measurements such as mid upper arm circumference and triceps, skin fold etc.
1.4 ACADEMIC ACHIEVEMENT

The word achievement generally applied to the field of education referring to the academic status of the child either as a whole or in different school subjects. An academic test is designed to measure "how well a person has been trained in a particular skills or area of knowledge." This type of test focuses primarily on past attainment in school work rather than on prediction of future success, as an aptitude test does.

The term academic achievement is said to be the coinage of the Greek Philosopher Plato. According to him academic achievement means the attainment level at which a student's functions in his or her school through a regular curricular in a fixed place, which he named as academy.

Academic achievement most likely seems to be as one of the predictors of people's success in general and pupil's success in their life career in particular. Hence, it is to be noted that academic achievement is an outcome of the instruction provided to the children in schools, which is determined by the grades, or marks secured by the students in the successive examination. The term "achievement" refers to indicate the degree of level of success attained in some general and specified area. It represents to the acquirement of knowledge or skills and may imply ability to make appropriate use of such knowledge or skill in a variety of present and future situations. Achievement is an end product of learning and its level and performance are affected by various conditions existing at the time of learning and its use. Educators tends to use the term in relation to attain ability in the school subjects although this is a restricted use of the term, although, it may be applied to the entire endeavor. Thus the word achievement is applied generally to the field of education referring to academic success of the child either as a whole or
independently in different school subjects. Most of the achievement tests are constructed for the purpose. It is imperative to point out at this juncture that the term like attainment, accomplishment, and acquisition, in spite of having varying shades of meaning are often used as synonym to achievement. In the present context the term achievement refers to pupil’s achievement as a reference to the level of attainment and proficiency in a prescribed course of study following formal schooling during a prescribed period of time. It is the acquired knowledge of an individual student in a particular branch of study due to learning experiences gained by the students in a defined period and it is measured through examining bodies after the allotted period for learning is over.

In most cases, the educational achievement consists of command acquisition of usable knowledge and the development of ability to perform certain tasks (Ebeil, 1965). Achievement shows the exact performance of a student in different school subjects. Good (1973) has defined academic achievement in the dictionary of education as knowledge attained or skill developed in school subject usually designed by test scores or by marks assigned by teachers or by both. Furthermore, he defined achievement as accomplishment or proficiency in a given skill or knowledge.

Educational attainment has been interpreted as a measure of knowledge, understanding and skill in a specified subject or a group of subjects. School examination is one way to measure the degree of achievement. But, it is not completely reliable and valid. There are tests especially designed to measure achievement called standardized tests, which have a higher of reliability, validity and usability.
Introduction

Academic achievement is an end product of learning. The level and performance are affected by various conditions existing at the time of learning. Academic achievement is influenced by number of factors as nutritional status, socio-economic status, intelligence, home environment, parental influence, school environment, teacher and parent's motivation, educational facilities, occupational and educational status of parents.

STATEMENT OF THE PROBLEM

The present study entitled "The Impact of Mid Day Meal on the Nutritional Status and Academic Achievement of school children in Aligarh City" has been taken up in government primary schools (mid day meal (MDM) school) and non-government primary schools (non-mid day meal (NMDM) school) of Aligarh city.

OBJECTIVES OF THE STUDY

1. To study the impact of Mid Day Meal on the nutritional status of school children (6 to 14 years).

2. To study the impact of Mid Day Meal on the academic achievement of school children (6 to 14 years).

3. To assess the quantity of Mid Day Meal provided in each selected school.

4. To assess the quality of Mid Day Meal provided in each selected school.
HYPOTHESIS

The present study is based on the following hypothesis:

1) There is no significant impact of Mid Day Meal on nutritional status of school children.

2) There is no significant impact of Mid Day Meal on academic achievement of school children.

SIGNIFICANCE OF THE STUDY

The National Program of Mid Day Meal in schools is the largest school feeding program in the world. Supply of one supplementary meal is the main purpose of this program because the home diets of enrolled children (poor children) are often inadequate from the nutritional point of view. The purpose of providing mid day meal in government primary schools is not only to improve nutritional status of children but also attract more poor children to school and sustain their interest in learning so that these children could spent their life comfortably.

Keeping in view, the importance and purpose of mid day meal program, it becomes necessary to know whether the program is being implemented properly and fulfilling the goal of raising nutritional status of school children in support of increase in academic achievement.

The present study is therefore an attempt to know whether the mid day meal program is fulfilling its objective of eradicating nutritional deficiency and to enhance the nutritional status and academic achievement of school children by providing them minimum calorie requirements and adequate nutrients. This study will be helpful in improvising the quality and quantity of mid day meal and also will provide some suggestions for the proper organization, implementation and distribution of the meal at each mid day meal centre. The study will
provide a clear picture, what impact mid day meal is leaving on the child’s academic performance and thus would suggest better method to increase the retention of pupil’s by making certain changes in mid day meal menu.

This study is reflecting the prevailing situation of mid day meal and its impact only in Aligarh City. More researches could be done in different parts of Uttar Pradesh which would help in identifying the root problem of failure of mid day meal scheme. On the basis of these finding changes could be made to make the program more effective keeping in mind the needs of students and teachers in these schools.