

## CHAPTER-6

### IMPROVEMENT IN NUTRITIONAL STATUS OF CHILDREN

MDM guidelines envisaged that scheme should provide appropriate interventions relating to micro-nutrient supplementation and de-worming. Improving the nutritional status of the children was the secondary objective of the scheme. A system was required to be introduced for measuring the improvement in the nutritional status of the children.

#### 6.1 Insufficient nutritive value

The scheme aimed at providing cooked meal adhering to the prescribed nutritional norm of calories and protein by adding fresh vegetables and soyabean *bari* (nuggets) in adequate quantities. Menu-wise quantity of calorie and protein is given in *Appendix-V*.

**Only 17 to 73 gm of raw food grains was served to the children**

Joint inspection of the kitchen of 2 NGOs at Kanpur Nagar and Agra and 12 schools in Bareilly, Etah, Kannauj and Lucknow districts showed that against the prescribed quantity of 100 grams of raw food grains, 48,410 children were given cooked meal of food grains ranging from 17 to 73 grams which could provide 58 to 248 against required 450 calories and one to six grams of protein only against 12 grams required (*Appendix-VI*).

The deficiencies noticed during the joint inspection in 320 schools of 16 test checked districts were as under:

Sl No	Deficiency found	Number of schools	Percentage (out of 320)
1	Meal was not provided as per prescribed menu	86	27
2	Prescribed quantity of meal was not served	87	27
3	Prescribed menu was not painted on the walls	31	10
4	Food grains and ingredients were not inspected by the teachers before cooking meals	126	39
5	The teachers were not aware of the prescribed ratio of rice and <i>dal</i> to be given to children	170	53
6	Cooks were not trained for MDM menu	233	73
7	Cooked meal was not tasted before serving	116	36
8	Hot cooked meal was not served	18	6

A few interesting cases noticed were as under:

- In EGS, Budhkulawa (Shrawasti district) cooked meal was not provided for 794 days during 2004-07 and instead raw food grains were distributed. In PS, Khairkala (Shrawasti district), MDM was not given during 2005-06 due to non-supply of food grains and fuel by the Gram Pradhan.
- The NGO at Kanpur Nagar which supplied MDM to 392 schools with 33,000 children did not put soyabean, the main source of protein, in the *tehri*<sup>17</sup>.

<sup>17</sup> Meal made of rice and vegetables and other ingredients cooked together.

Non-supply of the required quantity of MDM with the prescribed quantity of nutrients and different dishes prescribed in the menu resulted in inadequate nutritional support to children.

The Government replied (January 2008) that necessary instructions had been issued to the district level officers concerned to ensure, through effective monitoring, that MDM is served to the children as per norms and the DMs, Agra and Kanpur Nagar had been asked to conduct an enquiry into the irregularities in their districts.

### **6.2 Non-supply of MDM during summer vacation in drought affected areas**

**MDM was not served during summer vacation to 155.37 lakh students in 2004-05 and 7.73 lakh in 2006-07**

In compliance with the directive<sup>18</sup> of the Supreme Court (April 2004), the GOI issued (September 2004) instructions to provide MDM to children in drought affected districts during the summer vacation also, effective from the summer vacation of 2005. In 2004-05, 65 districts involving 155.37 lakh enrolled children and in 2006-07, five districts involving 7.73 lakh enrolled children were declared (February 2007) drought affected. The Government did not take any action to provide MDM in drought affected districts during summer vacation of 2005 and 2007.

The Government stated (January 2008) that MDM was not supplied during summer vacation as the instructions concerning the drought affected areas were received during the month of November 2004 and summer vacations falling in the year 2004-05 were over by then. Further, there was no staff available in the schools during the vacation to carry out the scheme. No reason was furnished for non-supply of MDM in 2007.

The reply was not tenable as MDM was to be served in the ensuing summer vacation falling after the drought had occurred. For the drought of 2004-05, MDM was to be supplied in the summer vacation of 2005 through Gram Pradhans/ NGOs.

Thus, a total of 1.63 crore children in drought affected districts were deprived of MDM during summer vacations of 2005 and 2007.

### **6.3 Micro-nutrient Supplementation and De-worming**

**Micro-nutrients and de-worming medicines were not provided to children at all**

According to scheme guidelines, major nutritional deficiencies affecting young children were (a) Protein- energy malnutrition (b) Iron deficiency - anaemia (c) Vitamin A deficiency and (d) Iodine deficiency disorders. The MDM scheme was to be utilized for appropriate interventions relating to micro-nutrient supplementation and de-worming such as (i) administering six monthly doses for de-worming and Vitamin-A supplementation, (ii) administering weekly Iron and Folic-Acid supplement, and (iii) other appropriate supplementation depending on common deficiencies found in the local area.

The State Government had neither issued any guidelines for providing micro-nutrient supplementation and de-worming medicines nor allocated any funds in the MDM scheme. Provision for micro-nutrient supplementation like iron, folic acid, vitamin-A and de-worming medicines was not made in any of the test checked schools even by the Medical and Health Department.

<sup>18</sup> "In drought affected areas, mid-day meal shall be supplied even during summer vacation."

The Government stated (January 2008) that the provision for de-worming and micro-nutrient under National Rural Health Mission (NRHM) was being made in consultation with Director General, National Programme, Monitoring and Evaluation. The fact remained that micro-nutrient supplements and de-worming medicines were not provided to the children.

#### 6.4 Use of iodized salt

The scheme guidelines envisaged use of iodized salt for cooking MDM, as iodine deficiency during childhood could result in loss of IQ (Intelligent Quotient) points and poor physical and mental growth and development. Joint inspection of schools showed that in 60 (19 per cent) out of 320 schools, iodized salt was not used and 53 (17 per cent) were using natural unprocessed crystal salt.

36 per cent schools were not using iodised salt



Natural unprocessed crystal salt in PS at Haraipur (Kannauj district)



Natural unprocessed crystal salt in PS at Rae Bareli

The State Government replied (January 2008) that instructions to use iodized salt had been issued and were being reiterated from time to time. The fact remained that instructions of the State Government were not observed by a large percentage of schools.

#### 6.5 Quality testing of cooked MDM

The scheme envisaged supply of fresh, hot and nutritious meals to children to improve their nutritional status. Government issued instructions (December 2004) to all the DMs for sample testing of cooked MDM through food inspectors available in the districts. Food Inspectors were required to keep a watch over the quality of food by sampling as well as tasting and to give suggestions.

Quality testing of cooked meal was never ensured in spite of several complaints regarding poor quality of MDM

The DMs of Agra, Kanpur Nagar and Lucknow engaged NGOs for supply of MDM to 2,500 to 37,260 children per NGO in urban areas through centralized kitchens. The cleanliness of the kitchen run by NGOs and quality of MDM was never checked by Food Inspectors.

No action was taken to get the samples of MDM tested, though Food Inspectors were posted in each district under the Chief Medical Officers (CMOs). The Chief Minister also observed (October 2007) that the current system of serving meals was defective as sub-standard food grains cooked in poor quality edible oil were being served to the children. The CMOs of seven<sup>19</sup> districts replied (August-December 2007) that they were not aware of the instructions and had no orders in this regard. The reply indicated that the DMs did not convey the instructions of Government to the CMOs concerned.

<sup>19</sup> CMOs of Budaun, Bareilly, Jhansi, Kushinagar, Lucknow, Maharaj ganj and RaeBareli.

## 6.6 Non-availability of weighing machines

Despite availability of funds weighing machine were not purchased

Protein-energy malnutrition among the school children could be assessed through weight deficit. A weighing machine was, therefore, required to be supplied to all the schools covered under the MDM scheme to weigh the children and record their weights to take care of the weight deficit cases. Despite availability of Rs 3.61 crore under MME, the Director released (February 2006) Rs. 1.20 crore at the rate of Rs 500 per school to 24,040 schools (25 per cent) with instructions (May 2006) to the BSAs to transfer the amount in the account of Village Education Committee and ensure procurement of high quality weighing machines for keeping a record of the weight of the children. However, 11 out of 16 test checked districts did not transfer the funds to schools. In the remaining five<sup>20</sup> districts where funds were transferred to schools, weighing machines were not purchased as of December 2007. As a result, weight of the children could not be monitored to ensure the efficiency of the supplementary nutrition provided in the schools under the scheme. No system of periodical health check up was established.

The Government stated (January 2008) that instructions had been issued to the concerned authorities for regular health check-up with the co-operation of Health Department and painting of height-weight chart on the wall of schools and that the funds would be provided soon for weighing machines for the remaining schools. Obviously, the instructions of the State Government in this regard were not followed by the functionaries concerned.

## 6.7 Conclusion

Improvement in the nutritional status of the children was neither ensured through sufficient nutritive value in the meals nor micro-nutrient supplements and de-worming medicines were provided. No system of periodical health check-up was introduced. Despite orders of the Supreme Court, children of drought affected areas were not provided MDM during summer vacations.

## 6.8 Recommendations

- The prescribed quantity of MDM having the prescribed calories and quantity of proteins should be ensured.
- The system of periodical health check-up should be introduced to ascertain improvement in the health and nutritional status of the children.
- Wide publicity of the scheme interventions should be made so as to increase public awareness and the children are not deprived of facilities like supply of MDM in drought affected areas during summer vacation.

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<sup>20</sup> Badaun, Gonda, Kanpur Nagar, Kannauj and Shrawasti.