UNIT 24 MAJOR NUTRITION PROGRAMMES – II: SUPPLEMENTARY FEEDING PROGRAMMES

Structure
24.1 Introduction
24.2 The Concept of Supplementation
24.3 Integrated Child Development Services (ICDS)
  24.3.1 Concept, Relevance and Objectives
  24.3.2 Components
  24.3.3 Organization and Implementation
24.4 Mid Day Meal Programme (MDM)
  24.4.1 Concept, Relevance and Objectives
  24.4.2 Components
  24.4.3 Organization and Implementation
24.5 Let Us Sum Up
24.6 Glossary
24.7 Answers to Check Your Progress Exercises

24.1 INTRODUCTION

The diets of poor people in our rural areas and urban slums lack several nutrients. In the last unit we talked about how the Government is trying to tackle the problem of specific deficiencies of iron, iodine, and vitamin A through prophylactic programmes. However, these programmes do not help to solve the problem of inadequate energy and protein in the diet. In this unit we discuss the approaches the Government is using to provide as much of the energy and protein which is missing in the home diets.

You are already aware that the worst forms of malnutrition afflict the vulnerable groups in the population. Pregnant and lactating women and young children are particularly at risk. To control this the Government of India has started supplementary feeding programmes (SFP) for children and women. A supplement usually takes the form of a ready-to-eat snack or dish and provides a substantial amount of energy and protein.

The programmes under which supplementary food is presently provided are the
i) Integrated Child Development Services (ICDS) and
ii) Mid Day Meal (MDM) programmes.

Objectives
After studying this unit, you will be able to:
• discuss the concept of supplementation and its relevance
• describe the major features of the ICDS and MDM programmes
• identify the advantages of adopting an integrated approach in improving health and nutritional status of people.

24.2 THE CONCEPT OF SUPPLEMENTATION

We have earlier mentioned the vulnerable groups in our population. These include infants and preschoolers, pregnant and lactating women. It is a fact that there is quite a wide gap between the RDIs and the amount of energy and protein actually supplied by the diet.

How do we fill this gap? The answer, obviously, is to give a nutritious food supplement rich in energy and protein. Our effort is to add extra food to the home diet of a person so as to meet the RDIs for energy and protein. The following figure illustrates this.
This is the basic concept of food supplementation. The approach is short-term because we are providing extra food to population groups without necessarily giving them the means to earn more. In the longer term we should aim to increase the purchasing power of people and educate them. This fosters a sense of independence and makes people less dependent on others for their food needs.

It is interesting to note that the supplementary feeding programmes initially catered only to children. Later, pregnant and lactating mothers were also included. Such programmes not only helped the mother through a safe birth but also improved the birth weight of the babies. Babies with a birth weight of 2.5 kg or more, have a definite health and nutritional advantage over those who are lighter at birth as you learned in Unit 22 of Block 5.

With experience, there has also been the growing realization that giving a food supplement alone is not enough. Poor people often live in unhygienic surroundings and are victims of many infectious diseases. You already know that malnutrition and infection go hand in hand. Therefore food supplements would be effective only when measures are taken to control and prevent infections and improve living conditions. Further all efforts will fail if people themselves are not convinced of the need for such services. This is where the role of education comes in.

Many of our feeding programmes continue to rely on only a food supplement. However, there is one—the Integrated Child Development Services (ICDS) programme—that seeks to offer a package of services where a food supplement is combined with health and educational services.

In this unit we will look at the major features of the ICDS programme and the Mid Day Meal programme (MDM). You will notice differences in approach and focus. The ICDS is targeted at infants, preschoolers and pregnant and lactating women. On the other hand, MDM is basically targeted at children.

Let us now begin with the ICDS programme.

### 24.3 INTEGRATED CHILD DEVELOPMENT SERVICES (ICDS) PROGRAMME

The ICDS programme is primarily a child welfare programme. It was started by the Government of India in 1975-1976. Before ICDS a number of child health and nutrition programmes were being operated by different departments but without proper coordination. In ICDS, for the first time an attempt has been made to combine (integrate) all the relevant services of health, nutrition and education and deliver them as a package to children and their mothers. Integration of services and consideration of the mother and child as one ‘biological unit’ are the unique features of this programme.

You may have heard of a programme called the Special Nutrition Programme (SNP) in our country. This programme provided a food supplement to vulnerable groups and was operational for several years. With the start of the Integrated Child Development Services (ICDS) programme in the mid-seventies, this programme was...
gradually linked up with the other components of ICDS. Today, supplementary nutrition forms one of the most important components of the ICDS package. As a result, SNP is in the process of being phased out as an independent programme.

24.3.1 Concept, Relevance and Objectives of ICDS

The nutrition programmes discussed in Unit 23, as you know, are specific nutrient supplementation programmes. They aim at the control and prevention of specific nutrient deficiency diseases like xerophthalmia, anaemia and iodine deficiency disorders. In other words, these programmes are single purpose programmes with emphasis on immediate benefit to the target population. But, we know that in economically poor communities malnutrition is not only due to the poor purchasing power of people. Even faulty feeding habits due to ignorance or superstitions and repeated infections and worm infestations due to bad environment (causing diarrhoea, dysentery, cough and fever) are equally responsible. Many of the deficiency diseases mentioned in this block often coexist in the community. In other words people suffer from more than one type of malnutrition at the same time, for eg, a child suffering from PEM may have vitamin A deficiency and anaemia as well. A woman with goitre can suffer from anaemia or vitamin deficiencies. Therefore, the real solution to the problem of malnutrition is tackling all these multiple factors namely, poverty, illiteracy and ill-health simultaneously in a coordinated manner. Realization of this fact by the Government led to the conceptualization of an integrated approach to overall development of children which resulted in the ICDS programme.

The programme’s main aim is to provide nutrition, health and educational services to children before and after birth and through the early childhood period so that their proper physical, mental and social development is ensured.

The specific objectives of ICDS are to:

i) improve the nutritional and health status of children in the age group of 0 to 6 years and adolescents;

ii) lay the foundation for proper psychological, physical and social development of the child;

iii) reduce the incidence of mortality, morbidity, malnutrition and school drop-out;

iv) achieve effective coordination of policy and implementation amongst the various departments to promote child development; and

v) enhance the capability of the mother to look after the health and nutritional needs of the child through proper nutrition and health education.

24.3.2 Components of ICDS

What are the components of ICDS?

The term 'components' refers to the kinds of services offered by the programme such as supplementary nutrition or immunization. As you read the following discussion you will realize that the ICDS programme is a package of several services.

In the last unit you would have come across the term 'beneficiary'. A beneficiary is the person who receives a particular service. All services in the ICDS programme are not extended to the entire population as you will find. Let us now begin our discussion on the components of the ICDS programme.

The components are:

A) Supplementary nutrition

B) Immunization

C) Periodic health check-ups, treatment of minor ailments and referral services

D) Growth monitoring

E) Non-formal preschool education

F) Health/nutrition education to women

G) Safe drinking water

The focal point of the convergence (bringing together) of these services is the ‘Anganwadi’ (AW). The AW or preschool child centre is located within a village slum or tribal area. Each centre is managed by an anganwadi worker (AWW) and a helper, and usually covers a population of 1000 in rural and urban areas and about 700 in tribal areas. The details of services and beneficiaries is summed up in Figure 24.1
SERVICES AND BENEFICIARIES

CHILDREN UNDER 1 YEAR
- HEALTH CHECKUP
- IMMUNIZATION
- SUPPLEMENTARY NUTRITION
- REFERRAL SERVICES
- PREGNANT AND NURSING WOMEN

1 TO 3 YEARS
- IMMUNIZATION
- SUPPLEMENTARY NUTRITION
- REFERRAL SERVICES
- ADOLESCENT GIRL

3 TO 6 YEARS
- NON-FORMAL NUTRITION
- PRESCHOOL HEALTH EDUCATION
- NUTRITION AND HEALTH EDUCATION
- ADOLESCENT GIRL
- ALL WOMEN 15-45 YEARS

Fig. 24.1 The ICDS Programme: Services and Beneficiaries. (Courtesy: UNICEF, India)
A. Supplementary Nutrition: This is one of the major components of ICDS. You know the meaning of the words ‘supplementary nutrition’. Let us now understand how supplementary nutrition is provided to the beneficiaries. Further, how are vulnerable sections of a particular community identified? For this purpose all families in the community are surveyed to identify the poorest children below the age of six, and expectant or nursing mothers. Three hundred days a year, supplementary food is prepared and distributed to them at the anganwadi. The type of food varies from State to State but usually consists of a food item (that can be easily prepared at the anganwadi) containing cereals, pulses, oil and sugar. Some states provide a ready-to-eat snack containing the same basic ingredients.

In Andhra Pradesh, for example, a ready-to-eat (RTE) powder is made from wheat flour, defatted soya flour (flour of soyabean from which tat has been removed) milk powder and sugar. This powder is then used to prepare a supplement. For infants and very young children, the powder is mixed with clean drinking water and fed. This is why the powder is also called a ready-to-mix (RTM) powder.

Special care is taken to reach children below the age of three and to encourage parents and siblings to bring them to the anganwadi for feeding. By providing about 300 calories a day to children under 6 years, the anganwadi attempts to bridge the calorie-gap i.e., deficit in calories that exists between the home diet they consume and what they require for healthy living. Food consumption surveys have shown that on an average, an Indian preschool child eats food which supplies 800-900 calories while he/she requires 1240 calories per day. This means the gap is around 300 calories per day.

Additionally, specific nutrients are supplied to take care of individual deficiencies: vitamin A for blindness, iron and folic acid for anaemia and iodized salt in areas where iodine deficiency is present. Energy and protein content of the supplementary food supplied to different target beneficiary groups is as follows:

<table>
<thead>
<tr>
<th>Target group</th>
<th>Energy (Kcal)</th>
<th>Protein (g)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Infants (6-12 months)</td>
<td>200</td>
<td>8-10</td>
</tr>
<tr>
<td>Children (1-6 years)</td>
<td>300</td>
<td>15</td>
</tr>
<tr>
<td>Adolescents</td>
<td>500</td>
<td>20</td>
</tr>
<tr>
<td>Pregnant and nursing women</td>
<td>500</td>
<td>25</td>
</tr>
</tbody>
</table>

Double the daily supplement is provided to the ‘severely’ malnourished children. How does the anganwadi worker decide whether a child is severely malnourished? Read the next unit for details. Generally the anganwadi worker measures the weight, of the child and the mid upper arm circumference. The lower the weight and the lower the mid arm circumference, the more the degree of malnutrition.

A variety of foods are used in the feeding programmes. A few examples are given in Table 24.1.

<table>
<thead>
<tr>
<th>Supplement</th>
<th>Beneficiaries</th>
<th>Ingredients</th>
<th>Type of processing/ preparation</th>
<th>Consistency</th>
<th>Location of processing</th>
<th>Acceptability</th>
<th>Shelf life</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ready to Consume</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bread</td>
<td>Preschool children</td>
<td>Wheat/skim milk, vitamins &amp; minerals</td>
<td>Baking</td>
<td>Soft slices</td>
<td>Central</td>
<td>Good</td>
<td>2-3 days</td>
</tr>
<tr>
<td>Muruku/Sev</td>
<td>School children and preschool children</td>
<td>Corn/soya skim-milk or groundnut meal, vegetable oil</td>
<td>Extruded processing</td>
<td>Hard/brittle</td>
<td>Central</td>
<td>Good*</td>
<td>40 days</td>
</tr>
<tr>
<td>Sukhadi/Panjeeri</td>
<td>School/pre-school children</td>
<td>Cereal/jaggery/oil</td>
<td>Roasting</td>
<td>Granular powder</td>
<td>Central</td>
<td>Good*</td>
<td>4 months</td>
</tr>
<tr>
<td>Miltone</td>
<td>School/pre-school children</td>
<td>Veg. protein isolate/milk and vitamins</td>
<td>Special processing/pasteurization</td>
<td>Liquid</td>
<td>Central</td>
<td>*Good</td>
<td>1-2 days</td>
</tr>
</tbody>
</table>
Supplement | Beneficiaries | Ingredients | Type of processing/preparation | Consistency | Location of processing | Acceptability | Shelf life
--- | --- | --- | --- | --- | --- | --- | ---
Others: Balahar | School/pre-school children | Wheat, groundnut meal & vitamins | Cooked with vegetable oil | Variety-semisolid meal | Central | Good | 1 day**
Energy Food | Preschool children | Cereal, pulse oil, oilseed | Roasting/ blending | Variety-porridge | Central | Good | 1 day**
Soya-fortified bulgar wheat (grits) | School/pre-school children | Bulgar wheat/ soya grits and vitamins | Cooked with oil or butter or veg. oil | Variety porridge to semi-solid meal | Local | Good* | 1 day**
Common cereal/ pulse mixes | School/ preschool children | Cereal/pulse/ Jaggery/oil | Cooked with oil | Variety-semi-solid meal | Local | Good* | 1 day**

*The consistency and bulk affects consumption by young infants.
**After cooking.

Some terms used: groundnut meal (groundnuts which have been ground); isolate (protein isolate is the protein portion taken out of the food); extruded (a product prepared by extruding through small holes i.e. pushing a dough like mixture through a sieve like equipment under pressure); soya fortified bulgar (bulgar is a form of wheat; soya fortified bulgar is bulgar wheat to which soya has been added); soya grits (soyabean pieces) vitamins and minerals (used to refer to added vitamins and minerals)

B) Immunization: All infants in the project area are immunized against infectious diseases such as diphtheria, whooping cough, tetanus, poliomyelitis and tuberculosis (Fig. 24.2). Measles vaccinations are also provided. All pregnant women are immunized against tetanus (Fig. 24.3).

![Fig. 24.2: Immunization of infants](image)

Highlight 3 indicates the recommended immunization schedule.

**Highlight 3

**Immunization Schedule**

Immunization plays a crucial role in preventing serious childhood diseases. These diseases include tuberculosis (TB), diphtheria, whooping cough, poliomyelitis (polio), measles, tetanus and typhoid. In the last block we have already mentioned that some of these diseases e.g. measles can result in severe malnutrition. They can also kill the young child.

The recommended immunization schedule is given here:

**For the pregnant woman**

Early in pregnancy | (TT-1) | First injection against tetanus
One month after TT-1 | TT-2 | Booster injection against tetanus
### For the Infant

<table>
<thead>
<tr>
<th>Age</th>
<th>Vaccine 1</th>
<th>Vaccine 2</th>
<th>Vaccine 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>1½ months</td>
<td>DPT-1</td>
<td>OPV-1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Injection against diphtheria, whooping cough and tetanus</td>
<td>Oral dose against polio</td>
<td></td>
</tr>
<tr>
<td>At 2½ months</td>
<td>DPT-2</td>
<td>OPV-2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Injection</td>
<td>Oral dose</td>
<td></td>
</tr>
<tr>
<td>At 3½ months</td>
<td>DPT-3</td>
<td>OPV-3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Injection</td>
<td></td>
<td></td>
</tr>
<tr>
<td>At 9 months</td>
<td>Measles</td>
<td></td>
<td>Injection</td>
</tr>
<tr>
<td>At 16-24 months</td>
<td>DPT Booster</td>
<td>OPV Booster</td>
<td>Injection</td>
</tr>
<tr>
<td></td>
<td>Oral dose</td>
<td>Oral dose</td>
<td></td>
</tr>
<tr>
<td>Between 5-6 years</td>
<td>Booster DPT</td>
<td>Typhoid vaccine</td>
<td>Injection</td>
</tr>
<tr>
<td></td>
<td>Two injections at an interval of 1-2 months</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Fig. 24.3 Immunizing pregnant women against tetanus. (Courtesy: UNICEF, India)**

**C) Health check-up, treatment of minor ailments and referral services**—At the anganwadi, children, adolescent girls and pregnant and lactating mothers are examined and treated at regular intervals by the local health personnel, such as the Lady Health Visitor (LHV) and Auxiliary Nurse Midwife (ANM). The Lady Health Visitor is also called the Health Assistant (Female). They provide a link between the village and the Primary Health Centre and sub-centres. In addition, the Anganwadi worker diagnoses minor ailments and distributes simple medicines provided in a medical kit. Children/women requiring special investigations and treatment are referred to doctors at the PHC or district hospital.
Nutrition Programmes

D) Growth Monitoring—The word 'Monitoring' means 'keeping a close watch'. Growth monitoring, therefore, means keeping an eye on physical growth in terms of height and weight of a person or groups of persons. In the context of the ICDS programme, growth monitoring, in fact, is weight monitoring of children.

Weight is a good indicator of a child's growth. Since it is more simple to measure and interpret than height, it is used in the AW for watching the progress of the child's health/nutritional status. This monitoring is done with the help of special growth charts. These are also known as weight-for-age charts. As shown in the figure, the chart (Fig. 24.4) consists of a card presenting in graphic form the weight-for-age curves drawn across. Each curve denotes a particular level of nutrition/growth status. Children whose body weights are equal to or above the 80% value of 'standard' are considered as 'normal', those weighing less than 80% and more than or equal to 70% as suffering from I grade/degree malnutrition, between 70% and 60% as II grade malnutrition, between 60% and 50% as III grade malnutrition and below 50% as IV grade malnutrition. It is obvious that the grades are in increasing order of severity—Grade I being mild and grade IV severe. At times these grades of malnutrition are denoted by different colours on the growth charts. The growth charts are utilized to educate the mothers regarding the health status of their children and the growth pattern. And more important, they help the mother/anganwadi worker to quickly identify signs of malnutrition and take prompt action. You will find more details in the next unit.

E) Non-formal opportunities for preschool learning—The main purpose of the preschool education component, particularly for those between 3 and 5 years is to stimulate and satisfy the curiosity of the child rather than follow any rigid learning curriculum. Children are taught songs and games. Toys are indigenous and are imaginatively produced from inexpensive locally available materials. Since there is no formally structured curriculum, and flexibility is encouraged, the anganwadi worker often responds to parental demands to teach the alphabet and elementary numeracy.

F) Nutrition education for women and adolescent girls.

Check Your Progress Exercise 1

1) Why do you think an integrated approach is better in providing services to a population? Answer in 4-5 lines.

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..........................................................................................................


2) Differentiate between the following three terms:

* Supplementary feeding of infants
* Mutual supplementation
* Supplementary feeding programmes
GROWTH CHART USED IN ICDS PROGRAMME
Target Groups (Beneficiaries) of ICDS

The target groups include:
- Infants under 1 year
- Children 1-6 years
- Pregnant and lactating women
- All women up to 45 years and adolescent girls.

Some of the special schemes for adolescent girls are given in Appendix 5.

The success of any programme depends on its organization and implementation. The previous discussion focused on the advantages of integration of services. But how is this integration actually achieved? You will find the answer as you read on.

To understand the organization and implementation of a programme you must have some idea of how India as a country is administered.

Our country consists, as you know, of states. The states are guided by a Central authority i.e. the Ministers of the Central Government. Each state is divided into districts and the districts into blocks. In some states blocks are also called talukas. Blocks are further subdivided into sectors. Sectors are made up of several villages or other human settlements. You will find that there are people at each of these levels who are assigned specific tasks.

We must add here that our health services are also provided through the same administrative structure. However the block level unit offering health services is called the primary health centre. At the sectoral level there are subcentres. And, each subcentre caters to a group of villages.

Now let us return to the ICDS programme itself.

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**Fig. 24.5: ICDS infrastructure**
The ICDS programme is implemented by the Department of Women and Child Development at the Central level in coordination with the Ministry of Health. At the state level, implementation is the responsibility of either the Department of Social Welfare/Women and Child Development/Health or a separate Directorate of ICDS. The flow chart in Figure 24.5 gives you an idea of the infrastructure through which the programme is organized. The designations of ICDS functionaries at the Block to village or community level and the corresponding health functionaries with lines of control and communication are also shown. The functions of each of the functionaries are described here and depicted in Fig. 24.6.

THE ROLE OF KEY PROJECT STAFF

GOVERNMENT ADMINISTRATION

Child Development Project Officer (CDPO)
- Provides link between ICDS and government administration.
- Secures anganwadi premises.
- Incharge of 4 Supervisors and 100 AWWs
- Identifies beneficiaries and ensures supply of food to centre, and flow of health services.
- Monitors programme and reports to State Government.

Supervisor
- Responsible for 20-25 anganwadi
- Acts as mentor to AWWs.
- Assists in record keeping, organizing community visits, visits of health personnel.
- Provides on-the-job training to AWWs.

Anganwadi Worker (AWW)
- Is multi-purpose agent of change.
- Selected from the community.
- Provides direct link to children and mothers.
- Assists CDPO in survey of community and beneficiaries.
- Organizes non-formal education sessions.
- Provides health and nutrition education to mothers.
- Assists PHC staff in providing health services.
- Maintains records of immunization, feeding and pre-school attendance.
- Liaises with block administration, local school, health staff and community.
- Other community-based activities, e.g. family planning.

Fig. 24.6: Function of the Project Staff

A) Anganwadi Worker (AWW)

AWW is usually a woman from the same village, slum or tribal area where the centre is located. She plays a pivotal role in the ICDS structure due to her close and continuous contact with the community. As the crucial link between the village population and the Government administration, she becomes a central figure in assessing and meeting the needs of the community she lives in. In other words the AWW:

- Is a person with multiple duties and is expected to bring about a change in the community's knowledge and behaviour in respect of child health and nutrition
Nutrition Programmes

- Is selected from the community
- Provides a direct link with children and mothers
- Assists block level functionaries in surveying the community and beneficiaries
- Organizes non-formal education sessions for preschool children
- Provides health and nutrition education to mothers
- Assists PHC staff in providing health services including family planning
- Maintains records of immunization, feeding, and preschool attendance.

B) Supervisor (Mukhya Sevika)

For every 20 to 25 anganwadis, one senior person invariably a lady is appointed to supervise and guide the AWW in her day-to-day activities. She is called a Mukhya Sevika (MS) and is trained for three months at Home Science Colleges or Departments of Social Work in the universities. Her functions are:

- To act as mentor and guide to AWWs
- To assist in record keeping, organizing community visits, visits of health personnel
- To provide on-the-job training to AWWs.

C) Child Development Project Officer (CDPO)

At the block level a senior officer, designated as CDPO, is appointed to oversee the programme. He/She is responsible for the implementation of the programme within the Block. CDPOs are given special two months training in child development, accounting, finance management and survey techniques. Their duties are:

- To provide a link between the ICDS and PHC and Block administration
- To secure premises for Anganwadis
- To regularly supervise the work of Mukhya Sevikas and AWWs and provide guidance
- To identify beneficiaries and ensure supply of food to centre, and flow of health services
- To monitor the programme and send reports to the State Government.

24.4 MID-DAY MEAL PROGRAMME (MDM)

You have just learnt several important facts about the ICDS programme. More important, you would have begun to appreciate the advantages of an integrated approach—giving a package of services rather than just a food supplement.

Let us now look at another supplementary feeding programme—the mid day meal programme.

24.4.1 Concept, Relevance and Objectives

The Mid-Day Meal Programme (MDM) is also called the school lunch or school meal programme. As the name indicates, the children attending elementary sections of schools are the chief beneficiaries. Supply of one supplementary meal is the main purpose of this programme. The reason why the MDM programme was started was that the home diets of these children are often inadequate from the nutritional viewpoint. Many, 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 benefit from the education, which is being provided at great cost to the exchequer.

Further, school age children are in the phase of rapid growth and development and hence their nutritional needs are considerable as you learnt in Unit 10, Block 3.

The schools provide easy access to a large number of vulnerable children for any organized welfare action, be it health or nutrition or education. As such there is justification for this programme.
Objectives

The programme has both health and educational objectives. There are:

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

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

Apart from the above clear cut objectives, this feeding programme, when run in conjunction with nutrition/health education programmes, 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.

24.4.2 Components of MDM

We have so far discussed the major aims and objectives of the MDM programme. Did you notice the difference in approach as compared to ICDS?

You would have realized that nutrition and health education are not an integral part of the MDM programmes. The major component, therefore, is a food supplement.

Who are the target beneficiaries?

The main beneficiaries of the programme are children between 6 and 11 years attending elementary/primary schools.

The menu provided in this programme is varied. The raw food material supplied by international agencies includes corn soya meal (CSM), wheat soya blend, soya fortified bulgar wheat-SFB and salad oil.

The raw ingredients are cooked into ‘upma’ or ‘khichri’ or some other forms, which are convenient to eat. They are also incorporated into ready-to-eat foods along with flavouring agents and condiments. Even milk powder in some places forms part of the supplies.

In Tamil Nadu, traditional ‘rice-sambar’ preparations are used in the programme.

The meal provides roughly 450-500 Kcal and 20-30 g protein per child per day, which is expected to meet one-third of the energy and half of the protein RDIs.

24.4.3 Organization and Implementation

The feeding is usually carried out within the school premises. The school teacher is responsible for the preparation and distribution of food and maintenance of records such as food stock registers, health cards and attendance registers relevant to the programme. A helper is provided to assist him/her in organizing the feeding.

The programme is operated by the Education department. Special budgetary provisions are made to meet the cost of fuel, condiments and other incidentals. We must mention here that health services are also provided to the same target group as part of a separate programme. The Medical Officer of the local Primary Health Centre (PHC) is expected to periodically undertake the health check up of the children and maintain records of height, weight and clinical (health) status of children. In some States, the Departments of Health run special school health programmes, under which a team of medical officers and paramedics regularly visit Government schools and conduct health check ups of children. The health examination includes vision testing and dental examination. Children requiring specialized treatment are referred to hospitals with Eye (Ophthalmology), Ear, Nose, Throat (ENT) and Dental specialists and Pediatricians (specialists in children’s diseases).

We must mention here that both ICDS and MDM are supported by several national and international agencies.

Highlight 4 presents a brief summary of the nature and work of three international agencies.
Highlight 4

Agencies with a mission

UNICEF: The UNICEF is a specialised agency of the United Nations (UN) concerned mainly with the welfare of children and women. It was started in 1946 by the UN general assembly to deal with rehabilitation of children displaced by World War II. In fact, it took over the functions of the health division of another UN organization called UN Relief and Rehabilitation Administration (UNRRA), which did outstanding work in the area of control and prevention of the spread of epidemic diseases which broke out during and after the world war. In 1953, when the emergency functions were over, the word 'emergency' was dropped and it came to be known as "UN Children’s Fund", but continued to have the initials UNICEF.

The major areas in which UNICEF provides assistance are: a) Child health b) Nutrition of mother and child c) Family and Child Welfare, and d) Education. In the area of health, the UNICEF has been assisting India in development of rural health services, control of communicable diseases and in the field of medical education and training of nurses, midwives and auxiliaries.

World Food Programme (WFP): The World Food Programme founded in 1963 is another international body formed in order to provide food aid to the nations affected by chronic food scarcity and malnutrition. WFP acts as a channel for food distribution from multiple donors to the needy countries. WFP expects that the recipient countries utilize the food aid for the purpose of public feeding programmes, which apart from satisfying hunger aim at a long-term solution to the problem of food availability and access. In other words, the 'targeted' release of the food for vulnerable segments of population is the guiding principle on which WFP works.

In India, however, WFP food aid has been mainly in the form of SFB (Soya fortified bulgar wheat) and oil which is being distributed to supplementary feeding programmes conducted under SNP and ICDS.

The headquarters of WFP is located in Rome where FAO is also situated.

CARE: CARE is an acronym (abbreviation) for an American Organization called 'Cooperative for American Relief Everywhere'. It is a voluntary organization created in 1946 to send food from American donors to people living in war-affected Europe. Subsequently, its activities extended to other parts of the World and the scope has been expanded to include other kinds of aid such as gardening tools, seeds, pumpsets etc. for developing school gardens; provision of mobile medical vans, X-ray machines, diagnostic sets, books and training materials for updating medical/health facilities in developing countries. In India, CARE’s significant contribution is in the shape of food for the supplementary feeding programmes for school children (MDM programme), as well as for preschool children and women as part of ICDS.

It also produces imaginative and effective nutrition educational materials for use in schools and communities.

Check Your Progress Exercise 2

1) Fill up the blanks

   a) In the ICDS programme nutrition, health and educational services are ............... and delivered as a ............... to its target beneficiaries.

   b) Target beneficiaries of ICDS programme are children under 6 years and ................ and ................ women.

   c) MDM programme provides one meal for children attending ................ sections of school.

   d) The objective of MDM programme is to improve the ................ and ............... status of children.
2) Match the following.
   a) Anganwadi Worker
   b) School teacher
   c) CDPO
   i) Mid-day meal programme
   ii) Growth monitoring
   iii) ICDS programme
   iv) Referral services
   v) Formal preschool education

24.5 LET US SUM UP

The major supplementary feeding programmes include:
   i) Integrated Child Development Services (ICDS) and
   ii) Mid Day Meal (MDM) Programme

The Integrated Child Development Services is a comprehensive programme of child development. It combines health, nutrition and education services and delivers them as a package to a child before and after birth and through his/her early childhood period. In other words, pregnant women, nursing mothers, infants and preschool children and adolescents are the beneficiaries of this programme. The package (integrated) approach is considered to work out not only cheaper but also more effective and easier to organize. The programme is operated by Ministry of Human Resource Development, Department of Women and Child Development, Government of India.

The main components of ICDS are:
   - Supplementary nutrition
   - Immunization
   - Periodic health check ups, treatment of minor ailments and referral services
   - Growth monitoring
   - Non-formal preschool education
   - Health/nutrition education for women.

The services are delivered at the community level through the Anganwadi Centre—a facility where children are encouraged to gather and participate in different health and educational activities. The centre is managed by the Anganwadi Worker and a helper. The centre’s work is supervised by the Mukhya Sevika and Child Development Project Officer (CDPO). At the district level, the Collector or District Planning Officer is overall incharge of the programme. Doctors and other health staff of PHCs perform health check ups, immunization and referral services. Thus the Department of Social Welfare in coordination with Health department organizes the activities of the programme.

The Mid Day Meal Programme aims at providing an additional meal to children, attending primary sections of school. The purpose is not only to improve nutritional status of children but also to attract more poor children to school and sustain their interest in learning so that drop out rates are lowered and school attendance improves. The food supplement is expected to provide at least a third of the energy RDI and one half of the protein RDI of each child every day. A number of recipes including rice, dal, oil, vegetables have been formulated for use in the programme.

The programme is organized by the Department of Education. Health functionaries of the local PHC or school health services are expected to provide health care to children participating in MDM. Thus efforts are made to have built in nutrition education and health service components.

24.6 GLOSSARY

Integrated Services or package of services: A number of relevant services are combined and made available at the same time to same set of beneficiaries.

Primary Health Centre: A vital part of the health system in our country operating at the level of a block.

Ready-to-eat snack: Snack which can be eaten without further (cooking) processing.
Nutrition Programmes

**Single purpose programme**: Programme having only one aim/objective, e.g. vitamin A prophylaxis programme aims at preventing nutritional blindness.

### 24.7 ANSWERS TO CHECK YOUR PROGRESS EXERCISES

#### Check Your Progress Exercise 1

1) Integrating services greatly enhances the effectiveness of each; providing a food supplement alone will not solve the problem if no action is taken to control and treat infections through say immunization and providing safe drinking water. On the other hand, if a child is seriously ill or already has a nutritional deficiency immediate medical attention is required i.e. referral services.

2) ‘Supplementary feeding of infants’ means slowly substituting breast milk with solid and semi-solid foods. Breast feeding is continued but the baby slowly gets accustomed to an adult diet with less dependence on breast milk.

‘Mutual supplementation’ means including food combinations in the diet with good protein quality. Such combinations provide essential amino acids in adequate amounts and make up for the deficiencies of individual foods e.g. cereal-pulse combinations are an example of mutual supplementation.

Supplementary feeding means giving extra food to make up for the lack of energy and protein in a diet in order to prevent nutritional deficiencies.

#### Check Your Progress Exercise 2

1) a) ‘Integrated’, ‘Package’
   b) Pregnant and lactating women
   c) Primary
   d) Health, educational

2) a and (ii)
   b and (i)
   c and (iii)