

# Developing Primer on Nutrition

BY

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## Introduction

## INTRODUCTION

Education is that process of development which consists the passage of human being from infancy to maturity, the process where by he adopts himself gradually in various ways to his physical and spiritual environment (Raymont, 1985).

Education is important from various points of view. Essentially it is a process of development, a development of the latent inherent capacities of a child to the fullest extent. It inculcates in a child higher moral and social ideals together with spiritual values; so that he is able to form a strong character useful to his own self and the society of which he is an integral part (Saxena, 1985).

Development is for man, by man, and of man. The same is true of education. Its purpose is the liberation of men from the restraints and limitations of ignorance and dependency. Education has to increase men's physical and mental freedom to increase their control over themselves, their own lives and the environment in which they live (Nyereve, 1988).

Literacy is an essential tool for communication and learning, for acquiring and sharing of information and precondition for a person's physical and mental growth and national development. Literacy is regarded as a way of preparing man for Social, Civic and economic role that goes far beyond the limits of rudimentary literacy training, consist merely in the teaching of reading and writing (Nayak, 1981).

The need for literacy was not felt in olden days as much as it is being felt today. It does not mean that the problem of illiteracy did not exist in those days. It did exist but it did not pose any problem in those self sufficient traditional societies. Knowledge was mostly transferred from person to person through spoken words. With the introduction of modern means of communication and transport, the traditional society is getting transformed and it is becoming closer and closer. Secondly with the advent of printing technology there has been a voluminous manufacture of reading materials. It has been estimated that an individual living in modern society receives one hundred times as much information as the ordinary individual in a developing country and 60 per cent of this information is communicated by reading (Nagappa, 1980).

Today the literacy rate in India is 36.23 per cent. Among these, males form 46.89 per cent and females 24.82 per cent. In Tamil Nadu the total literacy rate in Rural areas is 38.56 per cent. Among these, males are 51.16 per cent and females 25.80 per cent. In urban areas the total literacy rate is 63.45 per cent and among these 72.50 per cent are males and 53.99 per cent are females (India, 1986).

Adults, for the development of a country are the basic and powerful factors for a democratic and developing country like India. The adults are to be literate for the development of the country. In India "Illiteracy is a mass phenomenon", which blocks economic and Social Progress, affects economic productivity, population control, national integration and security and improvement in health and sanitation (Ahluwalia, 1980).

To face all these challenges it has become essential that the population of illiterates must be educated because, without adult education, illiterate persons of our country cannot uplift themselves socially, economically, politically, individually and morally. The rapid development requires a well proportioned and integrated educational programme including massive programmes of adult education, whose impact on development is noteworthy (Mydal, 1981).

To educate a big portion of illiterates in our country a nation wide programme for adult education need be started. This programme should be operated for the illiterate persons of age group of 15-35 years, with a view to providing to them skills for self-directed learning, leading to self-reliant and active role in their own development and in the development of their environment (Rao, 1980).

In an adult literacy programme, which paves innumerable brightened paths for such adults, a primer plays an evidently important role. A primer teaches a child read and write, is certainly not an ideal one, for such a programme. An adult generally does not like multi coloured pictures of fairies and tales told by grand mothers. He is a grown up person involved in struggle with social values and various problems of life. He will, therefore, find such a primer a dull book because, it does not cater to his interest. Decidedly he needs a primer which is prepared with a consciousness that its readers are not children and they need to be given such reading materials which are oriented to their attitudes and problems (Ramsankar, 1977).

A primer becomes a major aid in teaching adults to read and write. It creates the need for adult primers, more carefully prepared with a view to making them capable of fulfilling the purpose (Kripal, 1982). The Primer should include analysis of events and instances from real life. These incidents should bring out the problems, their solution and the solution opted for and reason there of, as also the factors that lead to success/ failure. These have to be worked out as aids to learning. The preparation of such material will require collaboration with different specialized organisations and resource persons (Shanthana Krishnan, 1986).

To create a healthy atmosphere in the rural areas, it is necessary to include the following subjects in the curriculum of learning which may be imparted through various media (Maitra, 1980).

- i) Improvement of local resources and situations such as natural resources, irrigation, facilities, power, environment, transport, and communication drainage, maintenance of forest wealth and preservation of animal and bird life.
- ii) Economic development including, agriculture, industry and trade suitable for the local area.

- iii) Social objectives and actions such as educational and cultural activities, sports and political activities, organising the community and community action. and
- iv) Concerning health, nutrition, personal hygiene, community health, prevention of water pollution, environmental sanitation, mothers welfare, etc.

Nutrition education formed an important part of the non-formal education as well as in functional literacy centres. The specific information was gathered on the following points. The physical and nutritional status of the adults, the major nutritional problems, the food beliefs and habits, agricultural practices, locally available foods, the common dietary items, cooking practices and infant feeding practices were also heard from different sources (Ahmed, 1980).

Having all these in view, this attempt was made to prepare a suitable primer on nutrition.

Reviews of Literature

## II REVIEW OF LITERATURE

The available literature related to this study is studied as under:

- A. Why Adult Education?
- B. The National Literacy Mission
- C. Learning Materials for Adult Education
- and D. Reaearch Conducted on Learning Materials.

### A. Why Adult Education?

Illiteracy is a condition of an individual or group that has failed to master the generally accepted skills of the written culture and is thus out off, from the cultural heritage of contemporaries (Srivastava, 1979).

Illiterates are those socially disadvantaged and down graded sections of society to which society has not provided the opportunity to acquire the skill to operate in the written mode of communication and hence debarred them from securing a meaningful place in their social, ecological setting (Srivastava, 1988).

Along with poverty and population, the rate of illiteracy seem to have also increased. (Fig -1) *The population* has been increasing at the rate of more than two per cent a year, where as illiteracy has increased by five to

eight per cent annum. Some seventy one per cent of the total population and eighty one per cent of all women are illiterate. We have thus more than half the world's entire illiterate population (Mehta, 1978).

Without literacy, the objectives of creating a conducive environment for national consciousness and national integration and developing multilingual competence in the future citizens, will remain elusive (Srivastava, 1985).

People have to be educated and their minds prepared for discarding the older ideas that have been found to be really harmful and they have to be led gradually and by degrees to favour ideal (Radhakrishnan, 1980).

Literacy is the single golden key to development and universal education alone can release their dormant productive forces of the 2/3rds of India's illiterate population (Ansari, 1984).

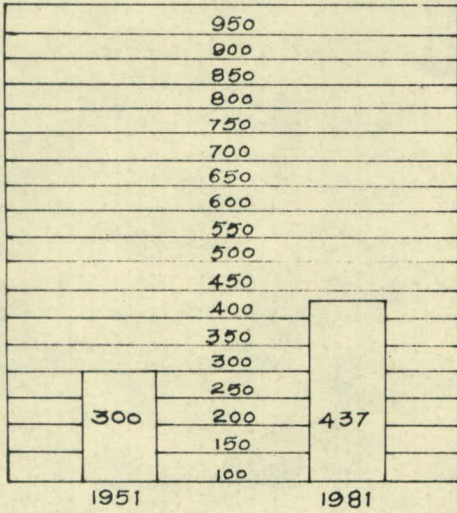
The Education Commission, 1984 states "education does not end with schooling but it is a life long process" The adult today has need of an understanding of the rapidly changing world and the growing complexities of society. Even those who have had the most sophisticated education, must continue to learn the alternative, is obsolescence.



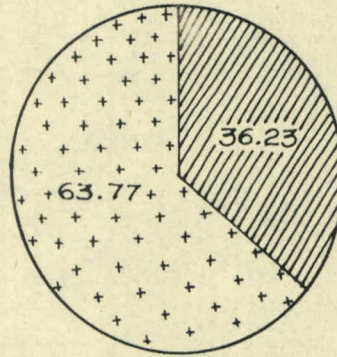
# LITERACY RATE IN INDIA

1951-1981 illiteracy rate

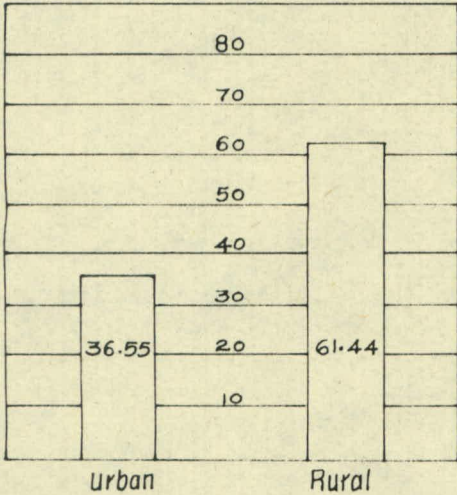
In million number of illiteracy



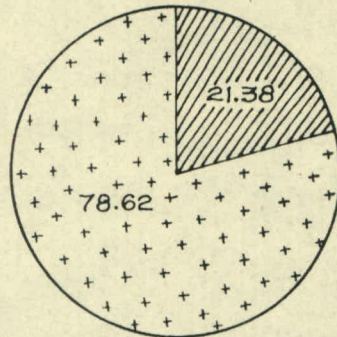
1981 literacy at the national level



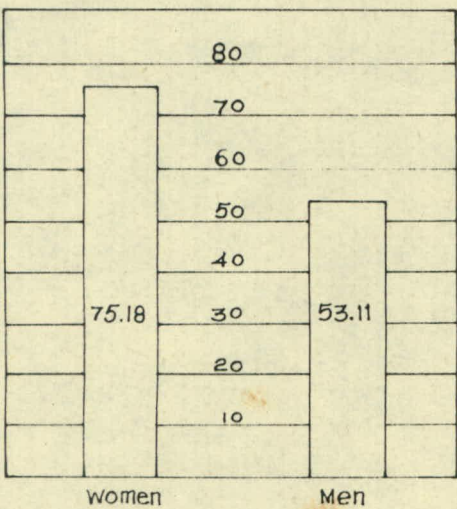
1981 Percentage of illiteracy Rural & Urban



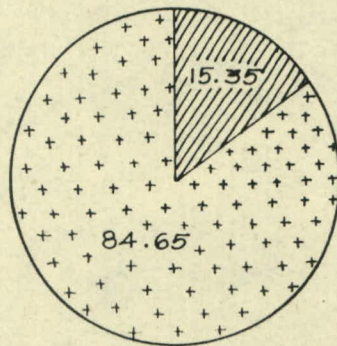
1981 literacy rate scheduled caste



1981 illiteracy percentage of Men and Women



1981 literacy rate scheduled tribes





 literacy  
 illiteracy

Figure.1

Our national development requires changes in knowledge, skills, interest and values of our people. There can be no hopes of making the country self-sufficient in food and essential raw materials, unless they are moved out of their age long conservatism, though a science based education becomes interested in experimentation and ready to adopt techniques, that increases yield. The economic growth is not merely a matter of physical resources but involves education of the masses of our people in new ways of living, thought and work (Mathur, 1978).

Therefore, no reform is more important or urgent than to relate our education to the needs and aspirations of the people and thereby make it powerful instrument of social, economic and cultural transformation, necessary for the realisation of our national goals, for the eradication of illiteracy of the millions of people. Adult education is suited to their various needs (Avinashilingam, 1978).

It is political will, which can afford the right place to adult literacy and non-formal education and give them a status equal to formal education, that will make education worth while not only for the poor and deprived classes but for formal education itself. Adult education is an essential component of national development although

returns cannot be measured with the precision investment in human resources, it undoubtedly a prime factor contributing to economic and social betterment (Chandra Sekaran, 1978) .

Adult education embraces all forms of educative experiences needed by men and women according to their varying interests and requirements at their different levels of comprehensions and ability and in their changing roles and responsibilities throughout life (UNESCO,1979) .

Adult education is the process whereby persons who no longer attend school on a regular and fulltime basis, undertaken sequential and organised activities with a conscious intention of bringing about changes in information, knowledge, understanding or skills (Liveright, 1984) .

Adult education includes all activities with an educational purpose carried on by people in the ordinary business equipment (Bryson, 1984) . Adult education is given on a part time basis and therefore given concurrently with work and the earning of living (Parker, 1984) .

B. The National Literacy Mission:

The National Literacy Mission has been formulated in 1986. It is primarily societal mission which implies that there is political, at all levels for the achievement of the mission goals. That a National consensus can be created for active participation of the people through the energisation of their latent potential for substantial improvement in their working and living conditions.

The important characteristics of NLM strategy are (NLM, 1988).

1. Designing of functional programmes with a view to increasing motivation.
2. Securing people's participation.
3. Involving voluntary agencies.
4. Improving on going programmes with science and technology inputs, better supervision, suitable training etc.
5. Launching of mass movement of functional literacy
6. Provision of Post-Literacy and Continuing Education facilities particularly through establishment of Jana Shikshan Nilayams and better use of existing institutional facilities.
7. Ensuring availability of standard learning materials.  
and
8. Universalisation of outreach.

The National Literacy Mission is one of the Five technology missions setup by the government of India to identify areas of development. It will seek to bring into use of our best human technological and pedagogical resource. The objectives of NLM, (1988) include Imparting functional literacy to 80 million illiterate person in 15-35 age group 30 million by 1990. additional 50 million by 1995.

The focus should be on rural areas with special concern for women and persons belonging to scheduled caste and schedule tribes. The aim is to make presently illiterate persons achieve self reliance in literacy and numeracy. Becoming aware of the causes of their deprivation and more towards realisation of their condition, through organisation and participation in the process of development.

- Enabling them to improve their economic status and general being.
- Imbibing the values of national integration.
- Conserving the environment, achieving women's equality and observing small family norm.

Availability on a wide scale of standard learning materials in print and non-print media, is crucial to the success of NLM. Following are some of the essentials of learning materials (NLM, 1988).

The characteristics of standard learning materials are that they should create motivation among learners and sustain it, increase instructor effectiveness and enable learners to retain and use literacy.

The learning material include motivational material used at pre-literacy stage, primers and workbooks used in adult education centres, aids used by instructors, literacy kits to be used by students and volunteers, post literacy materials and books, journals and newspapers, as well as distance learning packages for continuing education.

The essential requirements, for a standard learning material are relating to the needs and interests of learners, understanding of necessary research study, interaction of specialists, field workers and learners in the process of production, application of relevant literacy technology and expertise and field testing and continuous monitoring.

The Governing principles for mission management include:

Decentralisation and functional autonomy with centralised control, people's participation, enabling mechanisms for securing co-operation of collaborating agencies, personnel to have professional competence, induction of women on a large scale, clean delineation of levels of decision making, responsibility and accountability, flexibility, innovative methods of selection, training and motivation of functionaries, provision of adequate funds, including a substantial lumpsum, for innovative initiatives and use of computers and electronic media as learning aids in management and for debureaucratization.

The process of Technology Demonstration is drawn as under (SRC, 1988),

1. Selection of 40 districts- 20 well-endowed  
20 under-endowed
2. Creation of Mission Management System.
3. Identification of problems by Mission Management
4. Campaign for people's participation.
5. Development of techno-pedagogic package

6. Technology transfer for production
7. Monitoring and review of inputs-outputs
8. Determination of parameters for replication
9. Replication beyond 40 districts. and
10. Remission of problems from Non-TD districts for search of solutions.

C. Learning Materials for Adult Education:

Teaching material for adult education must be based on their needs and interests. It should be attractive and relevant to their lives. Timely supply of teaching learning material is also essential for the success of an adult education programme (Mane, 1984).

The Primer or any material for teaching and learning is to be prepared, using identified words. The idea of the problem should contain, the form of picture, words arranged in such a sequence, as to convey meaning, sentences formed with the words, made out of letters occurring in the key words, the content of sentences being related to the problem area-all these formed the content of the primer or the learning material (Ravindran, 1980).

The total content of the learning materials should be divided into several units which should be taken up one at a time (Thiagarajan, 1983). The number of pages for the new literates should be restricted to minimum and the length of each sentence should on an average be 11-15 words. The format of sentences should be simple and direct. Too small print or faulty typography also increases the difficulty level of reading materials. Diagrams or sketches are not very helpful because readers have not developed the skill to read these. But pictures or the sketches that depict life episodes in colour or black and white are liked (Khanna, 1983).

The teaching material to be prepared, should be need based, easily readable, understandable and usable. Material should be prepared through a process of coordinated efforts, focussed on specific groups with homogeneous socio economic background, interest and aspiration. Learning experiences and materials should provide learners an opportunity to determine, which topics are of great interest with the locally available resources and which are feasible to pursue (Singh, 1982).

The teaching materials can reduce abstraction to the minimum and concretize the vowels and consonants and with minimum strain enable the learner the learner to master the forms and shapes of the letters, it also inculcates (Lazarus, 1983) A spirit of co-operation and mutual help, collection and safe keeping of materials, patience and endurance, action and dynamism, play-way to fight boredom, economy in making resource material for teaching converting waste into health and the realization that it is not we who win but our preparation that wins (Ahmed, 1982).

Inappropriate materials, irrelevant curriculum and unsound teaching methodology induce many adults to discontinue their studies. Following are the requirements of a good learning material (Shafi, 1980).

1. Literacy materials should be developed on tested pedagogical principles. They should be based on the existing experiences and knowledge of the students. They should use graded vocabulary in lessons and include practice exercise enabling learners to progress at their own pace.

2. The adult should return home after each class with a feeling of accomplishment. Each module although complete in itself constitutes one part of the whole subject. The teacher covers one unit per session, so that a learner who misses a particular session is not lost, when a new lesson begins.
3. Materials should be simple to understand and set in large print so that the adult experiences, no difficulty in reading. Illustrations are important and should be situation specific. In preparing materials on inter-disciplinary team consisting of a linguistic expert, a psychologist, a sociologist an educator, an artist and a literacy student can make an informal contribution to the choice of content and format.  
and
4. In addition to class reading material a variety of supplementary readings on topics of interest are needed to improve basic literacy skills, stimulate the desire for further reading, arouse curiosity and expand the students interests.

The general considerations for the preparation of the primer, recommended by Krishnamurthy, (1986) are:

1. Reading, writing and elementary arithmetic should go together.

2. The first few lessons are extremely crucial because they determine whether the adult will continue his studies or dropout. Greatest care must, therefore, be exercised in designing these lessons.
3. Each lesson should be short and so manageable that the adult learner would have a definite sense of achievement every day, when he leaves the class.
4. The total number of lessons in a primer should be flexible. But the total time needed for learning the primer thoroughly should be about 100 to 200 hours.
5. Every lesson in a primer should be built round  
a) words or b) short and pithy sentences which convey meaningful messages relevant to the life and problems of the learners. Materials using either of these methods may be made available in every language.
6. How are these words and sentences should be selected and arranged in a sequence? This really becomes the key step in the designing of a primer.

7. Each lesson in the primer should be a self contained unit and include an introduction which will warm up the class, a statement of message, its break-up into words and symbols, drill on these, their recombination into new words and sentences, and finally a discussion on the issues raised by the message, leading preferably to some programme of action.
8. The sequential grading of lesson is of great significance and should form an integral part of the strategy to teaching the alphabet.
9. It is not necessary to teach every alphabetical symbol through a message only. The least frequent may be introduced at a later stage, just as new alphabetical symbols even without the use of any meaningful message in which they are embodied. What one has to avoid at any cost is the artificiality that becomes inescapable in trying to teach each symbol through a message or to connect each symbol to a picture. and
10. In designing the format selecting the size and quality of paper, type and range of illustrations, arrangement of matter on every page etc. The main consideration should be effectiveness of presentation and learning along with economy of cost and materials.

The preparation of learning materials for neo-literates should be based on the following broad criteria (Nayak, 1980).

1. The themes should be very close to every day's problems of the people.
2. Material should consist of small independent units roughly matching eight to ten pages.
3. Ideas should be very simple. Idea load should be kept as light as possible.
4. Vocabulary already used at the literacy stage should be 50 per cent more words, most commonly spoken in his area.
5. Sentences should be short, maximum average length being six to eight words.
6. Use of conjunct consonants should be limited, too many of them should not be used on a page.
7. The requirements should be clearly explained by showing a printed specimen.
8. Text should occupy only the total space, the rest should be covered by simple and forceful line drawings. Title should be easy to read and attractive.

D. Research conducted on learning Materials:

A study on the preparation of learning materials for functional literacy for women was done by Aruna Sathyapriya (1980). The finding included that :

The test conducted to assess the reading ability showed that 15 per cent of the learners were able to read thirty words per minute. Fifty per cent of the learners were able to read only ten words per minute, which indicate that they were just beginning to learn to read. In the writing conducted, 50 per cent of the learners were able to score more than 50 per cent marks. The learners besides the above skills were also acquainted with the functional knowledge of their occupation.

Another study on the preparation of a primer suitable for women for functional literacy by Janaki (1979) reveals the following:

A sample of 25 farm women between the age range 15 and 35 years was selected to pretest the primer. A number from one to fifty were also taught along with the lessons. The learners did not exhibit much difficulty in learning these numbers. On the other hand about 75 per cent of them stated that they could recognise the

bus numbers due to the exposure to numeracy sixty eight per cent of the sample expressed that the classes were interesting and informative, 45 per cent could read from 1 to 10 letters with in a minute and about 75 per cent could write from one to ten letters with in a minute.

Fifty per cent of the farm women could read and write the number from one to fifty. Lapse of time resulted in for getting the lessons taught to them. Only 10 per cent of them could remember the lessons after one week.

The study on developing primer on nutrition education for adult education done by Devadas, Chandrasekhar and Rajalakshmi (1980) brought forth the following:

A test was conducted to assess their reading and writing ability. The maximum reading speed was exhibited by 18.2 per cent members having an average speed upto 50 words. per minute. In the writing a maximum 55 per cent of the members had gained a writing speed of eight words per minute, 18.2 per cent had a speed of 12 words per minute. The learners did not find it difficult to read and write because of their regular participation in the teaching and learning process.

The findings revealed that the nutrition education imparted through the specially prepared nutrition education primer for adult education improved the learning skills and awareness of the nutritional facts of the learners.

A field experiment was conducted to make a comparative study of two adult literacy primers produced by Literacy House namely "Naya Sevara Praveshiks" and 'Naya Savera Readers'(Harman, 1980) .

The hypothesis was that two groups of adults comparable on most of the relevant background variables are subjected to a literacy training course, using two different primers for an equal period of time, there will be significant difference between the literacy attainment level of two groups. The results obtained confirmed that the hypothesis had some methodological, theoretical and practical implications.

An evaluation of reading material for neo-literates and a study of their reading needs and interest done in Andra pradesh, lists the following findings ( Research project, 1981) .

The physical aspects of the material, are satisfactory though the illustration could be improved. The producers have to be more careful about accuracy of the material and should keep the price of book within the purchasing power of neo-literates. The majority of the books are related to epics, biography, agriculture, social studies and literature. The vocabulary used is within the comprehension level of neo-literates. Books written in a dialogue style are most easy to understand, so far as the reading needs and interest of neo-literates are concerned.

Regarding the production of the books it is found that most of the agencies have special staff for the purpose. Few of the writers are however especially trained in the techniques of simple writing or aware of the needs and interests of the learners. The field testing has revealed that most of the books are too difficult for the average reader and their prices are much higher than what neo-literates are willing to spend.

A study of reading materials for neo-literates in Andhra Pradesh was carried out by Venkataiah, (1979) some of the findings are as follows:

1. The amount of reading material for the neo-literate adults did not exist in the state.

2. Organisations and individuals working in the field of adult education were handicapped.
3. The existing reading materials were not available in the libraries. No effort was made by any agency to give wide publicity.
4. The existing materials lacked a scientific basis. The needs and interests of the neo-literates were not studied before producing literature for them.
5. Many of the authors had neither experience nor orientation in the preparation of reading material for neo-literates.
6. There was dearth of technically qualified writers and production.
7. The primer were mainly based on:
  - a) The alphabetic picture association method (Lauback method) a kind of synthetic method
  - b) Word method a type of analytic method.
  - c) Key-word picture method a type of electric method and
  - d) Problem oriented literacy method.
8. The control of vocabulary was not vigorously followed in primers, supplementary and follow-up books.

9. No agency pre-tested its materials by using them for some time with the intended learners before, mass production.
10. Most of the agencies in the State stopped their production work with the primers.
11. A clear distinction was not maintained by the authors between primers and supplementary materials.
12. Charts, workbooks and teaching guides were lacking from most of the primers.
13. The materials differed widely with regard to the general get-up, selection of topics, illustration grading and style of language.
14. The suitability of the existing material was not evaluated. and
15. There was no correlation between the suitability of the reading materials and the quantity of its scale.

## Methodology

### III METHODOLOGY

The methodology for the study on developing Primer on nutrition consisted of the following steps:

- A. Planning the Study
- B. Preparing the Primer
- C. Testing the Primer
- and D. Evaluating the Primer.

#### A. Planning the Study:

India is facing two basic problems of poverty and illiteracy. The first one affects the vast mass of our citizens to live under condition of want and degradation, while the other hinders the opening of the doors of development and affects the ability of the poor to overcome their predicament.

For illiteracy the National Adult Education Programme is visualised as a means to bring about functional change in the process of socio-economic development. The learning process involves emphasis on literacy. It also stresses the importance of functional upgradation and of raising the level of awareness regarding their predicament among the poor and the illiterate (Saraswathi, 1988) .

Preparing suitable learning materials for literacy is an important step in adult education programme. Usually the primers are prepared based on the identified learning needs and the curriculum and syllabi are formulated on the basis of those needs (Krishnan, 1986).

Considering that a large segment of our population does not know how to cope up with nutrition problems because of illiteracy, this attempt was made to develop a suitable primer for nutrition education through literacy classes.

Thus the plan of the study was evolved to prepare and pretest a primer on nutrition suitable for illiterates in the local language Tamil.

#### B. Preparing the Primer:

The preparation of Primer included the following aspects.

- a. Analysing the types of Primers, and
- b. Developing the primer.

#### 1. Analysing the types of primers:

The methods of constructing the primers include (Gray, 1970).

- a. Synthetic method
- b. Analytic method, and
- c. Eclectic method.

a. Synthetic method:

This method includes the following aspects:

Recognition of letters:

The use of alphabet is of course the earliest method in most languages. It requires considerable effort in memorisation and may often appear meaningless and uninteresting to adults before they are able to recognise how these letters make up a word. It is therefore, little used now-a-days in organised adult literacy work.

Recognition of Sounds:

The method using the sound of letters will make more sense to an adult. It is most effective in phonetic language where the forms and sounds of letters invariably correspond each other. Sounds are learnt and are uttered rapidly to form a word and then a series of words. The method creates interest in the early stages like alphabetical method.

### Recognition of syllables:

This method is suited to languages which have a simple syllabic structure. The consonants are introduced logically in combination with vowels. It has the advantage that some of the syllables learnt may also be words so that a definite meaning is introduced right from the start. It has the disadvantage of placing heavy load on pupils memory at the beginning of the course, if he has learn syllabus which are not incorporated in words.

### b. Analytic method:

This method includes the following aspects:

#### The word method:

Words are presented and are learnt by oral repetition. After they have been seen words are introduced in a systematic order, which will give practice in intelligent reading. Attention is directed to the syllables and letters of the words. This method is more interesting to the adults, but is open to criticism that it may not develop enough accuracy in word recognition. If there is insufficient analysis of words at an early stage of the course, the learners may not realise how the words are made up.

The phrase method:

It is based on the assumption that phrases are more interesting than single words. They give more practice in efficient, reading. This falls, 'in between the word' and 'Sentence' method. It does not give sufficient mastery over the words..

The sentence method:

It is based on the principle that the sentence rather than the word or letter is the true unit in language since it expresses whole thought, sentence may be spoken, then written and read with comprehension. Important groups of words in each group can be recognised in sentences.

As the classes progress familiar words are recognised and the elements of new words understood, The method is well suited to stimulating adults interest but the sentences used must have an immediate practical meaning to the learners. Sufficient attention must be paid to recognition of words. The attention being focused upon actual meanings of sentences the practice on word recognition may be overlooked.

### The Story method:

The Principle is to provide a complete unit of thought with more meaning than the single sentence, containing a whole sequence of ideas. The story provides greater opportunity for discussion and for understanding word realisation than does the sentence. The learners familiarise themselves with the story and then pickout individual words.

### c. The eclectic method:

Obviously all methods described above have their own advantages and disadvantages. There is a modern trend towards a combination of the best elements of both types, which has been called the eclectic system by professor Gray. Most literacy programmes do not adhere rigidly to one of the particular methods described above, but select ~~wha~~ what may suit them from each, although basically using only one of the main systems.

## 2. Developing the Primer:

Mass illiteracy and lack of nutrition education may be ~~traced~~ as twin problems which stand at the grass root of **all** development especially that of the rural population in our country. Literacy is not merely

liberation of mind. It is an unmistakable equation of economic opportunities and an investment towards the ideal of increased production and income (Devadas, 1978)

Just as illiteracy nutrition also influences all aspects of life and national economy. Cost of malnutrition aggravates the poverty of the individual and the nation. It becomes important to have a suitable primer to impart nutrition knowledge to the illiterate mass. Many primers have been written for adult education. But primers concerning nutrition were none or only a few. Hence, a primer based on eclectic method was prepared to teach nutrition and named as 'ಆತ್ಮವಿಜ್ಞಾನ'. (Appendix-1)

The lesson starts with two words. The words were repeated in sentences to insist the words. The letters were located from each word. New words were prepared out of the located letters and new sentences were framed, out of the newly framed words. Each lesson was enriched with appropriate figures. Along with the lessons, numeracy was also taught.

## சீர்திருணை

The first lesson starts with the words 'அம்மா - ஆப்பிள்! ஆப்பிள் is a nutritious fruit. An apple a day, keeps the doctor away is a common proverb. The lesson had the picture of a mother and an apple. To highlight the words 'அம்மா, ஆப்பிள் it was repeated again and again.

அம்மா நல்ல அம்மா  
 அம்மா ஆப்பிள் பழம் தருவாள்  
 ஆப்பிள் சாப்பிட்டால் உடல் நலம்பெறும்  
 ஆப்பிள் அரஞ்சைப் போல் கவையாணை

From the word 'அம்மா - ஆப்பிள்' the alphabets and consonants were located as under:

alphabets : அ, ஆ,

Consonants: ம், ல், ள், ப், ட், ஞ்

From these letters new words were framed

அம்மா, அப்பா, அம், ஆல், ஆள், மா, பலா, பல்

From these new sentences were framed ஆம், அம்மா, ஆம் ஆப்பர்  
 Along with these letters and words numbers from one to five were also given in the first lesson.

The second lesson talks about 'இனிப்பு - ஈ'

These words were repeated in sentences

இனிப்புப் பண்டங்கள் உடலுக்கு நல்லதல்ல  
 இனிப்புப் பண்டங்களை ஈ மொய்க்கும்  
 ஈ மொய்த்த பண்டங்கள் உடல்நலத்திற்குக்கெடுதல்  
 ஈயால் பல நோய்க்கப்பரவும்.

The alphabets and consonants used in the second lesson included Alphabets. இ, ஈ

consonants: க், க், க், ய், த், -ற்

From the above listed letters and also from the letters used in the first lesson, new words <sup>were</sup> framed. They included

தீ, இட்லி, தக்காளி, கண்ணா, காண், காய், ஈயம், தக்கீர், தாய், பால்

From these newly framed words, new sentences were framed. The sentences were framed in such a way that they impart nutrition education.

பால் தா  
 இட்லி தா  
 தக்காளி தா  
 தக்கீர் தா

At the end, numbers from six to ten were given.

Like these all the other lessons were prepared. The third lesson starts with 'உணவு-ஆட்டம்'. These words were repeated in sentences. New words were framed, based on the letters taught in this lesson and

also from the letters taught in the first and second lessons. New sentences were also framed from these new words and numbers from 10 to 15 were also taught.

The fourth lesson talks about ' **எழுதின - ஏற்றம்** ' These words were repeated in sentences. New words were framed based on the new letters taught in this lesson and also from first, second and third lessons. New sentences were also framed by using these words. At the end numbers from 15 to 20 were, taught.

The fifth lesson explains about the **அடிப்படை கற்றல்** New words and sentences were framed by using new letters taught in this lesson and also from the previous lessons. At last the numbers from 20 to 25 were also taught.

The sixth lesson starts with **9** The word is again repeated in the lesson. New words and sentences were framed based on the letters introduced in this lesson and also letters of the first, second, third, fourth, and fifth lessons. The numbers from 25 to 30 were taught to the learners.

The seventh lesson begins with ' **செ விசையாக மாபுலா** '.

' These words were repeated again in sentences. By using new letters which were taught in this lesson and from the previous lessons, new words and sentences were framed. Numbers from 30 to 35 were taught.

The eighth lesson starts with ' **குடைநம்** ' The word is repeated again and again in the lesson. All the alphabets and consonants were covered with in these eight lessons. New words and sentences were framed by using all the letters taught in this lesson and from the previous seven lessons. Numbers from 35 to 40 were also taught.

Lesson nine gives an overall gist about all the lessons. This lesson teaches about ( ' **சேறாயிற வாய்க்கை குறையற்ற செவ்வம்** ' New words and sentences were framed by using all those letters introduced in all the eight lessons. Numbers from 40 to 50 were also taught along with simple sums.

### C. Testing the Primer:

The testing of the primer included the following steps:

- a. Selecting the area and the sample
- b. Testing the primer.

a. Selecting the area and the sample:

The area selected for testing the primer was Kamarajapuram, a harijan slum, in Coimbatore Corporation area. The slum was just one kilometer away from Avinashilingam Institute for Home Science and Higher Education for women, Coimbatore. The slum was selected for the study for following reasons. (Figure- 2)

1. Ninety per cent of the women in that slum were illiterate.
2. The place was very nearer to the university
- and 3. A good rapport had already been created through the earlier programmes such as N.S.S, C.S.S. etc.

About 10 illiterate women were selected at random, as the sample for the study. They were under the age group of 15-35 years.

b. Testing the primer:

The time taken for testing the primer was one month (30 days) between 5.2.89 to 10.3.89. Classes were conducted on all days except sundays, between 4.30 and 5.30 P.M., (one hour) daily. (Figure-3) The Plan of work followed is given in Table I.

PROJECT AREA

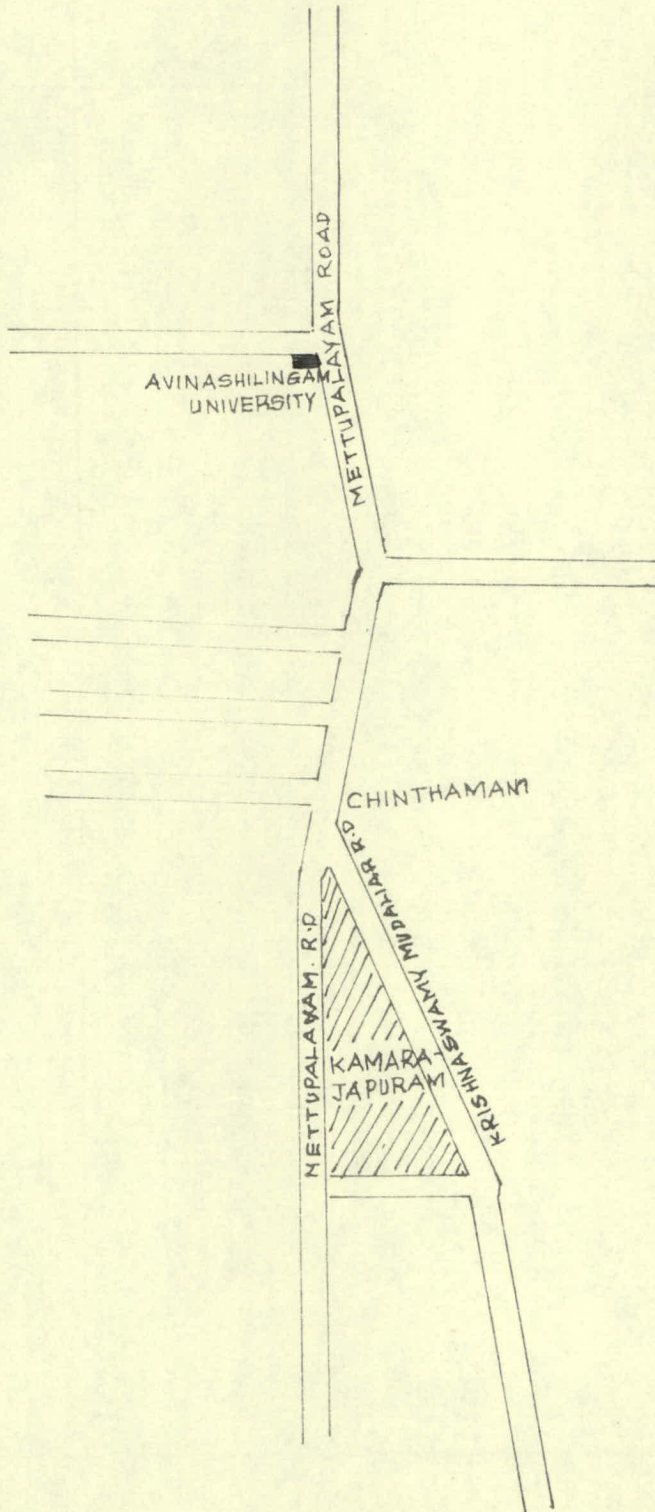


Figure . 2

ADULT EDUCATION IN PROGRESS



figure-3

ADULT EDUCATION IN PROGRESS



Figure-3a

TABLE I  
PLAN OF WORK

Date	Place	Aspect taught	Methods words	Aids used	Person incharge
5.2.89	Kamarajapuram	Developing rapport	Individual method		Investigator
6.2.89	Kamarajapuram	Teaching Ist lesson ' சுவர் - சுவர்கள் '	Teaching	Primer	Investigator
7.2.89	Kamarajapuram	Teaching the same lesson	Making them, do Ist exercise	Work book	Investigator
8.2.89	Kamarajapuram	Teaching numeracy from 1 to 5	Helping them, finish the Ist exercise	Work book	Investigator
9.2.89	Kamarajapuram	Teaching IInd lesson ' இனிய - ர '	Teaching	Primer	Investigator
10.2.89	Kamarajapuram	Teaching the same lesson	Making them, do IInd exercise in workbook	Work book	Investigator
11.2.89	Kamarajapuram	Teaching numeracy from 5 to 10 and again from 1 to 5	Helping them, finish IInd exercise in the workbook	Workbook	Investigator
13.2.89	Kamarajapuram	Teaching IIIrd lesson ' உணர்வு - உணர்வு '	Teaching	Primer	Investigator
14.2.89	Kamarajapuram	Teaching the same lesson	Marketing them, do IIIrd Exercise	Work book	Investigator
15.2.89	Kamarajapuram	Teaching numeracy from 10 to 15 and again from 1 to 15.	Making them, write numbers from 1 to 15	Slate, Pencil	Investigator

Date	Place	Aspect taught	Methods words	Aids used	Person incharge
16.2.89	Kamarajapuram	Teaching IV lesson "எழுபத்தைச் - எத்தாம்"	Teaching	Primer	Investigator
17.2.89	Kamarajapuram	Teaching the same lesson	Making them, do IV exercise	Work book	Investigator
18.2.89	Kamarajapuram	Teaching numeracy from 15 to 20 and again from 1 to 20	Helping them, finish IV exercise	Work book	Investigator
20.2.89	Kamarajapuram	Teaching Vth lesson 'அடிப்படை இரத்தி'	Teaching	Primer	Investigator
21.2.89	Kamarajapuram	Teaching the same lesson	Making them, do Vth exercise	Work book	Investigator
22.2.89	Kamarajapuram	Teaching numeracy from 20 to 25	Making them, write the numbers	Slate, pencil	Investigator
23.2.89	Kamarajapuram	Teaching VI lesson "ஒளி"	Teaching	Primer	Investigator
24.2.89	Kamarajapuram	Teaching the same lesson	Making them, do VIth exercise	Work book	Investigator
25.2.89	Kamarajapuram	Teaching numeracy from 25 to 30	Helping them, write the number from 1 to 30	Slate, pencil	Investigator
27.2.89	Kamarajapuram	Teaching VIIth lesson "இடி விசையால் பாய்வு"	Teaching	Primer	Investigator
28.2.89	Kamarajapuram	Teaching the same lesson	Making them, do VIIth exercise	Work book	Investigator

Date	Place	Aspect taught	Methods works	Adis used	Person incharge.
1.3.89	Kamarajapuram	Teaching numeracy from 30 to 35	Making them, finish the VII exercise	Work book	Investigator
2.3.89	Kamarajapuram	Teaching VIIIth lesson 'இடைநிழம்'	Teaching	Primer	Investigator
3.3.89	Kamarajapuram	Teaching the same lesson	Making them, do VIII exercise	Work book	Investigator
4.3.89	Kamarajapuram	Teaching numeracy from 35 to 40 and again from 1 to 40	Helping them, write the numbers	Slate, pencil	Investigator
6.3.89	Kamarajapuram	Teaching IXth lesson "நெய்யற்றவாழ்குறைவற்ற செல்வம்"	Teaching	Primer	Investigator
8.3.89	Kamarajapuram	Teaching the same lesson	Making them, do IXth exercise	Work book	Investigator
9.3.89	Kamaranapuram	Teaching numeracy from 40 to 50	Making them, write number	slatepencil	Investigator
10.3.89	Kamarajapuram	Conducting simple test on addition and subtraction	Conducting test	Slate pencil	Investigator
11.3.89	Kamarajapuram	Conducting oral test to evaluate their reading ability.	Conducting test	Primer	Investigator
12.3.89	Kamarajapuram	Conducting written test to evaluate their writing ability	Conducting test	Slate pencil	Investigator

#### D. Evaluating the Primer:

According to Reddy (1986) evaluation is a process of systematic appraisal by which we determine the worth, or value or meaning of something.

The evaluation of the Primer was done as under:

1. Extent of participation of the ~~women~~ learners *in the programme.*
  2. Development of skills by the learners.
  3. Acquisition of knowledge by the learners.
  4. Views of the learners about the primer.
- and
5. Suggestions given by the learners for future improvement.

All these aspects are dealt in detail in the following chapter.

## Results and Discussion

#### IV RESULTS AND DISCUSSION

The results of this study are discussed under the following headings:

- A. Extent of participation of the learners in the programme.
- B. Development of skills by the learners.
- C. Acquisition of knowledge by the ~~primer~~ learners
- D. Views of the Learners about the Primer
- and E. Suggestions given by the learners for future improvement.

- A. Extent of participation of the learners in the programme:

Table II presents the extent of participation of the learners in the pretesting of the Primer.

TABLE II

EXTENT OF PARTICIPATION OF THE LEARNERS		
S.No.	Attendance of the Learners	Number of learners
1.	30 days	4
2.	28 days	2
3.	25 days	3
4.	drop out	1

It is encouraging to see that about four learners attended the adult education classes 30 days. Two learners attended 28 days and three learners, 25 days. There was only one dropout because of health reasons.

B. Development of skills by the learners:

The development of skills by the learners are studied as under:

1. Reading ability of the learners
2. Writing ability of the learners.
3. Ability of the learners to do simple sums.

1. Reading ability of the learners:

Table III illustrates the ability of the learners in reading the words and sentences in the lessons.

TABLE III

READING ABILITY OF THE LEARNERS		
S.No.	Number of words per minute	Number of learners.
1.	1 - 3	2
2.	4 - 6	4
3.	7 - 9	3

The table clearly points out that, three learners could read about seven to nine words per minute with in 30 days and about four learners could read four to six words per minute and only two learners were lagging behind with one to three words per minute. It is true that with proper motivation, the learners could learn things effectively with under standing.

2. Writing ability of the learners:

Table IV depicts the writing speed of the learners per minute.

TABLE IV

WRITING ABILITY OF THE LEARNERS

S.No	Number of words per minute	Number of learners
1.	1 - 3	2
2.	4 - 6	5
3.	7 - 9	2

It is obvious from the table that the writing speed of the learners seems to be less when compared to reading, that it could be seen, only five members writing four to six words per minutes, and two learners, seven to nine words per minute. There is no difference in speed between reading and writing, for seven learners as they could four to nine words per minutes. and about the same number of learners could write the same number of words per minute. The alphapets and letters in tamil were not hard to learn and there was no difficulty either in reading or in writing by the learners.

3. Ability to do simple sums:

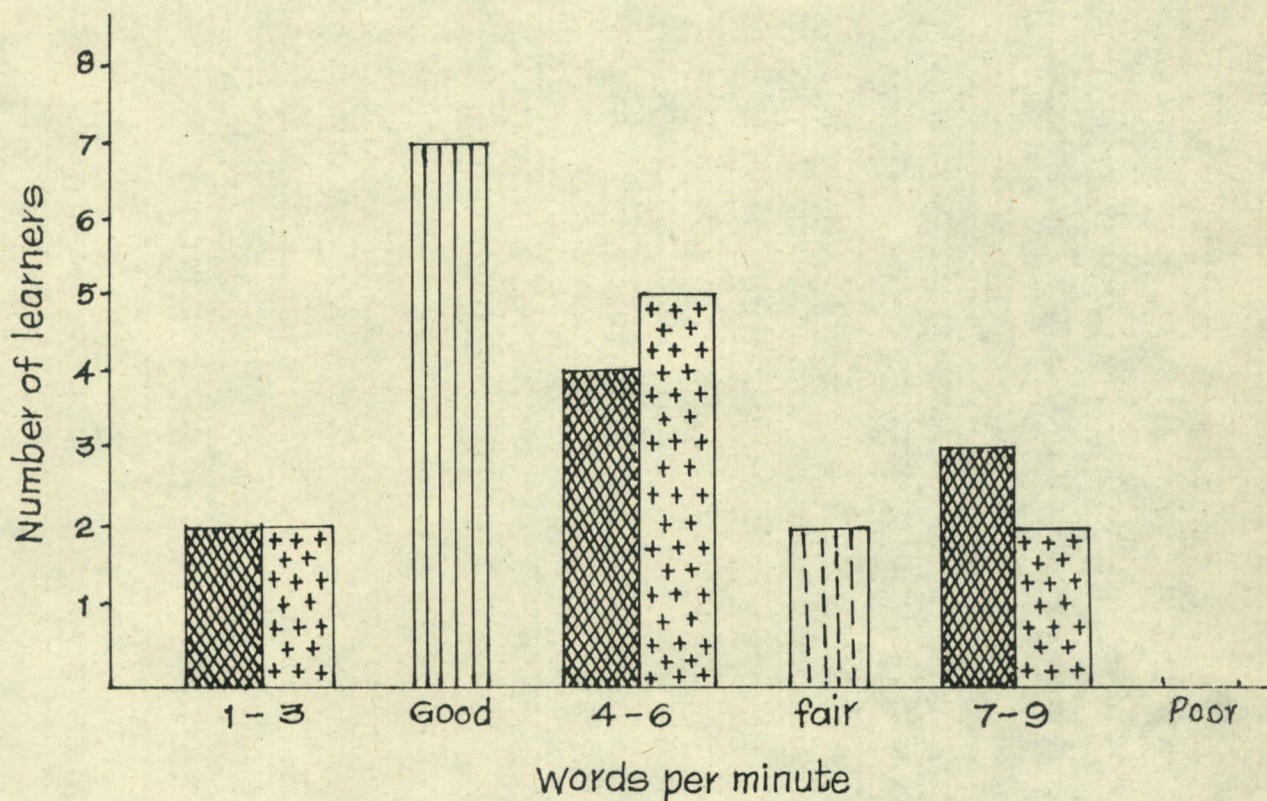
All the learners were able to read and write numbers without any mistakes. Table V indicates the skills of the learners in doing simple sums.

TABLE V

ABILITY TO DO SIMPLE SUMS		
S.No.	Rank	Number of learners
1.	Good	6
2.	Fair	3
3.	Poor	-

Doing sums is not a difficult job for the learners as they were doing it by themselves all these days without any paper and pencil. All the nine learners faired better in numeracy. (Figure-4).

## DEVELOPMENT OF SKILLS BY THE LEARNERS







-  Represents reading ability per minute
-  Represents writing ability per minute
-  Represents good in doing simple sums
-  Represents fair in doing simple sums

Figure. 4

C. Acquisition of knowledge by the learners:

Table VI represents the extent of acquisition of knowledge by the learners.

TABLE VI

ACQUISITION OF KNOWLEDGE BY THE LEARNERS

=====

S.No.	Knowledge	Number of learners
1.	Learnt alphabets	9
2.	Could write names	9
3.	Could read bus numbers	9
4.	Could understand nutrition	8
5.	Learnt new words and concepts	7

=====

It is highly appreciable to note that all the nine learners were able to learn the alphabets, write their names, and read bus numbers. Eight learners could understand nutrition and seven learners were able to learn new words and concepts.

D. Views of the learners about the primer:

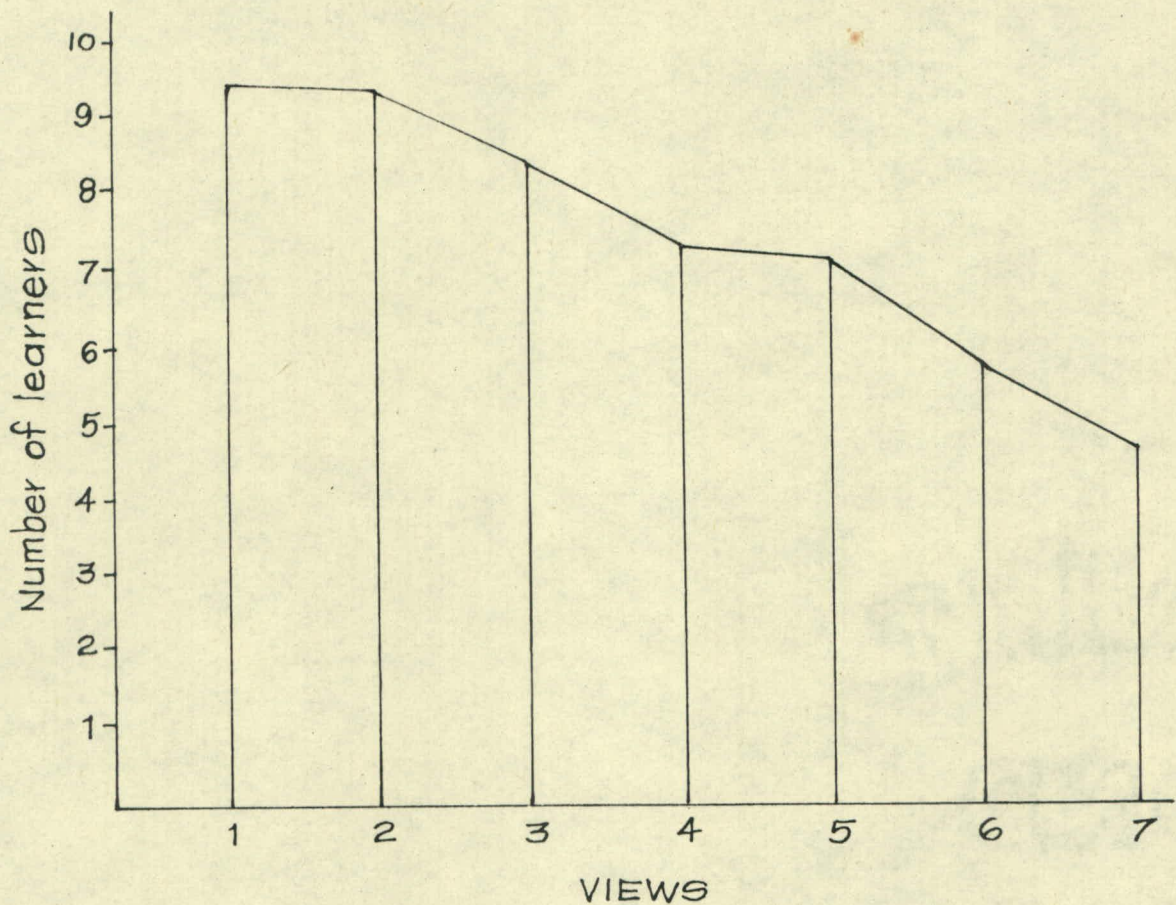
Table VII gives the views of the learners about the primer.

TABLE VII

VIEWS OF THE LEARNERS ABOUT THE PRIMER		
S.No.	View	Number of learners
1.	Attractive	9
2.	Like the subject matter	9
3.	Easy to identify letters	8
4.	Easy to write words	7
5.	Easy to read words	7
6.	Simple	6
7.	Life oriented	5

The above table clears that the primer was attractive and was liked by them all. Eight learners could identify the letters, seven could read and write the words easily, six found the primer, very simple, and five learners felt that the primer was life oriented. (Figure-5).

## VIEWS OF THE LEARNERS ABOUT THE PRIMER



1. Attractive
2. Like the Subject matter
3. Easy to identify letters
4. Easy to read words
5. Easy to write words
6. Simple
7. Life oriented

Figure. 5

E. Suggestions given by the learners for future improvement:

Table VIII indicates the suggestions of the learners for future improvement.

TABLE VIII

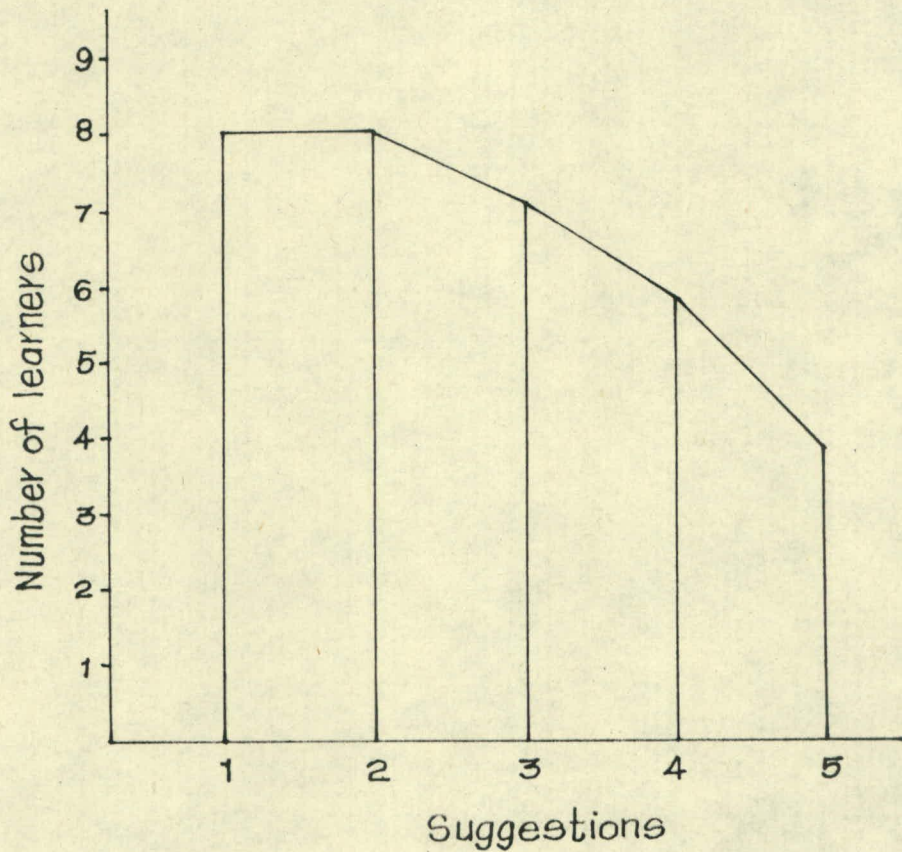
SUGGESTIONS GIVEN BY THE LEARNERS FOR FUTURE IMPROVEMENT  
 = = = = =

S.No.	Suggestion	Number of learners
1.	Need continuous classes on adult education	8
2.	More learning materials	8
3.	Classes to be conducted after 7' o clock	7
4.	Want to have a common place	6
5.	Appoinment of an animator	4

= = = = =

The suggestions are all impressive that eight of the learners participated in the pretesting of the primer, wanted to have continuous classes on adult education and more learning materials. About seven of them wanted classes to be conducted after 7 o' clock Six wanted to have a common place and four asked for the appoinment of an animator for them to conduct the classes. (Figure-6).

## SUGGESTIONS OF THE LEARNERS FOR FUTURE IMPROVEMENT



1. Continuity of the classes
2. Need learning materials
3. Classes to be conducted after 7 o'clock
4. Common place
5. Appointment of an animator

Figure.6

## Summary and Conclusion

## V SUMMARY AND CONCLUSION

A study on "Developing primer on Nutrition" was carried out in Kamarajapuram, a harijan Slum, which is situated one kilometer away from Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore. It brought forth the following findings:

A period of one month was taken to test the primer. Numbers from one to fifty and simple sums were also taught along with the lessons. The sample selected to pretest the primer included 10 women between the age group 15 and 35 years.

1. Among the 10 women learners, four had full attendance that is 30 days, two attended 28 days and three learners 25 days. There was one dropout because of health reason.
2. An evaluation was done to find out the skills developed by the learners. These include reading, writing and skill in doing simple sums.
3. Three learners could read seven to nine words per minute with in 30 days, of exposure. Four could read four to six words per minute and two learners were found to be lagging behind with one to three words per minute with in the stipulated period of 30 days.

4. Two learners could write seven to nine words per minute with in 30 days, five could write four to six words per minute and only two learners could write one to three words, per minute with in the said period.
5. All the nine learners faired better in numeracy.
6. The alphabets and letters in the language Tamil were not hard to learn. There was no difficulty either in reading or in writing by the learners.
7. Learning alphabets, writing names, reading bus numbers, understanding nutrition and learning new words and concepts were some of the aspects of knowledge acquired by the learners.
8. The views expressed by the learners about the Primer were, that the primer was attractive with a subject matter loveable, easy to identify letters could read and write words, simple and life oriented.
9. The learners wanted to have continuous classes, on adult education, more learning materials, the classes to be conducted after 7 O<sup>o</sup> clock, a common place for attending the classes and an animator to conduct the classes.

Based on the findings the investigator suggests the following:

1. The primer on <sup>developed</sup> nutrition ~~developed~~ can be used as a learning material to teach nutrition along with literacy.
2. More primers should be designed to cater to the interests and needs of heterogeneous groups.
3. The learning materials should be relevant to specific occupation of the learners such as agriculture, animal husbandry etc.
4. Motivation can be carried out through providing income generating activities, so that the learners attend the classes regularly.
5. Incentives, prizes and awards can be given for the learners, for their better participation.
6. Mass media such as radio, T.V., and Cinema can be used to attract the learners.  
and
7. Effective teaching methods can be used by the animators for the better performance of the learners.

The investigator hopes that these would be of great help to those functionaries, who are involved in planning and implementing effective adult education programmes. This would go a long way, thus wiping out illiteracy among the masses of our country.

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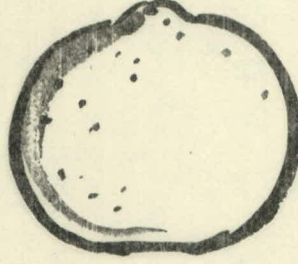
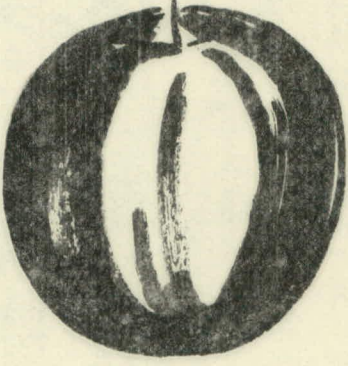
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Appendix

# அம்மா, ஆப்பிள்



அம்மா நல்ல அம்மா

அம்மா ஆப்பிள் பழம் தருவாள்

ஆப்பிள் சாப்பிட்டால் உடல் நலம்பெறும்

ஆப்பிள் ஆரஞ்சைப் போல சுவையானது

உயிரெழுத்து : அ, ஆ : மெய்யெழுத்து : ம், ல், ள், ப், ட், ஞ்

உயிர்மெய்யெழுத்து

ம் + அ = ம

ள் + அ = ள

ட் + அ = ட

ம் + ஆ = மா

ள் + ஆ = ளா

ட் + ஆ = டா

ல் + அ = ல

ப் + அ = ப

ஞ் + அ = ஞ

ல் + ஆ = லா

ப் + ஆ = பா

ஞ் + ஆ = ஞா

அம்மா, அப்பா

ஆம், ஆல், ஆள், மா

பலா, பல், பால்

ஆம் அம்மா

ஆம் அப்பா

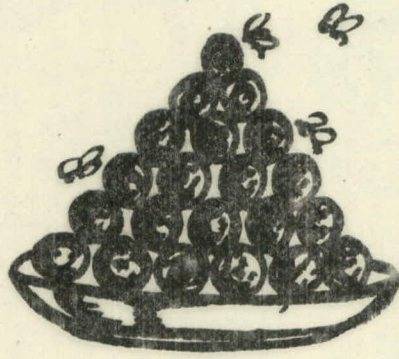
எண்: 1, 2, 3, 4, 5

பாடம்-2

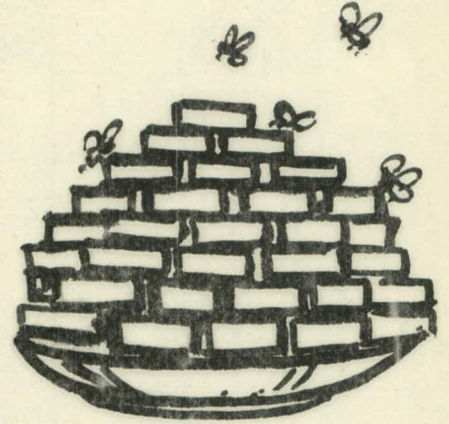
## இனிப்பு. ஈ



ஜிலேபி



லட்டு



மைதூர்பாகு

இனிப்புப் பண்டங்கள் உடலுக்கு நல்லதல்ல  
 இனிப்புப் பண்டங்களை ஈ. மொய்க்கும்  
 ஈ. மொய்த்த பண்டங்கள் உடல்நலத்திற்குக் கெடுதல்  
 ஈ.யால் பல ஔநாய்கள் பரவும்

உயிரெழுத்து : இ, ஈ. : மெய்யெழுத்து : ண், ங், க், ய், த், ற்  
 உயிர்மெய்யெழுத்து :

ண் + இ = ணி

க் + இ = கி

த் + இ = தி

ண் + ஈ. = ணீ

க் + ஈ. = கீ

த் + ஈ. = தீ

ங் + இ = ஙி

ய் + இ = யி

ற் + இ = றி

ங் + ஈ. = ஙீ

ய் + ஈ. = யீ

ற் + ஈ. = றீ

தீ, கண், காண், காய், தாய், இடலி, ஈ.யம்  
 தண்ணீர், தக்காளி, அகத்தி

பால் தா

இடலி தா

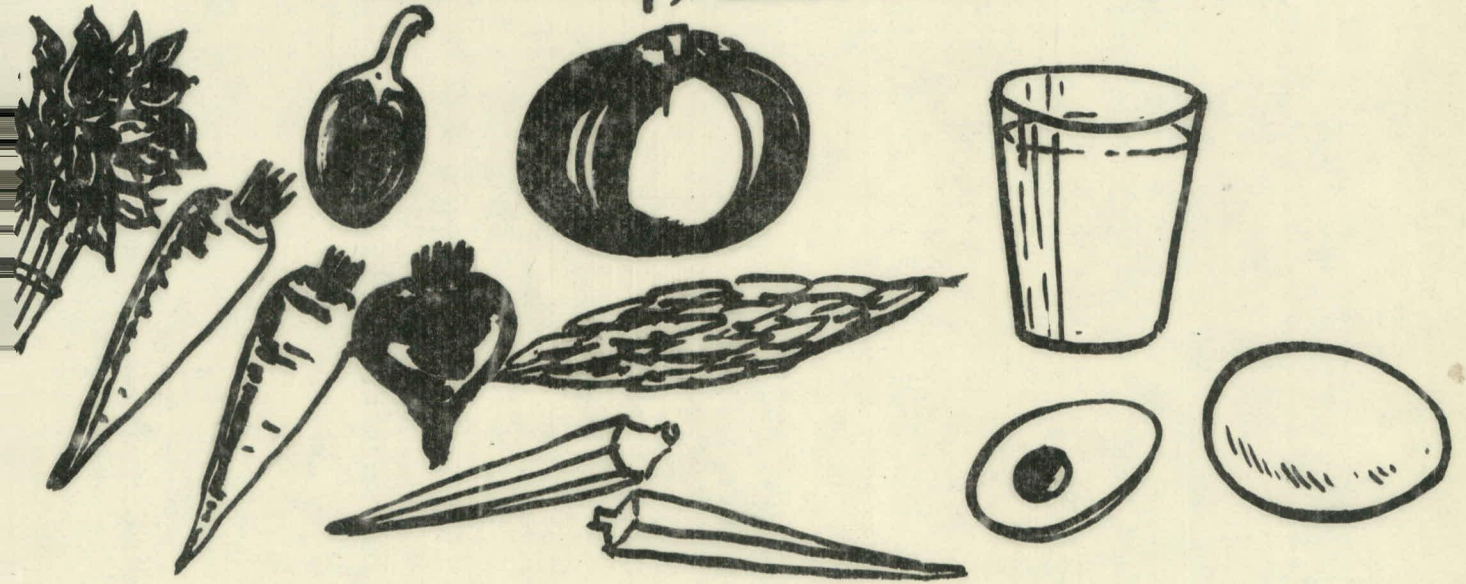
தக்காளி தா

தண்ணீர் தா

எண்: 6, 7, 8, 9, 10

பாடம் - 3

# உணவு, உடைதல்



உணவு வாழ்க்கைக்கு அவசியம்  
 உடைதலுள்ள உணவே சத்துணவு  
 காயும் கீரையும் சத்துணவு  
 பாலும் முட்டையும் சத்துணவு  
 சேர்த்து உண்ண உடைதலாகும்  
 பார்த்து நாமும் உண்டிருவோம்  
 உயிரெழுத்து : உ, ஊ : மெய்யெழுத்து : ழ்

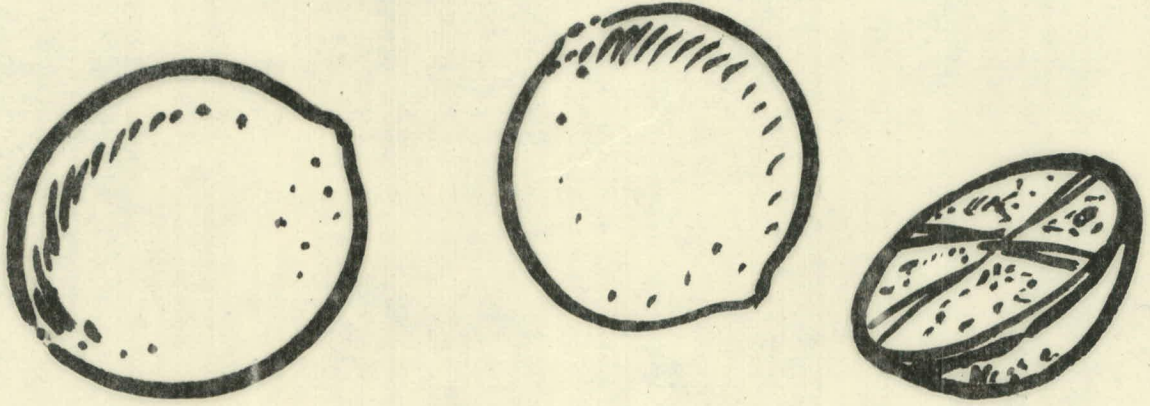
உயிர்மெய்யெழுத்து : ழ் + உ = ழு  
 ழ் + ஊ = ழு

கூழ், குழம்பு  
 பழம், பருப்பு, உப்பு  
 புரதம் பூசணி

காய் பார்  
 பழம் உண்

எண்: 11, 12, 13, 14, 15

# எலுமிச்சை, ஏற்றம்



எலுமிச்சம் பழம் புளிப்பானது

எலுமிச்சையில் உயிர்ச்சத்து "சி" உள்ளது

என்றும் நலமுடன் வாழ உயிர்ச்சத்து "சி" வேண்டும்

ஏற்றமிசு வாழ்விற்கு உயிர்ச்சத்து "சி" வேண்டும்

உயிரெழுத்து : எ, ஏ : மெய்யெழுத்து : ச், ண், ற்

உயிர்மெய்யெழுத்து :

ச் + எ = செ

ண் + எ = ணெ

ற் + எ = ரெ

ச் + ஏ = சே

ண் + ஏ = ணே

ற் + ஏ = ரே

தேன், ஏணி, எள்,

சத்துணவு, ஏலக்காய்

தேன் இனிக்கும்

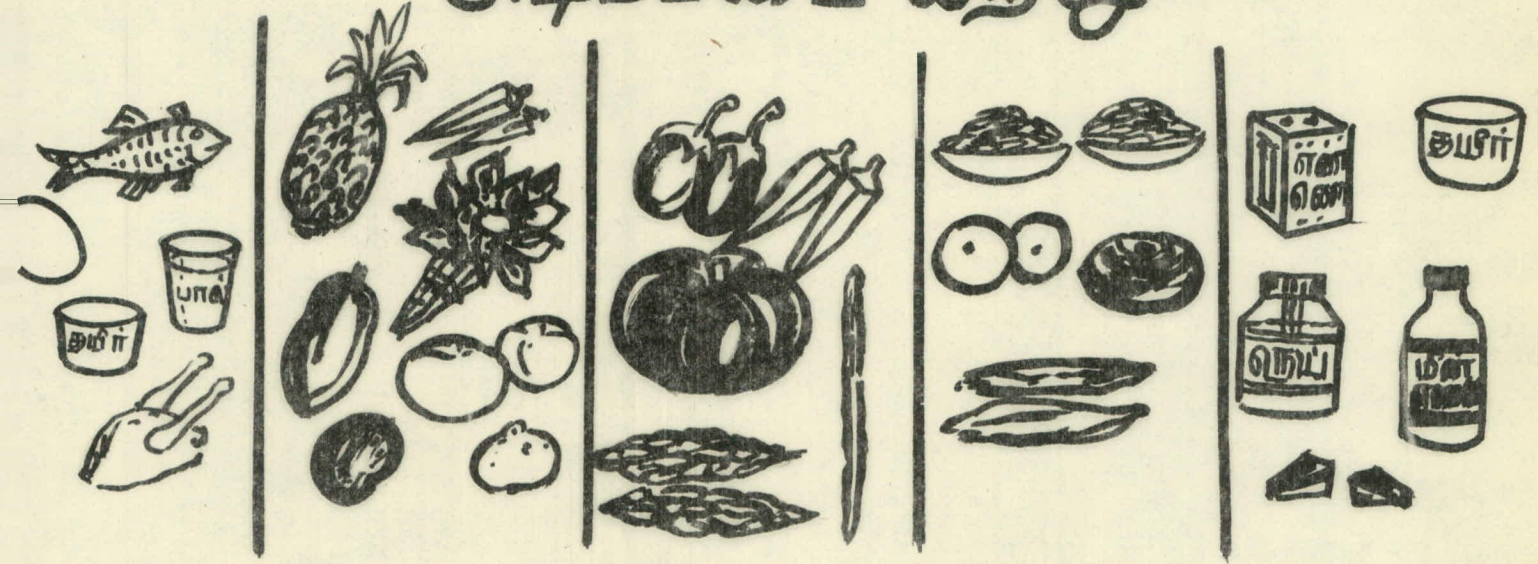
ஏலக்காய் மணக்கும்

சத்துணவு உடலும் தரும்

எண்: 16, 17, 18, 19, 20

பாடம்-5

# அடிப்படை ஐந்து



அடிப்படை உணவுகள் ஐந்து  
 பாலும் தயிரும் ஒரு வகையாகும்  
 பருப்பு வகைகள் மற்றொரு வகையாம்  
 பச்சைக் காய்கறி கீரை பழங்கள் மூன்றாம் வகையாம்  
 தானியம் கிழங்குகள் நான்காம் வகையாம்  
 எண்ணெய்ப் பொருட்கள் ஐந்தாம் வகையாம்

உயிரெழுத்து : ஐ : மெய்யெழுத்து : ற்

உயிர் மெய்யெழுத்து : ற் + ஐ = ஐற

கீரை, கடலை, புடலை

செனை, மாலைக்கண், அவரை

சத்தான கீரை

சுவையான செனை

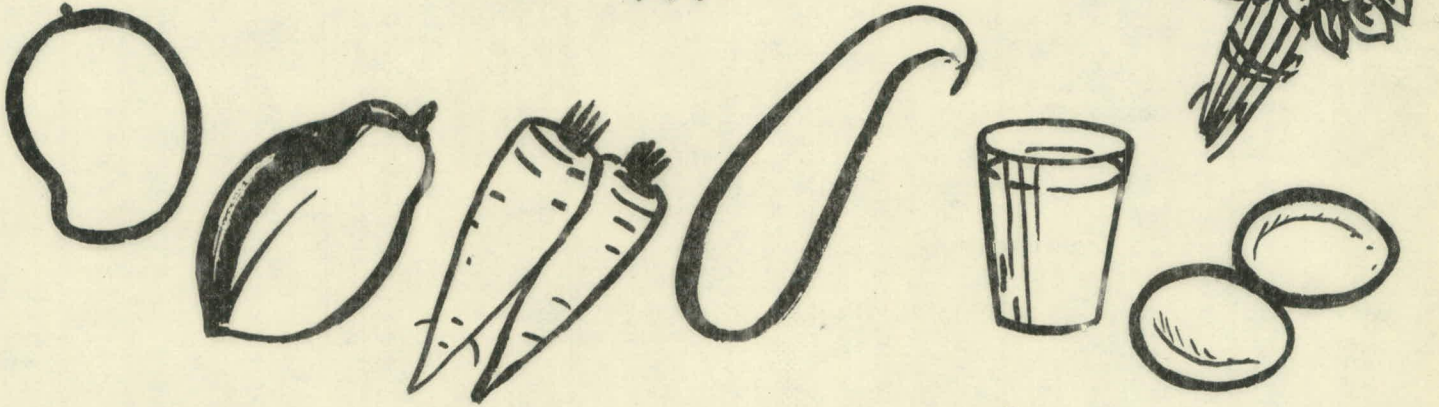
நீளமான புடலை

உண்டம் தரும் கடலை

எண்: 21, 22, 23, 24, 25

பாடம்-6

ஒளி



ஒளிகளுள் சிறந்தது கண்ணொளி  
 கண்ணொளி தருவது உயிர்ச்சத்து "ஏ"  
 மா, பப்பாளி பழங்களில் உள்ளது உயிர்ச்சத்து "ஏ"  
 காரட் பறங்கிக் காங்களில் உள்ளது உயிர்ச்சத்து "ஏ"  
 பால் முட்டை கீரையில் உள்ளது உயிர்ச்சத்து "ஏ"  
 உயிர்ச்சத்து "ஏ" உணவில் இருப்பது நன்று

உயிரெழுத்து - ஒ

ஒட்டகம், ஒளி, ஒன்று

கண்ணுக்கு நல்லது காரட்  
 உடலுக்கு நல்லது பால்  
 சக்தியை தருவது முட்டை  
 பழங்களில் சிறந்தது பப்பாளி

எண்: 26, 27, 28, 29, 30

# ஓடி விளையாடு பாப்பா



ஓடி விளையாடுவது சிறந்த உடற்பயிற்சி  
 ஓடி விளையாடினால் தசைகளின் வலிமை பெருகும்  
 ஓடி விளையாடுவதால் குழந்தைகளுக்கு நன்கு பசிக்கும்  
 ஓட்டம் ஒவ்வொருவருக்கும் நல்ல பயிற்சி ஆகும்

உயிரெழுத்து: ஓ : மெய்யெழுத்து: வ்

உயிர்மெய்யெழுத்து: வ் + ஓ = ஓவா

வாழை, வெண்டை, வெண்ணெய், வெந்தயம்

ஓமம் ஓட்டம், விளையாடு

வழு வழுப்பான வெண்ணெய்

ஓடி விளையாடு பாப்பா - நீ

ஓய்ந்திருக்கலாகாது பாப்பா

கூடி விளையாடு பாப்பா - ஒரு

குழந்தையைக் கவனமாக பாப்பா

பாடலம்-8

# ஒளடதம்



சத்துணவு எஃகு போன்ற உடல்வளம் தரும்  
 எஃகான உடம்பினன நோய் அணுகாது  
 நோயற்ற வாழ்விற்கு ஒளடதம் தேவைபில்லை  
 நோயற்ற வாழ்வே குறைவற்ற செல்வம்  
 உயிரெழுத்து: ஒள  
 அமுத எழுத்து: ஃ

ஒளவை, ஒளடதம், எஃகு

ஒளவை சொல் அமுதம்  
 ஒளடதம் நோய் தீர்க்கும்

எண்: 36, 37, 38, 39, 40

பாடம் - 9

# நோயற்ற வாழ்வே குறைவற்ற செல்வம்



சத்தான உணவு ஆயுளைப் பெருக்கும்  
 சத்தான உணவு நோயைத் தடுக்கும்  
 சத்தான உணவு ஆரோக்கியத்தைத் தரும்  
 சத்துணாவோடு சத்தமும் வேண்டும்  
 சத்தம் இருந்தால் நோய் அணுகாது  
 சத்தம் சுகம் தரும்

எண்: 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50

பாடம் - 1

பயிற்சி

அ ம் மா

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அ ப் பா

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ஆ ப் பி ள்

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பா ல்

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ப லா

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மா

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க ண்

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கா ல்

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## பாடம் - 2

பயிற்சி

கோடிட்ட இடங்களை நிரப்புக:

இனிப்பு பண்டங்களை ..... மொய்க்கும் ..... மொய்த்த பண்டங்கள்  
உடம்பிற்குக் கெடுதல் ..... யாங் பல நோய்கள் பரவும்.

நிரப்புக

மொ.....க.....

நல...தி...க

ப...டங்...க...

எழுதுக:

இடமி	நக்காளி	அகத்தி	பாசல்
.....	.....	.....	.....
.....	.....	.....	.....
.....	.....	.....	.....

பாடம் - 3

பரிநிதி

நிறப்புகள்

ராசி .. க ..

ஊ .. ட ..

உரு .. டி

பழம்

பருப்பு

உப்பு

முசுலி

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பாடம் - 4

பயிற்சி

நிரப்புக

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எ . . பி . . ச . . ப . . ழ . . ி

4 . . . . 4

எழுத்து

நெல்	நெல்வி	நெல்	சந்திரன்	நாகரம்
.....	.....	...	.....	.....
...	.....	...	.....	.....
...	.....	...	.....	.....

செப்பங்கிட்டு

.....

.....

.....

## பாடம் - 5

## பயிற்சி

அவரை	அவரை	வீரை	சவரை	கடரை	புடவை
.....	.....	....	.....	.....	.....
.....	.....	....	.....	.....	.....
.....	.....	....	.....	.....	.....

மாலைக் கவி	சேனைக்கிழங்கு	சுக்கடங்காய்
.....	.....	.....
.....	.....	.....
.....	.....	.....

பாடம் - 6

பயிற்சி

ஒலி	பப்பாவி	வந்தாகர	கார்ட்	கூடு
..	.....	.....	.....	.....
..	.....	.....	.....	.....
..	.....	.....	.....	.....

நிரப்புக

- க .. கொவி
- உயி .. .. ச .. ச
- ப .. பாவி
- மு .. கட
- .. ரட்

பாடம் - 7

பயிற்சி

வெள்ளை	வெள்ளை	வெந்தயம்	வாழை	ஒட்டம்
.....	.....	.....	.....	.....
.....	.....	.....	.....	.....
.....	.....	.....	.....	.....

வினாயாடு	இரத்தசோகை	உயிர்ச்சத்த
.....	.....	.....
.....	.....	.....
.....	.....	.....

## பாடம் - 8

பயிற்சி

புடைதல்	புள்ளை	எ.க
.....	.....	....
.....	.....	.....
.....	.....	.....

கோய்ட்டு இடங்களை நிரப்புக

- 1) சந்தையு ..... போகிற உடல்வலம் தரும்
- 2) ..... உடம்பினை நோய் அதுவளாத
- 3) ..... உடம்பிக்கு ..... தேவையினை

பாடம் - 9

பயிற்சி

சுத்தம்	சுகம்	நோய்	சத்தவடி	வாழ்வு
.....	....	.....	.....	.....
.....	.....	.....	.....	.....
.....	....	.....	.....	.....

கோடிட்ட இடங்களை நிரப்புக:

- 1) .....உணவு ஆயுளைப் பெருக்கும்
- 2) ..... உணவு நோளைத் தடுக்கும்
- 3) ..... உணவு ஆரோக்கியத்தைத் தரும்.