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Acknowledgements

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2. The National Curriculum Development Centre (NCDC)
3. The Uganda National Examination Board (UNEB)
4. The United Nations Children's Fund (UNICEF)
5. The World Health Organisation (WHO)
6. The African Medical Research Foundation (AMREF)
7 Uganda Red Cross (URC)
8. Child-to-Child

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Lastly, but by no means least, we wish to thank all those people, too many to mention individually by name, who contributed in one way or another to the development of the School Health Education Programme and to the writing and typing of this Teacher's Guide.

Despite the help of all those mentioned above, we are solely responsible for any errors that may be found in this book.

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Kampala, Uganda.

Foreword

The teaching of Health Education in Lower Classes of our Primary Education, is very important as far as the improvement of health in our society is concerned. A healthy society is that in which its members have not only acquired correct knowledge, skills and attitudes on health, but they are also putting all these into practice.

As a teacher in Lower Primary, your role in bringing up young citizens practising healthful living, and hence contributing to healthier society cannot be over emphasized. At this stage you are dealing with persons who have not yet hardened their beliefs and attitudes towards many health concepts depending upon the home environment. Your important duty as it is in any subjects is to help these children acquire the basic knowledge and skills so as to enable them to form good health habits. A good foundation to healthy living must be ensured at this level.

In teaching health education, you should keep the following aspects in your mind about your children. First, you are helping these children to grow up healthy and also learn to keep those they care for healthy. Secondly, the children you are teaching are potential change agents as far as health is concerned. They should, therefore, receive an encouragement from you, their teacher, to carry out this duty. This, you can achieve by first of all providing these children with correct knowledge and skills on health. This book will help you in this respect. Furthermore, you should be as practical as possible when teaching health education. Planned good play opportunities could be used to teach and learn Health Education. Many of the ideas considered in this book can very well be understood when demonstration method of teaching is applied. Hence use it and also let the children carry out the same demonstrations to ensure their proper understanding of the ideas being learnt.

More will be said about the teaching of health education in latter chapters. You should not however lose sight of Health Parades as an instrument for ensuring that the children practise what they have learnt. Such Parades should form part of everyday routine and should be made part of other curriculum subjects like Physical Education.

Lastly, children will receive encouragement from you if you practise what you teach. You, your family and your home environment should all exhibit healthful living. You should be a "pace-setter" as far as matters related to health are concerned. Such a condition will make the community more receptive to the ideas related to health since you, being referred to by the change agents (children) are positively showing a healthful living.

Take special interest in children under your care. You should try to detect health

problems from your children as early as possible so as to facilitate their early treatment. This might mean a lot on their future health. Particular attention should be paid to detection of difficulties in seeing and hearing among your children. They should also be helped to develop the skill of observation and an attitude of awareness of safe learning and living environment.

Lastly, be persistant in matters related to health. Children will develop desirable attitudes only when such attitudes are not interfered with by inconsistence on the part of the "model". You may also read the Foreword to Teachers' Guide on Health Education, Volume 2 for Primary 5, 6, and 7 for further guidance.

Mr. Y. Ajal Omilo
AG. CHIEF INSPECTOR OF SCHOOLS
Ministry of Education,
Kampala, Uganda.

Linking Volume 1 and 2 of Basic Science and Health Education Teacher's Guide

The Teachers Guide, Vol. 1 lays the foundation of Health Education knowledge, skills, attitudes and practices. It is on this foundation that Teachers Guide Vol. 2 develop further knowledge skills, attitude and practices taught in upper grades P5, 6, 7.

In teaching health education, continuity, consistance and practicability are very important factors which the teacher needs to keep in mind all the time so that the learner can properly develop good health behaviours.

Consequently, it is necessary for all teachers of Health Education to continuously study both Vol 1 and 2 of the Teachers Guide to be aware of the content development from P1 to P7.

This will facilitate a proper linkage between lower and upper primary levels.

This linkage will be cemented further if teachers would meet occasionally and compare their schemes of work and lessons together for the benefit of the pupils.

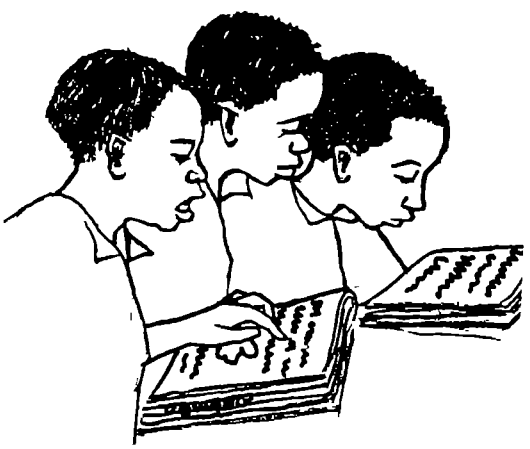
Since Vol. 2 has been in the schools long before Vol. 1. The approach and practices already acquired by pupils should not be disrupted but rather carefully accommodated unless there is a strong reason not to adhere to such established approach or practice.

Introduction to Book

How Children Learn

Children learn out of interest and curiosity. A teacher who is introducing new materials should first motivate children. Different methods of motivation should be used in order to get all the children who want to know something remember it and use it once they have learnt it.

We remember what we hear



We remember what we read

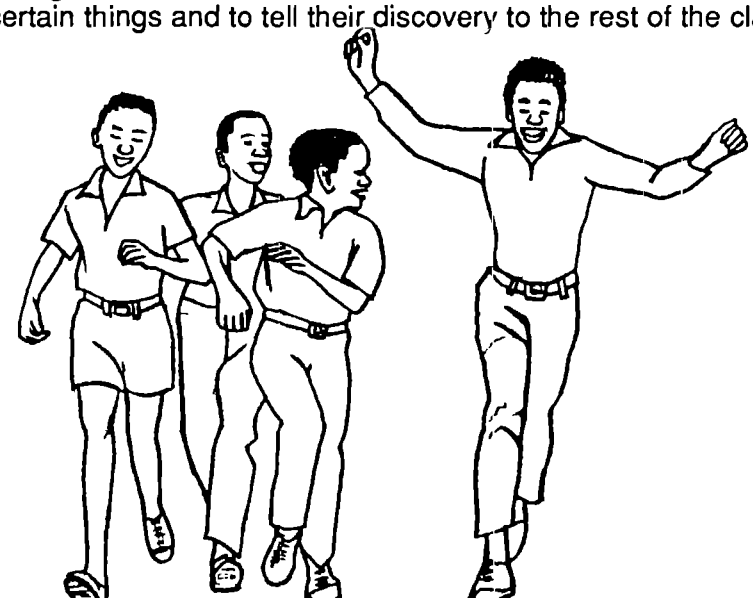
The materials to be learnt should be presented so clearly that it captures the pupils' interest. Some teachers can present clearly the material by using their voices and others can demonstrate so well that every child understands. Other methods such as plays and pictures may have to be used if all the children are to learn. In most cases children require both audio and visual aids to help them learn. More learning occurs if children are left to think about what has been taught. The child can then build mental pictures or images. Because of limited experiences it may be difficult for some children to build these images.

We remember what we do

Such children are helped to learn by being shown the object they are to learn about.

Pictures, words and objects should be big enough for children to appreciate. Most children learn better if they are left to do things themselves. Science is most effectively learnt by doing. The teacher should know which method of learning is the best for the children. Teachers should recognise children who have a problem with hearing or with their sight and send them to hospital for correction.

Children also learn by imitation. They will copy the teacher's skills and behaviour. They also learn very well from other children. The quick learners in class can be good child teachers to other pupils. These can be used as models for others to copy. The teacher should always act as a guide if this child-to-child method is used. Children should be left to discover certain things and to tell their discovery to the rest of the class.



Teachers should try to associate new facts and skills to be learnt with ones already known. When children remember one fact they are likely to remember the others associated with it. Association helps children to recognise and understand certain

things. Some examples of associations are bad behaviours and punishment, flies and diseases, good food and good health.

The materials to be presented, should be spaced and not too much should be taught at a time. Too much information confuses children.

After learning new materials it is easy to forget it unless it is practised and revised a number of times. Repetition fixes facts in our minds. The teacher should use the children's senses of hearing, sight, touch and movement.

Planning Health Education

Teacher Preparation

Teaching is a process that helps learning to take place and learning is the expected modification of or change in behaviour. It is important that a teacher must have sound knowledge of what children must know and be able to relate content with methods and sequence to the needs of the pupils using the environment and other appropriate resources. Effective teaching, therefore, requires efficient and adequate preparation on the part of the teacher. It demands a teacher to structure his preparation and work in relation to his pupils, the curriculum, resources and teaching methods. In order to achieve this, sound understanding of child development and teaching skills is essential. The process of preparing to teach normally begins with planning of the syllabus followed by planning for instruction and short-term preparation of daily lessons respectively.

Now that you are familiar with the Basic Science and Health Education Syallbus, you need to break up the content of the teaching syllabus into meaningful parts and arrange them in steps which follow each other. This Teacher's Guide is an essential reference to help you plan your work.

Developing a Scheme of Work

PRIMARY ONE TERM ONE
SCHEMES OF WORK

UNIT 6: Our Health
My Health and Other People's

Sub-Topics:

1. Our environment and our health
2. Ourselves and our bodies
3. Care of our bodies
   - care of our hands
   - care of the face

- care of the feet
- care of the eyes
- care of the skin
- care of the nose
- care of the ears
- care of the teeth

Sub-topic 1:
Our Environment andOur Health:

Objectives:

1. To be aware of the healthy environment.
2. To be aware of unhealthy conditions in our environment. (germs etc)
3. To keep our environment clean.
4. To develop good health habits.

Behavioural Changes:

Keeping and practising health rules (habits).
Avoiding germs.
Keeping the environment clean.

Main ideas.

A clean environment (compound, latrine, rooms etc) help to prevent disease.
A clean environment helps to keep us healthy and happy.
Using latrines properly and keeping them clean help to prevent disease.

Skills to develop:

observing
reporting
cleaning
enjoying/using.

Activities:

Cleaning the compound.
Cleaning the classroom (sweeping, dusting, tyding, arranging furniture etc.)
Rhymes, and songs about keeping environment clean.
Dramatizing.
Observing and reporting about the environment.
Making news sheet about a healthy environment.
Discussing.
Drawing then painting.
Making brooms.
Answering questions.
Making booklets e.g. "Health habits in our classroom" etc.

Materials Required:

Brooms (for inside & outside)
Rugs, waste paper baskets, water, soap, paint, paper, pencils, crayons/ charcoal, buckets, pots, (containers) hoes, rubbish pit.
Charts/posters (health messages, responsibility roster)

Evaluation:

1. Give explanation of a healthy environment.
2. Describe a healthy classroom, a clean compound and a clean latrine/toilet.
3. Role playing (participation, involvement of the children and teacher).
4. Answer questions about the importance of clean environment and dangers of unhealthy environment.

Follow up:

1. Get children to report when the latrine is not being properly used.
2. Get children to report when rubbish

is being left lying about in the compound.
3. Put locally made baskets for rubbish around the compound.
4. Inspect school premises everyday and point out what needs to be done.
5. Observe general cleanliness inside and around the class.

Test yourself:

A scheme of work is a plan that breaks up content of the teaching syllabus into manageable parts of the book taking into account variables like time allocation, pupils' ability levels, available resources and previous experience of the pupils. Whatever is to be done is guided by the educational aims and objectives given in the syllabus. In order to make a good scheme of work, a teacher needs to know the Basic Science and Health Education Syllabus well. He has to have and understand the Teachers' Guide together with other recommended Health Education books.

Reading and understanding these books helps a teacher to pick facts, main ideas for the pupils, identify and prepare relevant resources, choose appropriate methods and activities then proceed to prepare a scheme of work on paper. The scheme of work should stress progression in idea, content and intellectual demand, and should also indicate suitable approaches, activities, resources and assessment.

Developing a Lesson Plan

Lesson notes are important but are merely a last part in lesson preparation. Lesson notes aid memory and provide a programme for the lesson. In developing a lesson plan, a teacher makes a closer consideration of his topic, his objectives, the learning experiences the learner is supposed to acquire and the learning aids/resources he hopes to use for teaching. He thinks and practises what he hopes to teach. So he does pre-teaching and this adequately prepares him for effective classroom interaction. Planning and developing a daily lesson is part of pre-teaching and involves considering what subject matter to teach, characteristics of the learner for whom the lesson is meant, the desirable changes in behaviour on the part of the learner and how the lesson is expected to be presented. The stages or steps of a lesson will largely depend on the nature of the lesson and conditions under which it is to be taught.

It is important and common to identify distinct phases for planning and developing a lesson. Every lesson must have an inbuilt system that ensures that things work well and that remedial measures may be taken when things do not work as expected.

HEALTH EDUCATION IN OTHER SUBJECTS:

Important relationships and links exist between Health Education and other areas of curriculum and this relationship should be identified, recognised and encouraged through the process of inquiry.

EXTRA CURRICULAR ACTIVITIES

In learner centred lessons, children are given plenty of opportunity to interact with resources through activities. Activities which are outside normal/formal classroom practice, are regarded as extra-curricular because they extend beyond the prescribed curriculum. These activities are important because they reinforce classroom work, broaden pupils' experience and provide adequate practical work. In Health Education, it is important for children to actively participate in extra-curricular activities like Child-to-Child Association, Girl Guides, Scouts, Health Committee activities, Games and Sports, Debating Society, Drama, Young Farmers' Association etc.

In teaching science, the lesson is usually divided into the following phases:

1. **Introductory Phase:** This is where a teacher draws pupils attention to what is going to be taught. This is done either through oral questions on the previous lessons taught or through dramatisations, connected to the new lesson to be taught. The more the teachers get their pupils interested in this phase the better the lesson might be.

2. **Experiencing Phase:** In this phase pupils are made to understand the new ideas and skills being taught. Some effective methods of doing this would include, demonstrations, experiments, use of kits, use of resourcepersons and story telling. Pupils participation in this phase should be encouraged.

3. **Sharing of experiences Phase:** Here the teacher relates the new knowledge to the pupils earlier experiences. This could be done through discussions, questions and answers, field trips and practical work.

4. **Assessment/Evaluation Phase:** Here, the teacher finds out how much learning has taken place through pupils demonstration of knowledge and skills learnt.

While the above phases are outlined, teachers should at all points try to point out the application of what has been learnt to every day health liking.

Teaching Health Education

I hear and I forget
I see and I remember
I do and I understand

I Class Management

What does your classroom look like?
What is a learning classroom?
Is it interesting a place for children to learn?

Creating a Learning Climate

1. The friendly and knowledgeable teacher.
   What qualities do you think a teacher should have?

   How do your children see you?

Friend	Patient
Fellow-learner	Understanding
Advisor	Interesting
	Supportive
	Encouraging
	Knowledgeable

After you have taught a lesson, think over it.
Put yourself in the place of a pupil and go through the lesson again in your mind.

Are the children interested in the lesson?
Did the children take an active part in the lesson?

Did they feel confident to ask and answer questions?

Did I answer the questions properly?

Did I reward the children when they did well?

Will the children come to me for advice.

The Classroom Environment:

Look at your classroom.
Is there anything interesting for children to learn from?
How could you make it more interesting?
Here are some suggestions:

a) Put pictures on the walls, with questions for the children to answer, either from the School Health Kits, or other pictures.

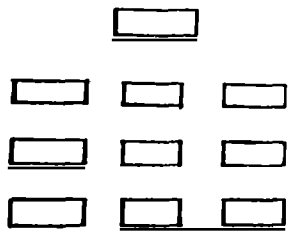
b) Have a "health corner" (and a maths corner and nature corner).
   Put a display there with a question or activity for the children, e.g. a picture of a good classroom environment with several educative corners.

Display objects	Question/Activity
Food items	Which foods make a mixed menu for day? Which foods are harmful to our health (e.g. soda?)
ORS packet, spoon, tumpeco, mugs.	Show your friend how to mix ORS.

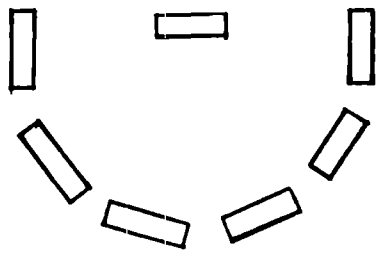
Why do we need an interesting classroom?
All of us learn when we are motivated - that is- interested.

4. Classroom Organisation

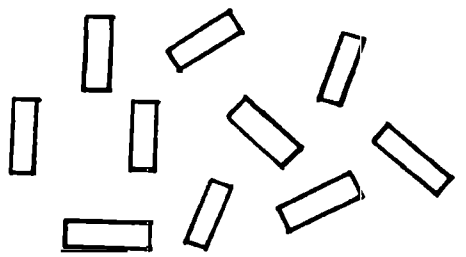
How do you organise your classroom?
Is it like this?



Or like this?



Or even like this?



What are the advantages and disadvantages of each method of organisation?

Sometimes we have no choice in the organisation of our classroom because:

i We have too many pupils.

ii The desks won't move.

iii The classroom is too small.

But sometimes we do have the choice but we never move the pupils around because:

i That is how we were taught.

ii We want every child to see us and the blackboard.

iii We fear we might lose control if the children are not all facing the front.

When is it useful to teach the class as a whole?

1. To introduce the lesson
2. To give facts or information on the topic
3. To give instructions for an activity.
4. To share results of group work or individual work
5. To summarise
6. For stories or dramas.

When is group work useful?

1. To give pupils a chance to solve a problem or a task.
2. To carry out practical activities.
3. To encourage discussion.
4. To allow pupils to help and motivate each other.
5. To provide opportunities for pupils to act as leaders.
6. To do different activities at the same time (and then share them later).

5. Teaching Methods:

Which methods do you use most often?
The following is a list of some of the methods we use in teaching. Tick those you use most often.

- Demonstration
- Discussion
- Dramatisation
- Role play
- Simulation
- Excussion
- Field trips
- Project method
- Problem solving
- Discovery
- Brainstorming
- Exhibits
- Film
- Observation
- Story telling
- Singing
- Debates
- Competition
- Child-to-Child
- Quizes

However teaching methods are those methods that can facilitate student's learning. Methods vary according to knowledge that is going to be learned and the teacher to teach. The old way of teaching was to tell students as much as possible, that is passing on teacher's knowledge. Today the teacher acts as a helper. Pupils you teach can learn better by doing rather than listening.

Does your teaching resist change or encourage it?

Education that encourages change:
But there are other ways - ways that build the students' confidence in their capacity to observe, criticize, analyse, and figure things out for themselves. These ways let the students discover that they are just as good as their teachers and everyone else. They learn to cooperate rather than compete in order to gain approval. They are encouraged to consider the whole social context of their people's needs, and to look for imaginative and courageous ways of meeting them.
This we will call education for change. Emphasis is more on learning than on teaching. Students are encouraged to voice their own ideas. They figure things out for themselves, and explore ways to help people free themselves from the causes of poverty and poor health.

If a pupil is to be a leader for change, helping others to find ways to solve their biggest problems, then it is important that his learning itself set an exarnple.

Good teaching is the art not of putting ideas into people's heads, but of drawing ideas out.
There are three kinds of situations for which diffirent kinds of methods can be used while teaching.

i) when teaching attitudes
ii) when teaching skills
iii) when teaching knowledge

6. How to Teach Attitudes:

There are some methods which the teacher can use when teaching attitudes, e.g.

When he gives practical examples.

When he gives direct experiences.

When he gives opportunities for discussion.

When he allows role playing exercises.

However, the teacher should always monitor whether there is change in attitudes. If not, find out why and try a different approach.

How to Teach Skills:

In teaching skills, there are three important steps to take.

(i) Describing the skill, which involves explaining why the skill is important. Why pupils have to learn it and the stages in performing it.

(ii) The teacher demonstrates the skill to his pupils and then they also perform it.

(iii) The children continue practicing the skill while the teacher supervises and helps to correct where something goes wrong.

The skill should be practiced continually outside the classroom.

How to Teach Knowledge:

Knowledge to be taught must always be relevant to the learner's needs. Plan exercises to avoid boredom and repetition. Use visual aids to clarify points.
To help pupils learn, you should make the learning active, ask questions, set problems and organise projects.

Give feedback explain how well each pupil is doing and how his work could be improved.

Make your teaching clear, speak loudly, write tidely and use simple language.

Make your teaching meaningful explain how it will help pupils to do their job better.

Let pupils learn at their own pace, leave enought free time and use a variety of teaching methods. Show that you care for pupils to learn, set high standards and get to know each pupil well.

However, it is important to be creative as a teacher, by making your own Health Education booklets and building up class libraries.

The Child to Child Approach:

Child-to-Child is an approach to Health Education and Primary Health Care spread by a worldwide network of health and education workers in over sixty countries.

Primary Health Care seeks to involve communities in making decisions and taking action to improve their own health. The Child-to-Child approach involves children in this task in three ways:

a) Through helping to care for their younger brothers and sisters and other young children in their family group.

b) Through assisting children in their own age group including those who have not gone to school.

c) Through working together to spread health ideas and improve health practices in school, home and community.

Child-to-Child started in 1979 in London, as you have read above. Over sixty countries of the world are using the approach in different ways.

In Uganda, Child-to-Child is a voluntary programme which spreads by a network of interested teachers, parents, pupils and health workers. Over 90 schools are using the approach in their daily teaching, outside the classroom and in communities.

How Child-to-Child works:

A felt need is identified in the school or community. This need could be a health problem.

d) Discuss the problem with the children

- find solutions to the problem

- take action collectively.
- then evaluate the out come.

In so doing children realise their importance in society and the role they can play. "CHILD POWER".

In schools a committee of teachers,/ pupil leaders and sometimes parents is formed. Their role is to identify health

problems in the school and the surrounding community. They then group children in the school according to age and ability, e.g. P1 & P7, P2 & P6, P3 & P5. P4 remains a neutral class.

Further more individual pairs are also made in the same groups. The task is then divided according to these groups.

With encouragement and prizes awarded to these children, the problem will be solved and a loving and friendly atmosphere will prevail among them.

Child-to-Child motivates children to discover to solve problems and to be self reliant which is very essential in our lives today.

There is a lot of information on Child-to-Child available at the Institute of teacher Education, Kyambogo and the Institute of Education London University in form of

a) Activity sheets
b) Story books
c) Text books
d) Magazines
e) Newsletters.

Resources for Teaching and Learning

Helping your pupils understand and use new health ideas is one of your biggest jobs. It can also be your most interesting job if you practice different ways to teach the same subject. Here are some ideas which you can use to teach health in addition to the information in this Teacher's Guide.

REFERENCES

A good place to get extra health information is from a health book. There are many good books about health which may help you to understand and teach better. If you cannot buy these books, you may be able to borrow them. Do you know if your local health worker, immuniser, DMO or doctor has any of these books? Do they have any other books about health? The District Health Educator should have many.

TITLE	THIS BOOK IS ABOUT	WHERE TO WRITE FOR INFORMATION
"Community Health" (Wood/Vaughan/ Glenville)	Community Health Care	African Medical and Research Foundation Entebbe, Uganda
"Community Health Worker's Manual" (E.Wood)	Primary Health Care	African Medical and Research Foundation Entebbe,Uganda

"Helping Health Workers Learn" (Werner/Bower)	Methods, Aids and Ideas for Rural Teachers of Health	Teaching Aids at Low Cost P.O. Box 49, St. Albans Herts, AL1 4AX (UK).
"Primary Health Education" (Young/Durston)	Teaching ideas and health information for primary school teachers.	Teaching Aids at Low Cost P.O. Box 49, St. Albans Herts, AL1 4AX (UK)
"Uganda Essential Drugs Manual" (Ministry of Health)	Health Information and drug usage, teaching ideas	*Essential Drugs Programme, Danish Red Cross P.O. Box 16, Entebbe.
"UNEPI/CDD Handbook (Ministry of Health)	Health Information on Immunisation diarrhoeal diseases	*UNEPI and Ministry of Health P.O. Box 8, Entebbe.
"Where There Is No Doctor. African Edition" (Werner)	Health Information teaching ideas	Teaching Aids at Low Cost P.O. Box 49, St Albans Herts, AL1 4AX (UK)
"Child to Child Activity Sheets and Newsletter"	Teaching ideas, health information for pupils	Teaching Aids at Low Cost P.O. Box 49, St. Albans Herts, AL1 4AX (UK)

Child-to-Child

*These books are free of charge. Write to the publisher and ask for a copy by explaining your teaching programme at your school.

Most health books have been written to help adults teach and learn. But these books can still be useful for pupils if you change the information like this.

1. **Read the book to yourself.** Make notes of the useful information. Does the information fit into your lesson plan? Can it fit into other subject lesson plans?

2. **"Translate"** the information into more simpler words for your pupils. Use words the children know. Can you explain the subject without reading it from the book?

3. **Add interest and fun to the lesson.** Make up stories about people in a local setting who practise good or bad health behaviour. Can you make your own visual aids using simple copies from the book? Can you use the ideas in the children's games? Can you make up songs and music about what you are teaching?

SCHOOL HEALTH KITS

The Ministry of Education has made different packs of health information and learning activities. These are called "school health kits". There are four kits.

- Control of Diarrhoeal diseases
- Immunisation
- Water and Sanitation
- AIDS Control

Each kit has a teacher's guide in it. The teacher's guide will tell you in what order and how to use the other materials. The other materials are charts, leaflets, story cards, information booklets and leaflets to be read by pupils. The kits provide the most benefit if used in this way.

1. Find the teacher's guide (a booklet or a small chart). Read the guide completely to yourself.
2. Each time the guide talks about a chart or other item, find the item and look at it yourself.
3. Now practise using the kit before you use it with the pupils. Can you give a demonstration to your colleagues?
4. Make a termly plan which uses the right parts of the kit for the right day and night lessons. Can you think of different lessons for which the kit can be used?

If you do not now have your own copy of some of the school kits, ask your District Education Officer. All registered primary schools in Uganda have been given school health kits through their DEOs. If needed, your DEO should apply for more copies from the Coordinator of School Health, Ministry of Education.

LOW COST TEACHING AIDS

Children and adults both find it easier to learn new things when the teaching is active. Active teaching is where pupils are helped to discover answers for themselves. There is an old saying about this:

IF I HEAR IT, I forget it,
IF I SEE IT, I remember it,
IF I DO IT, I know it.

You can make your health teaching more active by using teaching aids. Teaching aids do not need to be purchased from abroad or expensive to be useful. In fact, aids which pupils make themselves help them learn and remember more. Here are some ideas.

CHARTS OR POSTERS

1. Let pupils decide on a health message. Have them write one sentence about prevention or cause on a sheet of paper. To see what pupils have learnt, have them make a poster **after** your lesson. To see what pupils already know, have them make a poster **before** your lesson.

2. Let pupils draw a picture which shows their message. They can draw their own picture or copy something from a book.

3. Have pupils show their poster to their classmates, They can show the poster to everyone while explaining what they meant to show. Or put all the posters together on the wall or floor. Which poster do pupils like the best? Why? Was the health message correct? Can you show the posters to the whole school?

HEALTH TALK CARDS

1. Let pupils decide on a short story about health. Help them write the story using people with local names and practices.

2. Divide the story into 8 or 12 parts. For each part decide what the picture should be. Give each part of the story to a different pupil to draw a picture.

3. When the pictures are ready, have one pupil show and tell the whole story. Have the pupil show the correct pictures one at a time during each part of the story.

4. Ask children questions after the story is told. Ask why the people in their story did what they did. Ask what they should have done.

REAL OBJECTS

1. Tell pupils about your health subject. Ask them to bring things to class which help to show what was learnt in the lesson.

2. Get pupils to show and tell about what they have brought. If pupils cannot bring their own materials, you may have to bring things or get a health worker to bring things which they can talk about. For example:

Personal cleanliness - soap, water, basin, dirt, comb, dirty clothes.

Nutrition - fruits and vegetables.

Immunisation - child health card, empty vaccine bottle.

First Aid - bandages, soap, water blanket, sharp objects.

Family health baby toys, prayer books, musical instruments.

Sanitation - brush or broom, rubbish basket, food covers, dead or living insects.

3. Ask pupils what they use the real objects for. Do they have these things at home? How do they help or harm our health?

CUTOUTS/PUZZLES

Pupils can make their own puzzles or cutouts to use in different learning games. These puzzles will help pupils to remember parts of a larger thing, parts of cycles and how one problem leads to other problems for example, pupils can make puzzles for:

Parts of whole - our eyes, ears, lungs, different foods by groups.

Cycles - malaria, worms, bilharzia, water Four F's (diarrhoea)

Cause and Effect_ - poor feeding to sickness to death, lack of transport to no immunisation, disease to death, no fruit to lack of vitamins to blindness.

1. Ask pupils to draw a picture of the parts of cycle or chain of problems they have learnt in their health lesson. If possible have them draw on stiff paper or card board.

2. Now cut or tear the drawing into parts.

3. Have different pupils put the puzzle together again. Or use pieces to make new groups.

4. Ask questions about the puzzles where possible. What causes a health problem in a cycle? Can we stop the problem by taking one piece of the cycle away? Can we stop the problem by adding one piece to the chain?

Separate pieces of puzzles can be used to illustrate health talks as visual aids. Can pupils talk about health with one part of the puzzle?

Evaluation:

Evaluation is a process for finding out whether objectives have been achieved. Purpose of evaluation in Health Education.

1. To find out whether learning has taken place in the following areas.

   a) acquisition of knowledge about health.
   b) acquisition of skills.
   c) change in health habits/ behaviours.

2. To find out whether children carry health messages home.

3. To find out whether homes are improving their health.

How do we Evaluate?

1. Through testing, orally or written.

2. Continuous assessment through regular testing and observation.

Some Methods of Evaluation:

1. Asking children questions orally.

2. Setting a written test.
3. Asking children to demonstrate a skill.

4. Observing participation and assessing performance in Science and Health Education Fairs.

5. Observing improvement in individual health habits, school environment and the home.

When evaluating a health topic in the classroom refer to the objectives at the beginning of each chapter. Has each of them been achieved?

When evaluating improvement in health habits refer to the bahavioural changes in each chapter. Observe whether these changes are taking place.

When do we Evaluate?

a) In the classroom, during and at the end of the lesson or topic.

b) In the school environment during the health activity and afterwards over a period of time.

c) In the home, during home visits, daily activities and get feedback from children - the way they look and talk.

Changes may not happen immediately but may need some support and continuous encouragement. Eventually they should become permanent.

CHAPTER 1

Unit 6 - Our Health
P.1 Term 1

My Health and Other People's

Objectives:

By the end of this topic pupils should be able to:

1. Explain and demonstrate when and how to wash hands.
2. Give reasons why we wash hands.
3. Give reasons why we clean our hair, nails and bodies and demonstrate how we do this
4. Describe the importance of doing exercise.
5. Differentiate good from bad posture.
6. Describe various ways of disposing of rubbish safely.
7. Differentiate between a clean and dirty place.
8. Explain the dangers of dirty places and give reasons why we clean our compound.
9. Demonstrate how to use a latrine properly.

Behavioural Changes

Pupils should:

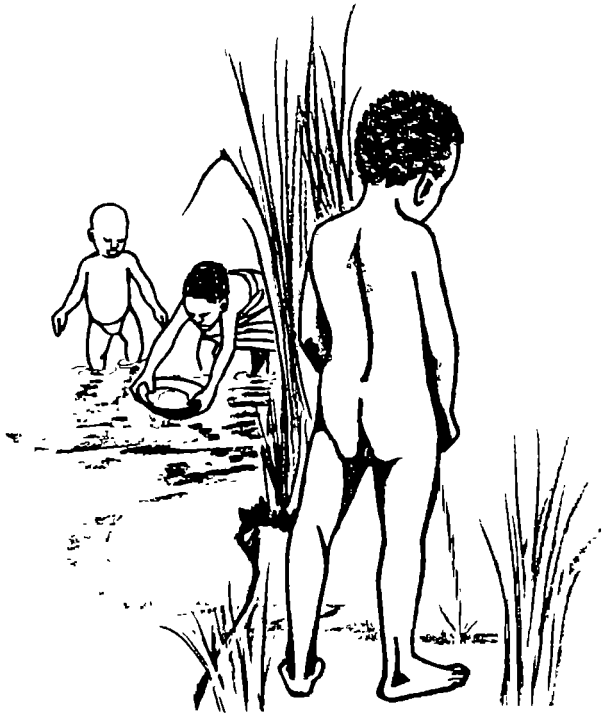
- Keep their bodies clean.
- Exercise regularly to keep strong and healthy.
- Keep compounds clean.
- Use latrines properly.

Main Ideas

- We need to wash our hands regularly to avoid disease.
- Exercise keeps us strong and healthy.
- A clean compound helps to prevent disease.
- Using latrines properly and keeping them clean help to prevent disease.
- A clean body and a clean environment make us healthy and happy.

Notes for the Teacher

Germs cause disease and are found in dirty places. Insects like flies and cockroaches live in dirty places and transmit these germs to humans.

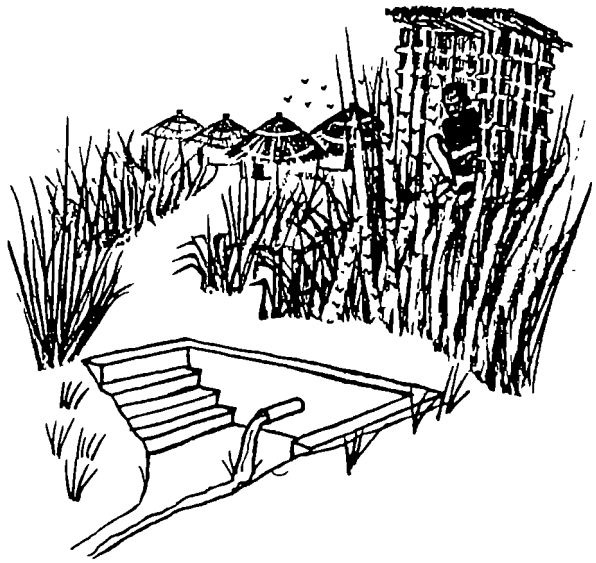


Dirty places include places where:

- Rubbish is dumped.
- Faeces are deposited.
- Dead animals are left to rot

Germs from dirty places reach us through:-

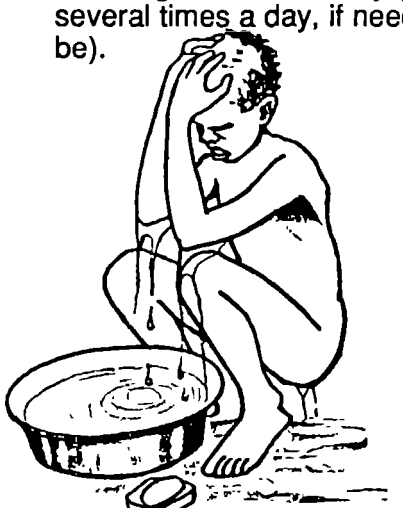
- Dirty clothes and bedding.
- Flies carrying germs onto our food, fingers or utensils.
- *Using dirty hands or utensils*



- Using latrines for defecating and urinals for urinating.
- Keeping latrines and urinals clean.

We can prevent the spread of these germs by:-

- Washing our bodies daily (or several times a day, if need be).



- Putting beddings in the sun regularly.
- Washing clothes and bedding regularly, and ironing them.
- Washing hands before eating, cooking, and after using the latrine.

- Keeping utensils clean.
- Burying, burning or safely disposing of rubbish and dead animals.
- Keeping houses and compounds clean.

Exercise is good for the body.

- It helps the blood to flow faster and carry out its functions better.
- It helps the digestive system to process food through the bowels.
- It makes muscles stronger.
- It improves appetite.
- It makes us healthy and happy.

Exercise should be done regularly.

SOME ACTIVITIES FOR PUPILS:

1. Show children the proper way of washing and cleaning different parts of the body especially hands, hair and nails.

Let children show each other how to wash hands properly.

Organise health parades every day to check on the standards of cleanliness.

Let the older children show the younger ones how to improve their cleanliness.

2. Compose stories on using clean compound and toilet and let pupils engage in role play, e.g. A family was not using a clean toilet and its members were getting sick everyday. Their father was taking them to a health centre or clinic for injections and other forms of treatment. One day Jane learnt that dirty places keep germs and germs cause disease. She went home and told the family to start cleaning the toilet and to remove rubbish from the compound. The following week members of the family were free from diseases and were happy.

4. Demonstrate how to clean the classroom and compound and how to dispose of rubbish properly.

4. Show children how to use a latrine properly by putting two chairs near each other and asking children to demonstrate how to use the latrine.

(Steps for using the pit latrine are found in the School Health Kit 'Water and Sanitation'. Follow this up by asking children to demonstrate the proper use of a latrine).

5. Set up class competition for personal cleanliness and tidiness of the classroom.

SKILLS TO DEVELOP:

1. Following instructions.
2. Observing.
3. Predicting.
4. Manipulating skills.

MATERIALS REQUIRED

Water, soap, brooms, combs, toilet covers, matches, hoes, slashers, rubbish tins. Half dried leaves.

School health kit on water and sanitation especially the picture of clean and dirty home.

Model of latrine.

Other pictures of clean and dirty environment.

EVALUATION:

1. Give simple verbal questions on the importance of using clean things.
2. Conduct health parades everyday to check their cleanliness.
3. Inspect school premises everyday.
4. Observe general cleanliness inside and around the class.
5. Observe role plays.

FOLLOW UP

1. Get children to report when the latrine is not being used properly.
2. Get children to report when rubbish is being left lying about in the compound.
3. Put locally made baskets for rubbish around the compound.
4. Use the responsibility roster (time table) for keeping the classroom clean and tidy.

TEST YOURSELF:

(What have you learnt from this chapter?)

1. What are the reasons why we wash our hands?
2. Cleaning our hair, nails and bodies is very important. What are the reasons? Why is it important?
3. What is the importance of doing exercise?
4. Describe good and bad posture?
5. Explain the dangers of dirty places.

CHAPTER 2

UNIT 6 OUR HEALTH

P 1: TERM 2

Caring for Our Bodies

Objectives:

By the end of this topic, pupils should be able to:

1. Tell why we wash our eyes, feet, skin, nose, teeth and ears.
2. Describe proper ways of caring for the above parts of the body.
3. Explain the dangers of not caring for the above parts.

Behavioural Changes

Pupils should:

- Demonstrate proper washing of face, feet, skin, nose, teeth, ears.
- Avoid putting things into nose, ears and eyes.

Main Ideas

- Keeping ourselves clean helps us to avoid disease.
- We must wash our bodies, everyday (or several times a day, if need be).
- We must brush our teeth in the morning, and evening to avoid tooth decay and bad smell.
- If things are put in the eyes, nose or ears, they may cause injuries.
- Looking at the sun directly can damage your eyes.

Notes for the Teacher

Dirt left on our bodies enables germs to live on it. Germs cause different diseases to our bodies. We need to keep our bodies clean by using clean water and soap.

If food is left in the teeth, germs will feed or live on it. These germs may cause tooth decay. Tooth decay causes toothache and bad smell.
Brushing our teeth will stop germs from getting into our teeth and making our mouth smell bad. If you get toothache go to a dentist or health worker.

Things like dirt, beans, small stones, seeds etc. may get stuck in the nose or ear or eye or even vagina and anus and damage these parts. If by accident something gets stuck in one of these parts, seek the help of a health worker or the teacher. *(see also the part on First Aid in this Book).*

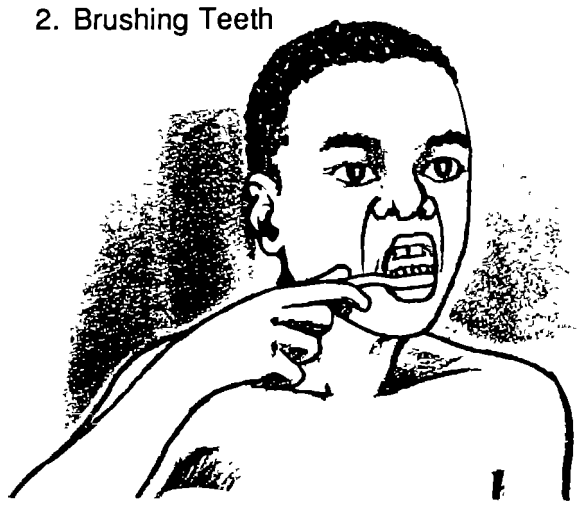
Care for eyes by washing them regularly and playing carefully, and avoiding dust and looking directly at the sun. The rays of the sun may damage your eyes and make you blind.

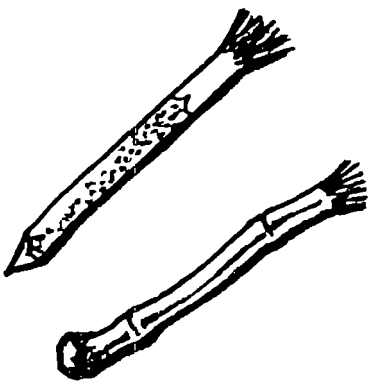
SOME ACTIVITIES FOR PUPILS:

1. Let older children demonstrate how to wash their young friends. Encourage older children to wash their young brothers and sisters at home. Encourage them to wash as shown at home.

After washing, pupils should wash the basins and store them clean.

2. Brushing Teeth





Local Tooth Brushes

(a) The teacher should make local tooth brushes for P1 children from safe pieces of shrub in the locality e.g. from mid veins of young palm leaves.

(b) Or before this lesson, teacher should ask each child to bring a tooth brush either modern or locally made by her/ his parents.

(c) Let children bring good clean ash from home or some modern toothpaste (not sand).

(d) Children can practise the correct way of brushing teeth and correct each other in pairs.

Brush teeth up and down, away from the gums.
Brush tooth after tooth to make sure all have been cleaned.

Rinse the mouth and wash the tooth brush after brushing.
Make sure all the teeth have been cleaned.

Avoid mixing brushes, sharing brushes, or using same charcoal because this may spread diseases.

(i) Tell a story about what happened to a child who did not brush his teeth.

3. Compose simple ryhmes or songs about clean bodies and teeth e.g. wash your body everyday three times using water and soap.
Brush your teeth everyday etc.

SKILLS TO DEVELOP:

Following instructions.
Manipulative skills.
Demonstrating.
Observing.

MATERIALS REQUIRED:

Basins, local or bought tooth brush, ash, toothpaste (bought), charcoal, soap sponge, clean water.

EVALUATION

1. Teacher should inspect children on health parades every morning to check on the cleanliness of pupils parts of the body and teeth.

2. Children can tell why they should wash their bodies and brush their teeth and when.

3. Let children identify the proper twigs to make tooth brushes from.

FOLLOW UP

Teacher visits some pupils' homes to observe cleanliness of family members. Discuss with parents.

TEST YOURSELF:

What have you learnt from this chapter?

1. Explain why we wash our eyes, feet,skin,teeth and ears.

2. What happens when these parts of the body are not properly cared for?

3. Explain how teeth should be cleaned.

Older children could be in charge of young children.

Demonstrate and explain proper ways of cleaning teeth.

Demonstrate proper ways of cleaning teeth and explain why we need to clean them.

CHAPTER 3

UNIT 15 ACCIDENTS AND FIRST AID

P1 TERM 2

Causes of Accidents

Objectives:

By the end of this topic, children should be able to:

1. Describe what an accident is.
2. Describe what First Aid is.
3. Name places where accidents commonly take place.
4. Mention ways of preventing accidents at home, on the way to school, at school, and at the well.
5. Name animals and insects that bite and those that sting.
6. Explain ways of preventing bites and stings.

Behavioural Changes

Pupils should:

- Know and observe rules of crossing and walking on roads.
- Avoid situations that are likely to cause accidents.

Main Ideas

- An accident is a sudden happening that causes harm to the body suddenly and unexpectedly.
- Accidents can take place any where, but they commonly occur at home, on the way to school, at school or at the well/river/lake.
- Accidents can be caused by fire, hot water, broken bottles, vehicles and bicycles, and drinking poison.
- All accidents can be prevented.
- Bites and stings (from some animals and insects) are harmful and can be prevented.
- First Aid is the first help given to a person who is injured before taking them to a health centre or hospital.

Notes for the Teacher

WHAT IS AN ACCIDENT ?

An accident is something harmful and takes place suddenly and unexpectedly. Accidents may result in simple injuries to the body like bruises and cuts. But they may also result in major complications like broken bones with heavy bleeding, failure to breathe, unconsciousness, or even death.

FIRST AID

People who have been involved in accidents need assistance. Such assistance is called First Aid. It is the first help given to a person to reduce pain, assist recovery or save life.

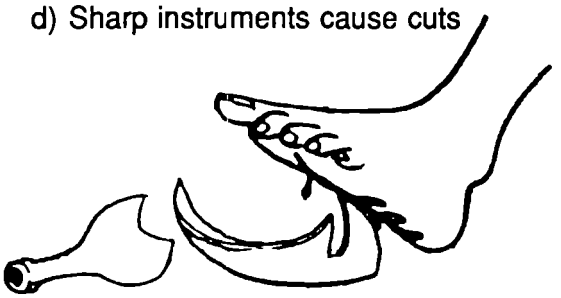
Accidents at Home and School

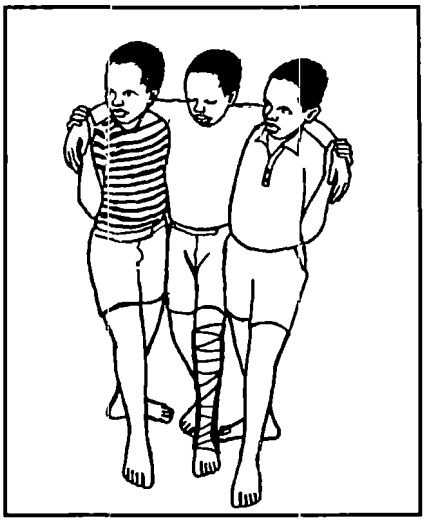
a) Falling into fire (fireplace or stove) will cause burns.

b) Spilling hot liquids and food (saucepan being pulled over) causes scalds.

c) Touching electric wires causes shock, breathing stops, heart stops, - death

d) Sharp instruments cause cuts

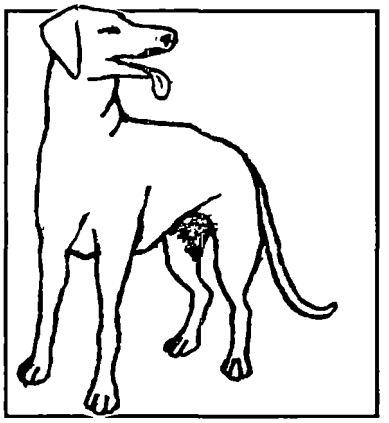




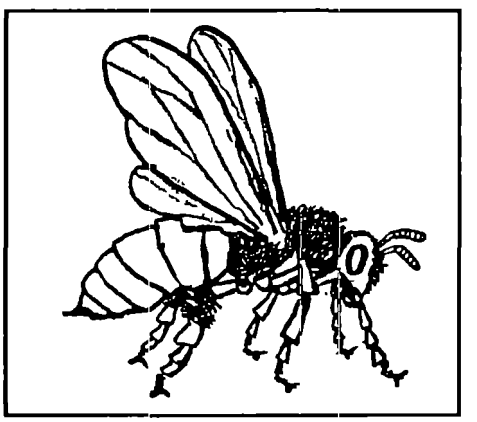
e) Swallowing poison
drugs, Kerosene, rat poison etc.
can cause death

f) Falling from trees can cause broken bones and cuts.

g) Dogs can carry rabies.



h) Stings can cause pain.



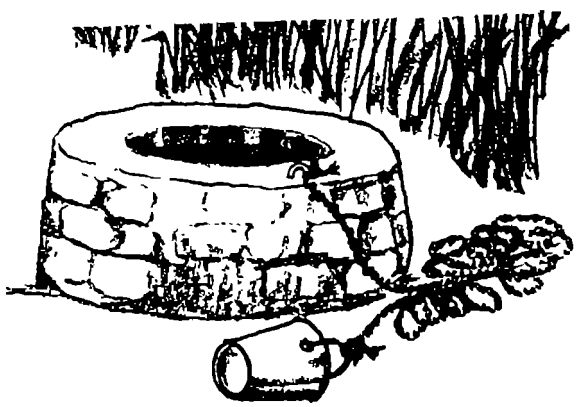
Accidents on the roads.

1. Motor vehicles can cause serious injury and death.

2. Bicycles can cause broken bones, cuts, and death.

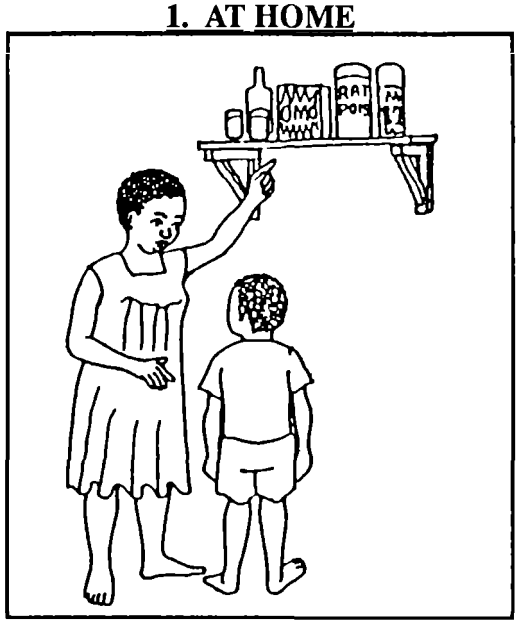
Accidents at the well river/lake.

1. Falling in can cause drawning and death.



Preventing Accidents

1. AT HOME



Keep away from fires.

Keep cooking pots and hot foods away from children.

Keep away from loose electric wires and plugs.

Keep away from electrical wires, plugs, sockets or switches when you are wet. Electricity can be conducted through water.

Use knives with great care.
Make sure that broken bottles are cleared from where people walk or play.

Put empty bottles in a safe place.

Only take medicines when given by an adult.

Climbing trees are very dangerous.

Keep away from dogs.

Play away from long grass to avoid snakes.

Avoid bees or other stinging insects.

2. ON THE ROAD

Look before you cross the road.

Play away from the road.

Take care when riding a bicycle.

3. AT THE WELL

Play away from wells and ponds/ rivers/lakes.

Take care when drawing water.

SOME ACTIVITIES FOR PUPILS:

a) Show pictures to pupils for them to identify different types of accidents.

b) Visit homes, school compounds, roads, and wells to identify places where accidents can take place. Let children explain or show how to prevent accidents at these places.

c) Let children draw a map of their compound and show places where accidents can occur.

d) Show pictures of animals and insects so that children identify those that bite and those that sting. The teacher can also show dead insects that sting.

e) Tell short stories and sing songs about accidents and First Aid.

SKILLS TO DEVELOP:

Interpretation of pictures
Drawing
Mapping
Observation
Describing

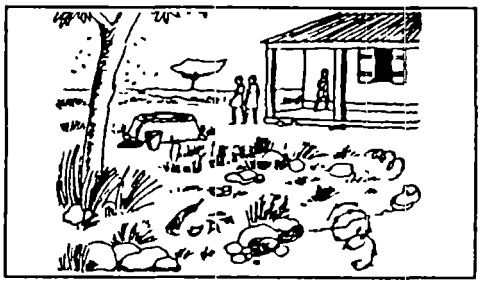
MATERIALS REQUIRED:

Pictures showing accidents e.g. at home, on the road, etc.
Pictures of animals and insects which bite and sting.
Stories and songs about accidents and first aid.

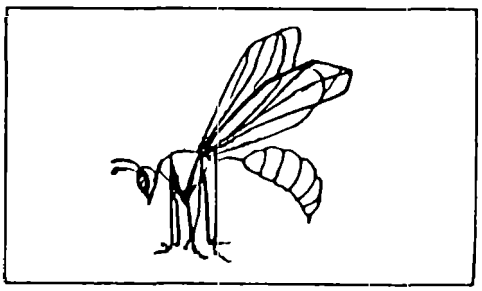
EVALUATION:

Give children a picture quiz on accident sites and animals that bite and sting.

Which place could accidents happen?



Which animal bites or stings?



FOLLOW UP

1. Form School Health Committees. Choose health leaders to organise making the classroom and school safe.
2. Children should report accidents that they have seen.
3. Organise health parades to identify children with bruises, burns and cuts.
4. Children should report where there are biting or stinging creatures.

TEST YOURSELF:

(What have you learned from this chapter?)

1. Define First Aid.
2. List 9 ways of preventing accidents at home.
3. Give 3 rules for safety on the road.
4. List 2 ways of keeping safe at the well/river/lake.

CHAPTER 4

UNIT 9 FOOD AND NUTRITION

P1 TERM 3

Names and Sources of Food

Objectives

By the end of this unit, pupils should be able to:

1. Describe why we need food.
2. Name the foods we eat.
3. Name places from where food is obtained.
4. Name ways of collecting foods.
5. Name ways of how food gets dirty
6. Mention ways of keeping food clean.
7. Name and demonstrate good eating habits.

Behavioural Changes

Pupils should:

- Eat good food at regular times.
- Collect different foods from various places.
- Wash hands before touching food.

Main Ideas

- Different types of food help our bodies in different ways.
- Some foods make our bodies grow bigger. These are body-building foods or grow foods.
- Some foods give us energy to play, walk and do manual work.
- Other foods protect our bodies from getting certain diseases and help the bodies work properly. These are called protective foods.
- Foods are obtained from farms, gardens, markets, shops, rivers etc. Foods may be wild plants or insects.
- Foods get contaminated by dirty hands, flies, dirty containers etc.
- Hands should always be washed before eating or handling food.

Notes for the Teacher

Food is any substance which when taken into the body will nourish the cells and enable the body to grow, do work, carry out other activities, and keep the body healthy.

The substances in foods which help with all body processes are found in different forms and quantities in different foods. As a result, some foods make the body grow bigger, others provide energy and others repair damage and protect us from disease.

Body-Building/Grow Foods:
These are eggs, milk, fish, meat, soya beans, peas, ground nuts, edible insects, yoghurt, liver and kidneys.

Energy-Giving/Go Foods:
These are cooking oil, butter, margarine, jam, sugar, maize, bananas, potatoes, rice, cassava, yams, bread, cakes, sweets.

Protective/Grow Foods:
These are fruits, vegetables, salt, water, butter, margarine and eggs. Children need a lot of body building/ grow foods in order to increase in height and weight, that is to grow up. Children and other people also need energy giving foods. These foods help them to walk, play, keep alert and warm.

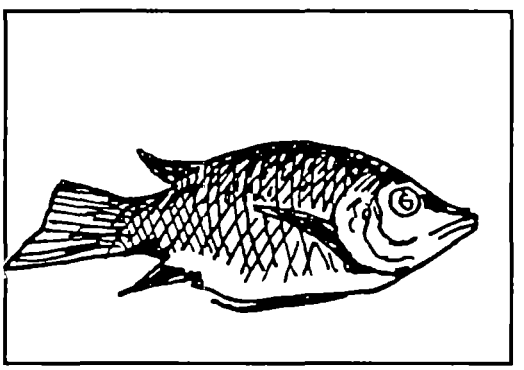
Protective grow foods keep our eyes, skin and hair shining. These foods also protect us from getting diseases like night blindness, rough skin and help to purify our blood. They also enable us to fight against other diseases.

It is recommended to eat at least one food from each group everyday. This makes up a balanced diet.

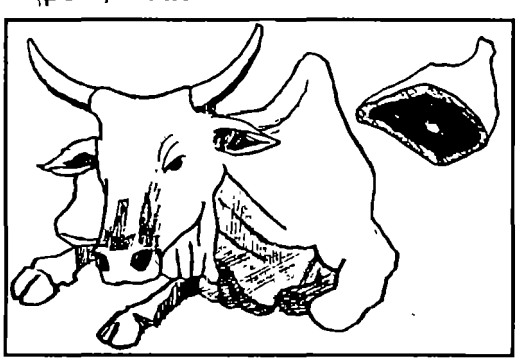
Foods are obtained from

a) farms and gardens e.g. matooke, potatoes, millet ground nuts, maize pawpaws, green vegetables etc.

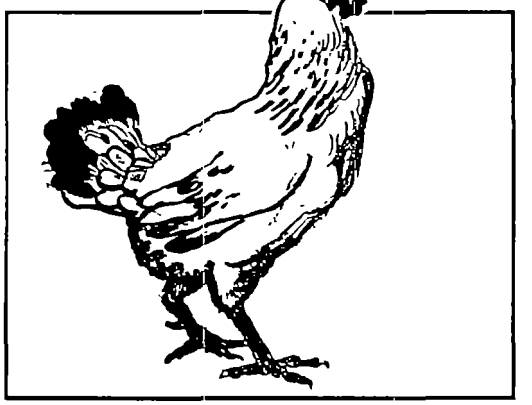
b) lakes and rivers e.g. fish, crab, lobsters etc.



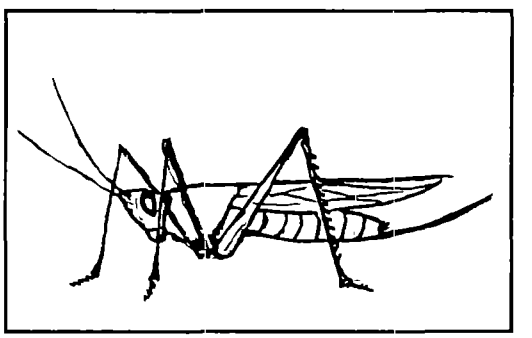
c) animals e.g. meat, milk, liver, kidney, pork, mutton



d) birds e.g. chickens, ducks, pigeons, doves, eggs, turkey



e) Some edible insects:
e.g. grasshoppers, ants,



f) some wild fruits we can eat: e.g. straw berries, "matunguru" N "ocao" "ntuntunu", "Apedur" (Tamrnarin)

People who live by farming eat fresh foods which are very good.
But people who live in towns and cities have to buy their foods from the markets, shops or super markets. Foods bought in shops, markets, and super markets are more expensive and not as fresh as foods obtained from the farm or garden.

There are many ways of collecting foods to eat. e.g. fishing, harvesting, buying from shops or markets, milking, sucking from mother's breasts etc.

Dirty Foods:

Foods are made dirty by dirty hands, flies, dirty containers, dust which settles on uncovered foods or soil which may be on the food. Dirty foods make us sick. When fruits fall on the ground from a tree, they become dirty with dust and soil. Sometimes a fruit like mango may fall on faeces on the ground. Then it becomes dangerous to eat that fruit before washing it thoroughly.

Dirty hands can also spread disease. When we go to the latrine/toilet or touch dirty objects, we often contaminate our hands with germs which may be carrying disease. That is why we should always wash hands before eating, and after visiting the latrine or toilet.

Good Eating Habits

a) Wash hands before eating, and after visiting the latrine/toilet.

b) Chew food properly and eat slowly, not hurriedly. Then much of the food will be useful to the body.

c) Do not talk with your mouth full of food; you may choke.

d) Eat food from each food group - eat a balanced meal.

e) Have regular meals. Eat enough from each group.

f) Wash hands after eating food.

g) Never eat left over smelly food. It may be poisonous.

h) Wash fruits and vegetables before eating them.

i) Do not eat food that has dropped on the floor. It may have picked up germs.

j) Eat well cooked foods. Brush teeth after eating food.

All Effects of Bad Eating Habits:

Bad eating habits can endanger our health:

1. **Constipation** is one of the will effects of bad eating habits.
   - improper chewing delays digestion thus causing constipation.
   - Other common causes of constipation are eating at short intervals and eating too much food.

2. Another danger is eating too little food.

This may come about if one generally swallows food too fast. It is heaped in the gullet and one feels that he has had enough food.

3. Drinking too much liquid when one is eating prevents a person from eating enough solid food. Too much liquid (e.g. water) may also dilute digestive juices and interfere with digestion.

4. Talking or laughing too much may cause food to go into the wind pipe and obstruct the respiratory system, or one may unknowingly swallow a dangerous solid e.g. a bone.

SOME ACTIVITIES FOR PUPILS:

a) Play a blindfold game to identify various types of food by taste, smell, and touch.

b) Visit market near school, and find out where the food comes from.

c) Help in the school farm and home garden.

d) Make a food corner - market with food wrappers and containers.

Group foods into those of

- animal/vegetable
- from Uganda/from outside
- by colour.

e) Demonstrate good eating habits.

f) Make leaky tins and use them to wash hands.

g) Make a chart of good food habits.

h) Make seed beds, poultry keeping,water plants and get class to visit a vegetable garden.

MATERIALS REQUIRED:

Sweet foods
Sour foods
Hard foods
Soft foods
Raw & ripe foods
Cooked foods
Empty food containers
Charts
Manilla papers
Markers and tables

SKILLS TO DEVELOP:

- Following instructions.
- Observation memory.
- Problem solving.
- Classifying.

EVALUATION:

1. Questioning
2. Group project chart on where foods come from.
3. Inter-house or inter-class cleanliness competitions.

FOLLOW UP:

1. Inspect food/meals in boarding schools to see if the diet is mixed.
2. Visit nearby market to see what foods are sold.
3. Keep food shop corner with real samples or containers.
4. Water containers: water pot, sauce pans, jerricans etc.
5. Fuel: firewood, match box, dry grass.
6. Sword grass/lemon grass/red top grass (for making house cleaning brooms).
7. Sticks with three or more branches at the same point (for making simple dust bins).
8. Food stuffs: cassava, sweet potatoes, fruits, bananas etc, for demonstration on how to keep them clean.
9. Food utensils: plates, cups, spoons, etc (for demonstration on how they can be cleaned throughly well with soap and water and sundried on the utensils stand).
10. Check on seed bed and school garden. Record which foods are available during this season in the gardens, at home, in markets.

Test Yourself:
(What have you learnt from this chapter?)

1. Why do we need food?
2. What do you understand by a "**balanced diet**"?
3. Describe the various ways of collecting foods.
4. Why is it necessary to wash our hands before touching food?
5. Describe the ill effects of bad eating habits.

CHAPTER 5

UNIT 18 IMMUNISATION

P1 Term 3

The Importance of Immunisation

Objectives

By the end of this topic, pupils should be able to:

1. List some sickness that happen in their homes.
2. Identify some of the bad effects of these diseases.
3. List ways in which these diseases can be prevented.
4. Describe the importance of immunisation.
5. Recognise the child health card.
6. Identify immunisation scars.

Behavioural Changes

Pupils should:

- encourage their parents to take their younger brothers and sisters, to clinics to be immunised.

Main Ideas

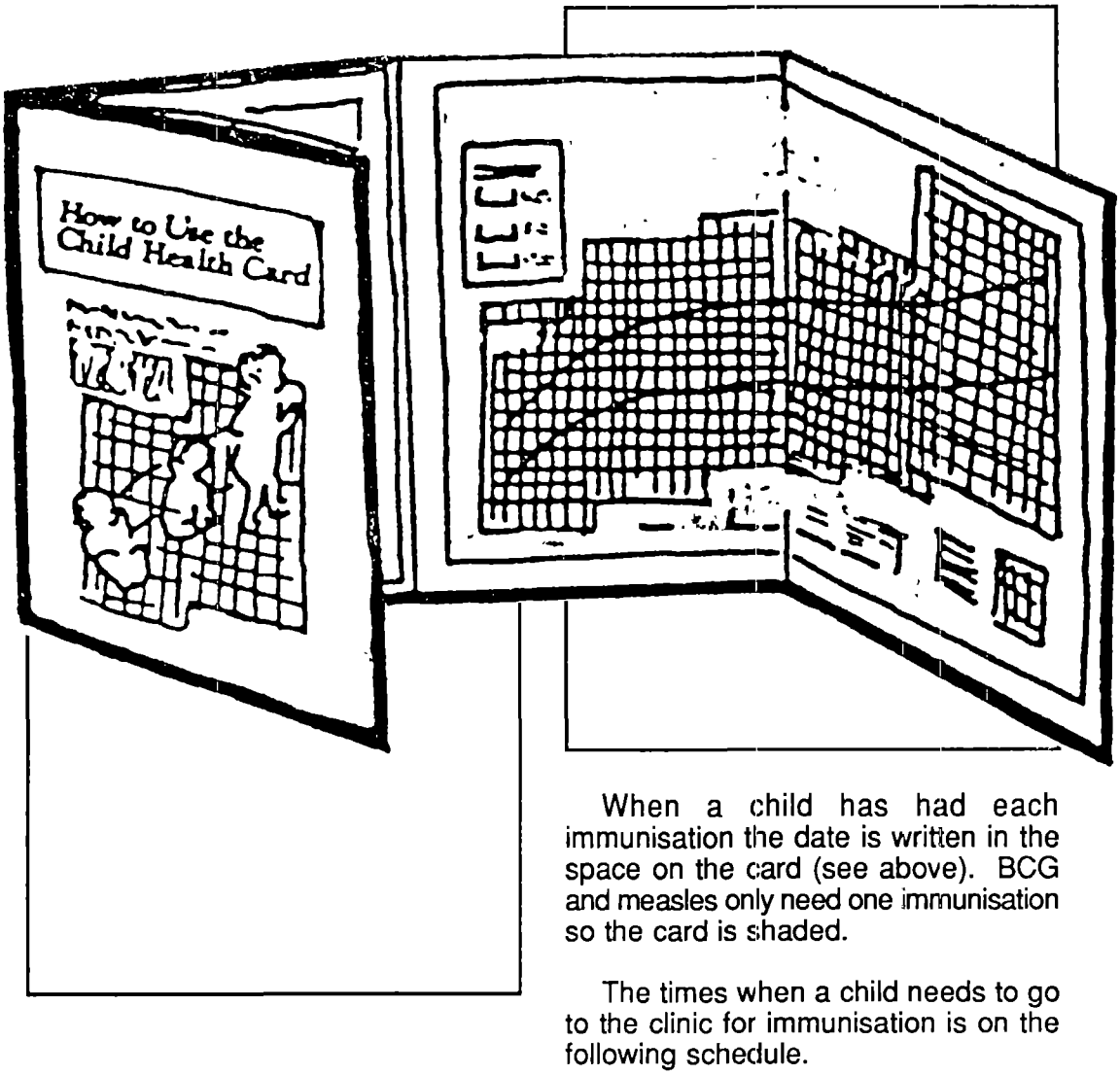
- There are some diseases which kill children. Some of them can be prevented by immunisation.
- The bad effects of these diseases. Children become very sick, some die, others may be lame, and they can infect others.
- Immunisation and the health card. The card shows that children have been immunised.
- Some immunisations leave scars on the arm where they are given. TB leaves a scar. Smallpox used to leave a scar. Other vaccinations do not produce scars. Polio is given as oral drops (by mouth). Others are given by injection.

Notes for the Teacher

Many sicknesses are found in the home. Some are preventable by immunisation.

A person can be protected against a disease by immunisation. **Antibodies** are what protects against diseases. After immunisation, the body of a person produces these antibodies which offer protection for a long time. People who are immunised should not catch the diseases they are immunised against even if they get in contact with those who have the diseases. BCG immunisation scars can be found on the left upper arm.

For details of these diseases, see chapter 8. Other diseases can be prevented by good health habits.



Use of the Child Health Card for Immunisation

The first page of the child health card gives information on immunisation. It looks like this:

The child needs to go to the clinic several times to complete the immunisations. It starts with Polio I/BCG at birth.

When a child has had each immunisation the date is written in the space on the card (see above). BCG and measles only need one immunisation so the card is shaded.

The times when a child needs to go to the clinic for immunisation is on the following schedule.

For more information on the child health card see the booklet: "How to use the child health card" in the Primary School Health Kit on Immunisation.

SOME ACTIVITIES FOR PUPILS:

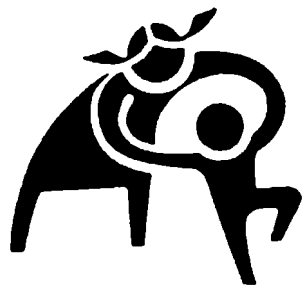
1. Look for scars on the body. Identify an immunisation scar.

2. Take the children to the clinic to see immunisation being given.

3. Show the children a health card. Show them where the names and ages are written, and also where the health worker writes a number of doses the child has got.

4. Ask children to find out from their parents, if they are immunised fully. They should also ask what immunisation they were given. Ask them to see their child health cards and those of their brothers and sisters.

5. Make a child health immunisation birthday card for new babies.



SKILLS TO DEVELOP:

1. Following instructions.
2. Observation.
3. Drawing.

MATERIALS REQUIRED:

1. Health card
2. Walking stick
3. Posters of healthy children
4. School health kit on immunisation

EVALUATION:

1. Testing knowledge.
2. Report back after finding out who is immunised at home.
3. Observe those who fall sick.

FOLLOW-UP

Find out which children have younger brothers and sisters and ask to see their Child Health Cards.

TEST YOURSELF:

(What have you learned from this chapter?)

1. What does the child health card show?
2. Which immunisations leave a scar? Where?
3. Which immunisation is given as oral drops?
4. What does the body produce after immunisation?
5. How old will a child be when all the immunisations are complete?

CHAPTER 6

UNIT 6 OUR HEALTH

P2 TERM 1

Cleaning Things We Use

Objectives

By the end of this topic pupils should be able to:

1. Explain the importance of using clean things.
2. Describe proper ways of:
   (a) Washing plates, cups, etc.
   (b) Washing a shirt or dress (Uniform).
   (c) Cleaning/sweeping a floor.
   (d) Keeping cleaned things clean.

Behavioural Changes

Pupils should:

- keep their homes and things within them clean.
- Always use clean utensils.
- Wash handkerchiefs often.
- Wear Clean uniform to school.

Sub Topics

a) The importance of keeping things we use in our homes clean.

b) Dangers of using dirty things.

c) How to clean things we use in our homes.

Main Ideas

- Dirty things spread diseases.
- Use clean things to avoid diseases.
- Wash hands before handling food to avoid getting sick.
- Put beddings out in the sun often to kill germs.
- Clean floor daily to keep away insects and dirt.

Notes for the Teacher

In P1 pupils learned that dirty things keep germs which cause diseases. Flies land or settle on these dirty things and carry germs away with them to:

1. Our food, causing illness such as diarrhoea.
2. Our eyes, causing eye disease.

We should cover food to keep flies away.
We should wash hands to get rid of germs.
To keep things clean (e.g. beddings, clothes, floors, utensils) you should wash them with soap and water.

- Wearing dirty clothes can cause skin diseases.
- If children wet their beds, wash the bedding and put the beddings out in the sun.
- Children usually grow out of bed - wetting, so do not punish them.
- Encourage children to work together in cleaning activities.
- Cleaned things should be kept:
  a) off the floor
  b) where children cannot reach them.
  c) where dust will not make them dirty again.
  Such a place should be a cupboard or a rack.

SOME ACTIVITIES FOR PUPILS:

1. Tell stories of one who used clean clothes and another who used dirty clothes, and got skin diseases.
2. Show pupils proper ways of washing clothes (uniform).
3. Practise proper ways of cleaning and scrubbing floors using the pupils' classroom.
4. Provide water for washing hands before handling food and after eating.
5. If children wet their beds, wash the beddings and put the beddings out in the sun.
6. Make plate stands/drying rack/racks for food with pupils at the school (work with older pupils).
7. Make a picture quiz.
   Draw cleaning objects e.g. bucket, brush.
   Let children pick out which of them cleans what.

SKILLS TO DEVELOP:

observation,
recording,
drawing,
working together.

MATERIALS REQUIRED:

Materials for cleaning:
Water, basins, soap, scrubbing brushes, brooms

Utensils for demonstration: Cups, plates, forks, spoons, saucepans

Clothing and bedding: Uniform, bedding and handkerchiefs.

EVALUATION:

1. At school inspect pupil's uniform everyday particularly on Mondays to see whether they are properly washed.

2. Older pupils can inspect the young ones (Child-to-Child) and report to the teacher for appropriate correction.

3. Oral tests on the importance of using clean things as well as how to keep utensils, clothes and hands clean.

FOLLOW UP:

Teacher may visit some pupils' homes to see how they are practising what they have learnt.

TEST YOURSELF:

(What have you learned from this chapter?)

1. What causes disease?

2. What should we do to keep flies away from our food?

3. How should we clean
   a) beddings,
   b) clothes,
   c) floors,
   d) utensils?

4. How do we keep cleaned things clean?

CHAPTER 7

UNIT 16 FAMILY HEALTH AND SOCIAL PROBLEMS

P 2 Term 1

Family Relationships and Interactions

Objectives

By the end of this topic pupils should be able to:

1. Mention some factors that promote good relationship among family members.
2. List things that pupils can do to demonstrate love for the family members and society.
3. Explain why we should care for one another.
4. Describe the importance of resting, sleeping, eating, playing working and praying.

Behavioural Changes

Pupils should be able to:

- Respect and obey parents, school authority and members of the community.
- Become responsible to care for sisters, brothers, and other children in the family and society.
- Demonstrate love among their family members and school society.

Sub Topics

a) How to promote good relationship among family members.

b) How to demonstrate love among family members and school society

c) Things we do in order to keep healthy.

Main Ideas

- Every member of the family should behave well to keep family and society happy. Children should be kind, helpful and obedient.
- Parents must show love, guidance and direction to their children and should also provide security for them.
- It is very important for children to have sufficient food, play and sleep for good growth.

Notes for the Teacher

In order for the family to be happy it must follow certain acceptable practices of the family and the society. The acceptable practices may be in regard to the feeding habits, helping others the way we speak and sharing responsibility. In a family it is important that members show love to each other in order for the whole family to be happy. Members of the family need to tolerate each other and show patience with special groups, children, aged and handicapped.

Parents show love to their children by providing to them security, shelter, playing facilities and protection.

Children should play in order to grow well. They need to play at the right time and in safe places. They need one hour of rest during day time and 10 hours at night. They should rest between activities.

Rest helps us regain energy to do more work and good food is essential for better health.

All members of the family should share work at home. Work helps us develop our body, mind and think properly.

Prayers help us communicate with God and ask for what we want, pardon for what we have done wrong and pray for others. Thank God for what we have had.

SOME ACTIVITIES FOR PUPILS:

- Demonstrate the correct method of sleeping, resting, eating, working, playing and praying.

- Demonstrate: How to respect, care, love, protect themselves and others, by using songs, drama, games and stones.

- Pupils can role play the role of family members in provision of love, security and others family's activities and responsibilities.

SKILLS TO DEVELOP:

1. Listen and obey.
2. Care for sisters and brothers e.g. bathing, feeding, protecting and keeping them safe from dangers.
3. Make some playing materials, dolls etc.
4. Say some prayers.

MATERIALS REQUIRED:

Posters :

- Prayer books
- Dolls
- Chalk
- Rosary
- Food
- Beddings
- Balls
- Materials for role play (dresses).

EVALUATION:

1. Question and answers.
2. Observation over pupils behaviours:
   - towards one another during prayers.
   - playing and leisure time.
   - following instructions.

FOLLOW UP:

- Care for brothers and sisters at home.
- Help parents at home.
- Group work in cleaning and sweeping classroom and compound.
- Lead some prayers at school and at home.

Test Yourself:

(What have you learnt from this chapter?)

1. How can good relationship among family members be promoted?
2. Mention what pupils can do to demonstrate love for family members and society.
3. What is the importance of
   a) resting, b) sleeping,
   c) eating, d) playing,
   e) working, f) praying?

CHAPTER 8

UNIT 18 IMMUNIZATION

P2 Term 2

The Six Immunisable Diseases

Objectives

By the end of this topic, pupils should be able to:

1. List the six childhood diseases that can be prevented by immunisation.
2. Explain the importance of immunising children.
3. Describe what can happen to a child who is not immunised or who is not fully immunised.

Behavioural Changes

Pupils should:
Encourage their parents to take their younger brothers or sisters to the clinic for immunisation.

Sub Topics

a) The six immunisable diseases in children.

b) Reasons for having children immunised.

c) Dangers of not immunising children or not completing the recommended doses of immunisation

Main Ideas

- Tuberculosis, whooping cough, diptheria, tetanus, measles and polio are common (diseases) in children, and can cause suffering, disability and sometimes death.
- They can be prevented by immunisation.
- These immunisations are given to young children, starting at birth.
- By the age of one year, children should have received all the immunisations.
- Children who are fully immunised should not catch these diseases.
- Children who are not immunised at all or not fully immunised catch these diseases.

Notes for the Teacher:

Tuberculosis, whooping cough, diptheria, tetanus, measles and poliomyelitis are common diseases in children. These diseases can be prevented by immunisation. However, children who are not immunised at all or not fully immunised may get these diseases.

Children who catch these diseases are often very sick and many of them die. Those who recover from these diseases do so after spending many days or weeks in bed. A number of them remain with permanent damage (handicap) from the disease.

Tuberculosis

Chronic cough

Loss of weight.

Tuberculosis is spread to others through the air. It can also be spread by drinking unboiled milk from a cow that has tuberculosis. The infected person can also infect other people who live in close contact with them. If the disease is not treated that person eventually becomes very sick and dies.
Children, especially those who have never been immunised against tuberculosis, should avoid to get in close contact with people who have tuberculosis. They may catch the disease from them. But children who have been immunised should never get T.B. They should be immunised at birth.

Whooping Cough

Whooping cough is caused by breathing germs from another person who has the disease. It causes cough which occurs

Whooping Cough

Coughing Spells which end in vomiting and gasp for breath
Runny nose

continuously and ends with a whoop. The child with whooping cough also has fever and a running nose.

At the end of each whoop the child may vomit. If the disease is not treated early the child may die from lack of air because of continuous coughing. Those who survive may develop malnutrition as a result of vomiting the food.

Whooping cough immunisation is given as an injection to babies, starting at 6 weeks of age. It is combined with diptheria and tetanus and is repeated three times. There is an interval of 4 weeks in between the injections. After the child has received the three doses, she is protected against whooping cough. (See immunisation schedule in chapter 5).

Diptheria

This is not a common disease but it may occur among people who live in crowded places. Children with diptheria have fever, and a membrane which covers the throat causing difficulty in breathing.

Diptheria

Sore throat
Swollen neck
Child is very ill.

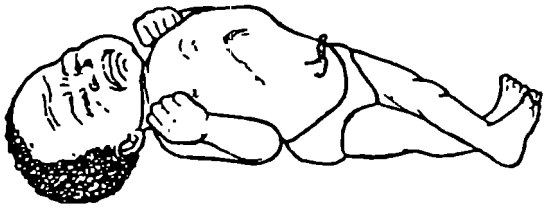
This membrane may suffocate the child to death. Diptheria is prevented by immunisation. The vaccine which is usually combined with that of whooping cough (pertussis) and tetanus, and is known as DPT. Doses are given three in all.

Tetanus

The germs that cause tetanus enter the body through cuts or bruises. They may enter through a thorn prick or a jigger or

Tetanus

New born baby stops sucking Mother's breast
Stiff muscles all over body
Spasms when touched



umbilical cord of new born child. The disease causes all the muscles of the body to contract. Patients who have tetanus cannot open their mouth and they are rigid. People who catch tetanus often die even if they receive treatment.

Immunisation against tetanus is given to babies starting at 6 weeks of age. The immunisation is given as an injection that is usually combined with that of diptheria and whooping cough (pertussis) and known as DPT. Three doses are given to protect against the disease. Tetanus vaccine should be repeated every 5 years to ensure continuous protection. It is also necessary for women between 16 - 49 to have a tetanus immunisation (this is known as tetanus toxoid). This gives protection to their unborn child before they get the disease.

Measles

This is a common infection in children. It can attack many children at once. It is spread from one person to another through the air during coughing, sneezing or talking.

Children with measles are usually very

Measles

High fever (before rash)
Red eyes
sore mouth
rash
runny nose
cough

sick with fever, skin rash, sticky red eyes and coughing. The cough sounds like the barking of a dog. Some children develop dehydration because of diarrhoea and vomiting. Some recover but others die from the disease.

There is no medicine to cure measles. It can be prevented by immunisation. A measles vaccine is given to children at 9 months of age or earlier if there are

other children with measles in their area. Those children with measles should be removed from others who are healthy.

Polio

Polio is a dangerous disease that causes paralysis of the body. The germ that causes this disease is passed in feaces and may spread from one person to another by means of unwashed hands, flies contaminating food. If the child does not die from polio, he remains with permanent paralysis.

There is no treatment for polio.

Paralysis or weakness in one or more limb.

Polio can be prevented by immunisation. This is given as drops in the mouth. Four doses are given. The first dose is given at birth. Other doses are given at one month intervals.

Immunisation

Immunisation is usually carried out at the clinic or in the hospital.

Children are usually weighed and given a card. On each card the name of the child is written. The immunisation given is recorded. (see chapter 5)

If all immunisations are given, it is recorded on the card. A child who has received all the imunisations is protected agaist the six diseases - measles, polio, whooping cough, tetanus, tuberculosis and diptheria.

SOME ACTIVITIES FOR PUPILS

1. Immunisation games such as snakes and ladders. (See School Health Kit on Immunisation).

2. Creating an immunisation corner in the classroom. (Something similar to a place where immunisation is given for children to role play).

3. Looking for scars of immunisation on their arms. They can count pupils with scars and those without. Identify which arm has a scar.

4. Songs of immunisation.

5. A play depicting the six killer diseases. (See School Health Kit for one idea)

6. Visiting an immunisation clinic.

SKILLS TO DEVELOP:

1. Observation
2. Recording
3. Interpreting

MATERIALS REQUIRED:

1. Pictures of children being immunised, of sick and healthy children.

2. The health card.

3. Primary School Health Kit on Immunisation.

4. Teacher's Guide Volume Two.

EVALUATION AND FEEDBACK

1. Testing knowledge of the subject.

2. Ask pupils to find out from their parents which immunisations they have received. They should report back.

3. Ask pupils to report on their younger brothers and sisters about the number of immunisations they have completed.

FOLLOW-UP

Ask questions about immunisation.

TEST YOURSELF:

(What have you learnt from this chapter?)

1. What are the names of the six immunisable diseases.?

2. When should a child have its first immunisation?

3. What is the importance of immunisation to children?

4. How many immunisations are given for:

    a) Polio,
    b) Tetanus,
    c) Diptheria,
    d) Whooping cough?

5. What is the danger of not being immunised or completing the recommended doses of immunisations mentioned above?

CHAPTER 9

UNIT 9 FOOD AND NUTRITION

P.2 Term 2:

Food Hygiene

Objectives:

By the end of this topic, pupils should be able to:

1. Name common foods and their sources.
2. Describe ways of keeping food clean.
3. Describe ways in which food can become contaminated.
4. Demonstrate clean eating habits, particularly washing hands and utensils.
5. List the uses of food

Behavioural Changes:

Pupils should:

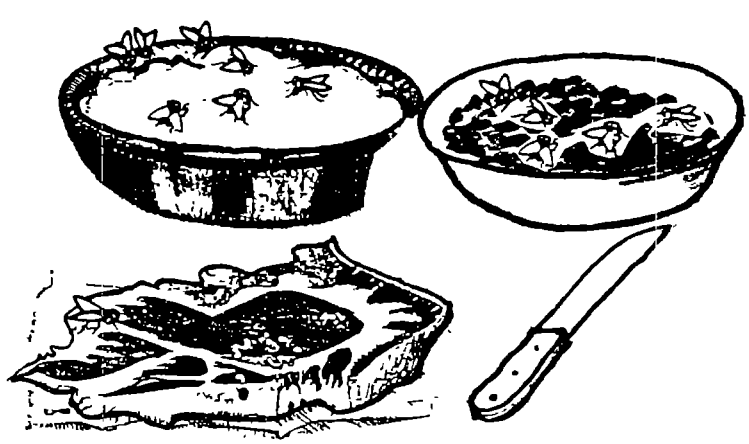
- Avoid eating contaminated food.
- Keep food clean at all times.
- Wash their hands before touching food.
- Keep utensils clean.

Main Ideas:

- Food must be kept clean to avoid making us sick.
- There are several ways of keeping food clean e.g. covering it.
- Hands and utensils must be clean when touching food.

Notes for the Teacher:

Food must be kept clean so that it does not make us sick. Unclean food can give us stomachache and diarrhoea. Flies can carry germs on to food, particularly where they have travelled from feaces. Food can also become dirty from dust, or dirty fingers. If kept for a long while, food goes rotten and bad.



Food can be contaminated in the following ways:

1. Handling it with dirty hands.
2. Leaving it uncovered and flies and dust contaminate it.
3. By keeping the food in dirty containers.
4. By keeping it in dirty places with flies around.

Food can be kept clean by:

1. Preparing it only immediately before eating (the skin of fruits and vegetables are protective covers for these foods).
2. Covering food with a clean net or cloth or keeping it in cupboards to keep off flies and dust.
3. Washing fruit and vegetables before cooking or eating them.
4. Keeping food away from small children with dirty hands.
5. Washing hands before preparing or eating food.
6. Keeping utensils for food clean.

SOME ACTIVITIES FOR PUPILS:

1. Revise P1 work.
   - "Names and sources of food".
   - Make a list of foods from gardens, shops, market, butchery, and farm/ factory.
2. Wash fruits and vegetables.
3. Demonstrate how to use food covers.
4. Clean and label food containers.
5. Get labels of wrappers of foods that are sold in shops and make a list of foods that are made in factories.
6. Make a shop corner with different foods, containers and wrappers.

Make a play of shopkeeper and shopper with given amount of money; and children go to the nearby market to make chart of food prices.

7. Children go to the nearby market.
8. Examine foods for signs of spoilage e.g. stale bread. Set up experiment to show how moulds grow on foods. Pupils record findings.

SKILLS TO DEVELOP:

1. Classifying
2. Observing similarities and differences.
3. Reporting, drawing, labelling.

MATERIALS REQUIRED:

Food covers	Food wrapers
Water	Food containers
Foods	Crayons
Fruits	Felt pens
Vegetables	Paper/Pencils

EVALUATION:

1. Questioning
2. Matching game of foods and their sources.

e.g.	paw-paw	factory
	sugar	garden
	omo	shop

FOLLOW-UP:

1. Observe whether children wash hands properly.
2. Ask children to observe and report the way food is kept at home.
3. Check the school kitchen.

TEST YOURSELF:

(What have you learnt from this chapter?)

1. What common foods can be obtained from the garden or farm?
2. What is the importance of keeping our hands and utensils clean?
3. Why is it necessary to wash fresh fruits before eating them?
4. Mention three uses of food.

CHAPTER 10

Unit 19 Primary Health Care

P2 Term 3

Helping Others to Keep Healthy

Objectives:

By the end of this topic pupils should be able to:

1. List activities they can do to keep healthy.
2. List ways in which they can help their brothers, sisters, parents and other people to keep healthy.
3. Describe what they do at home in their gardens.
4. List activities done together in the neighbourhood.

Behavioural Changes:

Pupils should:

- Adopt good health habits such as washing hands after visiting the toilet, general cleanliness, proper disposal of rubbish and excreta.
- Work willingly with others in cleaning their classrooms, compound and toilets.
- Develop an attitude of working together with their parents and others to improve community health.

Sub Topics:

a) Activities children can do to keep healthy.

b) Ways in which children can help others to keep healthy.

c) Activities children can do in different places.

Main Ideas:

- Working together as a family to promote health is part of primary health care. Health can be promoted by helping our parents, brothers and sisters in activities that are health promoting.
- Dirt causes ill health. Anything done to remove dirt will promote health. Sweeping the floor, washing utensils, and washing clothes promotes health.
- Planting flowers improves health by providing a clean and beautiful environment.
- We need to eat food if we are to remain healthy. Working in the garden helps to grow plenty of good food which we can eat to stay healthy.
- Food should be well prepared before it is eaten. Badly prepared food causes ill health. Only clean water should be used for drinking and cooking. All drinking water should be boiled.
- Working with our neighbours in activities that promote health is part of primary health care. More can be achieved if we worked with our neighbours to improve health.

Notes for the Teacher:

The meaning of Primary Health card and its essential elements are discussed in Volume II page 71 to which you should refer.

There are many activities that can be performed in the home to promote health. Such activities are part of primary health care.

- Sweeping the home keeps away dirt and dust. Dirt and dust cause diseases like coughing. Eating or drinking from dirty utensils can cause diarrhoea and vomiting. All utensils should be washed after use and kept clean.

  Clothes should be kept clean all the time. Clothes should be washed whenever they are dirty. Dirty clothes can habour lice and also cause skin rash and itching of the body.

- Food should be well prepared before it is eaten. Poorly prepared food can cause diarrhoea and vomiting. It may also cause some other serious diseases. All fruits should be washed very well before they are eaten.
  Preparing food well helps to kill or remove germs that cause disease. Well prepared food is nourishing and promotes health.

- A house should be kept clean, dusted well, and all rubbish should be thrown in a rubbish pit and burnt. Germs like to stay in dust. Rubbish can attract flies, insects, rats and other animals which also carry germs that cause serious diseases.

- It is important to wash our bodies regularly if we want to keep healthy.
  A dirty body may have a bad smell, lice and skin diseases like rash. A dirty body tends to itch very much so that it has to be scratched most of the time.

- Gardens where food is planted should be looked after well so that they produce plenty of good food. They need to be weeded regularly. Good food is necessary for promoting health.

- People who live near one another can work together to promote health in their area. They will do better work when working together. They can plan and organise activities to promote health in their area. They can dig rubbish pits, pick and burn rubbish, cut grass, clean wells and springs. They can help to teach the young ones and others in their area health habits. (Child-to-Child)

SOME ACTIVITIES FOR PUPILS

1. Cleaning the classroom.
2. Cleaning the school compound.
3. Burning rubbish.
4. Visit toilets to see if they are clean and covered.
5. Visit the school garden and identify foods that are commonly eaten vegetables, fruits.
6. Learn to make home made brooms.
7. Draw pictures of clean home-stead.
8. Songs and plays on promoting health.
9. Collect water for use at home/school
10. Help their sick brothers and sisters.
11. Making latrine covers.

SKILLS TO DEVELOP:

1. Following instructions.
2. Learning to make brooms.
3. Learning to observe - dirty and clean areas.

MATERIALS REQUIRED:

Pictures of clean home-stead, Clean water, Healthy children, Various Food, Worms, Banana fibre, Brooms and green sticks.

EVALUATION:

Questions on ways of helping others.

Questions on pupils body sanitation.

FOLLOW UP:

Record all the primary health care activities observed by pupils in a term.

TEST YOURSELF:

(What have you learnt from this chapter?)

1. Name at least three activities children can do to keep healthy.
2. How can children help their brothers, sisters and other people to keep healthy.
3. List the activities the children can do:
   (a) at home
   (b) in the garden
   (c) in the neighbourhood.

CHAPTER 11

UNIT 7 COMMON DISEASE

P. 2 TERM 3

Worms,Diarrhoea and Dehydration

Objectives:

By the end of this topic pupils should be able to:

1. Describe how each worm enters and harms the body.
2. Name signs and symptoms of worm infestation.
3. Describe some ways of preventing worm infestation.
4. Describe diarrhoea.
5. Name possible causes of diarrhoea.
6. Demonstrate simple ways of treating it.
7. Describe ways of preventing it.
8. Explain the effects of diarrhoea.

Behavioural Changes:

Pupils should:

1. Always wash their hands before eating and after using the toilet.
2. Have a place at home and school where there is water. With for washing hands.
3. Urinate and defecate in a latrine.
4. Keep home and school latrine/toilet clean.
4. Make water safe for drinking and protect it. Avoid buying rotting food and protect food from flies. They should teach family members how to do this, and the reasons for it.
5. Pupils should purify drinking water and protect it from contamination.
6. Pupils should clean all cooking and eating utensils and never feed a baby from a dirty bottle or on dirty water milk or food.
7. Guard against becoming dehydrated by drinking plenty of fluids when they have diarrhoea.
8. Mix ORS correctly and give ORS and extra fluids to their families teach friends how to mix and give ORS.

Sub Topics:

a) Worms, Cause, Effect, Prevention and Treatment of Tape and Round worms.

b) Causes and effect of diarrhoea

c) Prevention of diarrhoea

d) How to treat diarrhoea

e) How to make oral rehydration solution

Main Ideas:

1. Worm infestation can be prevented through simple health habits.
2. All worms can cause discomfort in the stomach and abdomen.
3. Roundworms are dangerous because they can cause a blockage.
4. Diarrhoea can lead to dehydration and death especially in children under five years of age.
5. Diarrhoea can be caused by bad or rotting food, drinking dirty water, eating with dirty hands, and utensils.
6. Viruses, bacterial and worms are found in dirty water, dirty utensils and contaminated food.
7. Flies or fingers can carry germs from feaces to food and cause diarrhoea.
8. Diarrhoea can be prevented by simple health habits.
9. Diarrhoea can be treated by drinking plenty of fluids and continuing to feed.
10. Babies should be breast fed.

Notes for the Teacher:

1. Roundworms

The Problem: Roundworms are about 20 cm long and live in the intestines and stomach. They cause pain and diarrhoea. If they are many, they may cause blockage in the intestines. This prevents food from being digested, and may contribute to malnutrition, and can cause death.

How they are spread: Roundworms are present in the faeces of an infected person. They reach the mouth through dirty hands, and eating raw vegetables which have not been washed. The eggs are swallowed and they hatch into larvae and go into the bloodstream. They get carried into the lungs and are then coughed up and swallowed. In the stomach and the intestines they grow into adult worms.

How to Recognise and Treat Roundworms:
Worms cause diarrhoea and general ill-health. Children will have swollen abdomens and become malnourished. Take children to the health centre for worm medicine.

How to prevent roundworms:
1. Use latrines for defecating.
2. Protect food from flies.
3. Wash hands after defecating.
4. Wash hands before preparing or eating food.
5. Wash fruits and vegetables.

2. Tapeworms

The Problem:
Tapeworms are long, flat and thin with segmented bodies. The head is small and has sucking discs and often hooklets, by which means it holds on to the intestinal wall. The old segments with mature eggs in them, drop from the lower end of the tapeworm and pass out with stools. They can cause diarrhoea and stomach ache.

How they are spread:
The eggs may chance to be eaten by cattle or pigs, in whose intestines or stomach they hatch into larvae. These larvae find their way into the muscles or other parts of the animals' body. They become dormant until the flesh of the animal is eaten by a human being or other suitable host.

Prevention of Tapeworm disease:
Children should be taught the importance of avoiding eating raw or insufficiently cooked meat. Meat prepared as "mchomo" is very common particularly in Uganda. But the buyers of this meat must be sure that it is sufficiently roasted.

3. Diarrhoea and Dehydration

Why Diarrhoea can be Dangerous:
Diarrhoea is where a person has loose, watery stools, (faeces), passed frequently. When a lot of fluids is lost and if it is not replaced a person can become "dehydrated", ill and becomes weak. Children under five years of age who become severely dehydrated, often die. Diarrhoea prevents food being absorbed so it increases malnutrition.

Malnutrition and dehydration from diarrhoea cause many deaths of children.

Causes of Diarrhoea:

Diarrhoea can have many causes, mainly from different viruses and some bacteria found in:

1. Bad food or rotting food.
2. Dirty drinking water.
3. Dirty hands.
4. Dirty eating and cooking utensils (also bottles used for babies).
5. Worms.

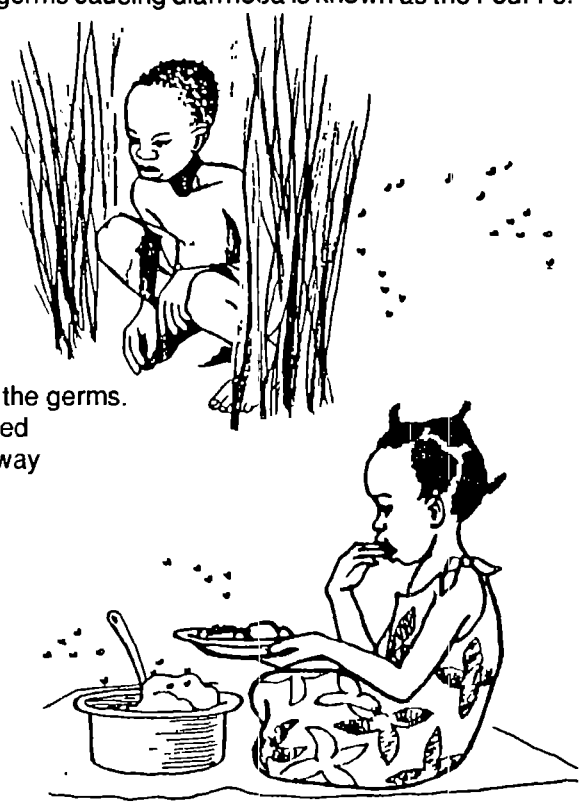
Other causes can be:

6. Eating too much unripe fruits (e.g. green mangoes) or heavy, greasy food.
7. Allegies to certain foods.
8. Side effects of some medicines.
9. Some types of malaria.
10. Poor nutrition, malnourished children often get more infection than well nourished children. They get frequent diarrhoea. They also do not absorb food so easily.

How Germs Causing Diarrhoea are passed on:

Germs causing diarrhoea are passed on through dirty water, hands, utensils.
The most common way of passing on germs causing diarrhoea is known as the Four Fs.

This is how it happens.



FLIES

These eat faeces and carry the germs into our food.

FAECES

These contain the viruses, bacteria and parasites which cause diarrhoea.
If people defecate on the ground, small children or animals can pick up the germs.
If people defecate in or near water used in the home, the germs will find their way into the water and in our bodies.

FINGERS

You may touch places where FLIES or FAECES have been and get the germs which cause diarrhoea

FOOD

Most germs stay alive in food.
The germs may have come from flies or children or animals. They may also get to food from dirty plates and utensils
If we eat this food without washing and cooking it, we will get diarrhoea.

How we can prevent diarrhoea:

Simple health habits will prevent diarrhoea.

1. Defecate in a latrine/toilet. Never defecate in or near water, because children playing nearby can get the germs from the feaces. Water may be collected for home use and will have germs in it.

2. Wash hands with soap after using the latrine/toilet and again before touching, cooking, or eating food. Washing helps to get rid of germs.

3. Wash all utensils, after each time they have been used. Store them in a place where flies and dirt cannot fall on them.

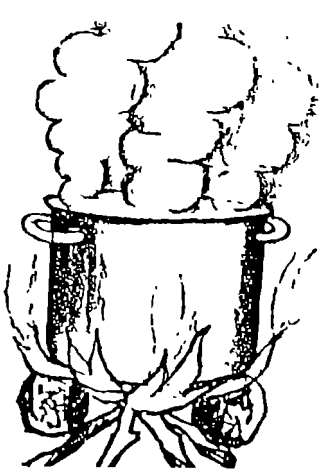
4. It is good to breastfeed a baby. Babies who are fed with bottles may get diarrhoea from a dirty bottle or dirty water which is used for washing the bottle. Dirty water or milk may also pass germs to the baby. Breast milk is clean, cheap, convenient and gives some protection to the baby against germs. Even when a baby has diarrhoea they should continue breastfeeding.

5. If food is rotting or bad, do not buy it. If it is rotting at home, throw it away. Keep food away from flies and animals, keep it under a net, in a cupboard, or refrigerator.

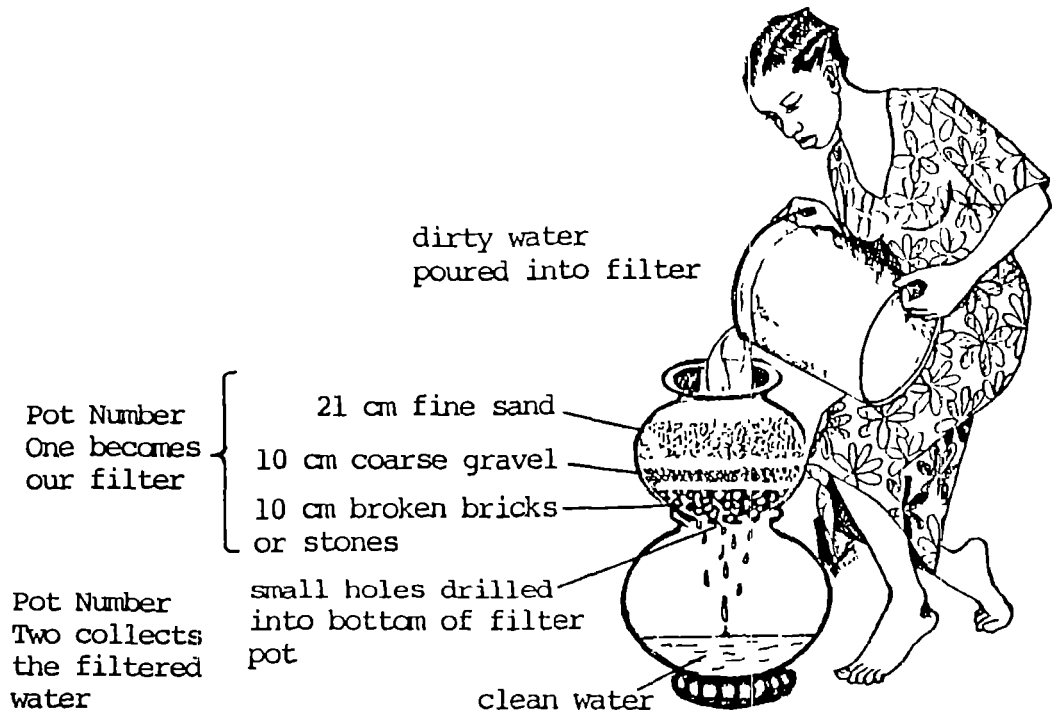
6. Purify drinking water. This can be done in different ways:

   a) By boiling until water bubles. (This time is needed to kill the germs).

   b) Two pot settling way. This is described in the Primary School Health Kit on Water and Sanitation cleaning Dirty Water Instruction Sheet.



c) Using a Water Filter.



Sometimes people prefer to use the Two-pot settling way or the water filter because it does not use fuel. It does take time, but children could do it. Boiling water takes fuel and also could be dangerous if pots for boiling water are spilled, or children are left to play near fires.

7. Protect clean water. Keep protected springs and pumps clean and working properly. Store clean water at home in a pot or container which is clean and covered.

How we can treat diarrhoea:

A person with diarrhoea looses a lot of fluid. This loss of fluid can be very dangerous particularly in young children.

There are four simple rules to follow to help a person with diarrhoea.

In older children and adults give liquids e.g.

- weak sweetened tea.
- soups.
- fruit juices.
- rice water.
- ORS.

Make sure they take a drink after every time they pass diarrhoea.

2. Continue giving the child food.

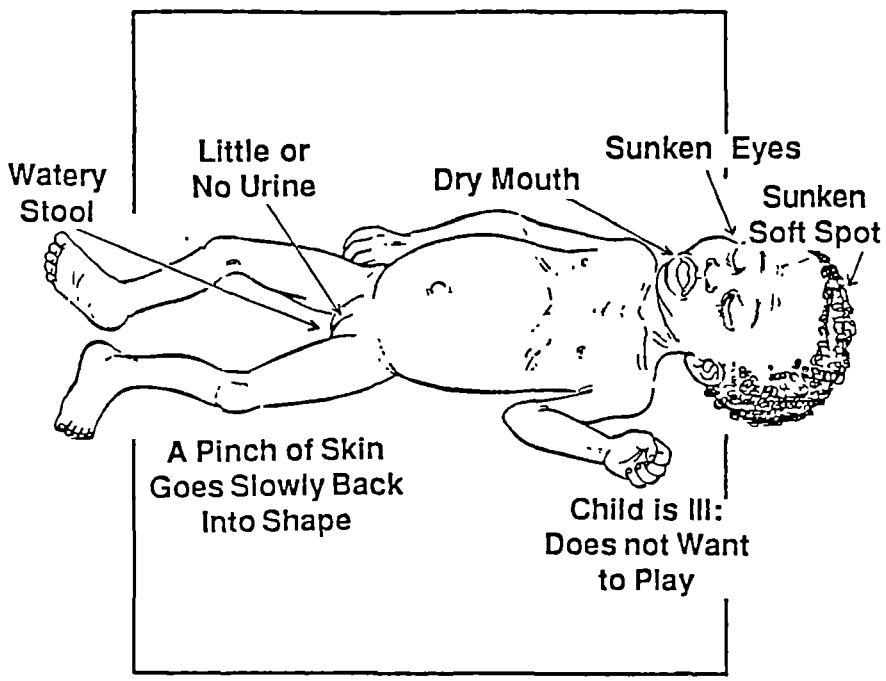
   Feed young children 5 or 7 times a day. Give foods which are easy to digest, such as:

   - porridge or posho
   - soups
   - fish
   - eggs.

   Also give fruits rich in potassium (as we loose a lot of it in diarrhoea). This is in:

   - bananas,
   - oranges and lemons,
   - passionfruits.

3. Watch for signs of dehydration.



If young children show these signs, give them plenty to drink and take them to a health centre immedately. If adults show these signs, increase the fluid for them to drink. If they are unable to drink, take them to the health centre.

4. If the sick person has blood or mucous in their diarrhoea or has fever, take them to the health centre the same day.

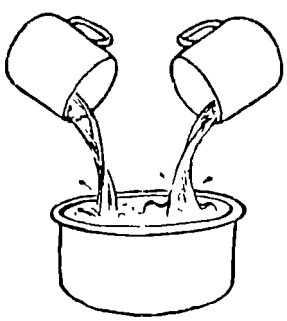
ORAL REHYDRATION SOLUTION (ORS):

The special drink (ORS) is a mixture of certain important salts and sugar in water. It will prevent dehydration. There are two ways to prepare it.

How to Mix Oral Rehydration Salts from Packets

1. Wash Your Hands.

2. Measure One Litre of Drinking Water into a Clean Container.



One Litre of Water is :

the amount of water in <u>two</u> Tumpeco Mugs

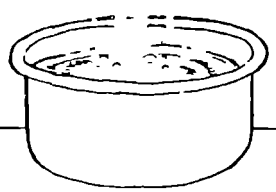
or

the amount of water in <u>two</u> Kimbo tins

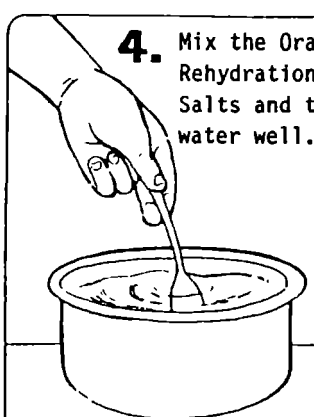
or

the amount of water in <u>two</u> Uganda Breweries beer bottles.

3. Open the packet of Oral Rehydration Salts and empty it into the water.

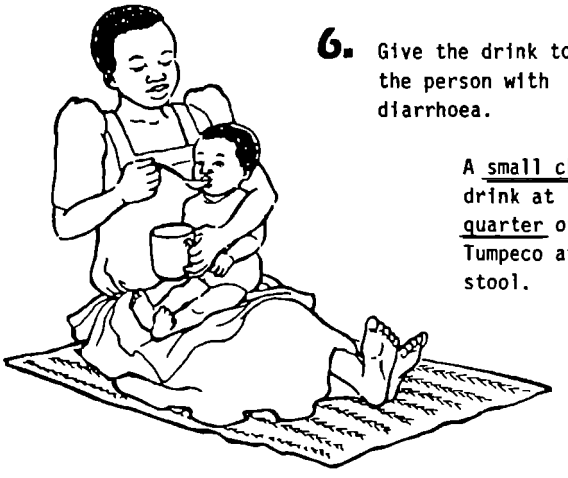


4. Mix the Oral Rehydration Salts and the water well.

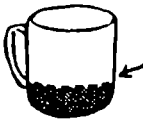


5. Taste the solution. It should never taste very salty.

DO NOT boil up this solution once it is made up.



6. Give the drink to the person with diarrhoea.



A small child should drink at least one quarter of a Tumpeco after each stool.

A large child or adult should drink at least one half of a Tumpeco after each stool.

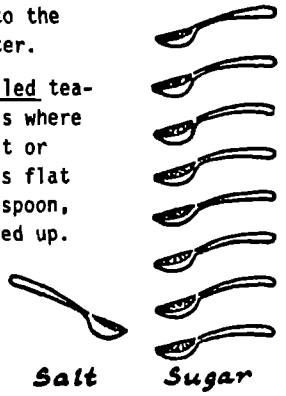
How to Make Oral Rehydration Solution from Salt and Sugar

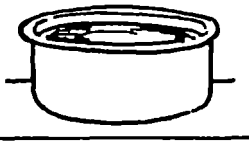
1. Wash Your Hands.

2. Measure One Litre of Drinking Water into a Clean Container.

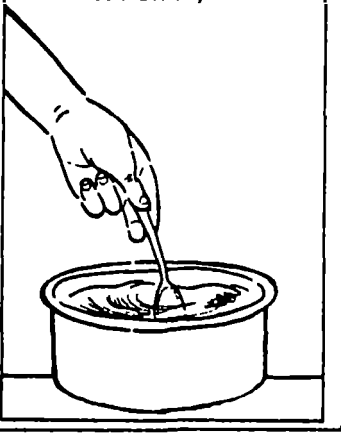
3. Measure ONE Levelled teaspoon of SALT and EIGHT levelled teaspoons of SUGAR into the water.

A levelled teaspoon is where the salt or sugar is flat in the spoon, NOT piled up.





4. Mix the salt and sugar into the water well (until you cannot see the salt or sugar at the bottom of the container).



5. Taste the solution. It should never taste very salty.

DO NOT boil up this solution once it is made up.

6. Give the drink to the person with diarrhoea.
A small child or adult should drink at least one quarter of a Tumpeco after each stool.
A large child or adult should drink at least one half of a Tumpeco after each stool.

MATERIALS REQUIRED:

- Plants.
- Gourds or bottles.
- Water.
- ORS packets.
- Salt and sugar.
- Teaspoon.
- Fruits (quava, orange or passion fruits).
- Tumpeco mug.
- Blue band/kimbo tin or beer bottle.
- The school health kit on control of diarrhoeal diseases and water sanitation.
- The UNEPI/CDD handbook (if available).

SOME ACTIVITIES FOR PUPILS:

1. Have two plants, one with plenty of water, the other without water. Ask pupils to observe and record what happens to each over a period of one week. Compare what happens to the plants with ourselves if we do not have enough water.

2. How we dry up
   How fruits dry up.

Take fruits, such as guavas or passion-fruit. Put them in a hot sunny place. Let pupils observe and record what happens to the fruits. Ask them to compare the skin of the fruit to the skin of a person who is dehydrated.

3. How we loose fluid or
   Water in a baby with diarrhoea

Children can see the effects of loosing much fluid through this activity.

1. Cut the top off a dry gourd or plastic bottle.

2. Fill the gourd or bottle to the top with water.

(Please draw the pictures in teachers guide volume 2 page 17)

3. Make holes for "tears" and "urine" to pass out.

4. Cover the top with a thin wet cloth.

5. Pull the plug out and get children to observe what happens.

4. How we get and prevent diarrhoea:

Use the "Dirty Habits" story. Either use the pictures to tell the class a story or get them to put the pictures in sequence and different children tell part of the story on each picture.

Use the same cards to get children to correct the habits in the pictures.

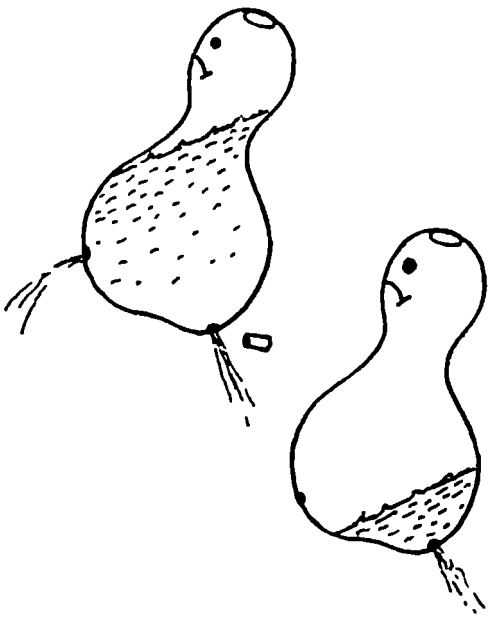
Questions to ask the children:

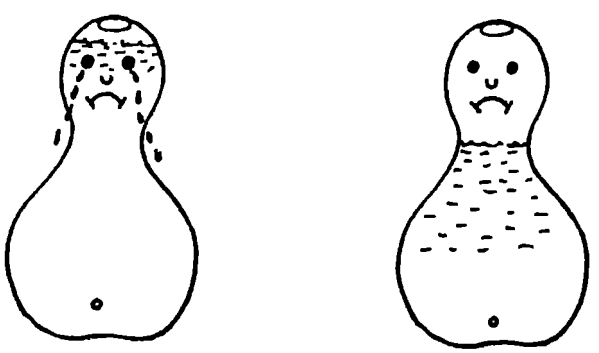
a) What happened to the baby?

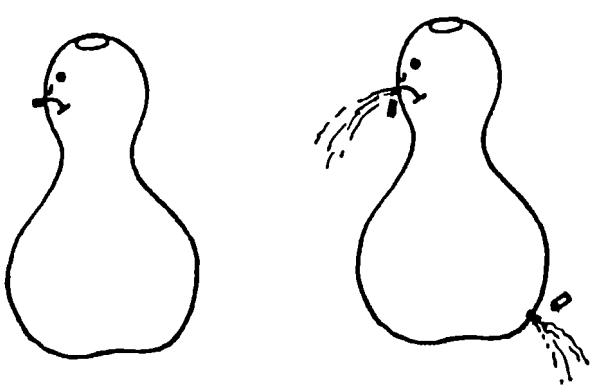
b) What happened to the cloth on top? (It should sink in). This is like the soft spot on the top of a baby's head. It sinks in when the baby is dehydrated. Only babies have their soft spot).

c) What do we need to do to make the soft spot rise again?

d) What happened to the tears?







e) What happened to the urine?

(Both "tears" and "urine" will dry up when a child also vomits. It loses water even faster than when it has diarrhoea alone).

f) What do we need to do to make the bay able to cry with tears and urinate again?

5. Treatment of Diarrhoea

a) Ask children whether they have had diarrhoea in the last two weeks. How was it treated? Make a list of all different ways used locally to treat diarrhoea.

b) Teach them how to mix ORS.

c) Get each child to demonstrate in turn to the class.

d) Ask each child to keep a record in their family of who gets diarrhoea how they helped and how long it lasted.

e) Get children to act out a role play. One is a mother. She brings her baby with diarrhoea to a friend for advice. What advice would the class give?

SKILLS TO DEVELOP:

Pupils should be able to:

1. Write simple works (e.g. names of people in their family).

2. Make a list (e.g. of treatment for diarrhoea).

3. Observe (e.g. the plant and a baby with diarrhoea).

4. Follow instructions (for mixing ORS).

5. Record (e.g. what happens to the plants).

6. Interprete diagrams (e.g. the pictures of dehydrated baby and adult).

EVALUATION:

Ask children to:

1. Name the causes of diarrhoea.
2. List ways of preventing diarrhoea.
3. Describe signs of diarrhoea. (they could draw this)
4. List fluids suitable for a person with diarrhoea.

FOLLOW UP:

- Observe children washing hands after using a latrine and before eating food.

TEST YOURSELF:

(What have you learnt from this chapter?)

1. What is diarrhoea?
2. Explain the dangers of diarrhoea.
3. Describe the 4 F's mentioned in this chapter.
4. How can diarrhoea be prevented?
5. Explain how diarrhoea can be treated?
6. Describe how you can make oral rehydration solution from sugar and salt.

CHAPTER 12

UNIT 15 ACCIDENTS AND FIRST AID

P 2 TERM 3

Safety and Accident Prevention

Objectives:

By the end of this topic, children should be able to :

1. Define "Safety".
2. List the types of accidents that commonly occur at home and at school.
3. Describe how each accident can be prevented.

Behavioural Changes:

Pupils should:

- Avoid playing near fires, water, in a bush and with electric appliances in homes.
- Keep away from medicines which have not been given to them by an adult.
- Bigger children help to keep smaller children away from fire, wells, hanging electric wires, climbing trees, bushes and medicines.
- Report broken bottles and have them removed from compounds at home and school.

Sub Topics:

a) Meaning of "Safety".

b) The types of common accidents.

c) Prevention of common accidents.

Main Ideas:

1. "Safety" means freedom from danger.

2. Common injuries from accidents at home and school are burns, fractures, cuts, near-drowning, bites and stings, poisoning, electrical injuries, and bleeding from nose (epistaxis).

3. Prevention of accidents is very important and should be the responsibility of everyone.

Notes for the Teacher

What is Safety?

Many accidents can be prevented by making everyone aware and avoid those situations which are likely to result in accidents. Safety means freedom from danger. We keep ourselves safe by avoiding accidents. We make ourselves safe by avoiding accidents. We make places safe by keeping them free from dangerous things which would cause harm.

Safety at Home and School:

We can keep home and school safe by preventing accidents. Common accidents and how to prevent them are explained in chapter on causes of accidents.

Find out what children know and revise the material in chapter 3 on causes of accidents.

In this topic, emphasise how children can help others prevent accidents and keep safe, e.g.

- Crossing the road.
- Playing in safe places.
- Avoid putting beads or other objects in nose, mouth and ears.
- Keeping medicines out of children's reach.

SOME ACTIVITIES FOR PUPILS:

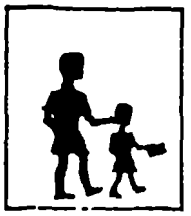
1. Refer to methods/activities in chapter 3 and choose those which help you revise the topic.

2. Let children relate accidents that have happened and discuss how they could have been prevented.

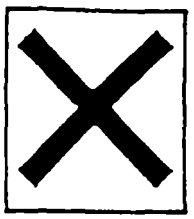
3. Let each child teach a child from P1 how to cross the road safely.

SKILLS TO DEVELOP:

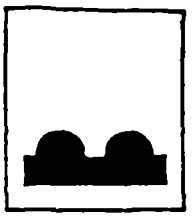
Observation, recording, describing, drawing.



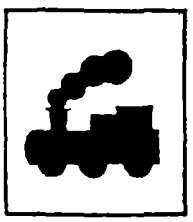
SCHOOL



CROSS ROADS

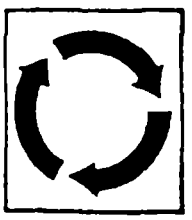


UNEVEN ROAD

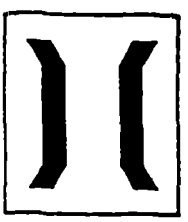


UNGUARDED RAIL CROSSING

DANGER AHEAD

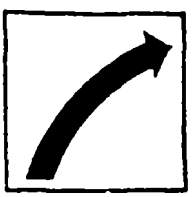


ROUNDABOUT



NARROW BRIDGE

NO SMOKING



ROAD BEND TO RIGHT

ZEBRA CROSSING

MATERIALS REQUIRED:

Pictures of places where accidents happen.

EVALUATION:

Question and answer. Observe them teaching another child how to cross the road.

TEST YOURSELF:

(What have you learnt from this chapter?)

1. What do you understand by the word "Safety"?

2. List the type of accidents that commonly occur:
   a) at home
   b) at school

3. How can these be prevented?

CHAPTER 13

UNIT 17 SANITATION

P. 3 TERM 1

Germs and Prevention of Disease

Objectives:

By the end of this topic pupils should be able to:

1. Explain what sanitation is.
2. Explain what germs are and where they are found.
3. Explain ways by which germs spread.
4. Explain what the four Fs mean and how they spread disease.
5. Explain what rotting is.
6. Identify diseases caused by poor sanitation.
7. Demonstrate ways of controlling the spread of germs.
   - personal hygiene.
   - proper excreta and rubbish disposal.
   - safe drinking water.
   - food hygiene.
   - vector control.

Behavioural Changes:

Children should:

1. Get involved in the home and school cleanliness.
2. Practice good use and care for latrines.
3. Wash their hands every time after using the toilet.
4. Avoid eating cooked foods which have been left open.
5. Know how to keep foods away from flies, dust, rats, poultry and crawling insects.
6. Be willing to clean their bodies regularly.
7. Co-operate in destroying vectors in homes/schools.

Sub Topics

a) Germs, disease and sanitation.
   - What are germs?
   - What is disease?
   - What is sanitation?
   - What is meant by poor sanitation?

b) Spreading of germs and disease.

c) Prevention of the spreading of germs and diseases.

d) How to care for a healthy environment.

Main Ideas

1. Sanitation refers to the public cleanliness in which the community is involved especially proper disposal of rubbish.
2. Germs are tiny (bacteria, fungi viruses) and are found everywhere. Some of the germs cause diseases.
3. Through low standards of sanitation, food, water, air, soil etc can be contaminated by germs and cause disease.
4. Poor sanitation causes the spread of diarrhoeal and parasitic diseases.
5. Disease caused by germs can spread through food, flies, feaces fingers (the 4Fs) bodily contact, insects and animals.
6. To prevent the spread of disease caused by germs, so as to promote a healthy environment, we must practise:
   - Personal hygiene.
   - Food hygiene.
   - Proper excreta and rubbish disposal.
   - Proper housing.
   - General Cleanliness.

SANITATION:

Sanitation is such cleanliness in the community especially of excreta and rubbish as this will favour health and prevent disease.

In order to fight the diseases, we must know about the organisms which cause

them. It is important that we should know where the organisms are found, how they enter the body, what conditions favour their growth both outside and inside the body. Then we can think of ways and means of fighting them successfully.

GERMS:

Germs are tiny organisms some of which cause disease. None of them are large enough to be seen without a good microscope. They include the bacteria, viruses and fungi. The viruses are the smallest of all germs.

Ways in which germs are spread:

1. Air (through coughing, contaminated dust).

How organisms/germs enter our bodies:

1. Air (through coughing, contaminated dust).
2. Water (drinking/using/warding in contaminated water).
3. Bodily contact.
4. Food.
5. Human and animal excreta.
6. Insects (carrying germs to food, water etc.)

ROTTING AND ITS DANGER TO HEALTH:

When a living thing such as a plant or animal dies, it begins to break down and this breaking down is usually accompanied by a smell. In this case we say that such a thing is rotting or decaying. This breakdown is caused by germs which use the dead living things flesh for food. Visit your school rubbish pit. You will notice the smell coming from rotting things. You will also notice flies around the pit. These flies can carry the germs from the rotten matter to our food and drinks. It is, therefore, important to have these pits far away from where we keep our foods and drinks.

ROTTEN ANIMALS:

Rotten animals make the affected environment unpleasant, unhealthy and the air around becomes very bad. In such an environment, disease carrying insects such as flies and animals like rats and dogs will be attracted. So it is better to have all rotting animals removed and buried or burnt. The animals so attracted will even make the place very unpleasant and filthy. We should always aim at making our environment as clean and less attractive to disease carrying organisms as possible. Remember that cleanliness brings about good health.

HOW THE FOUR Fs SPREAD GERMS AND DISEASE:

The four FS simply refers to the feaces, food, fingers and flies in connection to the spread of disease. When the standards of sanitation in any community are poor, feaces, food, flies and fingers can help in spreading diseases. Fingers contaminated with feaces can be used to handle food for ourselves or other people. Flies too can come from open feaces on to our food. If the food so contaminated has been infected with disease organisms, people who eat it will be infected too.

The four Fs emphasize the importance of:

a) Preparing and eating clean food.

b) Keeping the flies away from our food.

c) Washing our hands with clean water and soap every time after using the toilet, before eating or handling food for others.

d) Proper disposal of feaces by using only toilets or properly constructed pit latrines.

e) Avoiding playing in areas contaminated with feaces.

f) Washing thoroughly well such food items as vegetables and fruits like mangoes, oranges, passion fruits etc.

Prevention and spread of germs and germ diseases:

The following are some of the ways by which the spread of germs can be prevented.

Personal and Public Hygiene:

The health of a whole nation depends on the health of the individuals.
It should be the duty of each individual to keep himself or herself clean and healthy by observing simple rules of health.

Some of the things you can do to keep healthy:

- Washing hands after using toilets/latrines and before eating food.
- Keeping the body clean by:
  - washing regularly.
  - brushing teeth.
  - keeping finger nails short.
  - keeping hair clean.
- Proper use of pit latrines and urinals.
- Proper rubbish disposal (having composite pit).

- Protection of water sources and boiling drinking water.
- Food hygiene
  - keeping the food well protected from germ carrying insects.
  - proper food preparation.
  - use of clean food utensils.
  - washing hands before handling food.
- Provision of good housing (well ventilated and with enough light and room and clean compound).
- Control of vectors (like mosquitoes, tsetse flies, snails, etc) by clearing the bushes, stagnant water and avoiding playing in contaminated water.

ACTIVITIES:

1. Health Parades.
2. A village leader addressing the village community on ways of keeping the village clean.
3. Washing activities.
4. Removal of rubbish and animal excreta from the compound.
5. Making latrine covers, plate stand and brooms.
6. Making tooth brushes out of green sticks.
7. Boiling water for drinking.
8. Washing containers for drinking water thoroughly well.
9. Making dust bins.

SKILLS TO BE DEVELOPED:

1. Observations.
2. Following instructions.
3. Construction of covers, dustbins, toothbrushes.

MATERIALS REQUIRED:

1. Cleaning materials: brooms, soap,sponge, water, basins, razor blades,etc.
2. Banana fibre, reeds, sticks, nails, ground spears, pangas (for use when constructing a plate stand).
3. Tooth paste, tooth brushes (commercial and home made).
4. Water containers: water pots, sauce pans, jerricans etc.

5. Fuel: firewood, match box, dry grass.

6. Sword grass/lemon grass/red top grass (for making house cleaning brooms).

7. Sticks with three or more branches at the same point (for making simple dust bins).

8. Food stuffs: cassava, sweet potatoes, fruits, bananas etc, for demonstration on how to keep them clean.

9. Food utensils: plates, cups, spoons etc (for demonstration on how they can be cleaned thoroughly well with soap and water and sundried on a utensil stand).

10. Kit on diarrhoeal diseases control.

EVALUATION:

1. Testing

2. Using the home made brooms to clean the home/school compound.

3. Routine classroom and compound cleaning.

FOLLOW UP:

1. Cleanliness parades.
2. Inter-house or inter-class cleanliness competitions.

TEST YOURSELF:

1. Explain what sanitation is.

2. Explain ways in which germs spread.

3. Identify diseases spread by poor sanitation.

4. Describe 5 ways of controlling the spread of germs.

CHAPTER 14

UNIT 19 PRIMARY HEALTH CARE

P3 TERM 2

Working together for Good Health

Objectives:

By the end of this topic, pupils should be able to:

1. List activities that the individual, the family and the community can do to promote primary health care.
2. List some of the individuals' and families' responsibilities to solving health problems in the community.
3. Name some of the activities the individuals, family and community can do to prevent or reduce these health problems.
4. The family responsibilities in the PHC Programme.
5. Working as a community in preventing or reducing health problems in our community.
6. How to improve our lifestyles for good health.

Behavioural Changes:

Pupils should:

1. Conduct themselves in a way that reduces the chances of catching diseases.

2. They should be willing to work with each other in improving health or in activities that promote health.

Sub-Topics:

a) What is understood by Primary Health Care?

b) The advantages of Primary Health Care programme in promoting good community health.

c) Our (children's) responsibilities towards the improvement of the community health.

Main Ideas:

1. Individuals can promote good health.

2. Family members can help each other to promote good health.

3. People in a community can work together to promote proper health of the community.

Notes for the Teacher:

Pupils can become involved in primary health care either as individuals, or as a family or a community. They can become part of a health care team in any of those capacities. This helps them to be responsible for their health.

Each pupil can be involved in primary health care if she/he knows how to promote good health. Pupils should know simple ways of preventing diseases. Personal hygiene, proper washing of the body, hands and face, cleaning of the eyes, cutting nails, cleaning clothes are some of the many activities that promote personal health.

INDIVIDUAL HEALTHY LIFE STYLE

Pupils should:

- Live in a way that will keep them healthy.
- Eat good food, properly prepared, nutritionally balanced.
- Get adequate rest and exercise.
- Avoid smoking and drinking.

HEALTHY ENVIRONMENT:

Individuals should make sure places they live in are good and will not cause health problems. A healthy environment should have:

- Clean home, and school.
- Clean latrines/toilets.
- Water and food are protected.
- Food should be covered.

A pupil can teach others health education e.g. care for others who are sick.

COMMUNITY:

The community can be involved in primary health care. People who live in the same community know better their health needs (problems). They can suggest better ways of ending (solving) these problems. Community leaders can also be trained as health workers. They understand the local culture better than someone from outside. They can easily organise the people to do proper work as a team, and achieve good results in solving their health problems. People who work well as a team usually achieve better results than people who work on their own.

- Health Centres, protected water sources, latrines for the community, and rubbish pits can all be set up by the community where they need them most.

- Activities like immunisation, control of diseases can be planned by the community.

Community health workers have to work with other health workers in the area. When more complicated care is needed, they should be able to turn for help to highly trained staff.

SOME ACTIVITIES FOR PUPILS:

1. Child-to-Child activities in primary health care.
2. Cleaning the compound, latrine and classroom.
3. Visiting wells and cleaning the area around them.
4. Drawing pictures showing some of the primary health care activities e.g. immunisation etc.
5. Boiling drinking water and keeping it in clean containers.
6. Ask pupils to find out what primary health care activities take place in their villages. They should report back to the class, and discuss.
7. Role play of a village health team.

SKILLS TO DEVELOP:

1. Learning to clean bodies, compound, classroom and latrines.
2. Learning to protect sources of water.
3. Drawing pictures.
4. Observing.
5. Reporting.
6. Working together.

MATERIALS REQUIRED:

Pictures,
various foods.
Brooms.
Saucepans.
Hoes.
Clean water.
Water pots.
Slashers.
Posters on PHC, safe water, cleaning the compound.

EVALUATION:

1. Test knowledge of the subject.
2. Evaluate personal hygiene of pupils during school parade.
3. Observe pupils participation in cleaning the classroom, and school compound.

FOLLOW-UP

1. General cleanliness competition. These could be interclass or the class could be divided in groups and each is given a portion to clean. At the end of each week, marks are awarded after inspection.

2. Ask pupils to identify health problems in their school and to suggest solutions.

TEST YOURSELF:

(What have you learnt from this chapter?)

1. List 6 different ways of promoting good personal health.
2. Give reasons why the training of local leaders as health workers is important.
3. State four things which the individuals can do as a team to promote

CHAPTER 15

UNIT 6 OUR HEALTH

P. 3 TERM 2

Topic: Keeping Clean

Objectives:

By the end of this topic pupils should be able to :

1. Give reasons why we wash hands.
2. Explain when we wash hands.
3. Demonstrate proper ways of washing hands and bathing.
4. Demonstrate proper ways of cleaning teeth and explain why we need to clean them.
5. Give reasons why we clean our bedrooms.
6. Demonstrate proper ways of washing utensils, clothes and uniforms.

Behavioural Changes:

Pupils should:

- Wash hands before and after meals and after using the toilet.
- Wash utensils, clothes, beddings and uniforms and dry them.
- Come to school with clean bodies and uniforms.

Sub-Topics

a) Keeping our bodies clean - why and how?

b) Keeping beddings and utensils clean - why and how?

Main Ideas

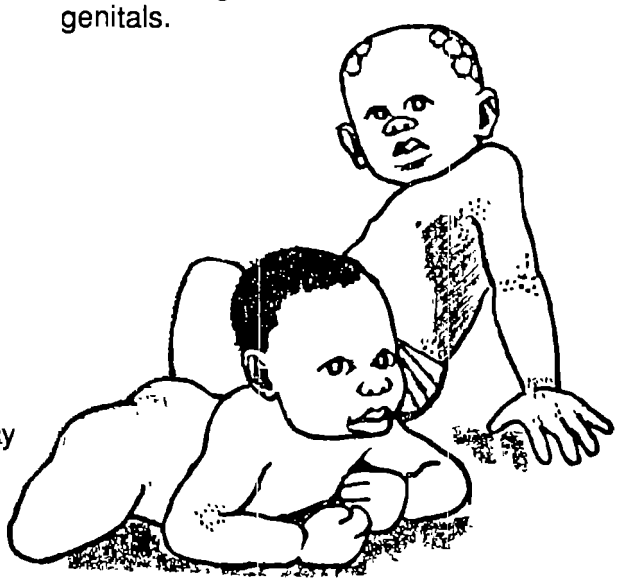
- We wash hands to remove dirt.
- Dirty hands keep germs.
- Germs cause diseases.
- We must wash our bodies everyday to avoid diseases.
- We must wash hands before and after meals.
- Wash hands after using the toilet.
- Dirty clothes smell badly and may spread skin diseases.
- Wash clothes and utensils using soap and water to remove dirt and germs.
- Clothes and beddings should be dried in the sun to kill germs.

Notes for the Teacher:

Germs live on dirty hands, clothes, beddings and utensils. Dirty clothes and beddings smell badly and may spread skin diseases like scabies and ring worms.

Scabies is caused by a mite which produces an itchy rash on the skin.

The rash is most common on wrists between fingers, around waist and on genitals.



Hands, clothes, beddings, and utensils should be washed with soap and water to remove germs. To avoid germs is to avoid disease. Always use clean utensils. Putting our beddings in the sunlight will kill germs.

For care of teeth and washing our bodies see chapter 2.

SOME ACTIVITIES FOR PUPILS:

1. Teacher shows children proper ways of washing hands by using her hands or one of the class pupils. After demonstration, let each child practise washing hands. Provide them with clean water and soap.

2. In another lesson, Teacher shows pupils how to wash their uniform, paying attention to stains, armpits, seams.

3. Using some school or class cups, plates, forks and spoons, teacher demonstrates proper ways of washing and drying these items. Then let children wash their cups, plates, etc.

4. Old pupils should help teach the young ones how to wash utensils.

For brushing teeth and washing the body see activities in chapter 2.

5. Children go to a house with a drying rack and learn how to use it.

SKILLS TO DEVELOP:

1. Observation.
2. Following instructions.
3. Sweeping e,g, bedrooms.
4. Making a bed.
5. Washing the uniform.

MATERIALS REQUIRED:

Water, small sticks, tooth paste, soap, basins, etc.

EVALUATION:

1. Teacher gives oral questions to enable children tell why and when they should wash their bodies, uniforms and utensils.

2. Occasional visits to pupils homes to find out whether children practise what is learnt at school are necessary.

FOLLOW-UP:

1. Twinning of the young children with old ones in order to carry out health parades. (Child to child)

2. Teacher conducts health parades to observe and check on pupils' cleanliness of hands, hair, nails, and other parts of the body and uniform.

TEST YOURSELF:

(What have you learnt from this chapter?)

1. Give reasons why we wash our hands.

2. Give the three most important times when to wash our hands.

3. How can you kill germs on bedding?

4. Name two skin diseases caused by germs.

CHAPTER 16

Unit 7 Common Disease

P 3 Term 3

Malaria, Trachoma and Sleeping Sickness

The three diseases, malaria, trachoma and sleeping sickness have been described separately, each disease with the fly that transmits it.

Malaria

Objectives:

By the end of this topic, the pupils should be able to:

1. Explain the cause of malaria.
2. Name the anopheles mosquito as a vector for malaria.
3. Describe the symptoms/signs and effects of the disease.
4. Describe the life history and characteristics of a mosquito.
5. Describe the control measures for malaria and mosquitoes.

Behavioural Changes:

Pupils should:

- Keep environment (home or school) free of breeding places for mosquitoes.
- Avoid mosquito bites.
- When unwell, report early for treatment.

Sub-Topics:

a) Malaria - what it is, the signs and causes.

b) The mosquito - life history and characteristcs.

c) How mosquitoes spread malaria to us.

d) Ways to control the spread of malaria parasite i.e. ways for controlling the mosquitoes.

e) Ways of treating malaria.

f) Effects of malaria on our health.

Main Ideas:

Malaria is a dangerous disease.

Malaria is caused by a malarial parasite. Spread of malaria parasites from man to man is by anopheles mosquitoes.

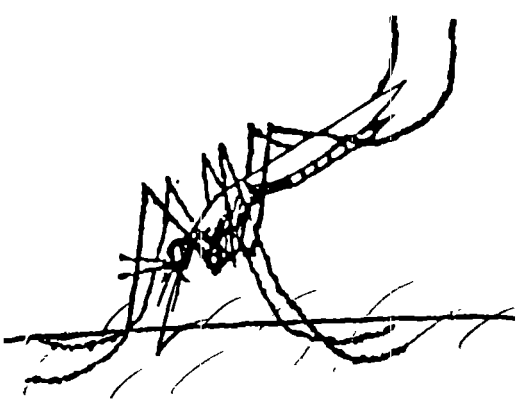
A sick person has severe weakness, headache, pain all over the body especially in the joints.

It can be prevented by mosquito control and personal protection.

A special drug is needed to treat malaria.

Notes for the Teacher:

Malaria is a dangerous disease which is caused by malarial parasite (plasmodia). The malarial parasites live in the blood of a person who has the disease. The process of transferring germs from a patient to a healthy person is called transmission. A special mosquito called anopheles is the vector for malaria and transfers the malarial parasites from a patient to healthy people.
Blood transfusion (receiving blood) can cause malaria, if the donor for this blood had malarial parasites in his body.



As they feed on human blood, mosquitoes inject their saliva containing

malarial parasites into the body (i.e. if they have previously fed on a person with malaria). The injected malaria parasites quickly multiply and become many. At this stage they cause the disease and they can be picked by another mosquito which comes to feed on this patient.

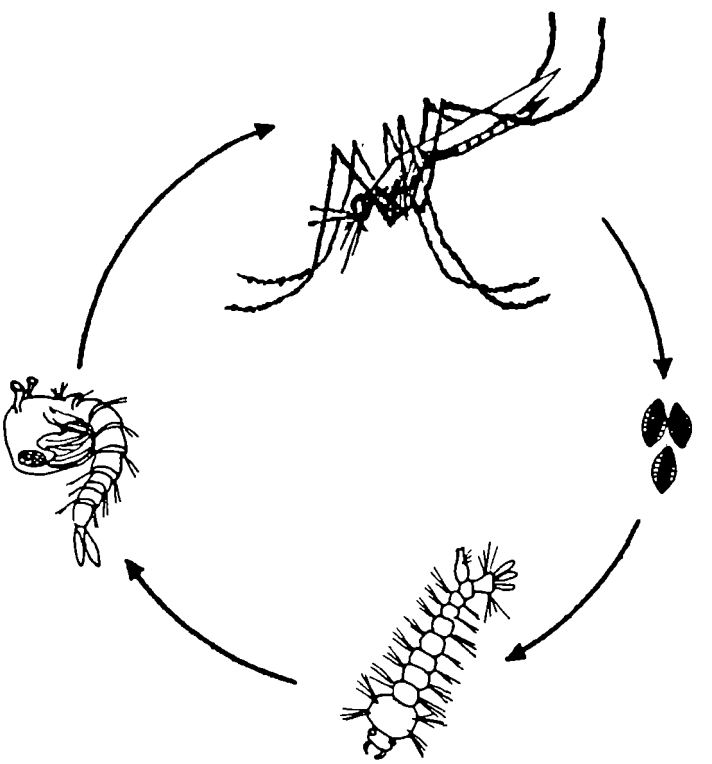
A person with malaria complains of tiredness, headache, and pains all over the body. High fevers and chills come and go. A person with malaria is observed to be/have (i.e. signs) sweating, shaking, high temperature, and dehydration. Early treatment with chloroquine or other drugs cures malaria. Malaria is a serious disease and can cause death, so a patient must be seen by a health worker.

A Mosquito:

The life history of a mosquito requires two things:

- Blood for the eggs in the female mosquito to grow.
- Stagnant or slow moving water for the young mosquitoes (larvae) to develop into adults.

Mosquitoes lay their eggs on stagnant water or slow moving water. The eggs hatch into young mosquitoes (larvae) which look like small worms, and they need water to survive. The larvae develop into pupae and later into adult mosquitoes which have wings. A mosquito may



feed three or four times (if disturbed) on different people before getting enough blood for growth of its eggs.

Control of malaria is possible if:

- All people protect themselves against mosquito bites.
- All those who have the disease are treated early so that they are not bitten by mosquitoes that pick the parasites.
- Mosquitoes in both adult and young stages are killed.
- The environment is kept free of all containers/places where water is likely to collect and stagnate.

SOME ACTIVITIES FOR PUPILS

1. Visit places in the environment where young mosquitoes are likely to be (Tree trunks, empty cans, water tanks, car tyres).
2. Observe movement of wormlike creatures in stagnant water (larvae).
3. Identify other life stages in water if possible, by comparing the creatures seen and what was observed in diagrams.
4. Collect larvae, etc. and demonstrate methods of killing.
   a) Deny air by pouring oil on surface of water with larvae in glass jar.
   b) Empty water on a flat surface and observe what happens.

MATERIALS REQUIRED:

- Health Kits on water/sanitation charts.
- Transparent water containers e.g. glass or jar.
- Live specimens found in school/home environment.

EVALUATION:

- Questions and answers; observations.
- Long term behavioural changes.

FOLLOW-UP:

Record class members who get malaria in the term.
Environmental hygiene home/school, observations of mosquito stages and destroy when seen.

TEST YOURSELF:

(What have you learnt from this chapter?)

1. Describe the places where mosquitoes breed.
2. What causes malaria?
3. State three ways by which mosquitoes can be controlled.
4. Explain how malaria is treated.

Trachoma

Objectives:

By the end of this unit Chapter pupils should be able to:

1. Explain the cause of trachoma.
2. Describe spread of trachoma.
3. Explain the symptoms/signs of the disease.
4. Explain treatment and control of trachoma.
5. Explain the effects of trachoma on people.

Behavioural Changes:

Pupils should:

- Practice good personal hygiene.
- Avoid and prevent flies from settling on eyes.
- Clean environment - destroy breeding places of houseflies.

Sub-Topics:

a) What is trachoma?; signs and symptoms.

b) Causes of trachoma flies and unhygienic environment.

c) Personal hygiene in controlling trachoma.

d) Treatment and control of trachoma.

e) The effects of trachoma.

Main Ideas:

Tracoma is a dangerous disease that can cause blindness. Plenty of water and good personal hygiene can prevent trachoma.

Notes for the Teacher:

Trachoma is a disease of the eye. It is caused by a small germ called chlamydia. The disease can be spread from one person to another by flies, dirty hands and sharing dirty (towels, basins) articles, with a person who has the disease. A person with trachoma complains of pain in the eyes. The eyes become watery, pinkish-red and swollen.

Pus may be seen in the eyes especially after sleep. Trachoma can result into blindness if it is not treated. Treatment of the disease consist of washing the eyes properly and applying the right eye medicines from a healthy worker. Trachoma is a disease which is common

where water is scarce. People are unable to get enough clean water for washing.

Prevention of Trachoma:

The disease can be prevented by practising good care for the eyes, and avoiding to share basins, bath water, bath towels, and beddings with those who have the disease. It is important to keep a clean environment, bury or burn rubbish, use latrines etc.

SOME ACTIVITIES FOR PUPILS:

1. Demonstrate proper face washing and eye care.

2. Blindfold walk in pairs to illustrate what it is like to be "blind" and realise the importance of caring for eyes and maintaining good sight.

SKILLS TO DEVELOP:

Cleaning body
Cleaning environment

MATERIALS REQUIRED:

Basins, soap, clean water.

EVALUATION:

Written questions and answers to be corrected, relating to causes and prevention of the disease.

FOLLOW-UP

- Health parade - observe all the pupils for clean eyes.

- Record members in the class who get problems of the eye during the term.

- Note those children who may have difficulty in seeing.

- Note whether a member in the class gets a disease like trachoma.

TEST YOURSELF:

(What have you learnt in this chapter?)

1. What is the germ that causes trachoma?

2. Name four ways of spreading trachoma.

3. How can you destroy the breeding places of houseflies?

Sleeping Sickness and Tsetse Flies:

Objectives:

By the end of this topic pupils should be able to:

1. Explain the cause of sleeping sickness.
2. Name the tsetse fly as a vector for sleeping sickness.
3. Explain the symptoms/signs and effects of sleeping sickness.
4. Describe the life history of the tsetse fly.
5. Explain the control measures for sleeping sickness and tsetse flies.

Behavioural Changes:

Pupils should:

- Clear bush around homes/schools.
- Avoid tsetse fly bites.
- Report to authorities abundance of tsetse flies in the area and take part in activities of eliminating them.

Sub-Topics:

a) Sleeping sickness as a disease. Symptoms, signs, causes.

b) Tsetse fly: What it looks like; its characteristics; its habitat.

c) The life history of the tsetse fly.

d) How tsetse fly spreads sleeping sickness.

e) Measures to control tsetse flies.

f) Prevention and cure of sleeping sickness.

Main Ideas:

Sleeping sickness is dangerous because it causes ill health and death. It is caused by a parasite called trypanosoma, which is found in blood and other body fluids.
It is spread by tsetse flies. The fly feeds on humans and other animals.
The parasites also cause disease in wild animals, domestic animals and humans.

The disease can be prevented by vector control to reduce tsetse fly bites.

Notes for the Teacher:

Sleeping sickness is a dangerous disease and it can cause death. Sleeping sickness is caused by a parasite called trypanosoma. Spread of the disease is by tsetse flies. The flies feed on wild animals, domestic animals and humans, and introduces the parasites that cause the disease.

The parasites are left in human body by the biting infected tsetse fly. They increase in number by multiplication and spread to involve other parts of the body and the brain. People with the disease have fever, headache, swelling of lymph glands and a skin rash. They loose weight and sleep for long hours. They fail to eat and become dehydrated. Special drugs can be used to treat the disease in the early stages. A person with the disease has to be treated in a special health unit where the drugs for the disease are given.

Control of the disease involves:

- Killing the tsetse flies with insecticides or catching the flies with tsetse fly traps.

- Destroying the places where flies stay by bush clearing near water places and in other locations - extensive agriculture.

- Vehicles should be sprayed after going through areas which have tsetse flies , to kill those flies which they may have picked.

- All people with the disease should be treated early.

- They should be protected from fly bites, by covering arms and legs in bad areas and covering themselves at night.

A TSETSE FLY:

The adult fly has wings and a conspicuously long mouth (proboscis). Tsetse fly bites are very painful. The adults feed on blood and it requires a blood meal every five days. They bite during day time. Both female and male flies carry sleeping sickness. They live for 3-5 months and they need shade and moisture. They are attracted by moving objects like cars, trains, and when they are attached to these, they can be carried long distances away and in that way they spread disease.

The adult female produces one living larva every 12 days. The egg hatches inside the mother and feeds on milk from the mother's glands until it is a fully grown larva. The larva is produced and placed in a shade near soft soil, sand or dead leaves. A white maggot-like creature (larva) moves deep into the ground and turns into pupa, which is dark brown to black. One month later the adult fly forms, forces its way out of the ground, and rests on the surface before it starts looking for food (blood meals).

SOME ACTIVITIES FOR PUPILS:

1. Make simple nets for catching flies.

2. Catch tsetse flies. Look and identify. Other stages can also be identified if flies are many in the area (larva, pupa).

3. Draw a chart of the life history of the tsetse fly and of sleeping sickness transmission.

SKILLS TO DEVELOP:

Identification of insects.

MATERIALS REQUIRED:

- Pencil.
- Manilla paper.
- Strings and nets.
- Poles.
- Picture of Tsetse fly.

EVALUATION:

Written answers for questions relating to effects of sleeping sickness and methods of prevention.

FOLLOW UP:

In schools in the area where the disease is common, pupils should list and report to friends the patients in the village near homes. They can be assisted by parents.

TEST YOURSELF:

(What have you learnt in this chapter?)

1. What is the parasite which causes sleeping sickness?

2. Name two of the ways through which tse tse flies can be prevented from spreading sleeping sickness.

Diarrhoea and Dysentry

Objectives:

By the end of this topic pupils should:

1. Tell the difference between diarrhoea and dysentery.
2. Name possible causes for each and ways of spread.
3. Describe the effects of diarrhoea and dysentery.
4. Name possible treatment for each.
5. Describe control methods for each.
6. Repeat on places where flies frequent in their area.
7. Keep their classrooms, toilets and kitchens clean.

Behavioural Changes:

Pupils should:

- Use soap to wash hands before eating and after latrine visits.
- Protect food from flies.
- Reject and avoid buying rotting food, exposed food, and fruits with a broken skin.
- Purify and protect water for drinking.
- Drink plenty of fluids when they have diarrhoea.
- Mix correctly and give fluids or ORS.
- Use latrines properly.
- Wash plates and cups, wipe tables and sweep the floor immediately after the meal.
- Guide your young sisters and brothers in washing hands and not eating left over food.

Sub-Topics:

a) What is diarrhoea?
What is dysentry?

b) How does dysentry differ from diarrhoea?

c) How diarrhoea is caused and how it spreads.

d) How dysentry is caused and how it spreads.

e) Possible treatment for diarrhoea.

f) Possible treatment for dysentry.

Main Ideas:

- Diarrhoea and dysentery are very dangerous diseases.
- They can cause dehydration which can kill.
- They can be prevented by simple health habits and availability of water to practice health habits.

Notes for the Teacher:

Information on diarrhoea
- see Chapter 11.

Dysentry:

When a person has frequent loose or watery stools, a person has diarrhoea. If mucus and blood can be seen in stools, he/she has dysentery.
The germs that cause the disease are passed out in the patient's faeces. These can be carried by fingers, or flies from feaces to food. These are the ways in which the underlined four F's spread the disease.

Faeces (1st F):
Germs of dysentery and other germs that cause diarrhoea are found in feaces. If it is put outside, children can touch it with their fingers, or it can flow away with rain to the water sources.

Flies (2nd F):
Flies eat faeces and they also want to eat our food if left uncovered. A fly from faeces carries germs and feaces on its body to our food when it comes to eat it.

Fingers (3rd F):
Fingers are always dirty and may carry germs that cause dysentery especially if there is a person who has the disease at home. They should be washed after passing stool and before eating meals.

Food (4th F):
There are a lot of flies in the market. All these can put germs on food bought in the market. Food bought should be washed properly and cooked well to remove and kill the germs.

Dysentery like diarrhoea can be prevented by availability of water and practising proper health habits. A person who has dysentery should be given plenty of fluids to prevent dehydration and he/she should be taken to see a health worker for further treatment and advice. Always cover food to prevent flies from feeding or falling on it.

SOME ACTIVITIES FOR PUPILS:

Refer to Chapter 11 "Diarrhoea and Dehydration" (activities carried out for diarrhoea).

Experiment with washing hands with soap and water. Observe the dirty water.

MATERIALS REQUIRED:

- School Health Kits on Water and

Sanitation, and Diarrhoeal Diseases.

- Basin, water and soap.

EVALUATION :

Question and answers related to differences between diarrhoea and dysentery, and methods of preventing and treating diarrhoea and dysentery.

FOLLOW-UP:

Observe how many pupils miss school due to diarrhoea in a term. Report to class, if members of family have the problem.

Visit children's homes where someone is suffering from diarrhoea and offer help.

TEST YOURSELF:
(What have you learnt in this chapter?)

1. What do you understand by:
   a) diarrhoea?
   b) dysentry?

2. What are the 4 F's and how do they cause diarrhoea?

3. Suggest three ways through which you can prevent diarrhoea and dysentry.

4. Why are diarrhoea and dysentry very dangerous diseases?

House Flies, Mosquitoes and Tsetse Flies

Objectives:

By the end of this topic pupils should:

1. Tell the life history of a housefly. Know the "life history" as a term.
2. Explain the characteristics of a housefly.
3. Know the dangers of a housefly.
4. Locate the breeding place of the house fly, tse tse fly and mosquito.

Behavioural Changes:

Pupils should:

- Keep an environment clean to reduce the breeding sites for houseflies.
- Participate in cleaning the home and school compounds.
- Kill adult and young houseflies.
- Avoid eating and drinking things in which houseflies have fallen.
- Precautionary measures from mosquito and tsetse fly bites.

Sub-Topics:

a) What is a housefly?

b) Where are house flies found?

c) Life history of a house fly.

d) Characteristics of a house fly.

e) Dangers of a house fly.

f) Control measures for house flies, mosquitoes and tsetse flies.

NB. For Mosquito this will be revision.

Main Ideas:

Main Ideas for Mosquitoes and tse tse flies are on previous pages.

- A housefly is found in many places and it is a dangerous insect.
- It spreads germs of many diseases such as trachoma, diarrhoea, dysentery and others.
- Number of flies in an area can be reduced by cleaning the environment.

Notes for the Teacher:

A housefly is found in most parts of the world, and it is a common insect in many homes. It is a very dangerous insect. It likes sitting and feeding on human food, and human excretions (i.e. urine, faeces, sputum and nasal secretions). Its body is covered with hairs and these hairs carry a lot of germs from dirty places. A housefly has a habit of vomiting and passing stool while feeding. Their vomits and faeces contain many types of germs if the fly was previously feeding on a dirty meal (e.g. faeces). The hairy body and the dirty feeding habits enable the fly to spread germs of many diseases to food, eyes and clean wounds if these are uncovered.

All the time, a housefly is looking for food and it is mainly active during day time and it rests at night.

An adult fly has two wings. The female lays her eggs in warm, moist, rotting material (e.g. faeces of many domestic animals, and humans, rotting food etc). In one day 150 eggs can be laid. One housefly can produce up to 3000 eggs during life.

CONTROL OF FLIES:

Deny a housefly suitable breeding places, by collecting all rubbish, feacal material, animal droppings etc and put in the right places. Cover with soil. Adult flies can be killed with insecticides.

Poisoned traps can be laid in the houses for flies (having cards with syrup and insecticide). Larvae can be killed by spraying the surface of exposed rubbish.

SOME ACTIVITIES FOR PUPILS:

- Discuss with children to find out their knowledge of a housefly and its characteristics and dangers.
- Collect specimens and identify the stages of the life history (in diagrams).
- Tell stories involving flies and disease.
- Discuss possible poisons for adult flies (exercise care when handling).

MATERIALS REQUIRED:

Glass jars or polythine bags.
Picture of a house fly.

EVALUATION FEEDBACK:

- Discussion with children to find out their knowledge of a housefly and its characteristics and danger.
- Collect specimens and identify the stages of the life history (in diagrams).
- Tell stories involving flies and disease.

- Each child explains the flies problem at home i.e. the situation whereby the flies are likely to spread diseases.

- Possible poisons for adult flies (exercise care when handling. **Only handled by teacher**).

Questions and answers relating to life history, habits and dangers of a housefly.

FOLLOW-UP:

Pupils should observe the dirty feeding habits of houseflies.
Report places where many flies are seen.
Report of day when seen.

Destroy or remove breeding places of flies.

TEST YOURSELF:
(What have you learned in this chapter?)

1. Where do we find house flies?
2. Where does a house fly lay its eggs?
3. How can we prevent a house fly from breeding?
4. How does a house fly spread germs from place to place?

Bedbugs, Lice, Ticks, Mites, Rats and Mice:

Objectives:

By the end of this topic pupils should be able to:

1. Name a disease spread or caused by each of the insects and animals: bedbugs, lice, ticks, mites, rats and mice.
2. Explain the effects, signs and symptoms of diseases caused.
3. Tell methods of control/prevention and treatment of diseases caused.
4. Explain the ways of controlling of these insects/animals.

Behavioural Changes:

Pupils should:

- Kill these animals and insects.
- Practice good health habits.
- Keep environment clean.
- Avoid being bitten by these insects.

Sub-Topics:

Bed bugs:

a) What they look like and where they stay.

b) How to control them.

c) Diseases caused and spread by bed bugs and lice.

d) Prevention of the disease.

Ticks and Mites:

a) What they look like and where they stay.

b) How to control them.

c) Diseases caused and spread by ticks and mites.

d) Prevention of the diseases caused by the ticks and mites.

Rats and Mice:

a) What rats and mice are.

b) Where they are found.

c) How to control rats and mice.

d) Diseases caused and spread by rats and mice.

e) Prevention of the diseases caused by rats and mice.

Main Ideas:

- Bites of bedbugs, lice, ticks and mites are dangerous to health.
- Poisons and germs can be introduced into our bodies as a result of their bites, and these can cause dangerous diseases.
- Blood sucking insects that bite man and mice or rats are involved in the spread of diseases from rats to man.

- Mice and rats eat and spoil stored food.

- Good house keeping and spraying can control the diseases spread by these insects and animals.

Notes for the Teacher:

Bedbugs:
Bedbugs are reddish brown insects. They have flat bodies and they have no wings. They feed on blood throughout life by sucking man or birds. Bedbug bites result in loss of sleep, headaches and loss of blood. They hide in beds, cracks of walls and in beddings and mattresses. Bedbugs lay many white eggs in the same locations where they hide. These hatch into young ones which also feed on blood.

Good housekeeping can prevent the presence of these insects. All cracks in walls should be blocked. Adults can be killed by spraying with insecticides and hot water can also be used on young ones.

Lice:
Two types are common and these are the head louse which is mainly found on hairs (heads) and the body louse which is found in the beddings. Both of them feed on man by sucking his blood. Their bites cause irritation and allergy. They transmit louse-borne typhus fever which can cause death.

Control of the diseases involves:
1. Killing the lice by shaving hair and spraying.
2. Teaching the people involved about bodily cleanliness.
3. Providing the people involved with soap and water and encouraging them to bath, wash all the clothes and changing into clean ones.

All this good personal hygiene can prevent the disease which is common in areas where people are crowded because of hardships and starvation.

Ticks:
Ticks are common parasites of domestic animals (cows, dogs etc). Ticks can also bite man and cause loss of blood, body paralysis (temporary) and introduce poisons and germs into the body. Infected ticks transmit tick-borne typhus fever characterised by fever and weakness.
In animals they cause tick fever.

Control:

- Avoid bites from ticks.
- Animal dips and spraying their pastures to clear ticks. Dogs can be dusted with insecticides.
- Eliminate ticks from the environment of domestic animals.
- Pasture rotation.

Mites:
One type of mite common in Uganda causes scabies which is a disease that is associated with rashes around finger webs and wrists in adults. In children rashes can be all over the body especially on the arms. There is severe itching and the lesions can get other germs into

them during scratching. This causes wounds and fever. Disease can easily spread from one person to another during shaking hands and if clothes and beddings are shared. People with the disease should be isolated during treatment with special lotions.

Prevention:

- Keep away from those who have scabies and do not share clothing with them.

- Practice personal cleanliness.

Rats and Mice:

They are found in rubbish damps and near our homes. They enter grain stores, eat and spoil our stored food. Fleas, mites, and ticks frequently suck their blood, and pick up germs that cause disease in rats and mice. Fleas, mites and ticks can transmit diseases from rats and mice to man. Typhus fevers can be transmitted to man through their bites, or by contamination of eyes, mouth or broken skin with faeces or crushed parts of infected mites, ticks, or fleas. These fevers all cause headaches and high temperatures and yellow body (jaundice). Plague is transmitted to man by a rat flea. Leptospirosis is a disease a person can get on contact with faeces or urine of rats. This can happen when a person stands, or bathes in water containing these rat wastes. All these diseases can be serious and they may cause death.

Control:

1. All sick people should be taken to hospital for appropriate treatment.
2. Environment should be kept clean so that rats and mice are not attracted in the area.
3. Rats and mice should always be killed to reduce their numbers.
4. Rats should always be excluded from dwellings by trapping.

SOME ACTIVITIES FOR PUPILS:

- Locate breeding places of each insect/ animal.
- Collect and identify the insects. Check hair for head lice, organise hair cutting and washing monthly (liaise with the homes).
- Practice proper hair combing.
- Demonstrate proper bed cleaning to remove bedbugs.
- Carry out health parade to check for scabies. Have older children check young ones for scabies.
- Make rat/mice traps.

MATERIALS REQUIRED:

Mattress, bedding, comb, scissors, basin, water, material for traps.

EVALUATION:

Questions and answers relating to disease caused by insects/animals and methods of control of the diseases.

FOLLOW-UP:

1. Report to class if any of the insects/animals are seen in school or home environment.

2. Check young siblings for the insects (head lice) and report to mother and class.

TEST YOURSELF:
(What have you learnt in this chapter)?

1. Name any disease spread by each of the following:
   Bed bugs, lice, ticks, mites, rats and mice.

2. Give two ways to prevent the spread of diseases by these insects and all animals.

Cockroach:

Objectives:

By the end of this topic pupils should be able to:

1. Describe the life history of a cockroach.
2. Describe the characteristics of a cockroach e.g. habitation, feeding etc.
3. Describe ways of controlling it.
4. List all the insecticides on the market which can kill insects.

Behavioural Changes:

Pupils should:

1. Kill cockroaches whenever seen (adults, all young ones and eggs).
2. Protect food from cockroaches. Keep rubbish containers tightly closed while near houses.
3. Do not eat uncovered left over food.

Main Ideas

1. A cockroach is an insect. It lays eggs that hatch into young ones.
2. Cockroaches transfer germs from dirty places to food.
3. They can be prevented from appearing by good housekeeping and covering all food in the house.

Notes for the Teacher:

A cockroach is an insect with 4 wings. An adult female lays eggs which hatch into many young ones. Like adults they eat anything (paper, shoes, wood, cloth and our food). They leave their hiding places during darkness and they start to look for food. They walk through feaces, dirty places, and food. They can transfer germs from dirty places to food, and this can spread disease germs.
The young ones increase in size by shading their covers. When they reach adult stage, they become adults with wings. They can be controlled by destroying eggs, killing young ones (eggs, young and adults) seen and cleaning the cupboards and food stores. Insecticides are useful to reduce them.

SOME ACTIVITIES FOR PUPILS:

1. Collect live insects and eggs and identify
2. Discuss with the children the appearances and characteristics of the different stages of a cockroach.
3. Compare with diagrams of the life history of a cockroach.

MATERIALS REQUIRED:

Picture of cockroach, Insecticide

EVALUATION:

Questions on life history, characteristics and control methods.

Do weekly cleaning at home to eradicate cockroaches (kitchens, stores etc.)

FOLLOW-UP:

1. Record and report the places where cockroaches were seen at home.
2. Describe how the insects seen behave/characteristics.

TEST YOURSELF:
What have you learnt from this chapter?)

1. Describe how cockroaches spread germs.
2. Describe ways of controlling cockroaches.

CHAPTER 17

UNIT 15 ACCIDENT AND FIRST AID

P3 TERM 3

First Aid for Common Accidents

Objectives:

By the end of this topic pupils should be able to :

1. Explain what First Aid is.
2. Describe causes of and prevention for accidents at home, on the way to school, at school and at the well.
3. Demonstrate First Aid for common accidents.
4. Locate the aid post centres in their local areas.

Behavioural Changes:

Pupils should:

1. Be able to avoid accidents, bites and stings at home, on the way to or from school, at school and at the well.

2. Be able to administer simple First Aid.

Sub-Topics:

a) Accidents: What is meant by an accident?
Common accidents in my home, in my school and in my community.
How to prevent the most common accidents.

b) First Aid: What is meant by first aid?
First Aid for most common accidents, identification, demonstration.

c) Resource person from First Aid experts to demonstrate and talk to the children.

Main Ideas:

1. First Aid is the first help given to a person who is injured before taking him/her to a Health Centre or Hospital.

2. Sprains, cuts, nose bleeding and poisoning are some of the injuries resulting from accidents.

3. Snake bites, drowning are common accidents at the well and in the bush.

4. All acccidents can be prevented.

5. First Aid can help to prevent more injury and save life.

Notes for the Teacher:

Revise Material in Chapter 3 and Chapter 12.

ACCIDENTS AT HOME AND SCHOOL		
Accident	**Injury**	**Prevention**
1. Falling into fireplace or stove	Burns	Keep away from fires.
2. Spilling hot liquids and food	Scalds	Keep children away.
3. Touching electric wires	Shock, breathing stops, heart stops (even death)	Do not touch electric sockets, wires, plugs switches especially when you are wet
4. Touching sharp instruments	Cuts	Clear broken bottles and sharp instruments away.
5. Swallowing poison	Severe sickness, internall injury or even death	Keep medicines, kerosene, rat poisons and agrochemicals away from children.
6. Falling from trees	Broken bones and cuts	Keep away from climbing trees.
7. Bites from dogs, cats, Rabies/septic cut cats, etc.		Beware of roaming dogs
8. Snake bites	Poisons system	Clear long bushes
9. Stings	Painful swelling	Do not play about with stinging insects
ACCIDENTS ON THE ROAD		
10. Motor vehicles	Broken bones, death	Look before crossing the road. Play away from the road.
11. From bicycles	Cuts, broken bones	Ride a bicycle safely. Keep brakes safe
ACCIDENTS AT THE WELL		
12. Falling in	Drowning	Play away from wells and ponds. Take care when drawing water.

FIRST AID:

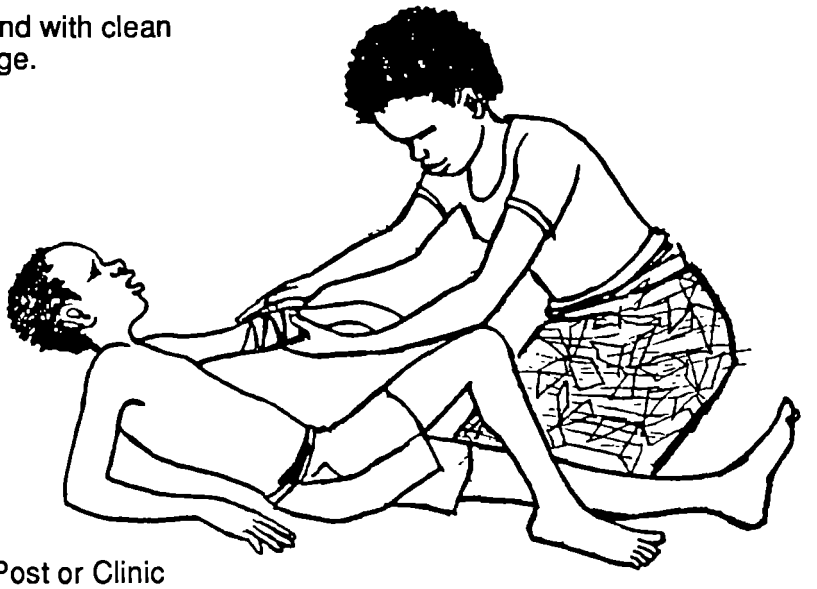
First Aid is the first help given to a person after an accident It can save life, prevent the injury from getting worse and to help bring about recovery. It is necessary to know how to apply First Aid.

HOW TO APPLY FIRST AID FOR CUTS:

1. Wash your hands very well with soap and water (hands have germs which could infect the cut).

2. Wash the wound well with soap and clean water.

3. Cover the wound with clean cloth or bandage.



Go to the Aid Post or Clinic if the wound is deep.

4. **Do not put animal faeces or mud on wound. This can cause very dangerous infection such as tetanus.**

How to Control Bleeding from a wound or a deep cut:

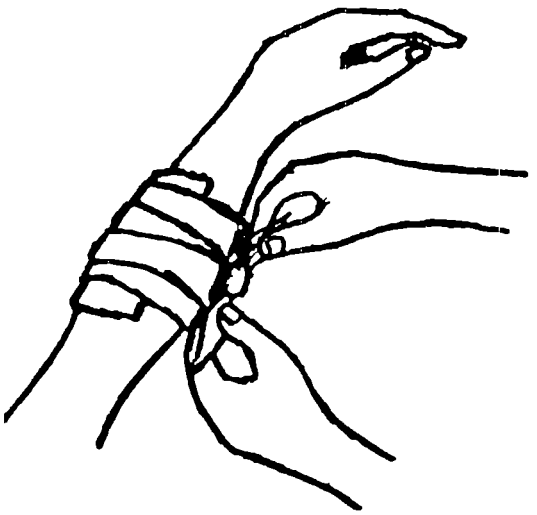
1. Raise the injured part.

2. Press the wound with a clean cloth or your hand if there is no cloth.

Keep pressing until the bleeding stops. This may take 15 minutes or more.

3. Tie the pad with a firm cloth bandage. If bleeding continues put more pads on top.
   Keep Pressing.

4. If bleeding continues
   Put more pads on top.
   Keep Pressing.



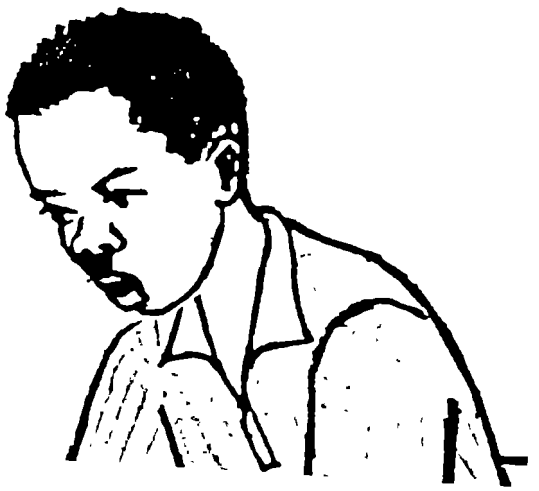
5. Take person to Aid Post quickly.

How to Stop Nose Bleeding:

1. Sit down quietly.
   Do not lie down or put head back.

2. Put head slightly forward.

3. Breathe through the mouth.



4. Pinch the soft part of the nose firmly for 10 minutes.

If bleeding continues take the person to the health centre.

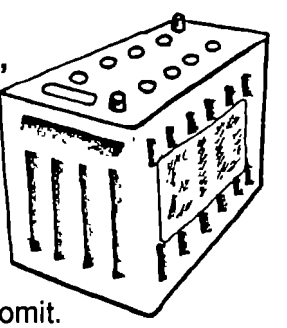
POISONING

People especially children poison themselves by eating or drinking wrong things or by taking too much medicine or tablets.

Medicines. Weed killer
Methylated spirit.

Some plants and berries are poisonous

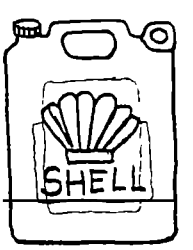
Acids in batteries, Caustic soda



Make the person vomit.

Do this by putting your finger in their throat, or by making them drink water with soap or salt. Take to the health centre immediately.

Kerosene or petrol

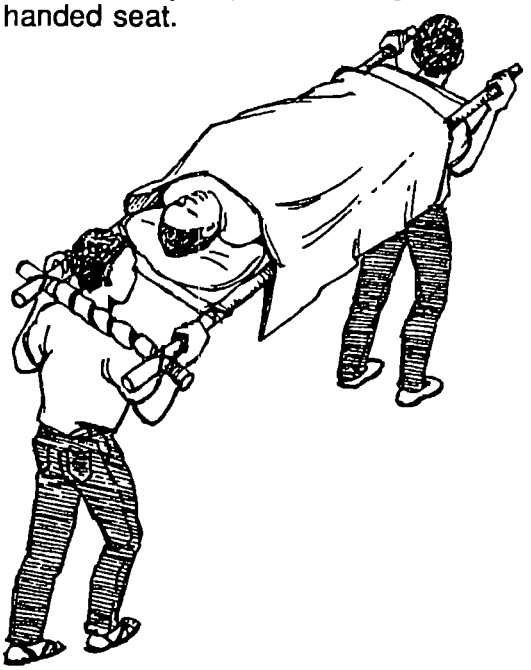


Do not make the person vomit.

Give the person milk or water to drink in order to dilute the poison in the stomack. Take to the health centre immediately.

Four Handed Seat.

How to carry a person using a four-handed seat.



Some Activities for Pupils:

1. Refer back to chapter 3 and 12.

2. Children should discuss and keep a record of accidents that happen at home, school, in the neighbourhood and on the way to or from school.

3. Discuss with class what accidents may happen anywhere at home, at school and in the bush. Divide the class into groups. Have each group brainstorm e.g. common accidents at home - one list and how to prevent them - another list. Then compile a class table of accidents like the one on page 17.3.

4. Demonstrate possible ways of preventing various accidents through songs, role play, etc.

5. Discuss picture stories and formulate possible school rules with the children.

6. Let children have the opportunity to practise and demonstrate effective ways of preventing various accidents and how to administer First Aid properly.

7. Get a collection of dead insects and let the children identify them under these headings.

Name Insects that:

Bite	Sting	Sting and Bite	Do no harm

MATERIALS REQUIRED:

Pencils
Manilla papers.

EVALUATION

1. Get children to continue collecting information about accidents they have seen at home or in the community. Let the children draw pictures to illustrate or record the accidents. Put up the children's work in the information corner.

2. Give a test to children to demonstrate how to cross a road safely.

FOLLOW UP:

1. Help children to report accidents in their home and community, keep a record and observe if they are increasing or reducing.

2. Observe if rules for prevention of common accidents are being followed e.g. in the home.

3. Keep a monthly calendar of accidents in classroom/school etc.

4. Keep a frieze of accidents.

5. Time line on accidents.

TEST YOURSELF:

(What have you learnt from this chapter?).
Complete the table below.

Fill in all boxes.

Accident	Injury	Prevention	Treatment
Falling into fire place.			
Spilling hot liquids and foods.			
Touching electric wires.			
Touching sharp instruments			

Accident	Injury	Prevention	Treatment
Nose bleed			
Swallowing Medicines, weed killer, methylated spirit, Plants and berries.			
Swallowing Kerosene, petrol.			
Vehicle accidents.			
Bites from dogs/cats.			

CHAPTER 18

P 3 TERM 3

UNIT 9 FOODS AND NUTRITION

Food Preservation and Contamination

Objectives:

By the end of this topic pupils should be able to:

1. Define contamination.
2. Describe ways through which food becomes contaminated.
3. Define preservation.
4. Name some foods which can be preserved.
5. Describe ways of preserving food.

Behavioural Changes:

Pupils should:

- Avoid eating contaminated food.
- Store foods properly to avoid contamination.
- Preserve suitable foods for future use.

Sub-Topics:

a) Food Preservation:
What is food?
What is food preservation?
Ways of preserving our food in our locations.

b) Food Contamination:
What is food contamination?
Ways of preventing food contamination.

Main Ideas:

- Contaminated foods can spread disease.
- Rotten food is contaminated food.
- Foods which have gone bad should not be eaten.
- Germs contaminate food through flies, dust, dirty hands and utensils.
- There are various methods of preserving food to keep it safe until it is needed.
- Foods keep longer when properly preserved.

Notes for the Teacher:

CONTAMINATION:

Contamination is the presence in food of germs, which make it go rotten or bad.

Dirty and contaminated food can cause disease.

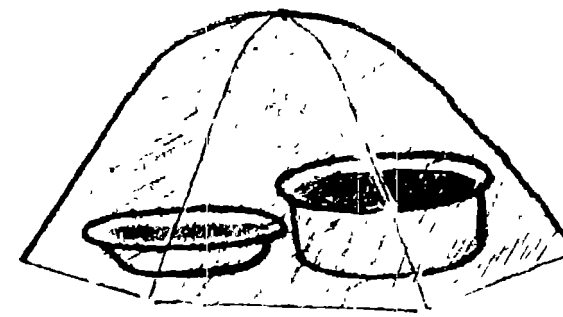
Damp, warm and dark places favour quick multiplication of germs. Pests, such as rats, mice, cockroaches and other insects can also spoil our foods.

Faeces can contaminate our foods and make us sick. Flies and cockroaches carry germs on their feet. First they walk on faeces, then they walk on our food with their dirty feet. Germs from the flies' feet stick to the food where they grow and multiply. When you eat such food, you get sick because that food is contaminated with germs.

PRESERVATION:

Preserving food means keeping it in good condition for future use.

Meat and fish can be dried, salted, smoked, canned or frozen to keep them in good condition.



Name the most common method used in your area.

Fruits and vegetables can be dried or canned. Some fruits are made into jam and marmalade. Preserved foods keep better and longer. Millet, groundnuts, beans, peas and mushrooms can be dried and kept in sacks, grannaries or stores.

Proper cooking kills germs. Cooking is also a method of preserving food. Milk and meat should always be properly boiled and covered.

Why do we Preserve Food

1. Some foodstuffs are plenty only at certain times of the year e.g. fruits, fish, vegetables and cereals. These may be preserved so that they can be used when they are out of season.

2. Some foods have to be transported for long distances to reach all the people who need them. e.g. fruits, fish, meat, milk.

Many methods are used for preserving foodstuffs. e.g.
Heat for drying, cooking, smoking and baking.
Salt or sugar e.g. in jam or salted meat/fish.

Freezing - ice preserves food by stopping bacteria from growing.

Bottling or canning as used in fruits, meat, etc.

Moisture, warmth and darkness help germs grow.

Remove these conditions to keep food longer or to preserve it.

SOME ACTIVITIES FOR PUPILS:

- Keep bread in a damp, dark place for 2 or 3 days, and observe what happens.
- Check for food pests in cupboards, houses, stores and school compound.
- Grow moulds on bread or potatoes as an experiment. Play the game of "feel and match".
- Write up the feel and match game.
- Field trip to observe smoking of fish, or observe any other preserving processes.
- List foods that can be dried, smoked, salted, frozen, cooked, canned, bottled etc.

- Collect these foods if possible (as seeing and doing will help child remember better.
- Children visit shops and make a list of foods there.
- Collect different types of foods found in shops, markets and shambas.
- Experiment on drying in the sun.
- Salt meat and see what happens.
- Get children to find out how their parents preserve foods.

SKILLS TO DEVELOP:

Observation, Recording

Tasting, Classifying

MATERIALS REQUIRED:

- Paper, pencils and exercise books, food samples.

EVALUATION:

Questioning

Observation of children's experiment.

FOLLOW UP:

Check food stores at school and homes to see if foods are well kept.

TEST YOURSELF:

(What have you learnt from this chapter?

1. What do you understand by contamination?
2. Why is it necessary to preserve food?
3. Describe the dangers of contaminated food.
6. Understand what can cause things to rot.

CHAPTER 19

UNIT 15 ACCIDENTS AND FIRST AID

P4 TERM 2

Injuries and Their Care

Objectives:

By the end of the topic, pupils should be able to:

1. Name some road traffic accidents.
2. Describe causes of road traffic accidents and ways of preventing them.
3. Demonstrate the Highway Code.
4. Describe common injuries of the bones.
5. List causes of fractures, strains/sprains.
6. Describe fractures and sprains.
7. Explain and show how to care for injury to bones, joints and muscles.
8. List ways of preventing falls, fractures and sprains.

Behavioural Changes:

Pupils should:

(i) Avoid situations that are likely to cause falls, fractures and sprains.

(ii) Exercise care when climbing, walking, running and playing.

(iii) Give First Aid for falls, sprains and fractures.

(iv) Observe the Highway Code.

Sub Topics:

a) Road traffic accidents, Common accidents, causes and ways of preventing them. the highway code.

b) Common injuries to bones, types of fractures and first aid for fractures.

c) Common injuries to joints and muscles,symptoms of sprains/strains and first aid for sprains/strains.

d) Ways of preventing falls, fractures and sprains. When there is time, take an extra lesson to let pupils practice the first aid.

Main Ideas:

1. Many accidents take place on the road and can be prevented.

2. Overturning, falling, colliding and knocking are some accidents that take place on the road.

3. Road accidents are caused by over-speeding, being drunk, careless walking, riding and driving and failure to follow the Highway Code.

4. Sprains, fractures and dislocations are common injuries to bones and joints.

5. Proper care is important
   - at the time of the accident.
   - during the healing process.

Notes for the Teacher:

Refer especially to Chapter 17 in this Guide and to "Skeltal and Muscular Injuries" p.63 in Teacher's Guide Vol. I. and to Basic Science Book 4.

How do road accidents happen?

Let pupils tell you what accidents have happened recently and how they happened. Refer to list under main ideas (no. 3) and chapter 17.

Symptoms of fractures:

The most common fractures are of arms/ hands and legs/ankles.

A fracture is a break. Broken bones can be either simple or compound fractures.

In simple fractures the bone is broken but remains inside the skin. The broken part (especially on an arm or leg) looks

the wrong shape, may be swollen, or bruised and is very painful.

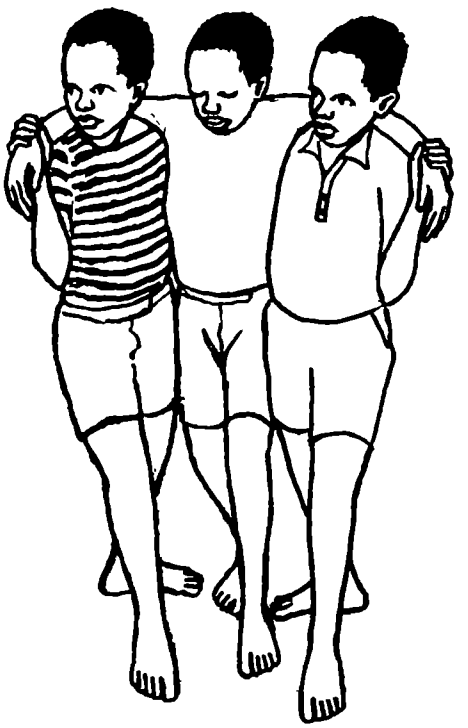
In a compound fracture the bone will have broken through the skin and there may be bleeding also.

Symptoms of sprains/strains:
A sprain is an injury to a joint. Usually the ligaments (soft tissue connecting two bones) are torn or pulled. The joint will become swollen and painful. If there is a bad tear, there may be bruising as well.

Symptoms of muscle injuries.
The most common injuries to muscles are cuts and bruises.

First Aid for broken bones
When a broken bone is a simple fracture, do the following:

1. Keep the injured bone still.
2. If it is broken arm or wrist, put it in a sling to rest it and keep it still.
3. If it is a broken leg or arm you can also make a home-made cast or splint. This is something to keep the injured bone still. You can make this from rolled up newspapers, a clean, smooth stick or something similar.
4. Take the patient to a health unit where they may be able to have an x-ray. The patient may need help to walk.
5. A broken bone may take many weeks to heal. All patients may need understanding, and may need assistance with moving around or carrying things. Also, cheer them up by spending time with them.



A compound fracture:

1. Cover the wound to prevent infection.
2. Stop bleeding if a lot, by applying pressure above the injury.
3. Support the injured part and keep it still, using suggestions for casts or splints above.
4. Get help quickly.

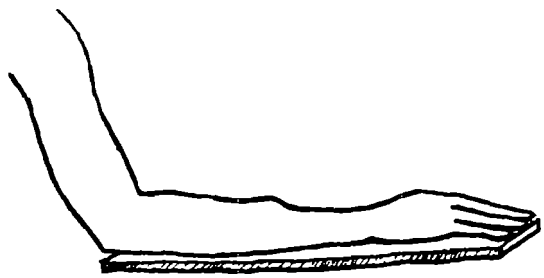
First Aid for Sprains/Strains:

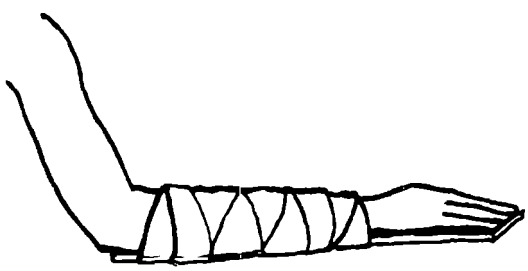
1. Raise the injured part.
2. Put on a cold wet cloth or ice to the injured part to reduce swelling and pain for 24 hours.

3. The joint should be supported and kept still using methods explained above.

5. Severe sprains heal after 3 or 4 weeks.

6 The health worker may prescribe some asprin to take for the pain.





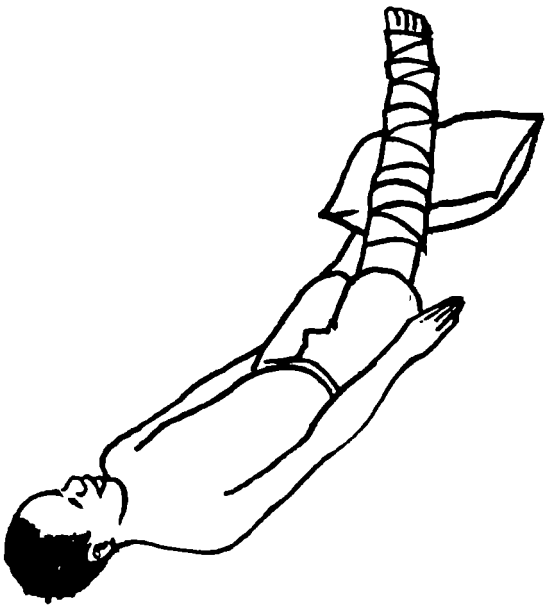
Take the injured person to the clinic.

Care during recovery.

A broken bone may take many weeks to heal. All patients need understanding, and may need assistance with moving around or carrying things. Also cheer them up by spending time with them!

A sprain may swell, and benefit from a cold wet cloth, and raising the injured part on a cushion.

Sometimes it is extremely difficult to know if a hand or foot is only bruised, sprained or broken. X-rays are taken to help. A tear in a joint is called **sprain.** The joint should not be moved about. It should be wrapped with something that gives support. Severe sprains heal after 3 or 4 weeks. Broken bones take longer. You can keep the twisted joint into the correct position for healing by using a home-made cast/or elastic bandage.



In order to relieve pain and swelling, keep the sprained part raised high after care. For the first 24 hours, put ice or cold wet cloth over the swollen joint. This helps to reduce swelling and pain. It is also advisable to take some asprin as prescribed by the Health Worker. After 24 hours you should soak the sprain in very warm water several times.

SOME ACTIVITIES FOR PUPILS:

1. Discuss with pupils why it is dangerous to cross the roads at bends.
2. Take children to the nearest road site that presents these problems and demonstrate how to overcome them. You could also use the school compound for pupils to demonstrate road safety. Use road signs to promote awareness.
3. Let pupils make up picture stories to show accidents e.g. falls, sprains, fractures - their causes and how to give First Aid to each one of them.
4. Compose a song with pupils to describe prevention of these accidents.
5. Let children practise putting on a sling and splint.
6. Let children demonstrate how to transport a person with a sprain/ fracture to a Health Centre.

SKILLS TO DEVELOP

Observation, predicting, drawing, construction, lifting/carrying injured people.

MATERIALS REQUIRED

Splint, cloth, pictures/posters, Highway Code.

EVALUATION:

Pupils may describe causes of the accident discussed and First Aid for each of them. Let them observe drawings, pictures to identify fractures.

FOLLOW UP:

Help pupils form Health Committees and make a record of accidents that happen in the area.

TEST YOURSELF:
(What have you learnt from this chapter?)

1. List 5 causes of road traffic accidents.
2. Describe how to cross a road safety.
3. Describe the steps for first aid for a broken bone.
4. What is a sprain?
5. List the steps for first aid for a sprain or strain.

CHAPTER 20

UNIT 5 SYSTEMS OF THE MAMMAL

P 4 TERM 3

Digestive System

Objectives:

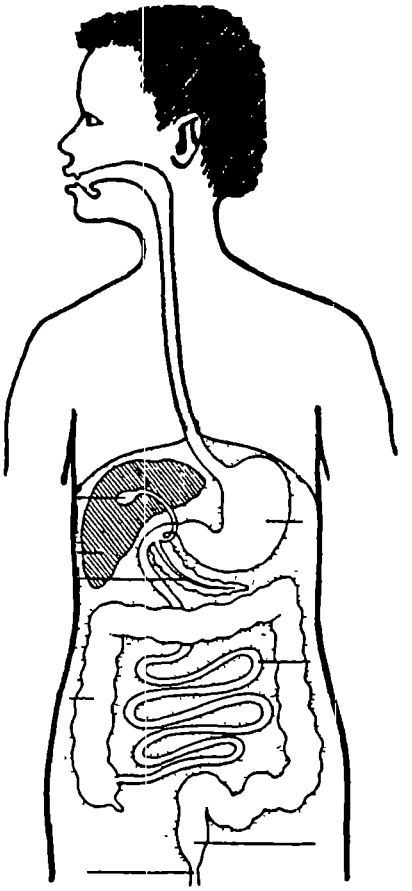
By the end of this topic pupils should be able to:

1. Label parts of the digestive system.
2. Describe the functions of the labelled parts.
3. Describe some good and bad food habits and how they affect our health.
4. Name types of teeth and their functions.
5. Label parts of the teeth.
6. Demonstrate ways of caring for teeth and ways of preventing tooth decay.

Behavioural Changes:

Pupils should:

1. Eat well cooked or ripe fruits.
2. Cut raw food (e.g. fruit & vegetable) into smaller pieces to make it easy for chewing.
3. Chew food properly.
4. Clean their teeth properly and regularly.
5. Avoid biting hard things which can damage their teeth.



Sub Topics:

a) Revision of the Digestive Systems, its parts and functions (done in Unit 5 Term 3).

b) Good and Bad Eating habits.

c) Teeth
- types of teeth
- false teeth
- care of teeth

Main Ideas:

1. Foods are introduced into the digestive system mainly through the mouth.
2. Each part of the digestive system has a specific function in the digestion of food.
3. It is important to care for each part to enable it to function properly.

Notes for the Teacher:

Most of the food we eat cannot be used by our bodies in the form in which we swallow it.

After chewing, food is swallowed to enable the digestive juices to act on it.

The body extracts the nutrients it needs for its repair, growth and energy.

GOOD EATING HABITS:

Activities:

To make sure your food gets digested properly, practise the following good eating habits.

1. Wash hands before eating to avoid germs and disease.
2. Eat small pieces of food to avoid choking.
3. Chew food properly to avoid stomachache and constipation.
4. Eat gently to allow food to be digested.
5. Talk when mouth is empty, not full of food.
6. Brush teeth twice a day, in the morning and at night before bed time.

DANGERS OF BAD EATING HABITS:

1. Too much food/big lumps swallowed can block the wind pipe and choke to death.
2. Eating hurriedly results in unchewed food being swallowed which can cause constipation and stomach aches.
3. Talking with a mouth full of food, you can bite your tounge, swallow unchewed food or too big a piece and choke.
4. Biting very hard things and opening bottles with your teeth can damage your teeth.
5. Too much alcohol can lead to liver disease, loss of appetite and less money for food.

SKILLS TO BE DEVELOPED:

Recording, Drawing, Labelling, Role playing, Writing, Describing, Reporting,

MATERIALS REQUIRED:

Paper, pencils, Teeth, tooth brushes, tooth paste, Empty glass, Bottle, Water.

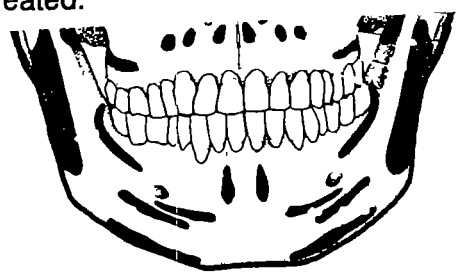
TEETH

Notes for the Teacher:

Teeth are very important to our digestion. We need teeth for biting and chewing our foods. Children below the age of seven years have softer teeth called **"milk teeth"**. They cannot bite/chew hard foods so most of their foods are mashed, minced or ground for them. From 7 years on, the milk teeth begin to fall off and new stronger teeth grow in their places.

These are adult teeth for ever, so we must take good care of them. Sweet foods and bits of foods stuck between teeth make them rot if not removed and washed away.

Rotten teeth are painful, smelly and ugly looking. Once a tooth gets a small hole in it, the hole will get bigger if not treated.



The hole fills up with more sweet foods which corrode the teeth further.

Foods which are most dangerous to teeth are all foods with sugar in them, like sweet drinks, sweets, bubble gum, biscuits even sugar - cane etc.

FALSE TEETH:

"False teeth" are sometimes taken out when a child has diarrhoea.

False teeth are actually not false. They are developing milk teeth in the gum. They should be allowed to grow properly.

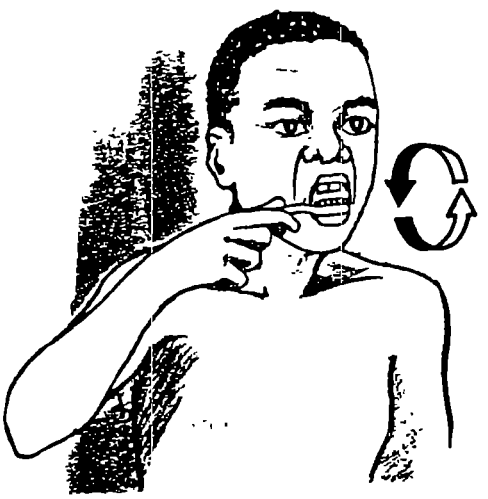
If taken out, they cause infection and children sometimes die.

Taking out "False Teeth" does not cure diarrhoea or anything else. It is a dangerous practice and should never be carried out.

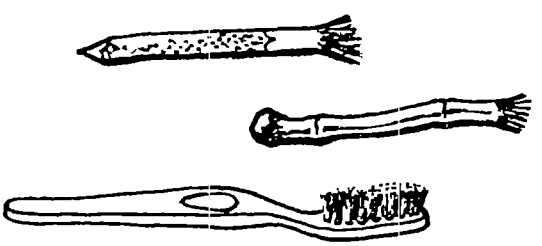
CARE OF TEETH:

Brush teeth twice a day, morning and night.

How to brush.
Brush in a circular method.



Type of brushes.



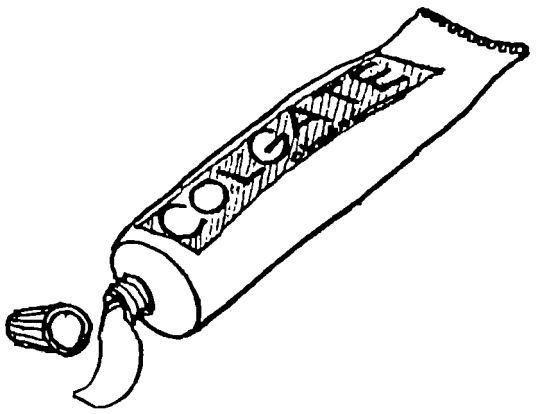
Commercial tooth brush

Things to use for tooth paste

Baking powder and salt.
Put some amount of salt to

some amount of baking powder.

Don't use sand, as it damages tooth enamel.



Some Activities for Pupils:

Ask two children who are loosing their teeth to bring their fallen teeth.
Put one tooth in a bottle of coca-cola or water with sugar in.
Put the other tooth in a bottle of plain water.

Leave them there for about 3 days. Take and examine the two teeth. The tooth in the sweet drink will be going soft, you can scrape off bits of it with a knife. The tooth in water remains still strong and healthy.

Get pupils to record how many teeth they have. How many their older and younger sisters and brothers have. How many teeth their parents still have. Make a class chart of teeth by age.
Draw a diagram of the digestive system from the mouth to the anus showing the different parts.

- Get pupils to trace the diagram and with them label the mouth, teeth, stomach, liver, pancreas, small intestines, large intestines and anus.
- Role play on good eating habits.
- Ask class to collect pictures of foods as advertised in magazines, or foods themselves.
- Discuss the usefulness and origin of these foods.
- Teach children how to clean teeth properly. Let them make their own rhyme.
- Show different types of tooth brushes modern and the local sticks.

Show types of tooth paste. Discuss the advantages and disadvantages of the one they use.

- Examine pupils teeth for cleanliness and decay.
- Draw structure of tooth and label.
- Role play a visit to a dental clinic. If possible organise a visit to a dentist's clinic.

EVALUATION:

Observe if children brush their teeth correctly.

FOLLOW UP:

Observe whether pupils use good eating habits.

Record how many children have poor teeth
Send them to a health worker.

TEST YOURSELF:

(What have you learnt from this chapter?)

1. Describe the functions of the:
   a) Kidney
   b) Liver
   c) Stomach
   d) Pancreas

2. Name the types of teeth and their functions.

3. List a) three **good** eating habits.
   b) three **bad** eating habits.

4. How should a teacher make sure that children prevent tooth decay and keep good teeth?

CHAPTER 21

P. 4 TERM 3
UNIT 9 FOODS AND NUTRITION

Nutrition, Health and Disease

Objectives:

By the end of this topic pupils should be able to:

1. Explain what is meant by nutrition.
2. Explain what is meant by malnutrition.
3. Describe types of foods needed by the body for different functions.
4. Plan a balanced diet.
5. Describe the ill effects of malnutrition.
6. Name the uses of the child-health card.

Behavioural Changes:

Pupils should:

- Try to eat a balanced diet.
- Eat regular meals.
- Record the weight of other children in their families.

Main Ideas:

- Nutrition is a process by which food is taken in and used by the body.
- Different types of foods help our bodies in different ways.
- Some foods make our bodies grow bigger. These are called body-building foods or proteins.
- Some foods give us energy to play, walk and do manual work. These are called energy-giving or carbohydrates.
- Other foods protect our bodies from getting certain diseases and help the body work properly. These are called protective foods or vitamins.
- We can check the growth of children using the child health card.
- Breastmilk is the best food for young babies.
- When the body does not get enough of all the foods needed, or gets the wrong foods, the body becomes malnourished.
- Malnutrition is a state when the body does not receive enough of all essential foods.
- Malnutrition causes disease, often called "deficiency diseases" because, lack of enough of one type of food causes a particular disease.

Notes for the Teacher:

(See Chapter 4 in this Guide and "Feeding and Foods for Vulnerable Groups"page 79, in Teacher's Guide Volume 2 P.5-7)

Nutrition is a process by which food is taken in and used by the body. The body needs three essential types of food; **proteins** (body building) **carbohydrates**, (energy-giving) and **vitamin** protective foods. When the body lacks enough of each of these types of food it becomes malnourished.

Body building foods (Proteins)	**Energy giving foods** (Carbohydrates and fats)	**Protective foods** (Vitamins)
Chicken Meat	Ghee Coconut	Fruits like Pawpaws

Body building foods (Proteins)	**Energy giving foods** (Carbohydrates and fats)	**Protective foods** (Vitamins)
Eggs	Cooking oil	Oranges
Fish	Maize	Mangoes
Peas	Rice	Pineapples
Groundnuts	Millet	Vegetables
Beans	Potatoes	Tomatoes, Carrots etc.

MAKING A BALANCED DIET:

In order to grow strong and remain healthy, it is necessary to choose some food from each group each day.

Some protein (or body building food) and some vitamins. A variety of protective foods should be included to avoid deficiency diseases.

SIGNS OF A HEALTHY PERSON:

A healthy child or person has the following signs. He is mentaly alert and enjoys physical and mental activities. He is **full of energy,** has **good eye-sight, bright eyes**, a **clear skin, hair in good condition** and colour, **strong bones** and **teeth; well formed muscles** and is **not fatty**. Healthy children grow taller every year and increase in weight.
When children are fed badly, (not on a balanced diet), they become very small for their age and do not seem to grow.

The Child Health Card:

When a baby is young the mother may need advice on feeding it and on child care for it.
At the child clinic each baby is given a Child Health Card. On this card, the weight of the baby is recorded each time the mother goes to get advice, and the record is in form of a line drawing. If the line goes up, as the baby gets older, then the baby is growing well. If the line falls, then the baby is not growing well because it is not eating enough or may be the baby is sick. Children should be weighed regularly so that sickness and poor growth are detected early. Then the mother can receive advice to improve the condition of her child.

Forms of Malnutrition:

NUTRITIONAL

DEFICIENCY DISEASES

Malnutrition causes particular diseases. Lack of particular food types causes nutritional deficiency diseases and have harmful effects on the body.

The main types of nutritional deficiency diseases are a result of:

1. Deficiency of vitamins e.g. a deficiency of vitamins A can cause cataracts on the eye.

2. Deficiency of mineral salts such as Iron can lead to anaemia, Calcium can lead to weakness of bones and

teeth and Iodine which leads to goitre in the throat.

3. Deficiency of proteins and carbohydrates - in various quantities. leads to marasmus and kwashiorkor.

MARASMUS AND KWASHIORKOR:
Marasmus and Kwashiorkor are very common among children in developing countries. These diseases are mainly a result of deficiency of proteins and carbohydrates in various quantities.

MARASMUS:

Marasmus is a disease of children caused by starvation. The child is fed on a diet without growth and energy foods. This is common in children who have no breast milk (death of mother or abandoned).

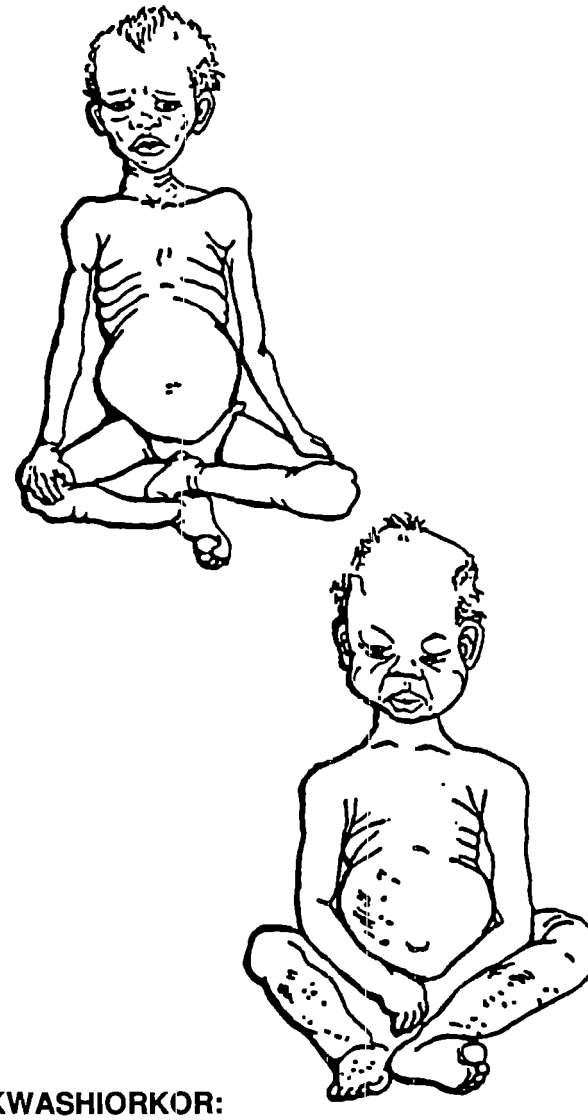
Marasmus occurs mostly in children because **too little food** is offered to them or they cannot absorb the food they eat. Other causes of marasmus are infective diarrhoea in children or a long illness such as tuberculosis.

Marasmic children look thin, withered and very small for their age having a face of an older person.

Marasmus can be prevented by teaching parents to **breast feed** their children and make the best use of the foods available to them. They should grow protein foods and visit the young child clinics for advice.

SIGNS OF MARASMUS

- Child has the face of an old man.
- The child is always hungry.
- The child is underweight and very thin.
- Often the child has a pot belly.



KWASHIORKOR:

Kwashiorkor is a disease of children caused by **absence of proteins** in the child's diet. It can be caused by infections or absence of mother.

Kwashiorkor usually occurs when the **child is suddenly taken off breast milk.** The child becomes unhappy and loses appetite.

SIGNS OF KWASHIORKOR:

- Failure of growth, the weight and height of the child are too low for the age. (Refer to child health card).
- Many parts of the body are swollen because of excessive fluid accumulation in tissues.
- The hair changes its colour, becoming brown to almost white. It loses its curl and is thin and sparse.
- The skin turns paler than normal.
- Misery: the child shows no interest in anything and looks unhappy, and has no energy even to cry.
- Usually he has diarrhoea.

Kwashiorkor can be prevented by feeding children on enough protein especially milk and weaning them on a balanced diet - more protein than carbohydrates is given. i.e. more fish, eggs, soya, beans, ground nuts etc.

SOME ACTIVITIES FOR CHILDREN

1. Bring foods that should be eaten by older children and adults.
   Plan a simple balanced meal with pupils, work out the cost of the meal.
2. Make a list of foods which can be given to babies, children under five and mothers, which are strong in nutrients for growth and health.
3. Get a scale and have children weigh themselves with clothes off with only pants. Show pupils how to plot their weight on graph paper. Display weight chart of well fed healthy baby.

Show samples of child health cards.

4. Ask pupils to try to see if they can recognize a child with Kwashiorkor or marasmus.
5. Invite a Health Worker to give a talk and show pictures.
6. Discuss local (of the place where the school is situated) community's ideas about marasmus and kwashiorkor.

Discuss how to prevent them.

SKILLS TO DEVELOP:

1. Classifying.
2. Drawing.
3. Interpreting pictures which depict action and events.
4. Understanding relationship of sequence.(understanding relationships using vocabularly which express these relationships).
5. Making graphs.
6. Pasting, sticking, examining.
7. Observation.
8. Questioning.

9. Recording.
10. Discussion.
11. Interpretation role play.

MATERIALS REQUIRED:

Pictures, photographs, diagrams of:

Milk, Eggs, Sugar, Fork, Cup or bowl, Weighing scale, Crayons, Colouring, Pencils

Food samples, Manilla paper
Graph papers, Books, Glue, Scrap book

EVALUATION:

- Questioning.

FOLLOW - UP:

Make a list of food staffs eaten in a week according to the main food substances in them.

TEST YOURSELF:

(What have you learnt from this chapter?)

1. Explain what is meant by:
   a) Nutrition.
   b) Malnutrition.
2. Describe the signs of a healthy person.
3. Describe the types of foods needed by the body for different functions.
4. Describe how to prevent a child from becoming malnourished.
5. Name the uses of the Child Health Card.

CHAPTER 22

UNIT 7 COMMON DISEASES

P 4 TERM 3

Worms:

Objectives:

By the end of this topic pupils should be able to:

1. Describe how each worm enters and harms the body; roundworms, hookworms, threadworms and tapeworms.
2. Name signs and symptoms of worm infestations.
3. Describe some ways of preventing worm infestation.

Behavioural Changes:

Pupils should:

1. Always wash their hands before eating and handling food.
2. Defecate in a latrine.
3. Always wash their hands after using the latrine.
4. Wash fruits and vegetables before eating them.
5. Wear shoes if possible.

Sub-Topics:

a) Signs and Symptoms of Worm Infestation

b) Types of Worms -Roundworm
-Hookworm
-Threadworm

c) Prevention of Worm Infestation.

Main Ideas:

1. Worm infestation can be prevented through simple health habits.
2. All worms can cause discomfort in the stomach and abdomen.
3. Hookworm is dangerous because it causes severe anaemia
4. Roundworms are dangerous because they can cause a blockage.
5. Hookworms, roundworms, threadworms and tapeworms are all found in the faeces of infected persons.

Notes for the Teacher:

There are many different kinds of worms which can infest a person.
The most common are roundworms, hookworms threadworms and tapeworms.

1. Hookworm:

The Problem:

Hookworms live in the bowels. They fasten themselves to the wall of the intestines and suck the person's blood. (Hookworm causes blood loss and) severe anaemia.

How they are spread:

Hookworm eggs are present in the feaces of infected people. The eggs hatch into larvae in the ground and live for a long time. They enter people through their skin, usually the feet. When they enter the body, they travel via the blood to the lungs. They are coughed up and swallowed and then reach the intestines where they grow into adult worms.

How to Recognise and Treat Hookworms

There is itching and a rash where the larvae enter the skin.

The child will be pale and weak.

If a lot are present the child may develop fever, dullness, and slowness, and severe anaemia.

Take the child or person to a health centre for treatment.
Give them food rich in iron e.g. green vegetables, fish.

How to Prevent Hookworms

1. Wear shoes. This is the only sure protection.
2. Encourage children not to rest elbows on the ground.
3. Keep toilet blocks clean.
4. Defecate in a latrine.
5. Avoid walking barefooted in areas which are contaminated by faeces.

2. Threadworms:

The Problem:

Threadworms are very small about 1 cm long and live in the large intestine. They are not dangerous but can cause bad itching around the anus. In girls they may cause pain by crawling over the hymen.

How they are spread:

At night the female lays thousands of eggs outside the anus. The person scratches the area and the eggs get under the fingernails. The person can infect himself again by eating these eggs or can infect others by contaminating their food, or water with these eggs.

How to Recognise and Treat Threadworm:

They can be seen around the anus at night (like small pieces of white thread).

They can sometimes be seen in the faeces.

They will cause bad itching especially at night.

Take the person to the health centre for treatment.

Also cut their nails very short, wash carefully and wash all clothes and bed linen to kill eggs.

How to prevent threadworms:

The best way is always to wash carefully. If possible, wash with soap and water after defecating. Keep nails short, especially if eating with hands.

General Conclusion about Intestinal Parasites

In order to effectively prevent the spread of intestinal parasites we must be obedient to rules of cleanliness.

a) There should be adequate provision for the disposal of all human excreta, and the use of proper toilets should be universal, human excreta should not be used to fertilize fields and gardens. Excreta manure is good for

gardens if treated properly.

b) Both adults and children should avoid going barefooted in places where the ground may be contaminated.

c) People should keep their bodies as clean as possible and wash their hands throughly before eating and handling food.

d) Children should be provided with clean places in which to play, and should be taught to keep their fingers and all other objects, except proper food out of their mouths.

Some Activities for Pupils:

1. a) Take the picture story "Dirty Habits" from the School Health Kit on Water and Sanitation. Use the pictures to tell a story about a person with worms.

   b) Ask children to make up their own stories.

2. Select the posters in the School Health Kit on Diarrhoeal Diseases which mention worms. Get children to choose those pictures and messages which are relevant to worms.
3. List methods that are used to keep latrines clean.

4. Let children examine each others nails for cleanliness.

SKILLS TO DEVELOP:

1. Write/tell stories.

2. Listen.

3. List.

4. Sequence (pictures and story).

5. Interprete pictures (from the Health Kits).

6. Understand what can cause things and what effects are (e.g. Lack of wearing shoes may cause hookworm. The effects will be anaemia etc.)

MATERIALS REQUIRED:

1. School Health Kit on Water and Sanitation, especially the picture story "Dirty Habits".

2. School Health Kit on Diarrhoeal Diseases especially the posters:

   a) Prevent diarrhoea.
   b) Prevent diarrhoea.
   c) How germs can spread.

EVALUATION:

1. Ask children to explain how the different worms are spread.

2. Ask children to list the simple health habits to keep them free of worms.

3. Give a story and ask each child to record the places in the story where a "wrong habit" is being practised.

FOLLOW UP:

1. Observe the condition ofchildren for signs and symptoms of worms.

2. Observe and encourage the washing habits of children at school, and the condition of their nails.

3. Children can report every week on whether family members have worms, and how often families wash.

TEST YOURSELF:

(What have you learnt from this chapter?)

1. Describe how each worm enters and harms the body:

    a) Roundworm.
    b) Hookworm.
    c) Threadworm.